

Stanford Technology Law Review

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Clark D. Asay*

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ABSTRACT

Copyright was initially conceptualized as a means to free creative parties from dependency on public and private patrons such as monarchs, churches, and well-to-do private citizens. By achieving independence for creative parties, the theory ran, copyright led to greater production of a more diverse set of creative works.

But this lingering conception of copyright is both inaccurate and harmful. It is inaccurate because, in today's world, creative parties are increasingly dependent upon "Technological Patronage" from the likes of Google, Amazon, Apple, and others. Thus, rather than being alternatives or adversaries, copyright and Technological Patronage are increasingly interdependent in facilitating both creative and innovative activity. It is harmful because, by overemphasizing copyright's role in spurring creative activity, the traditional view of copyright tends to polarize debates about how best to address key copyright questions.

Instead, copyright is more accurately understood as an interdependent part of a broader creative system that facilitates both creative and innovative activities. This Article reviews several examples of this interdependence. It also highlights this interdependence by examining how technology companies are solving some of copyright law's most pressing issues.

Overall, this interdependent view of copyright provides a better framework for assessing the role of copyright, its technological complements, and proposed solutions to issues that relate to both creative and innovative activities. This Article also suggests that copyright and patent laws would be well served by doctrinal adjustments that better reflect these interdependencies. Indeed, the Constitutional provision authorizing intellectual property laws arguably supports such efforts.

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INTRODUCTION

Debates about the effects of technology on creative output are longstanding.¹ On the one hand, some proponents of nearly unfettered

1. See JESSICA LITMAN, DIGITAL COPYRIGHT 111 (2001) (reviewing the various challenges to copyright law presented by new technology); see generally, e.g., Ben Depoorter, *Technology and Uncertainty: The Shaping Effect on Copyright Law*, 157 U. PA. L. REV. 1831 (2009) (examining the relationship between technology and copyright law and arguing that rapid technological change creates legal delay and uncertainty, which in turn leads to anticopyright sentiments, greater reliance on self-help by content providers and users, and legislative involvement in copyright law); Keiyana Fordham, *Can Newspapers Be Saved? How Copyright Law Can Save Newspapers from the Challenges of New Media*, 20 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 939 (2010) (arguing that digital technologies have partially undermined the newspaper industry and proposing copyright reforms that can help address this issue); Jessica Litman, *Revising Copyright Law for the Information Age*, 75

technological advancement argue that technological change is largely a boon to creative output and that copyright frequently operates to impede both creative output and technological innovation.² Copyright, therefore, should be relaxed in significant respects.³ Indeed, some go so far as to argue that copyright in today's technological world can often be dispensed with; the purported incentive spark of copyright is unnecessary to facilitate creative activity in many contexts.⁴ Technological advancements and other non-copyright-related factors are often sufficient to spur enormous amounts of creative activity.⁵

In contrast, others argue that copyright remains a vital institution, and that unconstrained technological advancements threaten creative output by facilitating copyright infringement and generally devaluing creative works.⁶

OR. L. REV. 19 (1996) (arguing that attempts to maintain old copyright rules in the face of technological changes is the wrong approach).

2. See generally, e.g., Michael Carrier, *Copyright and Innovation: The Untold Story*, 2012 WIS. L. REV. 891 (presenting evidence suggesting that aggressive copyright enforcement on the part of record labels following the *Napster* decision had the effect of chilling vast amounts of innovative activity); Edward Lee, *Technological Fair Use*, 83 S. CAL. L. REV. 797 (2010) (arguing that copyright law, as currently implemented, is ill-equipped to deal with various technological challenges to it, and proposing as a partial solution to such problems a fair use defense to copyright infringement that more fully takes into account technological considerations); Mark A. Lemley, *Is the Sky Falling on the Content Industries?*, 9 J. TELECOMM. & HIGH TECH. L. 125 (2011) (arguing that technology, rather than being a threat to the content industries, is typically a boon to them, and offering several suggestions as to how the content industries can adjust their business models in order to succeed in the digital age).

3. See generally, e.g., Michael A. Carrier, *Increasing Innovation Through Copyright Common Sense and Better Government Policy*, 62 EMORY L.J. 983 (2013) (setting forth a number of proposed reforms to copyright law that may help foster innovation); F. Gregory Lastowka, *Free Access and the Future of Copyright*, 27 RUTGERS COMPUTER & TECH. L.J. 293 (2001) (arguing that copyright law should be relaxed in certain respects in order to more effectively take into account the growing trend of free content distribution); Lee, *supra* note 2.

4. See, e.g., Sara K. Stadler, *Forging a Truly Utilitarian Copyright*, 91 IOWA L. REV. 609, 609 (2006) (arguing that copyright may not be necessary as an incentive spark for the fine arts); Eben Moglen, *Anarchism Triumphant: Free Software and the Death of Copyright*, 4 FIRST MONDAY 8 (1999), available at <http://firstmonday.org/ojs/index.php/fm/article/view/684/594> (arguing that the free software movement shows that the incentives of copyright are largely irrelevant to creative output in the software world).

5. Jeanne C. Fromer, *Expressive Incentives in Intellectual Property*, 98 VA. L. REV. 1745, 1771-81 (2012) (discussing important non-pecuniary interests that spur innovative and creative activities); David Lange, *Reimagining the Public Domain*, LAW & CONTEMP. PROBS., Winter/Spring 2003, at 463, 482-83 (arguing that creative activity often flows from "creative play" rather than being caused by copyright per se); Moglen, *supra* note 4.

6. Jake Linford, *A Second Look at the Right of First Publication*, 58 J. COPYRIGHT SOC'Y U.S.A. 585, 586 (2011) (arguing for a first right of online publication for copyright holders that is not subject to a fair use defense); John M. Newman, *Copyright Freeconomics*, 66 VAND. L. REV. 1409, 1412 (2013) (arguing that a growing trend of zero-price content brought about through technological changes undermines the economic model underpinning copyright law and suggesting changes to copyright law in order to preserve its relevance); Scott Timberg, *It's Not Just David Byrne and Radiohead: Spotify, Pandora and How*

Therefore, some in this camp argue for bolstering copyright protections in order to ward off the threat to creative output that technological advancements purportedly present.⁷ Laws such as the Digital Millennium Copyright Act (“DMCA”) and court holdings effectively banning certain digital technologies exemplify such efforts.⁸

This Article argues that a significant cause of the disconnect between these two sides lies in how copyright has traditionally been conceptualized, and that re-conceptualizing it can help solve the impasse. For instance, historically, one of the primary purposes in establishing copyright was to provide creative persons with an independent means by which to create.⁹ That is, so long as authors and artists were beholden to monarchs, churches, or other private and public patrons for their livelihoods—which had often been the case traditionally—creative output would be constrained for fear of upsetting the

Streaming Music Kills Jazz and Classical, SALON (July 20, 2014, 2:00 PM MDT), http://www.salon.com/2014/07/20/its_not_just_david_byrne_and_radiohead_spotify_pandora_and_how_streaming_music_kills_jazz_and_classical/; Tim Waterstone, *Amazon Is Discounting Us to Death*, THE GUARDIAN (Apr. 6, 2012, 1:00 PM EDT), <http://www.theguardian.com/commentisfree/2012/apr/06/amazon-destroy-britain-book-industry>. See generally, ASTRA TAYLOR, THE PEOPLE’S PLATFORM: TAKING BACK POWER AND CULTURE IN THE DIGITAL ECONOMY (2014).

7. See ROBERT LEVIN, FREE RIDE: HOW DIGITAL PARASITES ARE DESTROYING THE CULTURE BUSINESS, AND HOW THE CULTURE BUSINESS CAN FIGHT BACK (2012); Fordham, *supra* note 1; Newman, *supra* note 6; *Strengthen Copyright in Digital Environment – Gambian Minister*, HUMAN IPO (Jan. 8, 2014, 1:00 PM), <http://www.humanipo.com/news/38598/strengthen-copyright-in-digital-environment-gambian-minister> (Gambian trade minister arguing that copyright must be bolstered in the face of digital technologies).

8. *A&M Records, Inc. v. Napster, Inc.*, 239 F.3d 1004, 1021-24 (9th Cir. 2001) (confirming that the distributor of a peer-to-peer file sharing program could be liable as a contributory and vicarious infringer); *UMG Recordings, Inc. v. MP3.com, Inc.*, 92 F. Supp. 2d 349, 350-52 (S.D.N.Y. 2000) (holding that defendant’s online posting of MP3 files for access by individuals who could prove that they owned a CD copy was not a protected fair use under copyright law).

9. *Copyright Law Revision: Hearings on S. 1006 Before the Subcomm. on Patents, Trademarks, and Copyrights of the Senate Comm. on the Judiciary*, 89th Cong. 65 (1965) (statement of Abraham Kaminstein, former Register of Copyrights) (indicating that “[t]he basic purpose of copyright protection is the public interest, to make sure that the wellsprings of creation do not dry up through lack of incentive, and to provide an alternative to the evils of an authorship dependent upon private or public patronage.”); Sir Thomas Babington Macaulay, Speech Delivered in the House of Commons (Feb. 5, 1841), in FOUNDATIONS OF INTELLECTUAL PROPERTY 310 (Robert Merges & Jane Ginsburg eds., 2004) (arguing that, though copyright as a monopoly comes with some drawbacks, it is much preferable to the preceding systems of patronage); Shubha Ghosh, *Deprivatizing Copyright*, 54 CASE W. RES. L. REV. 387, 429-38 (2003) (describing copyright as a mechanism for eventually displacing the evils associated with public patronage from the crown in England). See generally Neil Weinstock Netanel, *Copyright and a Democratic Civil Society*, 106 YALE L.J. 283 (1996) (arguing that copyright is not merely a necessary evil, but is a beneficent “state measure that uses market institutions to enhance the democratic character of civil society” and, by encouraging the creation and dissemination of creative works free from patronage, copyright fosters an active, engaged citizenry and participatory democratic institutions).

respective patron.¹⁰ Copyright, by granting individuals economic rights in their works, was meant to help solve this problem by providing authors with an independent means by which to commercially exploit their works.¹¹ And in so doing, society would benefit as the recipient of a more diverse set of creative works.¹²

Historically, then, patronage and copyright have often been viewed as at odds, with copyright conceived of as an independent means by which to eliminate the negative dependencies associated with patronage. While some scholars recognize certain merits of patronage, even in those accounts copyright and patronage are viewed as two different ways of encouraging creative output, rather than as complementary in any significant way.¹³

But conceptualizing copyright as an independent, sufficient system by which to facilitate creative activity is both inaccurate and harmful. From the inception of copyright, creative persons have depended on both copyright and a variety of intermediaries—or patrons—in order to achieve the purposes of copyright, namely, to promote the “Progress of Science and the useful Arts” by facilitating creative activity. While the roles of such intermediaries may have negative consequences in some respects, their significant involvement nevertheless belies the founding mythology behind copyright.

In addition to being inaccurate, this conception of copyright as an independent, sufficient system by which to facilitate creative activity is also harmful because it tends to polarize debates on how to improve the broader creative system. Copyright is often either cast as the enemy or savior, and proposed solutions follow suit. But copyright, though meant to encourage creative activity, does not itself directly translate into creative activity. Instead, copyright is better conceptualized as one important factor in a series of inputs to a broader creative system. Indeed, thinking of copyright as a standalone system responsible for spurring creative activity overtaxes its capacities and fails to explicitly take into account the interdependent realities of creative activity. Conversely, conceptualizing copyright as an interdependent part of a creative system provides a more useful framework for analyzing the role of copyright, its interdependencies, and potential solutions to issues related to creative processes.

This Article argues that because the broader creative system is increasingly

10. Macaulay, *supra* note 9.

11. *Id.*

12. *Id.*

13. See, e.g., Ghosh, *supra* note 9, at 408 (discussing patronage as an alternative to copyright whose role in yielding creative output is credited); Mark S. Nadel, *How Current Copyright Law Discourages Creative Output: the Overlooked Impact of Marketing*, 19 BERKELEY TECH. L.J. 785, 845 (2004) (arguing that in many important cases patronage, rather than copyright, has been the key to spurring creative activity); Lloyd L. Weinreb, *Copyright for Functional Expression*, 111 HARV. L. REV. 1149, 1233-34 (1998) (identifying patronage as an alternative to copyright that has helped yield creative activity) .

technological in nature, copyright is increasingly interdependent with “Technological Patronage” in facilitating both creative and innovative activities. This Article defines “Technological Patronage” as technological support that many parties provide to the general public, often without an ex ante financial impact on the recipient. Thus, in contrast to the founding and still lingering conceptualization of copyright as an independent system by which to facilitate creative activity, certain forms of Technological Patronage are increasingly important in helping copyright satisfy its constitutional prerogative.¹⁴ And by the same token, copyright and the creative works that it helps generate often spur technological innovation. This Article reviews several examples of how Technological Patronage and copyright are increasingly interdependent in facilitating both creative and innovative activities.

The interdependence between the two is further highlighted in examining the roles that Technological Patrons play in helping solve some of copyright law’s thornier issues. Indeed, because of the tight interrelationship between technological advancements and copyright law, Technological Patrons often end up at the forefront of litigation and contractual efforts to answer some of copyright law’s most pressing issues. This Article examines some of these efforts in further highlighting the interdependencies between copyright and Technological Patronage in creative and innovative settings.

These interdependencies also provide grounds for better harmonizing patent and copyright laws. That is, traditionally, copyright and patent laws have been conceived as separate bodies of law with distinct purposes; copyright aims to encourage “creativity,” while patent law focuses on inventive activities. But the interdependencies between creative and innovative activities reviewed in this Article suggest that each body of law might be adjusted to better reflect these interdependencies and thereby better support the purposes of the other.

Such interdependencies, of course, may also come with their warts. For instance, Technological Patrons, when wielding too much power, may act in ways that negatively affect society by restricting access to and production of a diverse set of creative works. Amazon’s recent spat with Hachette, where Amazon restricted access to and eliminated discounts for some of the major book publisher’s offerings in response to a contractual breakdown, is just one recent example.¹⁵ YouTube’s recent threat to shut independent record labels out of the site unless they accede to new contractual terms is yet another.¹⁶ But such impasses do not appear to be the result of insufficient copyright protections. Instead, they are, if anything, problems rooted in market concentration. While current antitrust law may not adequately address all such scenarios, it nonetheless remains the body of law most appropriate for them.

This Article proceeds as follows. Part I explores both why many

14. U.S. CONST. art. I, § 8, cl. 8.

15. *See infra* Part IV.A.

16. *See infra* Part IV.B.

commentators have traditionally argued that copyright is superior to a patronage system, and the purported evils of patronage in general. Part II then examines the growing importance of Technological Patronage. It argues that copyright is increasingly interdependent with Technological Patronage in facilitating diverse creative activity and promoting access to the results of that activity. By the same token, the two also often work together in triggering significant amounts of technological innovation. Thus, the traditional dichotomy between patronage and copyright is a false one; copyright and Technological Patronage are interdependent parts of a creative and innovative system, and copyright is increasingly unable to meet its constitutional prerogative on its own, particularly as the world grows increasingly technological.

Part III then explores several different ways in which Technological Patrons are helping solve particularly thorny problems in copyright law today, including issues surrounding a digital first-sale right, digital fair use, and the scope of copyright protection for software. Resolution of such legal issues is also a form of patronage that ultimately can help facilitate both creative and innovative activities.

Part IV then examines the ways in which Technological Patrons may harm society by hindering the purposes behind copyright. It suggests that antitrust law—rather than expanding copyright law—is often the most appropriate body of law to address many of these possible ills because the problems arise from market concentration, not from inadequate copyright protections.

Part V concludes by exploring some broader implications of the interdependencies between creative and innovative activity discussed in the Article. In particular, it suggests that copyright and patent laws, while traditionally conceived as separate systems with distinct purposes, would be well served with doctrinal changes that better reflect and facilitate the interdependencies between creative and innovative activities.

I. THE RISE OF COPYRIGHT LAW AS A REMEDY TO PATRONAGE

The first copyright laws were enacted in part in order to help eliminate the perceived ills of patronage in underwriting creative output.¹⁷ The theory runs as follows: so long as authors and artists remain dependent upon private and public benefactors for their livelihoods, this dependence would limit both the amount and diversity of creative output. In England, home of the first copyright statute, the debates surrounding extension of the then copyright term include some of the more frequently cited language from Lord Macaulay depicting the evils of patronage:

I can conceive no system more fatal to the integrity and independence of literary men than one under which they should be taught to look for their daily

17. *See supra* note 9.

bread to the favour of ministers and nobles. I can conceive no system more certain to turn those minds which are formed by nature to the blessings and ornaments of our species into public scandals and pests.¹⁸

Copyright purportedly addresses these concerns by providing authors with independence. In short, by endowing authors with property rights in their works, copyright allows authors to put the fates of their works in the hands of the broader market rather than a single patron. This “marketable right in one’s expression” thus encourages greater production of creative works.¹⁹ As the U.S. Supreme Court has noted:

The economic philosophy behind the copyright clause [of the U.S. Constitution] . . . is the conviction that encouragement of individual effort by personal gain is the best way to advance public welfare through the talents of authors and inventors.²⁰

But copyright plays an additional role beyond merely encouraging production of works; it also facilitates diversity in creative output because authors are not beholden to their benefactors, who may otherwise exercise restrictive influence on the nature of, and viewpoints expressed in, the creative works.²¹ In contrast, the “marketable right” that copyright provides allows authors to express whatever viewpoint they deem fit. Neil Netanel thus suggests that copyright is “a state measure that uses market institutions to enhance the democratic character of civil society.”²²

Despite these purported advantages, copyright remains an imperfect solution, even in the estimation of those that first argued for copyright over patronage.²³ For instance, in granting a quasi-monopoly over creative works, copyright artificially restricts access to the goods and therefore raises the costs that others must incur in order to obtain access to them.²⁴ Thus, while such rights may incentivize authors to engage in creative activity, they may also increase costs of access beyond what is required to provide the necessary

18. Macaulay, *supra* note 9.

19. *Eldred v. Ashcroft*, 537 U.S. 186, 219 (2003) (citing *Harper & Row, Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 558 (1985)).

20. *Id.* at 212, n.18 (quoting *Mazer v. Stein*, 347 U.S. 201, 219 (1954)).

21. *Id.* at 219 (citing *Harper & Row*, 471 U.S. at 558); Matthew Sag, *Copyright and Copy-Reliant Technology*, 103 Nw. U. L. Rev. 1607, 1675 (2009); Netanel, *supra* note 9, at 288.

22. Netanel, *supra* note 9, at 335.

23. See Macaulay, *supra* note 9 (indicating that copyright is the lesser of two evils, but, as a monopoly, still an evil).

24. See generally Guy A. Rub, *Contracting Around Copyright: The Uneasy Case for Unbundling of Rights in Creative Works*, 78 U. CHI. L. REV. 257 (2011) (discussing the economic issue of deadweight loss that copyright law causes in general, and questioning in particular whether the ability to unbundle copyright rights via contract helps reduce that deadweight loss).

incentives in the first place.

Furthermore, even if copyright facilitates the production of creative works, it may not facilitate an ideal level of diversity among those works. Copyright may thus share some of the same defects of which patronage is accused. For instance, the marketplace can provide for its own form of hegemony, with some noting that the market is “not notable for encouraging the variant and unpopular.”²⁵ The music and film industries in particular are often accused of only supporting more mainstream creative works for obvious commercial reasons, as discussed more fully below.²⁶ Sources of funding beyond copyright, including some forms of patronage, may thus remain necessary in order to promote an ideal range of viewpoints.²⁷

But as reflected in the world’s intellectual property law regimes,²⁸ copyright remains a preferred system to patronage for both encouraging production of and access to creative works and ensuring that a greater range of viewpoints is found in those works. By opening the door to economic independence, copyright purportedly frees creative output from the dependencies with which it was once shackled.

II. MARRYING COPYRIGHT AND PATRONAGE

But conceiving of copyright as a standalone economic system responsible for society’s creative output neglects to take into account its ongoing dependencies. Indeed, the traditional dichotomy between copyright and patronage belies the reality of how copyright and certain forms of Technological Patronage intersect in the marketplace today. Rather than being alternative, independent forms of encouraging creative output, copyright and Technological Patronage are interdependent parts of a broader creative and innovative system. Indeed, as the world grows increasingly technological, this interdependence will only grow. And this growing interdependence suggests that characterizations pitting copyright and technology as adversaries are unhelpful to solving the issues that do arise in the dynamic between the two. Instead, conceiving of the two as interdependent parts in the same creative and innovative system reduces polarization while establishing a more useful framework through which to understand their relationship.

25. Lloyd L. Weinreb, *Copyright for Functional Expression*, 111 HARV. L. REV. 1149, 1233-34 (1998).

26. *See infra* Part II.

27. Weinreb, *supra* note 25, at 1233-34.

28. U.S. COPYRIGHT OFFICE, CIRCULAR NO. 38A: *International Copyright Relations of the United States* 1 (2010) (reviewing the many international treaties that provide for some form of copyright protection, and to which most of the countries of the world have acceded).

A. *The Older Patrons*

Forms of what might be called patronage have been prevalent as a complement to copyright for some time.²⁹ In the music industry, for instance, traditionally an artist's success has been heavily dependent on a record label's promotion of and support for the artist.³⁰ Copyright, then, may provide the artist with an exploitable economic right, but support from record labels is, in many cases, also necessary. Similar models have characterized other content industries as well.³¹

Some suggest that this type of relationship is more accurately viewed as one of investment rather than patronage. This may be so because, unlike traditional forms of patronage, record labels, publishing houses, and the like make substantial investments in the development, marketing, and commercial success of new artists and bear the vast majority of financial risk in the event of commercial failure.³² Indeed, typically record labels, book publishers, and others are assigned the copyright in the works and therefore become in effect the content owners.³³

But regardless of whether these intermediaries are best described as patrons or investors or some combination of both, many commentators nonetheless view their roles as negative in important respects.³⁴ For instance, some suggest that these intermediaries limit the diversification of creative works because they focus their promotional efforts only on authors or works that appeal to broad

29. See David Nelson, *Free the Music: Rethinking the Role of Copyright in an Age of Digital Distribution*, 78 S. CAL. L. REV. 559, 565 (2005).

30. Lital Helman, *Fair Trade Copyright*, 36 COLUM. J.L. & ARTS 157, 169-72 (2013) (reviewing the important role that record labels play in producing music).

31. See, e.g., Lev Grossman, *Books Gone Wild: The Digital Age Reshapes Literature*, TIME (Jan. 21, 2009), <http://www.time.com/time/magazine/article/0,9171,1873122,00.html> (discussing a similar financing model in book publishing); Jared Wade, *On Location: The Risks of Movie Production*, ALL BUSINESS (Dec. 1, 2004), <http://cf.rims.org/Magazine/PrintTemplate.cfm?AID=2574> (describing a similar financing model that exists in the movie industry).

32. Brian Day, *In Defense of Copyright: Record Labels, Creativity, and the Future of Music*, 21 SETON HALL J. SPORTS & ENT. L. 61, 76 (2011).

33. Helman, *supra* note 30, at 161 (citing authorities that indicate that the copyrights in sound recordings are typically owned by the record labels).

34. See generally Helman, *supra* note 30 (highlighting significant issues arising from record labels' role in producing music, and arguing for a modified regime that would better compensate the artists themselves); Neala Johnson, *Q & A with Trent Reznor of Nine Inch Nails*, HERALD SUN, May 17, 2007, available at <http://www.heraldsun.com.au/entertainment/q-a-with-trent-reznor-of-nine-inch-nails/story-e6frf9hf-1111113550202>; Peter Lauria, *Infringement! Artists Say They Want Their Music Site Dough*, N.Y. POST, Feb. 27, 2008, available at http://www.nypost.com/seven/02272008/business/infringement__99428.htm; Alan McGee, *Recording Contract? Rip-Off You Mean*, GUARDIAN MUSIC BLOG (Oct. 25, 2007), <http://www.theguardian.com/music/musicblog/2007/oct/25/alanmcgeethursmpic>.

audiences.³⁵ Furthermore, because these intermediaries often end up owning the copyright of the work through assignment from the author or otherwise have contractual arrangements dependent on selling as many copies of the creative works as possible, they expend significant efforts restricting access to the works in cases that may be legally ambiguous.³⁶

In short, though these types of intermediaries' investments in authors and creative works may result in production of some creative works, their involvement may in the end actually reduce access as well as limit the range of works that the public consumes. In other words, this form of patronage appears to result in many of the traditional ills of patronage. Thus in many cases, rather than complementing copyright law in ways that have a net positive effect, these forms of patronage may instead suffocate copyright's potential to encourage greater production of and access to a wider range of creative works.

B. *The Barons of Technology*

But a new set of intermediaries—Technological Patrons—is increasingly encroaching on the turf of the old. Indeed, more and more consumers look to the technological platforms that Technological Patrons provide in order to find and access creative works. Most owners of creative works, therefore, rely on such platforms in order to reach a significant number of consumers with their works. And as these technological platforms have firmly taken root, the production and provision of creative works has exploded, too. Thus, Technological Patronage is increasingly important and necessary to allowing greater access to, and encouraging production and diversification of, creative works. And the commercial possibilities associated with producing and making available creative works are a major reason behind the innovative efforts of Technological Patrons in the first place.

Hence, rather than being competing or alternative models, Technological Patronage and copyright are increasingly interdependent in a broader creative system in bringing about copyright's purposes. And that interdependency also means that copyright plays a significant role in triggering innovative activity. The founding story behind copyright, in which copyright stars as an independent means by which to rescue culture from the vices of patronage, is thus no longer true today, if it ever were. Copyright is dependent in significant ways on technology, and vice-versa, and this seems likely to become even more so as the world grows more technological in nature.

35. See generally LAWRENCE LESSIG, *FREE CULTURE: HOW BIG MEDIA USES TECHNOLOGY AND THE LAW TO LOCK DOWN CULTURE AND CONTROL CREATIVITY* (2004); Helman, *supra* note 30, at 171-72 (describing homogeneity as an effect of record labels' involvement in the music industry); *Sleeping with the Enemy: Hollywood's Abusive Relationship with Race*, 1 *GEO. J. L. & MOD. CRITICAL RACE PERSP.* 41, 45-49 (2008) (describing continuing homogeneity in the roles that minorities play in Hollywood films).

36. LESSIG, *supra* note 35, at 18-20.

The following sections detail some of the more important categories of Technological Patronage and the ways in which copyright is increasingly interdependent with them in fostering greater creative and innovative activities and access to the fruits thereof.

1. *Technology Development Kits*

The last decade has witnessed an explosion of devices and technological platforms—mobile and otherwise—that provide the public with a variety of benefits. And one of the benefits that consumers increasingly expect is to be able to access the books they read, the music they love, the videos they enjoy, and other types of content on and through such technological platforms.

In order to facilitate this access, numerous technology companies provide the public with what are called software and hardware development kits (for purposes of this Article, “technology development kits” or “TDKs”).³⁷ Companies provide these TDKs to developers and other content creators in order to enable them to more readily create technology and other creative works that can then be accessed through the company’s or a partner’s technology platform. Access to the TDKs is typically free of charge, subject to certain licensing terms.

To illustrate: Amazon provides developers and other content creators with a number of TDKs that enable them to more readily create apps, content, and other functionality for the Kindle e-book platform as well as Amazon’s line of mobile devices.³⁸ They also provide a TDK for those interested in creating and distributing apps through the Amazon Appstore for Android.³⁹ Similarly, Google provides a TDK for Android as well as its app store, Google Play, as does Apple for its App Store, iPhones, iPads, and various other hardware and software products.⁴⁰ Other technology companies provide TDKs for their lines of hardware and software products for similar reasons.

These technology companies clearly have their own interests in mind when providing this Technological Patronage to the public. For instance, the companies typically take a cut of whatever a third party receives from the consumer for apps or content sold through the companies’ technology

37. See, e.g., *Apple Developer Resources Site*, <https://developer.apple.com/ipad/sdk> (last visited Mar. 9, 2015) (Apple’s iOS SDK); *Android Developer Resources Site*, <http://developer.android.com/sdk/index.html> (last visited Mar. 9, 2015) (Google’s Android SDK).

38. See, e.g., *Kindle Development Kit for Active Content*, <http://kdk.amazon.com/gp/public/gateway> (last visited May 14, 2015) (Amazon’s TDK for Kindle); *Amazon Fire Devices Developer Site*, <https://developer.amazon.com/appsandservices/solutions/devices/kindle-fire> (Amazon’s suite of development resources for Kindle Fire, Amazon Fire TV, and Fire Phone) (last visited May 15, 2015).

39. See *Amazon APIs*, <https://developer.amazon.com/appsandservices/apis> (last visited Mar. 9, 2015).

40. See *Apple Developer Resources Site* *supra* note 37.

platforms.⁴¹ And even when the apps or content are distributed free of charge, the companies have other interests in providing the Technological Patronage, such as increasing the overall attractiveness of its technology products and increasing advertising revenue. But such commercial considerations simply suggest that copyright and the creative works that it helps to generate are an important impetus to developing TDKs and the underlying technological platforms in the first place, thereby highlighting the interdependent relationship between copyright and technological innovation.

And the overall effect of this form of Technological Patronage has been to increase production of and access to a broader range of creative works.⁴² TDKs increase production of creative works by significantly reducing the amount of time that it would otherwise take developers to create their apps and other content.⁴³ Indeed, the number of both apps and developers creating apps has exploded over time and appears poised to continue to expand rapidly.⁴⁴

Furthermore, TDKs have helped spawn a wide array of creative content representing a variety of viewpoints because Technological Patrons have traditionally been largely agnostic about what types of creative works third parties make available through their technology platforms.⁴⁵ To the extent that creative works are deemed illegal or otherwise pose a serious public relations risk to the company, a company may cut off its patronage in such cases.⁴⁶ But overall, Technological Patrons have reasons to avoid discriminating against specific developers when they can avoid it.⁴⁷ Though there have been some

41. Tristan Louis, *How Much Do Average Apps Make*, FORBES (Aug. 10, 2013, 5:30 PM EDT), <http://www.forbes.com/sites/tristanlouis/2013/08/10/how-much-do-average-apps-make> (reviewing the amounts of revenue that many major technology companies receive through app sales on their various platforms).

42. Panos Papadopoulos, *Rise of the Mega SDK Vendors in Mobile*, VISION MOBILE (July 2, 2013), <http://www.visionmobile.com/blog/2013/07/the-rise-of-the-mega-sdks-in-mobile> (reviewing, among other things, the role that SDKs have played in facilitating creative activity by developers).

43. *Id.*

44. Chantal Tode, *Mobile App Market Continues Its Meteoric Rise: Report*, MOBILE MARKETER (Nov. 11, 2013), <http://www.mobilemarketer.com/cms/news/research/16568.html> (reviewing statistics on mobile app development that indicate rapid growth and predictions of further expansion).

45. This is so despite the fact that companies typically retain, through their terms of service, near absolute discretion in their ability to remove content from their platforms.

46. Austin Ruse, *Google Out of Porn Biz?*, BREITBART (June 6, 2014), <http://www.breitbart.com/Big-Journalism/2014/06/06/Breaking-Google-Out-of-Porn-Biz>; Matt Williams, *Apple Blocks 'Objectionable' App That Reports Deaths from US Drone Strikes*, THE GUARDIAN (Aug. 30, 2012, 16:40 PM EDT), <http://www.theguardian.com/technology/2012/aug/30/apple-blocks-us-drone-strike-app>.

47. Indeed, for a time Amazon.com was even reluctant to pull from its marketplace a guide book for pedophiles, indicating that it "believe[d] it [was] censorship not to sell certain books simply because we or others believe their message is objectionable." Although it ultimately did remove the book in response to public outrage, its reluctance to do so and its statement provide one clear example of what seems to have become a norm for digital

well-documented instances of such discrimination, overall the record suggests ongoing access to this form of Technological Patronage is more the norm than the exception.

Last, TDKs have also increased consumers' access to creative works by not only facilitating production of a wide array of creative works, but enabling access to the works through the underlying technology platform. Indeed, the various storefronts that now exist for most major technology platforms make finding and accessing creative works relatively simple,⁴⁸ even if digital search remains an imperfect art.

Thus, copyright and Technological Patronage in the form of TDKs exhibit in several important respects a symbiotic relationship within the broader creative system. Copyright provides content creators with a marketable right, thereby encouraging creative activity. This creative activity and its commercial possibilities, in turn, encourages Technological Patrons to engage in innovative activity. The resulting TDKs and associated technology platforms then help provide not only greater access to the creative works, but also tools with which to more readily create additional content in which the marketable right subsists. Indeed, this form of Technological Patronage has resulted in access to a wider range of creative materials than copyright and its older set of intermediaries have traditionally been able or willing to produce.⁴⁹ Hence, copyright and Technological Patronage have worked together in several key areas to ameliorate many of the purported ills of patronage in facilitating both creative and innovative activities.

2. Content Creation and Hosting Tools

In addition to TDKs, Technological Patrons provide the public with a host of other types of tools and services that (1) assist would-be authors in producing a wide range of creative works, and (2) promote public access to such works. This section does not attempt to catalogue all of the tools and services available, but instead highlights a representative few that illustrate some of copyright's more important technological interdependencies in the broader creative and innovation systems.

One well-known example is YouTube and similar services. YouTube provides a variety of tools and services that aid users in creating and hosting

platforms: permissiveness. See Nick Saint, *Amazon Caves: Pedophile Guide Pulled from the Kindle Store*, SFGATE (Nov. 11, 2010, 4:00 AM PST), <http://www.sfgate.com/news/article/Amazon-Caves-Pedophile-Guide-Pulled-From-The-2472372.php>.

48. *The Rise of Mobile Application Stores: Gateways to the World of Apps*, BOOZ & CO. (2010), available at http://www.strategyand.pwc.com/media/file/The_Rise_of_Mobile_Application_Stores.pdf (reviewing the rise of app stores).

49. See, e.g., Floor64, *The Sky Is Rising!*, TECHDIRT (Jan. 2012), available at <https://www.techdirt.com/skyisrising/> (reviewing the growth of content in absolute volume and suggesting that consumers have increasingly more content choices).

content on its site.⁵⁰ Competing video sharing websites do as well.⁵¹ And statistics suggest that such services have been immensely successful in both facilitating creation of content and promoting access thereto.

For instance, in terms of access, over one billion unique users visit YouTube each month in order to watch over six billion hours of video—nearly an hour for every person on Earth.⁵² A majority of teenagers today also obtain their music through YouTube.⁵³ Other sites also register significant traffic, though on a much smaller scale in comparison to YouTube.⁵⁴

In terms of content creation, users upload approximately 100 hours of video to YouTube every minute.⁵⁵ Other sites also experience significant activity.⁵⁶ Clearly, Google's and others' technologies are not solely responsible for the creation of uploaded and viewed footage; the economic incentives associated with copyright likely play a role for many content creators. But the technological tools that Google and others provide have certainly helped facilitate the creative activity and access thereto.

Technological Patrons such as Amazon, Apple, and others also provide a variety of tools for self-publishing books and other forms of literature. Amazon, for instance, provides services that allow authors to skip traditional publishing houses and produce and distribute literary works on demand.⁵⁷ Amazon and other companies involved in the e-Book world also provide authors with technological tools that facilitate production and distribution of electronic versions of their literary works, which have become increasingly

50. See, e.g., *Working Together: An Overview of YouTube's Resources for Creators*, YOUTUBE, <https://www.youtube.com/yt/creators/creator-benefits.html> (last visited May 15, 2015).

51. *Create Something New*, VIMEO, <http://vimeo.com/create> (last visited May 15, 2015) (providing an overview of the video creation tools that Vimeo, a competitive service to YouTube, offers).

52. *Statistics*, YOUTUBE, <http://www.youtube.com/yt/press/statistics.html> (last visited May 15, 2015).

53. Ben Richmond, *YouTube Is About to Do to Record Labels What Amazon Does to Publishers*, MOTHERBOARD (June 17, 2014, 1:45 PM EST), http://motherboard.vice.com/en_us/read/youtube-is-about-to-do-to-record-labels-what-amazon-does-to-publishers (indicating that 64% of teenagers access music through YouTube, more than any other source).

54. Eric Larson, *5 Reasons to Choose Vimeo Instead of YouTube*, MASHABLE (May 30, 2013), <http://mashable.com/2013/05/30/vimeo-over-youtube> (indicating that roughly 70 million unique users visit Vimeo each month).

55. *Statistics*, YouTube, <http://www.youtube.com/yt/press/statistics.html> (last visited July 21, 2014).

56. Sam Gutelle, *Vimeo Users Streamed 4.9 Billion Videos In 2013*, TUBEFILTER (Jan. 27, 2014), <http://www.tubefilter.com/2014/01/27/vimeo-5-billion-views-2013-timeline>.

57. See, e.g., *CreateSpace*, https://www.createspace.com/pub//diy.do?ref=1383688&utm_id=6072&cp=70170000000c3cK&ls=Amazon&sls=Amazon_Selfpub (last visited July 21, 2014) (providing an overview of Amazon's suite of technologies and services for self-publishing literary works).

important in the digital age.⁵⁸

Such tools and services have thus helped spawn diverse creative activity and enhanced access thereto in a way that copyright, on its own, could not. Indeed, some accounts suggest that today's world generates in days the same amount of content that, previous to 2003, was generated in the entire history of the world.⁵⁹ Other accounts indicate that not only does more content exist, but more people are earning money from that content than ever before, and consumers spend an ever increasing amount of their disposable income on consuming such content.⁶⁰ And tools and services such as those described above play a vital role in bringing about these results.⁶¹

Copyright, of course, still remains important as part of the broader creative system. Copyright provides prospective authors with a marketable, enforceable set of rights that must be taken seriously by both the Technological Patrons as well as consumers. Furthermore, copyright's interdependence with Technological Patronage means that copyright plays a significant role in spurring innovative activity. Indeed, a basic incentive for developing such technologies in the first place is the institution of copyright and the commercial possibilities that copyrighted creative works, in conjunction with the technologies, present. To such ends, Technological Patronage in today's world expands copyright's capacities by enabling more parties to create more creative works that are then accessible to a broader audience.

3. *Technological Money*

In addition to providing technological tools and platforms for third parties to create and showcase their works, in some cases Technological Patrons also simply subsidize consumer access to creative works on their technology platforms. For instance, members of the Amazon Prime program—which requires a nominal \$99 per year fee—obtain free (to them) access to a large number of creative works through Amazon Instant Video and the Kindle e-Book platforms.⁶² In order to provide this free access, Amazon almost undoubtedly pays content owners in some form on behalf of consumers. In so doing, Amazon and other companies thus patronize content owners—and thereby encourage increased production and access to creative works—in order

58. See, e.g., *Kindle Direct Publishing*, <http://www.amazonkdp.com> (last visited July 21, 2014) (providing an overview of Amazon's self-publishing tools for its Kindle e-Reader technologies).

59. Brett King, *Too Much Content: A World of Exponential Information Growth*, HUFFINGTON POST TECH (Jan. 18, 2011), http://www.huffingtonpost.com/brett-king/too-much-content-a-world-_b_809677.html.

60. Floor64, *supra* note 49.

61. *Id.*

62. The nominal fee charged for the program does not even begin to cover the costs that consumers would otherwise incur in accessing what is available through the program.

to provide their customers with enhanced technological products and services.

Other examples of such subsidization include Apple's iTunes Match program, which, like Amazon Prime, requires a nominal fee to participate.⁶³ This program allows users to store in the cloud and access from anywhere any music that they have, including music not purchased through Apple.⁶⁴ In order to be able to provide consumers with this type of access, Apple almost certainly struck some type of commercial agreement with record labels.⁶⁵ Netflix's and Amazon's funding of original films and TV series in order to attract consumers to their technological platforms is yet another example of similar subsidization.⁶⁶

Hence, in some cases Technological Patrons engage in a more traditional form of patronage by directly subsidizing the creation and distribution of creative works, all on behalf of their customers. Nonetheless, copyright and technology's interdependencies are still clear in such cases. Technological Patrons provide the subsidy in order to increase the lure of their own technological products. The creation and promotion of these technological products thus directly leads to the creation and promotion of creative works. And the commercial prospects associated with copyrighted creative works makes creating and promoting such technological products worthwhile in the first place. Thus, while Technological Patrons clearly have their own commercial purposes in mind, technological innovation and copyright complement each other in such cases (1) as part of the broader creative system in bringing about increased production of and access to a more diverse set of creative works; and (2) in facilitating innovative activity.

4. *Free and Open Source Software*

Another significant form of Technological Patronage in the software world consists of the free and open source software (FOSS) movement. In short, FOSS is software provided under a variety of license terms whose most critical condition is that the software comes with access to the source code—or human

63. See *iTunes Match*, <https://www.apple.com/itunes/itunes-match/> (last visited May 15, 2015) (providing an overview of the program).

64. *Id.*

65. Again, the nominal fee to participate would in no way cover the amounts that would otherwise be due to record labels for the copies stored and streamed from the cloud.

66. See, e.g., Emily Steel, *Netflix Bolsters Offerings in Documentary Genre*, N.Y. TIMES (July 28, 2014), http://www.nytimes.com/2014/07/28/business/media/netflix-bolsters-offerings-in-documentary-genre.html?_r=0 (discussing Netflix's plans to contribute an additional \$3 billion dollars to developing original content in order to lure subscribers to its services); Mark Sullivan, *Amazon Will Spend \$100M on New, Original Shows in Q3*, VENTURE BEAT (July 24, 2014 4:00 PM), <http://venturebeat.com/2014/07/24/amazon-will-spend-100m-on-new-original-shows-in-q3/> (discussing Amazon's significant financial commitments to developing original content for its technological platform).

readable—version of the software.⁶⁷ Source code is valuable because it is essentially the detailed blueprint of how the software works, and subsequent software engineers possessing it can more easily make alterations and additions to the software program in order to improve upon it.⁶⁸

The FOSS movement has been exceptionally successful,⁶⁹ so much so that some claim that the open nature of the FOSS development model is now the norm in the software world.⁷⁰ Vast numbers of FOSS programs are available under permissive license terms to anyone desiring access to the technology. Indeed, some of the most popular software technologies in the world, including Android, Firefox, and Linux, are FOSS. And, again, this access is typically not subject to a licensing fee, as is the case with more traditional forms of proprietary software.

Companies and other entities have a variety of reasons for providing this form of Technological Patronage. Some provide it for commercial reasons.⁷¹ Indeed, many successful businesses have been built around FOSS; Red Hat is an example of a billion dollar company that largely sells services related to a FOSS product, a form of the Linux operating system in its case. Others provide the patronage for non-economic reasons, including for prestige enhancement or simply out of the love of creativity.⁷²

Copyright law has played and continues to play an important role in facilitating this Technological Patronage. For instance, access to FOSS is provided through copyright licenses. The founders of the FOSS movement used copyright to promote their vision of free access by creating copyright licenses that sought to turn copyright on its head.⁷³ That is, some of the most important FOSS licenses require that, as a condition of use, any subsequent works that use or incorporate the FOSS be subject to the same permissive licensing terms.⁷⁴ Other licenses simply license the FOSS to anyone wanting access to it. In both cases, however, the basis of the licenses remains copyright.⁷⁵

Hence, the Technological Patronage provided through the FOSS movement has depended critically on copyright. While I have argued elsewhere that

67. See Clark D. Asay, *A Case for the Public Domain*, 74 OHIO ST. L.J. 753, 759 (2013).

68. James A.J. Wilson, *Benefits of Open Source Code*, OSS WATCH (May 9, 2013), <http://oss-watch.ac.uk/resources/whoneedssource>.

69. See Clark D. Asay, *Enabling Patentless Innovation*, 74 MD. L. REV. 431, 442 (2015).

70. Katherine Noyes, *Open Source Software Is Now a Norm in Businesses*, PCWORLD (May 18, 2011, 10:07 AM), http://www.pcworld.com/article/228136/open_source_software_now_a_norm_in_businesses.html (citing to a report that indicates that open source software has gone “mainstream” in the business world).

71. Asay, *supra* note 67, at 762-65.

72. *Id.*

73. Moglen, *supra* note 4.

74. Asay, *supra* note 67, at 759-61.

75. *Id.*

copyright may not be as crucial to the success of the movement going forward as traditional accounts suggest, at least early on, the movement probably could not have survived without copyright as a basis for its licensing scheme.⁷⁶ Accordingly, copyright law and the FOSS movement's Technological Patronage have been interdependent complements to each other in yielding enhanced creativity and innovation in the software world.

The FOSS movement facilitates this enhanced creativity and innovation in a number of ways. First, the FOSS movement increases *access* to creative and innovative software works. Indeed, one of the primary purposes of the movement is to permit access to the source code to anyone wanting it. And a variety of readily accessible platforms exist that make locating and obtaining FOSS relatively simple.⁷⁷ Almost by definition, then, the FOSS movement promotes greater access to creative and innovative software works.

This access increases the production of additional creative and innovative output. For instance, the extensive number of freely available FOSS projects allows developers to skip recreating the wheel and more easily build upon what already exists.⁷⁸ In other words, subsequent developers can focus on improving upon and adding to the underlying works rather than having to first build them themselves.⁷⁹ And this freed-up development time results in increased production of software content.

It also facilitates a greater diversity of works in the software realm because each developer can access the wealth of freely available FOSS projects and move in whatever new direction they deem fit. Naturally, the market may play a role in steering developers away from a diversity that the market will not support. But overall, diversity of software goods still likely increases, even when a dominant software product develops.

Take Linux, for instance.⁸⁰ This famous FOSS project now powers much

76. See generally Asay, *supra* note 67. But see also Greg R. Vetter, *A Public Domain Approach to Free and Open Source Software*, 75 OHIO S. L.J. 8 (2014) (highlighting several concerns with moving away from an intellectual property law-based approach for fostering open innovation).

77. See, e.g., *Comparison of Open-Source Software Hosting Facilities*, WIKIPEDIA, http://en.wikipedia.org/wiki/Comparison_of_open-source_software_hosting_facilities (last visited May 15, 2015).

78. Howard Baldwin, *4 Reasons Companies Say Yes to Open Source*, COMPUTERWORLD (Jan. 6, 2014, 6:30 AM ET), http://www.computerworld.com/s/article/9244898/4_reasons_companies_say_yes_to_open_source?taxonomyId=11&pageNumber=1 (suggesting that a primary reason that parties use FOSS is the cost savings of not having to recreate the software works themselves).

79. *Id.*

80. Google's Android FOSS project is yet another example. Google supports and maintains the official version of Android that is used on many smartphones and tablets. But Amazon and others have created their own branches of Android for their technology products. And they haven't simply copied Google's Android, but instead have altered it significantly in order to match their needs and provide a different experience to their users. Thus, access to the underlying works allows not only for the use thereof, but production of a

of the computing world. Numerous parties have created a number of versions of Linux for a variety of computing environments, from embedded devices, to desktops, to phones, to cars.⁸¹ Access to the underlying work has thus allowed for increased production of creative works as well as diversification of them. Some might argue that this access has actually resulted in hegemony because Linux is now so dominant in many areas of software that other creative options are foreclosed. But that is true only insofar as the many variants of Linux are the same product, which is not the case.⁸²

In sum, the FOSS movement is another example of copyright law and Technological Patronage complementing each other in ways that yield increased production of and access to a more diverse set of creative and innovative works. The software industry increasingly depends on FOSS in order to spur innovation and creativity, and the FOSS movement continues to utilize copyright in promoting its vision. Indeed, because of the FOSS movement's success, some have advocated mimicking its tenets in other sectors in hopes of achieving similar results.⁸³

5. *Some Possible Technological Warts*

The relationship between the types of Technological Patronage reviewed above and copyright includes some possible deficiencies that are worth mentioning at this point. While none of these appear to be detrimental to the arguments of this Article, they are noted both in order to briefly address some typical counterarguments as well as to better illustrate the boundaries of the Article's arguments.

First, some argue that the types of Technological Patronage reviewed

more diverse set of works as well. See Ewan Spence, *Why Has Amazon Risked Distraction By Releasing The Fire Smartphone?*, FORBES (July 7, 2014, 8:25 PM), <http://www.forbes.com/sites/ewanspence/2014/07/07/why-has-amazon-risked-distraction-by-releasing-the-fire-smartphone> (summarizing how Amazon has used a differentiated version of Android for its own devices).

81. Graham Morrison, *The Hidden Places Where Linux Dominates*, TECHRADAR (Jan. 29, 2011), <http://www.techradar.com/us/news/computing/the-hidden-places-where-linux-dominates-923626>; Christopher Tozzi, *Automotive Grade Linux Released for Open Source Cars*, THE VARGUY (July 1, 2014), <http://thevarguy.com/open-source-application-software-companies/070114/automotive-grade-linux-released-open-source-cars>.

82. See, e.g., Steven J. Vaughan-Nichols, *The 5 Most Popular Linux Distributions*, ZDNET (Aug. 26, 2012, 15:55 PDT), <http://www.zdnet.com/the-5-most-popular-linux-distributions-7000003183> (discussing five of the most popular Linux distributions just for desktops).

83. See, e.g., M. Ryan Calo, *Open Robotics*, 70 MD. L. REV. 571, 582-83, 611 (2011) (arguing that an open model of innovation in the field of personal robotics is necessary in order for the field to reach its potential). See generally John R. Ackermann, *Toward Open Source Hardware*, 34 U. DAYTON L. REV. 183, 183-85 (2009) (discussing efforts to apply open license principles to hardware development generally).

above have facilitated the creation of and access to too much content.⁸⁴ In other words, while the copious amounts of available content may seem like a boon, in reality consumers suffer as they are forced to sift through excessive amounts of content in search of a limited number of worthwhile creative works.⁸⁵

While such concerns may have some merit—particularly if the overall quality of content available suffers at the expense of increased quantity—it is hard to grant such concerns too much weight. First, the complaint itself suggests that copyright, in conjunction with Technological Patronage, is working rather well in promoting “the progress of Science and the useful Arts” by facilitating increased production of and access to creative and innovative works. The complaint, therefore, confirms the interdependencies between the two in the broader creative and innovative systems.

Second, if consumer expenditures on creative works are any indication of favorable quality, it appears that consumers are finding and purchasing more quality content than ever before.⁸⁶ And this remains true even if the majority of expenditures focus on a limited set of creative works, since interdependence between copyright and Technological Patronage in promoting copyright’s purposes does not mandate that all works be created commercially equal.

The more challenging critique of the types of Technological Patronage outlined above is that they actually undermine copyright by (1) facilitating copyright infringement, and (2) undermining creative persons’ ability to earn a living. If these two related points are true, than Technological Patronage may ultimately do more harm than good by disincentivizing creative persons from engaging in creative activity. Rather than being productively interdependent, therefore, copyright and Technological Patronage may be at odds, as some commentators suggest. These are complex, interrelated issues, and it is beyond the scope of this to address them completely. But both concerns will be touched upon briefly in order to better illustrate the arguments of this Article.

Concerns about technological advancements undermining creative persons’ ability to earn a living have been prevalent for some time. Some argue, for instance, that music-streaming services like Spotify and Pandora pay artists so little that many otherwise talented artists are opting out of the industry entirely.⁸⁷ Similar complaints have been lobbied against Amazon’s effect on

84. See, e.g., Dougald Hine, *What Good Is Information*, AEON MAGAZINE (Mar. 6, 2014), <http://aeon.co/magazine/living-together/the-problem-with-too-much-information/> (arguing that the flood of content that is now available can contribute to a lack of meaning in life).

85. See, e.g., Paul Barclay, *The Myth of the Long Tail*, BIG IDEAS (Feb. 22, 2014, 6:00 AM), <http://www.abc.net.au/radionational/programs/bigideas/the-myth-of-the-long-tail/5275658> (reviewing the conclusions of a study by Harvard Business School Professor Anita Elberse in which she found that, while more content exists today, consumers generally still focus on a small number of creative works).

86. See *supra* note 49.

87. Scott Timberg, *It’s Not Just David Byrne and Radiohead: Spotify, Pandora and How Streaming Music Kills Jazz and Classical*, SALON (July 20, 2014, 2:00 PM MDT),

the book industry.⁸⁸ Indeed, others argue more generally that a culture of free or cheap content has mainly enriched Technological Patrons while impoverishing the middle classes of creators.⁸⁹ These complaints have a common theme: if Technological Patronage continues to devalue content, then those currently producing it will eventually cease to do so.

A few responses are in order. First, this Article argues that copyright and Technological Patronage are interdependent in facilitating enhanced creative activity and access thereto; an important implication of that argument is that copyright remains a significant part of the equation, even if not the only part. Hence, copyright remains vital in giving creative parties the ability to police their works and prevent piracy thereof, thereby preserving value.

As such, a second and related point is that legacy business models, rather than Technological Patronage, may be the cause of some of the purported devaluing of content. For instance, in the music industry, artists have long assigned their copyrights to record labels in order to obtain their promotional support. But in giving up these rights, artists lose the ability to control their creative works' fates. With such rights, record labels may act in their own commercial interests, while neglecting those of individual artists, in striking deals with Technological Patrons that allow for the musical works to be streamed.

Such instances of devaluation may thus be more the result of defects in legacy business models becoming amplified in the digital economy than inherent defects in the digital economy itself. Furthermore, such scenarios illustrate that copyright remains a valuable set of rights, but one that must be smartly utilized in order to preserve productive interdependencies between copyright and Technological Patronage. In other words, the dependencies between copyright and Technological Patronage are not infallible, even if they are increasingly inevitable.

Third, some instances of devaluation may be the result of scenarios where a Technological Patron wields too much power in a given field. In other words, such instances are problems of market concentration rather than deficient rights under copyright or inherent problems with technology itself. In such cases, as discussed later, antitrust law is probably the most appropriate solution to helping maintain a competitive landscape.

Related to the concern that Technological Patronage tends to devalue content, many claim that Technological Patronage actually undermines copyright by facilitating copyright infringement. That is, since services such as

http://www.salon.com/2014/07/20/its_not_just_david_byrne_and_radiohead_spotify_pandora_and_how_streaming_music_kills_jazz_and_classical/.

88. Tim Waterstone, *Amazon Is Discounting Us to Death*, THE GUARDIAN (Apr. 6, 2012, 1:00 PM EDT), <http://www.theguardian.com/commentisfree/2012/apr/06/amazon-destroy-britain-book-industry>.

89. See ASTRA TAYLOR, THE PEOPLE'S PLATFORM: TAKING BACK POWER AND CULTURE IN THE DIGITAL AGE (Fourth Estate 2014).

YouTube and others facilitate creation and distribution of content, potential infringers similarly have an easier time using the service to create and host infringing content. As a result, creative parties lose needed revenues, the content itself is devalued in the eyes of the consuming public, and creative parties opt out of the creative system altogether.

Furthermore, aspects of the Digital Millennium Copyright Act (“DMCA”) may exacerbate such problems. By providing services such as YouTube a broad safe harbor against secondary copyright liability for hosting infringing materials so long as certain conditions are met, the DMCA may make it even more likely that such services undermine the ability of copyright owners to obtain the necessary monetary awards for creating works. In this view, this type of Technological Patronage is no patronage at all, but instead deals copyright a significant blow in its ability to encourage production of a diverse set of creative works.

But such arguments do not hold up to scrutiny. First, as discussed above, this type of Technological Patronage leads to creation of and access to works that otherwise would neither exist nor be available. In other words, this form of Technological Patronage has helped create access to creative works that copyright law, on its own or even in conjunction with other intermediaries, could not. So for a whole category of content creators, this form of Technological Patronage helps yield significant numbers of works, and copyright law ensures that, once created, these creators have a marketable set of rights should they wish to exploit them. In this light, copyright and Technological Patronage’s interdependencies are not only clear, but also productive.

Second, many content owners that may not need Technological Patronage in order to create their works still benefit from it by obtaining a greater audience for their works. Indeed, most major studios and content providers have some sort of presence on YouTube and other such services.⁹⁰ So while digital services such as YouTube may have made copyright infringement easier to commit, one logical corollary to increased access to creative content is enhanced abilities to monetize it, thereby further highlighting the interdependencies of the two.

And third, though such services may make copyright infringement easier to commit, to some extent the DMCA itself helps counterbalance that concern. For instance, such services are not eligible for the safe harbor under the DMCA unless the service owners expeditiously remove allegedly infringing content once notified by the content owner.⁹¹ The safe harbor is so valuable to companies that, in most cases, the service provider will simply remove

90. See generally Edward Lee, *Warming Up to User-Generated Content*, 2008 U. ILL. L. REV. 1459 (2008) (discussing generally major content owners’ growing partnerships with sites such as YouTube).

91. 17 U.S.C. § 512(c)(1)(C).

materials from their site upon receiving a notification, even in cases where the notification may not actually be legally justified.⁹² Furthermore, though services such as YouTube have no clear legal obligation to actively monitor their sites for infringing material, some have implemented technologies to detect and ferret out cases of infringement.⁹³

In sum, though services such as YouTube certainly result in copyright infringement, this type of Technological Patronage appears to aid copyright law in facilitating increased production of and access to a wider variety of creative content, which in turn increases monetization opportunities. Furthermore, despite the threat of copyright infringement, the DMCA as currently implemented provides copyright owners with tools with which to help combat it. And last, services such as YouTube have actively implemented tools to help identify and prevent instances of copyright infringement. This is not to claim that copyright and technology's interdependencies are always in perfect harmony, but it is to say that the current system provides some important tools that help maintain a productive relationship between the two.

6. Conclusion

The foregoing discussion highlights several important ways in which Technological Patronage is interdependent with copyright in yielding increased production of and access to a greater diversity of creative works. The complementary nature of the two stands in contrast to traditional accounts of the relationship between patronage and copyright. Copyright and content owners today depend critically on Technological Patrons in order to succeed in the marketplace. And Technological Patrons depend critically on content owners for the success of their own technology products as well. While content owners have long feared the effects of technology in eroding their business models by facilitating piracy, the reality has become that content owners are increasingly beholden to the copious amounts of Technological Patronage that they today receive. And, in many important respects, these interdependencies appear to serve well the interests of copyright and technological innovation alike.

III. TECHNOLOGICAL PATRONS' ROLE IN SOLVING COPYRIGHT DILEMMAS

So far this Article has explored several examples of where Technological Patronage is interdependent with copyright in yielding increased production of

92. Alfred C. Yen, *Internet Service Provider Liability For Subscriber Copyright Infringement, Enterprise Liability, and the First Amendment*, 88 GEO. L.J. 1833, 1883 (2000).

93. Bryan E. Arsham, *Monetizing Infringement: A New Legal Regime for Hosts of User-Generated Content*, 101 GEO. L.J. 775, 791 (2013) (discussing YouTube's self-imposed implementation of copyright infringement monitoring technologies).

and access to a diverse set of creative works and technological products.

Part III turns to the role that Technological Patrons play in helping address some of copyright's most pressing legal issues. This role is natural given the interrelationship between the Patrons' technological products and various forms of content and, thus, further highlights the interdependencies between Technological Patronage and copyright in creative and innovative contexts.

A. *The First-Sale Doctrine's Digital Dilemma*

One significant area of copyright law in which Technological Patrons have and will continue to play a role is the first-sale doctrine. This doctrine is an exception to the general rights of copyright holders. It dictates that once a copyright owner has made an authorized first sale of a copy of a copyrighted work, the owner of that copy has the right to further dispose of it without having to obtain authorization from the copyright owner.⁹⁴ This exception is necessary because, otherwise, the owner of a copy of a book would violate the author's distribution right when giving away that copy to another.⁹⁵ The first-sale doctrine thus enables things such as used bookstores, libraries, and many other important secondary markets for copyrighted works.⁹⁶

The first-sale doctrine, furthermore, has recently received a boost from the U.S. Supreme Court. In its recent *Kirtsaeng* opinion, the Court ruled that the first-sale doctrine includes no geographic limitations.⁹⁷ In other words, even if a copyrighted work was originally produced and distributed outside the United States, so long as the copyright owner authorized the first distribution of that copy of the work, the recipient of the copy can then dispose of it as she wishes, including importing it into the United States.⁹⁸ Some suggest that this ruling will harm copyright owners, whose ability to geographically price discriminate will be significantly curtailed as a result.⁹⁹ Be that as it may, the *Kirtsaeng* decision helped cement the first-sale doctrine as an important exception to the exclusive rights that the Copyright Act grants copyright holders.

But as more and more content has entered the digital realm, application of the first-sale doctrine has become less certain. This is so because a number of circuit courts have interpreted the Copyright Act to allow for evasion of the

94. See 17 U.S.C. § 109. See generally Aaron Perzanowski & Jason Schultz, *Digital Exhaustion*, 58 UCLA L. REV. 889, 908-12 (2011) (providing a general overview of the history of the first-sale doctrine).

95. See generally Clark D. Asay, *Kirtsaeng and the First-Sale Doctrine's Digital Problem*, 66 STAN. L. REV. ONLINE 17 (2013).

96. *Id.*

97. *Kirtsaeng v. John Wiley & Sons, Inc.*, 133 S. Ct. 135 (2013).

98. *Id.*

99. See generally Guy A. Rub, *Rebalancing Copyright Exhaustion*, 64 EMORY L.J. 741 (2015) (arguing that copyright owners should be able to prevent importation of copyrighted works in order to enable effective price discrimination).

first-sale doctrine when copyright owners label the sale of copies of their works as a “license” to the work.¹⁰⁰ In such cases, the first-sale doctrine does not apply, according to these courts, since the doctrine only applies when someone “owns” a copy of a copyrighted work.¹⁰¹ In some circuits, therefore, digital content owners are able to eliminate the first-sale doctrine through careful structuring of their agreements with consumers.

As such, the first-sale doctrine faces a digital dilemma. Some may believe that it faces no such dilemma because the infinitely reproducible nature of digital works means that applying the doctrine in the digital context would completely undermine the ability of copyright owners to commercialize those works. After all, physical products have limited lifespans. So even with secondary markets for physical products, somewhat frequent sales of new products are necessary to replenish those markets. With digital products, by contrast, no such necessity exists because the products may not similarly degrade over time. In consequence, content owners would presumably lose significant numbers of sales for their digital works should a digital first-sale right exist.

These concerns certainly have merit, but they are not a justification for eliminating the first-sale doctrine in the digital context altogether.¹⁰² Rather, if anything, these concerns justify making adjustments to the first-sale doctrine in the digital context.¹⁰³ Of course, some may still believe that the first-sale doctrine is currently too broad, whether applied to physical or digital products. But again, even if the doctrine is currently too broad, that is not a justification for eliminating the doctrine in the digital space, but rather for limiting the doctrine in its application to both the physical and digital spheres.

So what’s the solution? For political economy reasons, Congress seems unlikely to amend the Copyright Act to explicitly mandate that the first-sale doctrine applies in the digital context. And until it does so, courts are stuck with the current language of the Copyright Act, a reasonable interpretation of which allows for easy evasion of the first-sale doctrine, as described above.

Technological Patrons, on the other hand, may be better situated than others to ensure that the first-sale doctrine—or some form thereof—survives the digitization of content. Because Technological Patrons provide content owners with increasingly essential technological platforms through which consumers access creative works, these Technological Patrons have significant leverage vis-à-vis even the biggest of content owners. Indeed, these Patrons have in the past shown the ability to secure enhanced permissions for and

100. *See, e.g., Vernor v. Autodesk, Inc.*, 621 F.3d 1102, 1103-04 (9th Cir. 2010). For an overview of the variety of approaches courts have taken to making this determination, see generally Brian W. Carver, *Why License Agreements Do Not Control Copy Ownership: First Sales and Essential Copies*, 25 BERKELEY TECH. L.J. 1887 (2010).

101. Carver, *supra* note 100.

102. Asay, *supra* note 95.

103. *Id.*

access to content that content owners, on their own, may have been reluctant to grant and which copyright law, as currently interpreted, does not mandate.¹⁰⁴

Furthermore, some of the biggest concerns with a digital right of first-sale may be most readily solved in the context of a contractual relationship between Technological Patrons and content owners. For instance, as mentioned, some of the primary concerns with a digital first sale right are that, unlike physical products, digital copies do not degrade over time and thus can be replicated in perfect condition and transferred an infinite number of times.¹⁰⁵

The contractual terms and conditions between Technological Patrons and content owners could help address some of these concerns. Furthermore, while some instances of piracy will occur no matter what solutions are adopted, technological solutions for allowing transfers of works while ensuring that the transferor does not retain a copy can be built and, indeed, already exist today.

The following sections describe several examples in which Technological Patrons have helped or may help facilitate application of some form of the first-sale doctrine in the digital sphere. Of course, the opposite possibility also exists, and Part IV *infra* discusses the role that antitrust law may play in ensuring that Technological Patrons do not become an obstacle, rather than a conduit, to production of and access to creative content.

1. *E-Book Lending*

As the largest book and e-book distributor in the world, Amazon holds significant sway in the world of commercial literature.¹⁰⁶ Other notable online

104. For instance, in the digital music sphere, early on Apple was able to convince major record labels to make their works available on and through Apple's hardware and software products, subject only to a lightweight digital rights management ("DRM") technology that is relatively simple to bypass. Amazon followed suit by convincing the labels to make their music titles available via Amazon without DRM at all. Apple, Amazon, Google, and others have also struck deals with the major music publishers to allow for cloud-based streaming and storage of music; Amazon even permitted this functionality before getting explicit agreement from the content owners. We take much of this for granted now, but without the involvement of these companies, it is unlikely that this type of access would be available today.

105. See Jonathan C. Tobin, *Licensing as a Means of Providing Affordability and Accessibility in Digital Markets: Alternatives to a Digital First Sale Doctrine*, 93 J. PAT. & TRADEMARK OFF. SOC'Y 167, 177-84 (2011) (discussing generally problems associated with a digital first-sale right).

106. Such power was manifest in the e-book sphere in 2010 and earlier, when Amazon was able to sign agreements with most of the major publishing houses that allowed Amazon to set the retail price of the e-books. That meant that, though the publishing houses sold books to Amazon at whatever wholesale price the parties agreed to, Amazon could sell the book to consumers at a lower price, which it did in many cases. Publishers disliked this because, in their view, it tended to lessen the value of books in the minds of the consuming public. But Amazon preferred it for a variety of reasons, in part at least because the company was thereby able to get consumers hooked into their digital ecosystem. And given Amazon's significant market share, there was little the publishers could do until another behemoth

e-Book retailers include Barnes & Noble, Apple, Google, and Sony.¹⁰⁷ Because content owners increasingly depend on these companies to provide access to their creative content, these Technological Patrons have been able to offer their consumers certain rights that, while not the same as a digital first-sale right, nonetheless approximate it in certain respects.

For instance, both Amazon and Barnes & Noble offer book-lending functionality through their products, meaning that certain e-book titles are eligible to be transferred to others for their use. For Amazon customers, the lending period is currently fourteen days, and any such title may be lent only one time.¹⁰⁸ Lending terms for Barnes & Noble customers are similar.¹⁰⁹

Thus, despite Amazon, Barnes & Noble, and the publishers labeling consumers' access to e-book titles as a license rather than a transfer of ownership to a copy of the work—and thereby eliminating the absolute application of the first-sale doctrine—Amazon and Barnes & Noble have worked with publishers to grant consumers some quasi-first-sale rights. Admittedly, this lending right is not nearly as broad as an absolute first-sale right. But it is more than what the content owners on their own might otherwise offer.

These Technological Patrons have also helped enable another important secondary market that the first-sale doctrine in the physical world permits: libraries. Amazon, Barnes & Noble, and others have worked together with thousands of public libraries across the United States to enable e-book lending from those libraries.¹¹⁰ The number of titles available in this format from any given library differs significantly, and some libraries do not yet provide for e-book lending at all.¹¹¹ Nonetheless, despite these limitations, these digital libraries provide further evidence of the influence that these Technological Patrons exert in altering content owners' behavior in favor of some quasi-first-sale rights.

Of course, such influence has its limits. Technological Patrons have not yet

entered the fray, which Apple did in 2011, only to be accused itself by the Department of Justice of antitrust violations for colluding with the publishers to set e-book prices.

107. *eBook Retailers*, EBOOK ARCHITECTS, <http://ebookarchitects.com/learn-about-ebooks/retailers/> (last visited May 15, 2015).

108. *See Lend or Borrow Kindle Books*, http://www.amazon.com/gp/help/customer/display.html/ref=hp_rel_topic?ie=UTF8&nodeId=200549320 (last visited May 15, 2015).

109. *See How Do I Lend and Borrow a Book*, <http://bookclubs.barnesandnoble.com/t5/NOOK-First-Edition-Technical/How-do-I-lend-and-borrow-a-book/td-p/552254> (last visited May 15, 2015).

110. *Borrow Books from a Public Library*, AMAZON.COM, <http://www.amazon.com/gp/help/customer/display.html/?nodeId=200747550> (last visited May 15, 2015) (detailing how consumers can borrow books from public libraries via Kindle technology); *Digital Borrowing*, <http://www.barnesandnoble.com/u/library-sideload-digital/379003794/> (last visited May 15, 2015) (detailing how consumers can borrow books from public libraries via Barnes & Noble's Nook technology).

111. *Id.*

been able to secure an absolute first-sale right for their customers, and it may not be in their interest to do so. After all, they, too, lose profit when titles are repeatedly transferred among customers without payment. Thus, though Technological Patrons may have been effective in bringing about through private ordering what politics renders nearly impossible, their own commercial interests may stand in the way of securing a broader set of rights.

Furthermore, for a Technological Patron to be in the position to force such concessions from content owners, the Technological Patron may need to be in such a dominant position that an antitrust violation is likely. Put differently, the type of leverage necessary to force an absolute digital first-sale right may, if achieved, also mean that such a result is less likely, since the Technological Patron may be more likely to abuse its dominant position in the opposite direction. Part IV turns to these and related questions.

2. *Shared Accounts*

The first-sale right is approximated via other permissions to which Technological Patrons and content owners have contractually agreed. For instance, consumers can often register their content accounts on multiple devices.¹¹² That means that family members and others wishing to share access to works can pool their titles and other creative works under one account, each register their devices to that account, and thereby access each others' works. This not only applies to e-books, but music, videos, and other creative works as well. In some instances accounts need not even be shared. In such cases the Technological Patron has simply secured the right of family members to each have access to the same content under separate accounts.¹¹³

While this type of functionality is not a perfect substitute for a first-sale right and certainly introduces some inconveniences, it nonetheless helps avoid some of the harsher results of not having the right by allowing access to works among groups of closely associated persons, most typically families.

3. *Digital Resale Marketplaces*

Other technology companies have sought to facilitate digital resales by establishing digital resale marketplaces that approximate the physical world as much as possible and thereby address some of the concerns about digital piracy. For instance, ReDigi, which launched in 2011, offers a service that

112. *Authorize Your Device*, Amazon.com, <http://www.amazon.com/gp/help/customer/display.html?nodeId=201379910> (last visited May 15, 2015) (detailing this feature with respect to Amazon Music).

113. *Family Sharing. Sharing with Your Family Comes Naturally. Now It Comes to All Your Content*, <https://www.apple.com/ios/ios8/family-sharing/> (last visited May 15, 2015) (detailing Apple's program that permits this).

facilitates sales of used music files between customers.¹¹⁴ The platform includes technologies that verify that the files were legally purchased and attempt to prevent the party selling the file from retaining a copy for themselves.¹¹⁵ Capitol Records sued ReDigi in 2013 and won the case, with the court ruling that the first-sale doctrine did not shield ReDigi from copyright liability.¹¹⁶ An attempt to appeal the decision was denied.¹¹⁷

Despite this setback, ReDigi continues to operate and has refined its technologies in a way that, it claims, makes its services legal.¹¹⁸ In fact, the company is planning to expand beyond music into e-books, software, and audiobooks as well.¹¹⁹ As of the date of this writing, no additional lawsuits have been filed against ReDigi based on its updated services; one can buy and sell used music files through the service today. Other more established Technological Patrons, such as Amazon and Google, have filed for and obtained patents covering the operation of digital resale markets.¹²⁰ While they have not yet implemented these ideas, it may be only a matter of time before they do.

Thus, despite the absence of an absolute digital first-sale right, several Technological Patrons have either already sought to approximate its effect or may do so in the near future, both through contractual efforts and litigation. While additional legal challenges are nearly certain, the growing technological nature of the world suggests that technology's dependence on content—and vice-versa—will only grow. As a result, Technological Patrons' involvement in facilitating a digital first-sale right will almost certainly grow, too.

B. *Digital Fair Use*

Technological Patrons have been at the forefront of other technological copyright questions as well. For instance, perhaps the most well-known exception to copyright's set of exclusive rights is what is known as "fair use."

114. *ReDigi Launches World's First Marketplace for Used Digital Music*, WHAT HI*FI? (Oct. 13, 2011), <http://www.whathifi.com/news/redigiReDigi-launches-worlds-first-marketplace-used-digital-music>.

115. *Id.*

116. *See generally* Capitol Records, LLC v. ReDigi Inc., 934 F. Supp. 2d 640 (2013).

117. Ben Sisario, *A Setback for Resellers of Digital Products*, N.Y. TIMES (Apr. 1, 2013), available at http://www.nytimes.com/2013/04/02/business/media/redigi-loses-suit-over-reselling-of-digital-music.html?_r=0.

118. *ReDigi Frequently Asked Questions: Is ReDigi Legal*, <http://newsroom.redigi.com/faq/> (last visited May 15, 2015) (assuring users the current service is legal).

119. *See*, for instance, ReDigi's website homepage, which prominently features the ability to buy and resell music, software, e-Books, and audiobooks, at <https://www.redigi.com/site/> (last visited May 15, 2015). However, as of the date of this writing, only buying used music was possible on the site.

120. David Streitfeld, *Imagining a Swap Meet for E-Books and Music*, N.Y. TIMES (Mar. 7, 2013), <http://www.nytimes.com/2013/03/08/technology/revolution-in-the-resale-of-digital-books-and-music.html?pagewanted=all>.

This exception allows for certain limited uses of copyrighted works, despite such uses technically infringing authors' exclusive rights under copyright.¹²¹ Traditional categories that have qualified as fair use include using copyrighted works for purposes of criticism, news reporting, parody, teaching, scholarship, and research.¹²²

Nonetheless, what constitutes "fair use" has always been a difficult question to answer *ex ante*. The Copyright Act lists four non-exhaustive factors that courts assess in determining whether some use of a work is a "fair use": the purpose and character of the use, the nature of the copyrighted work, the amount of the copyrighted work used, and the use's effect on the market for or value of the copyrighted work.¹²³ Courts often give most weight to the purpose and character of the use factor—i.e., whether the use is "transformative" or not—as well as the use's effect on the market for or value of the copyrighted work.¹²⁴ But no one factor is dispositive.¹²⁵ Like any multi-factor balancing test, then, knowing beforehand how a court will take the factors into account when assessing any given use is often speculative at best. Indeed, some have cited the porous nature of the fair use defense as one of the primary problems with it.¹²⁶

With the rise of the Internet and the digitization of creative works, questions regarding what constitutes "fair use" in the digital sphere have abounded. Because the business models of many Technological Patrons critically depend on uses of digital content that, without a defense of fair use, may infringe copyright, Technological Patrons have been instrumental in litigating claims and successfully establishing a variety of fair uses in the digital sphere. The following sections detail a few of the more prominent examples thereof.

121. U.S. COPYRIGHT OFFICE, FAIR USE, FL-102 (June 2012), <http://www.copyright.gov/fls/fl102.html>.

122. *Id.*

123. 17 U.S.C. § 107.

124. *See* *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 579 (1994) ("The more transformative the new work, the less will be the significance of other factors."); 4 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 13.05 [A] [4] (2005) (stating that the fourth factor often "emerges as the most important, and indeed, central" factor in fair use cases (citations omitted)). *See generally* Joel L. Hecker, *The Wave of the Future or Blatant Copyright Infringement?* 79 N.Y. ST. B.J. 44 (2007) (indicating that courts have traditionally given the most weight in a fair use analysis to the first and fourth factors).

125. *Campbell*, 510 U.S. at 577-78 (indicating that no one factor is dispositive); *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 475-76 (1984) (same).

126. *See, e.g.,* *Monge v. Maya Magazines, Inc.*, 688 F.3d 1164, 1170 (9th Cir. 2012) (quoting *Dellar v. Samuel Goldwyn, Inc.*, 104 F.2d 661, 662 (2d Cir. 1939) (per curiam)) (referring to the fair use doctrine as "the most troublesome in the whole law of copyright."); NEIL WEINSTOCK NETANEL, COPYRIGHT'S PARADOX 66 (2008) (indicating that "[g]iven the doctrine's open-ended, case-specific cast and inconsistent application, it is exceedingly difficult to predict whether a given use in a given case will qualify" as fair use).

1. *Perfect 10's Perfect Storm*

In the well-known *Perfect 10, Inc. v. Amazon.com, Inc.* case, Google secured a victory in the Ninth Circuit relating to permitted digital fair uses.¹²⁷ Perfect 10 is an adult entertainment magazine that operates a subscription-only website.¹²⁸ A number of third parties had copied images of nude models from Perfect 10's site and placed those images on various websites, in violation of Perfect 10's terms of service and copyright rights.¹²⁹ Through Google and Amazon's search technologies, users could access links to the third party sites hosting the infringing images and, in the case of Google's image search, view degraded thumbnail versions of the images without accessing the actual website where the images were hosted.¹³⁰

Perfect 10 ultimately sued both Amazon.com, Inc. and Google for, among other things, violation of their distribution and display rights under copyright.¹³¹ The District Court held that Google's provision of thumbnail versions of the images violated Perfect 10's display rights under copyright law.¹³²

Significantly for purposes of digital fair use, on appeal the Ninth Circuit reversed the district court, holding that Google's provision of the thumbnail versions of the images constituted fair use.¹³³ The court held that the use was highly transformative in that the thumbnail versions indicated the source of information rather than being used for expressive purposes; use of the images in this different context was thus sufficient to satisfy the first factor of the fair use analysis.¹³⁴ And though such images may hypothetically supplant Perfect 10's licensing of the images for mobile devices, the court found that the use was so transformative as part of a search engine that the significant public benefit thereof outweighed whatever commercial advantages Google may have reaped therefrom.¹³⁵

The court weighted the second and third factors—the nature of the copyrighted work and the amount used—only slightly in favor of Perfect 10. Though the works were highly expressive and thus of the type that copyright law was meant to protect, the court found that this factor only weighed slightly in favor of Perfect 10 because the images were already found on the Internet prior to Google displaying thumbnail versions of them.¹³⁶ Perfect 10 was thus

127. 508 F.3d 1146 (9th Cir. 2007).

128. *Id.* at 1157.

129. *Id.* at 1154-56.

130. *Id.*

131. *Id.* at 1157.

132. *Id.*

133. *Id.* at 1168.

134. *Id.* at 1165-66.

135. *Id.*

136. *Id.* at 1167.

not entitled to the enhanced copyright protection that comes with unpublished works, though they remained entitled to some.¹³⁷ On the third fair use factor, Google necessarily used the entirety of the images, so the court deemed this factor as neutral in the overall balance.¹³⁸

On the fourth factor—the use's effect on the market for or value of the copyrighted work—the court found that the thumbnail versions did not harm the market for the full-size images; thumbnail versions were no substitute for the larger ones.¹³⁹ Furthermore, though market harm may be presumed if use of the image is for commercial gain, that presumption does not arise in cases of transformative use because market substitution is less certain.¹⁴⁰ And last, though *Perfect 10* has a licensing market for reduced-size images, there was no finding that Google users had actually downloaded the thumbnail versions for use on cell phones.¹⁴¹ Consequently, the court found this hypothetical harm as merely that.

In sum, Google's efforts to advance image search technology also resulted in litigation that ultimately produced significant guidance on digital fair use. That guidance suggests that at least some courts are amenable to permitting use of copyrighted materials in new technological contexts that provide society significant benefits. Google and other Technological Patrons' interests thus lead them to not only provide patronage that facilitates increased production of and access to a wider variety of creative materials, but also result in these Patrons taking commercial risks to help establish the contours of significant exceptions to copyright rights such as digital fair uses. And with such contours more firmly established, innovators and creative persons alike are better equipped to pursue new lines of creative and innovative activity.

2. *Google Books*

Indeed, subsequent digital fair use cases have relied heavily on the reasoning from *Perfect 10*, including litigation relating to the Google Books project. In 2002 Google began its ambitious project of digitizing the world's available literature.¹⁴² It formed partnerships with many high-profile university and public libraries in a laborious effort to digitize and then make available via search queries the libraries' tens of millions of book titles.¹⁴³

The Google Books project's precise scope has changed over time, but as currently implemented, the service allows for searching the full text of the

137. *Id.*

138. *Id.* at 1167-68.

139. *Id.* at 1168.

140. *Id.*

141. *Id.*

142. *Google Books History*, GOOGLE BOOKS, <http://www.google.com/googlebooks/about/history.html> (last visited May 15, 2015).

143. *Id.*

books that Google has digitized, with some exceptions.¹⁴⁴ Once search results appear, users can access and download the full text of works that are in the public domain.¹⁴⁵ For other titles, the amount of text that appears seems to depend on what Google and the copyright holder have agreed to.¹⁴⁶

For instance, with some works, a preview of the work is available in the form of multiple accessible pages, some of which include the search terms.¹⁴⁷ In such cases, Google and the copyright holder presumably have reached some sort of agreement to make such amounts available to the public.¹⁴⁸

In other cases, only small snippets of text surrounding the search terms are available, presumably because the copyright holder and Google failed to agree to additional permissions.¹⁴⁹ Google Books also provides links to purchase the searched books, both in hardcopy form and e-Book format from the Google Play store, when available.¹⁵⁰

Google's position all along has been that both digitizing the books and making small snippets of them available via search queries constitutes fair use.¹⁵¹ While Google does copy the entire work in each case, which would typically weigh against a finding of fair use, Google and others consider the purpose and character of the copying to be highly "transformative," i.e., the project allows users to search through as well as find books, which functionality allows for a variety of uses beyond what the copyrighted works are traditionally used for.¹⁵² Furthermore, Google and others believe that this type of transformative use fails to negatively affect the market for digitized works—if anything, the Google Books project improves the market for copyrighted works by allowing users to more readily find and purchase them.¹⁵³

Nonetheless, Google's initiation of the project brought immediate reaction from major publishing houses as well as other copyright holders and organizations associated with them. In short, these parties claim that Google did not obtain permission to create digital copies of their works and thus violated their rights under copyright.¹⁵⁴ They also contend that the doctrine of

144. *How Google Books Works*, GOOGLE BOOKS, <https://support.google.com/books/answer/43724?hl=en> (last visited May 15, 2015).

145. *Id.*

146. *Id.*

147. *Id.*

148. *Id.*

149. *Id.*

150. *Id.*

151. *See Perspectives: Legal Analysis*, GOOGLE BOOKS, <https://www.google.com/googlebooks/perspectives/legal.html> (last visited May 15, 2015).

152. *Id.*

153. *Id.*

154. *See* Letter from Peter Givler, Executive Director, AAUP, to Alexander Macgillivray, Senior Intellectual Property and Product Counsel at Google, Inc., *available at* <http://www.bloomberg.com/bw/stories/2005-05-22/the-university-press-assn-dot-s->

fair use does not apply to Google's use of their works.¹⁵⁵ Many of these same parties filed lawsuits in 2005 against Google, some of which suits are still ongoing today.¹⁵⁶

Others have already chronicled the exodus of these lawsuits, including class certification issues that arose during the litigation and the proposed and ultimately rejected settlements of the litigation.¹⁵⁷ The purpose here is not to repeat in detail that helpful work. Instead, it is to highlight the role that Google has played with the Google Books project and the subsequent litigation in helping to further define what constitutes digital fair use. Indeed, the ultimate resolution of these issues provides additional evidence of the interdependencies between technology and copyright as well as more precisely delineating how they may work together going forward.

Naturally, Google has its own interests in pursuing the project; it must have some strategic commercial sense for the company. Otherwise, it would not assume the significant costs and risks associated with the project. Be that as it may, Google's pursuit of its own interests in this case promises to help society generally by creating information about the scope of digital fair use upon which others can then rely.¹⁵⁸

Google, in fact, has already secured significant legal victories in its campaign to win a fair use ruling. Once the district court over the litigation rejected the parties' multiple proposed settlements, Google's fair use arguments again took center stage. On November 14, 2013, U.S. Circuit Judge Denny Chin in Manhattan accepted Google's argument that digitizing millions of books and then making snippets of the text available online via search queries constituted fair use.¹⁵⁹

Importantly, the court sided with Google in concluding that Google's use was transformative in nature by giving the books a new purpose or character.¹⁶⁰ And, it cited the *Perfect 10* case in coming to this conclusion.¹⁶¹ The first factor in the fair use equation thus weighed heavily in favor of Google. The court also reasoned that the project could be expected to boost rather than

objections.

155. *Id.*

156. Complaint, Author's Guild v. Google, 954 F. Supp 2d 282 (S.D.N.Y. 2013) (No. 05 Civ. 8136).

157. See generally, e.g., James Grimmelman, *Future Conduct and the Limits of Class-Action Settlements*, 91 N.C. L. REV. 387 (2013); James Grimmelman, *The Elephantine Google Books Settlement*, 58 J. COPYRIGHT SOC'Y U.S.A. 497 (2011). See also Linford, *surpa* note 6.

158. For an argument that IP law should potentially expand to protect this type of information in order to reward the investments made by parties such as Google, see Michael Abramowicz & John F. Duffy, *Intellectual Property for Market Experimentation*, 83 N.Y.U. L. REV. 337 (2008).

159. Authors Guild, Inc. v. Google Inc., 954 F. Supp. 2d 282 (S.D.N.Y. 2013).

160. *Id.* at 291-92.

161. *Id.*

undermine book sales.¹⁶² Hence, the other most significant factor in the fair use test, i.e., the use's economic effect, also, according to the court, went in Google's favor. Overall, the court held that the project provides society significant benefits while maintaining "respectful consideration" for authors' rights, despite the fact the Google copied highly expressive works in their entirety.¹⁶³

While several layers of appeal are possible—and the plaintiffs have already filed an appeal with the Second Circuit¹⁶⁴—the district court ruling nonetheless provides some interim clarification of what constitutes fair use in the digital sphere, at least in one major circuit: namely, that digitizing entire copyrighted works and then putting them to new, highly beneficial uses without negatively affecting the author's market for the works constitutes fair use.

Furthermore, the Second Circuit recently provided significant clues about how it may handle the plaintiffs' appeal. In June 2014, the Second Circuit in *Authors Guild v. HathiTrust* upheld a district court ruling that HathiTrust's digitization of millions of copyrighted works into a full-text searchable database constitutes fair use of the copyrighted works.¹⁶⁵ The HathiTrust was founded in 2008 as an offshoot of the Google Books project.¹⁶⁶ It is a partnership of many major academic research libraries and includes digital materials from the Google Books project as well as from the Internet Archive, Microsoft, and in-house partner institutions.¹⁶⁷

Unlike the Google Books project, however, for most users the HathiTrust Digital Library ("HDL") does not display actual text from books in response to search queries. Instead, when most users search for terms in the HDL, results appear simply as page numbers of the book in which the terms appear.¹⁶⁸

In applying the four fair use factors in this case, the court ruled that creation of a full-text searchable database is a "quintessentially transformative use" because the result of a term search differs in "purpose, character, expression, meaning, and message from the page (and the book) from which it is drawn."¹⁶⁹ Again, the court cited the *Perfect 10* case in coming to its conclusion.¹⁷⁰ And though the nature of the copyrighted work—the second factor in the fair use analysis—might technically weigh in favor of the

162. *Id.* at 292-93.

163. *Id.* at 293.

164. Nicholas Tomsho, *Authors Guild Files Appeal in Google Copyright Claim*, JURIST (Apr. 12, 2014, 11:30 AM ET), <http://jurist.org/paperchase/2014/04/authors-guild-files-appeal-on-copyright-claim-against-google.php>.

165. 755 F.3d 87 (2d Cir. 2014).

166. *Id.* at 90.

167. *Id.*

168. *Id.* at 91. For those with certified print disabilities—or any disability that prevents a person from effectively reading printed material—the HDL does provides access to the full text of copyrighted works.

169. *Id.* at 97.

170. *Id.*

plaintiffs, that factor is not dispositive, according to the court, particularly in cases where the use is highly transformative, as is the case with the HDL.¹⁷¹

The court ruled that the last two factors of the fair use test—the amount used and the economic effect—also weighed in favor of HathiTrust. First, copying the entire contents of each book was necessary in order to enable HathiTrust's transformative use of the works.¹⁷² And second, the court reasoned that the plaintiffs failed to demonstrate that the HDL acts as a substitute in the marketplace for the original works.¹⁷³

Of course, the Second Circuit may rule differently in *Authors Guild v. Google, Inc.* because the search queries in the Google Books project do result in retrieval of snippets of text from the books in certain cases. Nonetheless, it would seem to require some mental gymnastics for the Second Circuit to come to a different conclusion in that case while remaining consistent with its ruling in *Authors Guild v. HathiTrust*.

After all, the Google Books project is still in all important respects the same as the HDL—namely, a searchable full-text database of copyrighted works—and thus the analysis relating to the first factor of the fair use equation should be the same: the use is highly transformative. The second and third factors of the fair use test relating to the nature of the copyrighted work and the amount used should also play out no differently. That is, while copyright law is meant to protect the types of works copied, the fact that the use is highly transformative should outweigh this factor as it did in the *HathiTrust* case. And, as in the *HathiTrust* case, Google necessarily copied the entire contents of each title in order to produce the searchable database.

The text retrieval element of the Google Books project should only affect the fourth factor of fair use, if any, i.e., the economic effect of the use on the market for or value of the copyrighted works. But it seems unlikely that the Second Circuit will rule that the snippets that Google displays actually substitute for the original works—most obviously because they do not. Presumably, then, the result will be the same on this factor in both cases, and the overall result will be, too.

Given the highly unpredictable nature of litigation, it is of course possible that the Second Circuit could come to a different conclusion on the basis of these or other differences between the two databases. Furthermore, even assuming a Google victory in the Second Circuit, other circuits, as well as the Supreme Court, would have to weigh in before additional certainty could be obtained. Nonetheless, for those that support the Google Books project and the legal outcomes thus far, there is certainly reason for optimism.

In sum, Google's pursuit of the Google Books project promises to provide significant benefits to society, to some extent regardless of the litigation's

171. *Id.* at 98.

172. *Id.* at 98-99.

173. *Id.* at 90-101.

outcome. While this form of Technological Patronage may align with Google's strategic commercial vision, it should also ultimately provide society with significant information about the scope of digital fair use as well as, potentially, greater access to and information about the works themselves. The final rulings relating to fair use should thus help facilitate greater creative and innovative activities by creating greater certainty about what is permissible in the interrelationship between technology and copyright.

Of course, the opposite may also be true. If the ultimate fair use rulings were so broad that they undermined copyright owners' ability to obtain economic rewards for their works, they may have the effect of dampening the economic incentives upon which copyright law is predicated. But if one believes the courts' and others' reasoning about the economic impact of Google's and others' digitization of copyrighted works on the original works—and there seems to be good reasons to do so—then such Technological Patronage may instead enhance copyright holders' fortunes rather than diminish them.

Hence, the Google Books project and resulting litigation are further evidence of the interdependencies between Technological Patronage and copyright in a broader creative system. The institution of copyright helps generate creative works, which in turn trigger technological innovation aimed at making greater use of those works, which then facilitates such uses in ways that promote additional creative and innovative activity. And the cycle goes on. Though it may not always be virtuous, it nonetheless contradicts the opposing view that either copyright or technology is the key to creative output. In today's world, they both are.

C. *Software's Copyright Problem*

Technological Patrons have also recently been at the forefront of helping solve some of the biggest questions regarding software's copyrightability. In general, software is subject to copyright protection in the U.S.¹⁷⁴ Congress, courts, and even international treaties all mandate as much.¹⁷⁵ At the same time, copyright is only meant to extend to the expression of ideas, not the underlying ideas themselves. Indeed, the U.S. Copyright Act expressly

174. 17 U.S.C. § 101 (2014) (defining a computer program as “a set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result.”). Computer programming is not specifically enumerated as subject to copyright protection in the Copyright Act, as many other categories of works are, but according to some courts it is implicitly included as a literary work. *See* *Computer Assocs. Int'l., Inc. v. Altai, Inc.*, 982 F.2d 693, 702 (2nd Cir. 1992) (indicating that “[w]hile computer programs are not specifically listed as part of the . . . statutory definition, the legislative history leaves no doubt that Congress intended them to be considered literary works.” (citations omitted)); *see also* 17 U.S.C. § 102(a) (2014).

175. *Id.*; Agreement on Trade Related Aspects of Intellectual Property Rights, art. 10(1), Apr. 15, 1994, 33 I.L.M. 81

excludes from copyright protection any “idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied.”¹⁷⁶ It’s traditionally left to patent law to protect these categories to the extent that they meet the requirements of the Patent Act.

Because software is by definition functional—in general it can be described as a series of instructions to bring about some result—it has proven difficult for courts to precisely delineate which aspects of software deserve copyright protection as original and creative expressions of the underlying idea, and which aspects fall within the categories mentioned above, for which Congress has expressly foreclosed copyright protection, and for which patent protection may be more appropriate.

One of the more significant questions about software copyrightability is whether application programming interfaces (“APIs”) are subject to copyright.¹⁷⁷ In general, APIs are a set of software tools and instructions meant to help software developers build software programs that work within the technological environment for which the APIs were created.¹⁷⁸ In other words, APIs enable distinct software programs to effectively communicate and exchange information with each other. For instance, APIs enable a host of useful things that most take for granted: logging into a website using one’s Facebook credentials; cutting and pasting between distinct software programs; using non-Microsoft programs on devices powered by Microsoft Windows; obtaining Google Maps results on Yelp; and the list goes on. APIs thus allow for interoperability between software programs by allowing them to work together. And they are increasingly crucial in a digital ecosystem in order to enable interactions between heterogeneous platforms and thereby unlock latent value.¹⁷⁹

In some respects, APIs would seem to be exempt from copyright protection. After all, at some level they can clearly be described as a system, method of operation, or procedure. To illustrate with a simplistic example: in order for Developer A’s program to operate with and effectively exchange information with Developer B’s program, Developer B’s APIs dictate the

176. 17 U.S.C. § 102(b) (2014).

177. See Pamela Samuelson, *The Strange Odyssey of Software Interfaces and Intellectual Property Law* (2008), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1323818 (tracing the evolution of how APIs have and have not been protected under IP law). See generally John Harilee, *The Protection of the Unpublished Application Protocol Interface Under Copyright Law*, 4 VA. J. L. & TECH. 6 (1999) (addressing this question over a decade ago).

178. See generally Brian Proffitt, *What APIs Are and Why They’re Important*, READWRITE (Sept. 19, 2013), <http://readwrite.com/2013/09/19/api-defined> (describing how APIs work).

179. Vinod Baya & Ted Shelton, *Interview with Sam Ramji*, PRICEWATERHOUSECOOPER, <http://www.pwc.com/us/en/technology-forecast/2012/issue2/interviews/interview-sam-ramji-apigee.jhtml> (last visited Jan. 25, 2015).

parameters for doing so. Developer A must follow specific procedures in order for Developer A's program to interoperate with Developer B's program; generally the APIs will dictate that certain source code headers—one might view them as tokens or keys—be used in order to successfully trigger certain functions from and compatibilities with Developer B's program. As such, it is difficult to describe APIs as anything other than a system, method of operation, or procedure that the API originator has developed in order to allow others to create programs that interoperate with their own.

Indeed, some courts have appeared to follow this logic. For instance, in an important Ninth Circuit case, *Sega Enterprises v. Accolade Inc.*, the court indicates that the interface specifications—or parts of the APIs—of the Sega game console were unprotectable elements of the copyrighted software because, even if they were expressive in some measure, they were necessary to use in order to realize compatibility with the Sega game console.¹⁸⁰ Thus, Accolade maintained a successful fair use defense to its copying and decompiling of Sega's entire game console software in order to obtain access to the non-protectable pieces of the APIs and therewith create Sega-compatible games.¹⁸¹

But does that mean third parties can replicate the APIs for their own purposes? In other words, if a party uses the APIs not in order to create a compatible software program, but instead to augment their own APIs and software programs, does the result change? Or should these questions even matter? After all, if the APIs are uncopyrightable and some other form of protection, such as a patent, does not apply, then third parties should be able to use them as they will. This and other related questions are the focus of one of the most important software copyright decisions issued to date, as discussed more fully below.

1. *Android's Java Problem*

Google's Android software has become the world's most popular software platform for mobile devices, including smartphones, tablets, gaming consoles, and others.¹⁸² Google licenses Android under a variety of permissive open source software licenses that make it accessible to parties other than just Google.¹⁸³ It thus powers devices from a variety of companies, including LG, Samsung, Amazon, Motorola, and many others.¹⁸⁴ As of November 11, 2013,

180. 977 F.2d 1510, 1524-26 (9th Cir. 1992).

181. *Id.*

182. Steven Levy, *New Android Boss Finally Reveals Plans for World's Most Popular Mobile OS*, WIRED (May 13, 2013, 6:30 AM), <http://www.wired.com/2013/05/exclusive-sundar-pichai-reveals-his-plans-for-android>.

183. *Licenses*, ANDROID, <https://source.android.com/source/licenses.html> (last visited Jan. 25, 2015).

184. Lisa Mahapatra, *Android Vs. iOS: What's the Most Popular Mobile Operating*

Android was used on 43% of the world's smartphones, making it by far the most popular mobile software platform in the world.¹⁸⁵

Part of Android's ubiquity and usefulness stems from its incorporation of Java APIs. Sun Microsystems originally developed the Java APIs; Oracle Corporation subsequently acquired Sun Microsystems and thus ownership of the Java APIs.¹⁸⁶ Sun developed the APIs to help programmers solve a ubiquitous problem: having to create a new version of a software program for every different technology platform in order for the program to operate properly on each.¹⁸⁷ The Java APIs helped solve this problem by enabling software developers to create programs once that could then operate on any number of different technological platforms.¹⁸⁸

When building Android, Google elected to copy many aspects of the Java APIs into the Android ecosystem. Google did so largely because programmers were already familiar with many of the functionalities that the Java APIs permitted. Thus, Google decided to incorporate many of the same functionalities into Android so that programmers would have an easier time working with and adopting Android.¹⁸⁹

Google thus copied the basic structure, sequence, and organization of 37 specific Java APIs into the Android platform.¹⁹⁰ In some cases Google also copied from the Java APIs single words or short lines of software source code. Google copied this "declaring code" into Android because, without doing so, the pertinent Java API would not work as intended.¹⁹¹ Google also copied entire files of source code in several instances.¹⁹² But in nearly all other cases, Google created its own "implementing code," the software that actually carries out the functions specified by the declaring code within the Java APIs.¹⁹³

Oracle ultimately brought copyright infringement claims against Google on the basis of Google's use of the Java APIs within Android.¹⁹⁴ Google answered

System In Your Country, INTERNATIONAL BUSINESS TIMES (Nov. 11, 2013, 3:22 PM), <http://www.ibtimes.com/android-vs-ios-whats-most-popular-mobile-operating-system-your-country-1464892>.

185. *Id.*

186. Larry Dignan, *Oracle Buys Sun; Now Owns Java; Becomes a Hardware Player*, ZDNET (Apr. 20, 2009, 4:44 PM GMT), <http://www.zdnet.com/blog/btl/oracle-buys-sun-now-owns-java-becomes-a-hardware-player/16598>.

187. *See generally History of the Java™ Programming Language*, WIKIBOOKS, http://en.wikibooks.org/wiki/Java_Programming/History (last modified Jan. 20, 2015).

188. *Id.*

189. *Oracle Am., Inc. v. Google Inc.*, 872 F. Supp. 2d 974, 978 (N.D. Cal. 2012).

190. *Id.* at 977-79.

191. *Id.*

192. *Id.*

193. *Id.*

194. The original suit also included patent infringement claims. *See Oracle Sues Google Over Android*, REUTERS (Aug. 13, 2010, 2:23 AM EDT), <http://www.reuters.com/article/2010/08/13/us-google-oracle-android-lawsuit-idUKTRE67B5G720100813>. But Oracle ultimately lost on the patent claims. *Oracle*, 872 F.

the suit by, among other things, arguing that the APIs were not subject to copyright and, even if they were, Google's use of them constituted fair use.¹⁹⁵ In a highly anticipated decision, the district court found that the basic structure, sequence, and organization of the APIs were not copyrightable because they were a system or method of operation,¹⁹⁶ which the Copyright Act expressly excludes from copyright protection, as described above.¹⁹⁷

The district court also found that copying the declaring code could not constitute copyright infringement because the merger and short phrase doctrines under copyright law barred copyright for that specific code.¹⁹⁸ That is, copyright generally only protects the expression of an idea, not the idea itself. And when only one or a limited number of ways exist to express a particular idea, the idea is said to merge with the expression, whereby copyright protection ceases for that expression.¹⁹⁹ Furthermore, copyright generally does not protect names or short phrases.²⁰⁰

The district court reasoned that because only one way exists to express the declaring code in order for it to operate as intended, the idea behind it merges with the expression, and copyright protection is thereby foreclosed.²⁰¹ Furthermore, because the declaring code is in each instance typically a single word or short line of software code, the short phrase doctrine also prevented the declaring code from obtaining copyright protection.²⁰²

Finally, because the district court deemed that the Java APIs were not subject to copyright—or at least the parts of the APIs that Google copied—it found no need to order a new trial on the issue of fair use.²⁰³ The original jury had failed to resolve the issue, resulting in a “hung jury” on the fair use question.²⁰⁴

Oracle appealed the district court's decision, which normally would have gone to the Ninth Circuit.²⁰⁵ But because the original suit included assertions of patent infringement, the Court of Appeals for the Federal Circuit, which has

Supp. 2d at 976. (“In phase two, the jury found no patent infringement across the board.”)

195. *Oracle*, 872 F. Supp. 2d at 975-76.

196. *Id.* at 976-77.

197. *See* 17 U.S.C. § 102(b) (2014).

198. *Oracle*, 872 F. Supp. 2d at 996-98.

199. *Id.*

200. 37 C.F.R. § 202.1(a) (2015).

201. *Oracle*, 872 F. Supp. 2d at 996-98.

202. *Id.*

203. *Id.* at 1001-02.

204. Rachel King, *Oracle v. Google Jury Returns Partial Verdict, Favoring Oracle*, CNET (May 7, 2012, 11:30 AM PDT), <http://www.cnet.com/news/oracle-v-google-jury-returns-partial-verdict-favoring-oracle>.

205. *See* Anthony J. Dreyer et al., *Federal Circuit Overturns Oracle v. Google and Potentially Widens Debate Over Copyright Protections*, SKADDEN, n. 1 (May 15, 2014), <http://www.skadden.com/insights/federal-circuit-overturns-emoracle-v-googleem-and-potentially-widens-debate-over-copyright-#topftn1>.

nationwide jurisdiction over appeals involving patent assertions, heard the appeal.²⁰⁶

The Federal Circuit reversed the district court on nearly every important point. First, it emphatically held that the declaring code is subject to copyright because Oracle had infinite options as to the selection and arrangement of the thousands of lines of software that Google, in the cumulative, copied.²⁰⁷ Furthermore, the court held that the short phrase doctrine does not bar copyright in this instance because the 7,000 lines of declaring code that Google copied should be viewed in the cumulative rather than as individual lines or words.²⁰⁸

The Federal Circuit also concluded that the general structure, sequence, and organization of the Java APIs were subject to copyright. The Federal Circuit found that the district court failed to follow binding Ninth Circuit precedent—which, according to it, holds that copyright can protect the expression of a process or method—and instead followed precedent from another circuit.²⁰⁹ Furthermore, even the precedent upon which the district court relied was distinguishable from the facts in the present case.²¹⁰ The Federal Circuit thus concluded that because Oracle employed creative choices in expressing the ideas underlying the Java APIs, that original work was subject to copyright protection, despite whatever functional elements it entailed.²¹¹

On the fair use question, the Federal Circuit remanded the case for a new trial on the issue. Although in its review of the fair use factors the court seemed to side with Oracle's position that Google's use of the APIs was not fair use, the court concluded that enough material facts were still in dispute that it could not decide the issue.²¹²

2. *An Analysis*

This landmark decision has spawned significant controversy in the technology industry, with some arguing that the decision could prove disastrous for software innovation,²¹³ while others believe the court came to exactly the correct conclusions.²¹⁴ Google, of course, has a number of options. It could

206. *Id.*

207. Oracle Am., Inc. v. Google Inc., 750 F.3d 1339, 1361 (Fed. Cir. 2013).

208. *Id.* at 1362-63.

209. *Id.* at 1365-68.

210. *Id.*

211. *Id.* at 1367.

212. *Id.* at 1376-77.

213. Russell Brandon, *Federal Court Overturns Google v. Oracle Decision, Setting Disastrous Precedent*, THE VERGE (May 9, 2014, 1:53 PM), <http://www.theverge.com/2014/5/9/5699958/federal-court-overturns-google-v-oracle>.

214. Florian Mueller, *Oracle Wins Android-Java Copyright Appeal: API Code Copyrightable, New Trial on Fair Use*, FOSS PATENTS (May 9, 2014), <http://www.fosspatents.com/2014/05/oracle-wins-android-java-copyright.html> (largely

request an en banc review of the decision with the Federal Circuit, though the tenor of the original decision from the panel may suggest doing so will be futile.²¹⁵ It could also seek a decision from the Supreme Court, which it has recently done.²¹⁶

If the Supreme Court were to deny its petition for a writ of certiorari, then a new trial on the fair use question would occur unless Google were to pursue en banc review at the Federal Circuit. Based at least on the Federal Circuit's opinion, Google's chances to prevail on the fair use issue appear unpromising.

Generally, the Federal Circuit's decision reflects an expansive view of software copyrightability.²¹⁷ Essentially, the court suggests that so long as the software developer had some choices as to how to structure and design the APIs, the APIs are entitled to copyright protection. That is not a high threshold, and admittedly copyright law generally does not require much before a work becomes subject to copyright.

Part of what seems to underlie the court's reasoning is that Google did not copy the Java APIs in order to make them interoperable with Oracle's Java platform, but instead used them in order to create their own, potentially competing system that in fact is not compatible with Oracle's Java platform. Hence, the Federal Circuit calls Google's compatibility arguments confusing and points to evidence presented at the district court level indicating that Google adopted the Java APIs in order to make adoption by programmers more seamless.²¹⁸

Of course, Google's compatibility argument is more nuanced than that; part of its rationale in adopting Java APIs is because developers that have written programs using Java can then use those programs within Android without having to completely rework the program. But the court dismissed this argument summarily, indicating that it had no evidence proving this point and that, in any event, the copyrightability of Oracle's software does not rest on Google's compatibility needs.²¹⁹

One key, unresolved issue stemming from this decision, therefore, is what role does interoperability play in the software copyrightability analysis? The Federal Circuit suggests it is to be considered at the time of creation of the software only; that is, if interoperability concerns dictated a software developer's creative choices in designing the software, then those aspects of the

applauding the ruling).

215. *Id.* (suggesting that a full-court review would probably not change the outcome).

216. Jonathan Band, *Supreme Court Reviews Google v. Oracle Petition; Interoperability Ruling Under Scrutiny*, Disruptive Competition Project (Jan. 9, 2015), <http://www.project-disco.org/competition/010915-supreme-court-reviews-google-v-oracle-petition/>.

217. See Dreyer, *supra* note 205; Pamela Samuelson, *Guest Post: Are APIs Patent or Copyright Subject Matter*, PATENTLYO (May 12, 2014), <http://patentlyo.com/patent/2014/05/copyright-subject-matter.html>.

218. *Oracle*, 750 F.3d at 1371.

219. *Id.*

work so dictated may not be copyrightable.²²⁰ Interoperability concerns of third parties only become relevant, if at all, in a fair use analysis.²²¹

But though the Federal Circuit purports to be applying Ninth Circuit law in so holding, several Ninth Circuit cases as well as cases from other circuits suggest that interoperability plays out differently in the software copyrightability analysis. *Sega*, for instance, may be interpreted to support the proposition that APIs absent the implementing code, to the extent their use is necessary in order to enable interoperability, are exempt from copyright protection as functional elements of the software.²²² Other courts seem to agree.²²³

Of course, in Google's case, the Java APIs were used not to ensure compatibility with Oracle's Java Platform specifically, but rather with software programs that others write using the Java programming language and Java APIs. Whether that specific difference entails a different result is yet to be determined. But the policy behind allowing for interoperability in spite of copyright—namely, in order to encourage greater competition, innovation, and creative activity—would seem to apply in Google's case as well.

Indeed, if Google's case ultimately becomes a decision of fair use, arguments in favor of fair use are not altogether without merit, despite the Federal Circuit taking a rather grim view of their prospects. On the first factor—the purpose and character of the use, including whether the use is for commercial or nonprofit purposes—Google can make a case that what it has done with the Java APIs supersedes anything that Oracle has been able to achieve with them. Oracle has never successfully implemented the Java APIs as part of smartphone software platform.²²⁴ Google has, and completely rewrote the implementing software code for the platform, as well as augmenting the 37 Java APIs with hundreds more of its own. Google will face challenges in winning this point, since in some nominal sense it has simply used the APIs in the manner for which they were originally intended—that is, as APIs. But Google has arguably put them into a completely different context and helped transform the smartphone and mobile computing industry by doing so. Thus, though the use is certainly commercial in nature, if one accepts the view that the use of the APIs is highly transformative, the commercial aspect alone should not prove dispositive.

On the second factor—the nature of the copyrighted work—software is by nature utilitarian, and so logically more aspects of it should be found functional, and therefore uncopyrightable, than other types of creative works.

220. *Id.*

221. *Id.* at 1371-72.

222. Samuelson, *supra* note 217.

223. *Id.*

224. Larry Dignan, *Google: Oracle, Sun, Blew It On a Java Smartphone*, CNET (Apr. 18, 2012, 5:46 AM PDT), <http://www.cnet.com/news/google-oracle-sun-blew-it-on-a-java-smartphone>.

Indeed, such a proposition finds support in the *Sony* and *Sega* cases mentioned above. And particularly in a case where a party such as Google copies aspects of the Java APIs primarily in order to replicate the categories of functions that the APIs provide for and which many in the industry expect—all the while undertaking the significant effort to write the code that actually implements the function itself—this factor would seem to support Google’s position.

On the third factor of the fair use analysis—the amount of the copyrighted work used—some of this analysis depends on how it is framed. For instance, Google only used 37 of hundreds of available Java APIs. But viewing the issue from a different angle, if each of the APIs is viewed as a separate work, then Google copied 37 separate works in their entirety. Of course, this is not how the Federal Circuit viewed the APIs—they viewed them in the cumulative, including the declaring code, in coming to the conclusion that the work included significant expressive choice. Overall, then, Google seemed to only use that number of the Java APIs that it deemed were essential for software developers accustomed to Java to have.

The final factor—the use’s effect on the market for or value of the copyrighted work—may be the most difficult obstacle to Google winning a fair use argument. Before Oracle acquired Sun, the company had a long history of licensing the APIs; indeed, licensing APIs is not uncommon in the world of technology. Of course, it seems questionable to foreclose a finding of fair use simply because a party is willing to license assets and others are willing to pay, though some courts have engaged in such circular reasoning.²²⁵ Indeed, risk-averse parties may regularly pay for things that the law may not actually require of them.²²⁶ For instance, a prominent engineer at Google notoriously indicated in the run-up to the *Oracle v. Google* decision that he was under the impression that the company would need to license the APIs from Sun Microsystems, and Google in fact engaged in extensive negotiations with Sun Microsystems to license the APIs, though they never reached a deal.²²⁷

While all of this may seem damning for Google’s fair use case, the question nonetheless remains what the market impact of Google’s use was. Oracle clearly lost some revenues from the lost licensing opportunity to Google. But Oracle has never successfully developed a smartphone/tablet

225. See generally *Am. Geophysical Union v. Texaco Inc.*, 60 F.3d 913 (2d Cir. 1994) (rejecting Texaco’s fair use argument, largely on the basis that copying individual journal articles hurt the licensing market for the individual articles even though, at the time, the market was not well-developed).

226. See generally James Gibson, *Risk Aversion and Rights Accretion in Intellectual Property Law*, 116 *YALE L.J.* 882 (2007) (arguing generally that risk aversion may lead to an expansion of intellectual property rights, or at least how parties and courts perceive the scope of intellectual property rights).

227. Brandon Bailey, *Larry Page Evasive With Oracle’s Lawyer, But Admits Google Never Obtained Java License*, *SAN JOSE MERCURY NEWS* (Apr. 18, 2012, 9:55:02 AM PDT), http://www.mercurynews.com/ci_20424638/google-oracle-trial-larry-page-admits-android-java-licence (detailing some of the history of the negotiations between the two sides).

software platform using its Java APIs, nor has it successfully licensed anyone else to do so. So Google's use of the APIs in such a platform does not appear to undercut any revenues that Oracle expects.²²⁸ True, Oracle is free to continue to try do create such a platform or license someone else to do so.. But preventing Google from using the APIs, on the mere supposition that Oracle may eventually do so, or may eventually successfully license someone else to do so, seems like the wrong result.

In fact, in some respects Google's use of the Java APIs may actually enhance Oracle's market for the Java APIs. Because Google incorporated the APIs into its own platform, software developers that use Java now need not switch APIs. While Google's use of the APIs may not be the only factor in encouraging developers to continue to use Java, it may be a significant one. Android's incorporation of Java APIs may thus actually bolster Java as an industry standard, which in the future may mean that third parties are more likely to use Oracle's Java-related products for other purposes for which Oracle actually provides technological solutions.

3. Conclusion

In sum, many unanswered questions remain following the Federal Circuit's decision in *Oracle v. Android*. Many feel that the court reversed decades of well-settled law that allowed for use of functional aspects of works in order to permit interoperability.²²⁹ And yet others feel that the court's decision helps protect valuable business assets, which, in the end, should help promote innovation.

Though the final result will certainly have significant effects on creativity and innovation in various industries, the larger point for purposes of this Article is to highlight the role that Google and others play in helping address some of the more contentious issues in copyright law today. In other words, while the specific results matter, the meta-result—that is, having additional guidance at all—is also crucial in enabling other parties to take into account risks in pursuing creative and innovative activities. Technological Patrons such as Google thus take on significant financial risks in pursuing activities that, because of interdependencies between technology and copyright, implicate vital copyright questions, with respect to both software and other digital content. They therefore not only provide significant patronage that facilitates creative activity directly, but also ultimately help resolve the meaning of the law itself, which in the end also facilitates creative as well as innovative

228. Larry Dignan, *Google: Oracle, Sun Failed at Java Smartphone Now Stop Whining*, ZDNet (Apr. 18, 2012, 05:22 GMT), <http://www.zdnet.com/blog/btl/google-oracle-sun-failed-at-java-smartphone-now-stop-whining/74561> (highlighting Google's evidence that Sun/Oracle had tried but failed multiple times to develop a Java-based software platform for smartphones).

229. See Samuelson, *supra* note 217.

activities.

IV. TECHNOLOGICAL PATRONAGE'S DARK SIDE

This Article has thus far explored the significant ways in which Technological Patrons such as Google, Amazon, and others facilitate creative activity by both (1) contributing tools and content to society that lead to increased production of and access to a more diverse set of creative works, and (2) helping resolve some of the thornier issues in copyright law by means of both contractual arrangements and litigation. In so doing, Technological Patrons aid copyright in achieving its constitutional purpose. And, of course, Technological Patrons provide such support in part due to copyright and the commercial possibilities associated with it. Technology and copyright are thus increasingly dependent on each other, particularly as the world grows increasingly technological.

But Technological Patronage may also come with its set of warts. Though more and more companies have concluded that openness and collaboration are often a successful business strategy, they certainly do not always follow that mantra. Particularly in cases where Technological Patrons have significant market position, they may use that position to pursue what they perceive as their commercial interests at the expense of other considerations. In such cases, one casualty can be the purposes behind copyright, in which cases the synergies between copyright and Technological Patronage explored above may break down.

But, as this section will argue, the remedy to such ills is not in general to bolster copyright. The ill to be corrected in many such cases is market concentration, not an excessively weak copyright. And the natural antidote to excessive market concentration is antitrust law, not copyright law.

This Part will first review some of the more recent situations where Technological Patrons have used their superior market positions to jeopardize access to and production of creative works. It will also explore why antitrust law is the appropriate, even if not always effective, means of addressing these types of scenarios.

A. *Amazon's Hachette Job*

Amazon is a dominant player in the world of e-Books and e-Readers. Though the company does not publicly reveal sales figures, a variety of sources suggest it is the clear leader and is poised to remain so, despite significant challenges from the likes of Apple, Barnes & Noble, and Google.²³⁰

230. See Jeremy Greenfield, *Kindle Most Popular Device for Ebooks, Beating Out iPad; Tablets on the Rise*, FORBES (Oct. 30, 2013, 4:26 PM), <http://www.forbes.com/sites/jeremygreenfield/2013/10/30/kindle-most-popular-device-for->

Amazon at times has used this market position to the advantage of consumers. For instance, historically Amazon retained the contractual ability to set retail prices for the e-Books it sold, and it accordingly in many cases sold books at prices below the wholesale prices that it paid the copyright owners.²³¹ Copyright owners naturally disliked this arrangement, since in their view such lower prices tended to devalue books generally.²³² Nonetheless, publishing houses were at a disadvantage in changing it given Amazon's superior market position. Amazon was forced to change this pricing scheme once Apple joined the e-Book fray and agreed to allow publishing houses to set the retail prices, though Apple later came under antitrust scrutiny itself for alleged price fixing with the publishing houses.²³³

But Amazon has also used its superior market position in ways that arguably harm access to and production of creative works. For instance, more recently the company restricted access to and eliminated discounts on offerings from a major publishing house, Hachette, over a purported contractual dispute.²³⁴ In such cases, the synergies between copyright and Technological Patronage may appear to break down.

But in reality, the problem, to the extent that one exists, lies in market concentration rather than having anything intrinsically to do with the relationship between Technological Patronage and copyright in yielding increased creative and innovative activity. In seeking to renegotiate its contracts with Hachette and others, for instance, Amazon does not appear to be exploiting weak rights under copyright. Instead, its leverage is based in its dominant position in the world of e-Books. The most appropriate body of law for such issues is thus antitrust law, not copyright law.

Of course, even if antitrust law were to provide a solution, such solutions may come with a cost. After all, the market sway that Amazon and others have

ebooks-beating-out-ipad-tablets-on-the-rise/ (indicating 40% of people that read e-Books own an Amazon Kindle dedicated e-Reader); Aaron Pressman, *Slowing Ebook Sales May Embolden Publishers in Amazon Spat*, YAHOO! FINANCE (June 26, 2014, 4:28 PM), <http://finance.yahoo.com/blogs/breakout/slowing-ebook-sales-could-hurt-amazon-in-battle-with-publishers-174752232.html> (indicating Amazon is in the lead in the e-Book market and may be still gaining).

231. *What Is the Agency Model for Ebooks? Your Burning Questions Answered*, PUBLISHING TRENDSETTER (May 1, 2012), <http://publishingtrendsetter.com/industryinsight/simple-explanation-agency-model/> (summarizing the differences between the so-called agency model in which the book publisher sets the retailer price and remits 30% of the sale to Amazon; and the wholesale model in which the book publisher sells the book to the retailer at a specified price, and the retailer is able to set the retail price, at its discretion).

232. *Id.* See also Rupert Murdoch: "Amazon Pricing Devalues Books", REUTERS (Feb. 3, 2010, 10:15 AM), available at <http://www.pcpro.co.uk/news/355255/rupert-murdoch-amazon-pricing-devalues-books>.

233. *Rupert Murdoch*, *supra* note 232.

234. Emma Cueto, *Amazon vs. Hachette: Everything You Need to Know About This Feud*, BUSTLE, <http://www.bustle.com/articles/26570-amazon-vs-hachette-everything-you-need-to-know-about-this-feud> (last accessed May 15, 2014).

can lead to significant consumer benefits such as, for instance, quasi-digital first-sale rights and lower prices. Be that as it may, the question nonetheless seems to be most properly handled as a matter of antitrust law, rather than as a copyright issue, since the issue largely relates to potential market imbalances.

B. *YouTube's Indie Label Doomsday*

As noted, YouTube has become one of the most popular ways in the world to access music and video. The site now partners with major record labels and other content owners to host a significant amount of music and video content that users often have been able to access for free.

But YouTube has begun to change its services in response to competitive pressures. Online streaming music services such as Pandora and Spotify have increased competition in the field, offering a variety of enhanced music streaming capabilities that have lured many consumers to their services. Accordingly, YouTube has begun to offer new services meant to compete with the offerings of these and other companies.

For instance, in 2013 Google launched the “Google Play Music All Access” subscription service that allows those paying a monthly fee to access music on demand, ad-free.²³⁵ And more recently, Google announced that it will introduce a subscription-based streaming music service on YouTube that may work in conjunction with the Google Play Music All Access service.²³⁶

As part of being able to introduce this service, Google has sought to negotiate new terms and conditions with major record labels as well as independent artists and labels. But many of the independent labels balked at the terms that YouTube demanded, arguing that accepting the terms was not plausible for them and that major record labels received more favorable conditions than Google offered the independent labels.²³⁷

Initially, Google responded to the concerns of independent labels with a “take-it-or-leave-it” approach, indicating that they would launch the service simply without the music of those refusing the terms.²³⁸ Furthermore, if the independent labels did refuse to sign up to the proposed terms, they would also be shut out from the free, ad-supported version of YouTube.²³⁹ Subsequently,

235. Josh Constine, *Google Launches “Google Play Music All Access” On-Demand \$9.99 A Month Subscription Service*, TECHCRUNCH (May 15, 2013), <http://techcrunch.com/2013/05/15/google-play-music-all-access>.

236. Steven Knopper, *YouTube's new Subscription Service: Indie Labels Speak Out*, ROLLING STONE MUSIC (July 1, 2014, 10:05 AM EDT), <http://www.rollingstone.com/music/news/youtubes-new-subscription-service-indie-labels-speak-out-20140701>.

237. *Id.*

238. *YouTube to Block Indie Labels Who Don't Sign Up to New Music Service*, THE GUARDIAN (June 17, 2014, 10:03 AM EDT), <http://www.theguardian.com/technology/2014/jun/17/youtube-indie-labels-music-subscription>.

239. *Id.*

amid some public uproar, Google delayed the service's launch while seeking to work out contractual issues with the remaining holdouts.²⁴⁰

The YouTube-independent labels scenario may thus parallel the Amazon-Hatchette situation in important respects. In both cases the parties providing the Technological Patronage wield significant bargaining power because their platforms have become so dominant in their respective fields. And if the dominant party in this case, YouTube, does ultimately shut out music from independent labels because of their failure to accede to YouTube's terms, then arguably the synergies between Technological Patronage and copyright collapse as access to and production of music content is hindered rather than facilitated.

But again, the power imbalance does not seem to be rooted in the scope of copyright. That is, limiting the scope of fair use, or eliminating the first-sale doctrine entirely, would not, for instance, remedy the situation. Instead, if anything, the breakdown between Technological Patronage and copyright in yielding access to and production of creative works stems from market concentration. And so as a theoretical matter, the synergies between the two remain possible so long as other bodies of law, such as antitrust, are effectively applied.

But these types of breakdowns do support this Article's theoretical point about copyright in general. In the technological age in which we live, copyright, on its own, is unable to provide authors the means by which to successfully create. Technological Patronage is increasingly necessary, and the two are increasingly interdependent. And as is evident in situations such as with YouTube and Amazon, when providers thereof threaten to withdraw their support, authors, even armed with copyright, can be hard-pressed to succeed. In such cases, antitrust may also be a necessary co-dependent in fostering a healthy creative and innovative landscape.

C. "Closed" Android

The history of the Android software platform also explicates some of the themes discussed above. As mentioned previously, Android has become one of the most popular and important software technologies in the world, powering an array of mobile devices from a host of different parties.

Because Google provides Android under a variety of permissive, open source software licenses, anyone can take Android free of charge and adapt it to their own purposes. This form of Technological Patronage has thus facilitated a significant amount of creative and innovative activity as parties have made use of the provided technologies on a variety of devices.

240. Evan DeSimone, *YouTube Gives Indie Labels a Reprieve . . . For Now*, NMR (July 7, 2014, 1:08 PM), <http://newmediarockstars.com/2014/07/youtube-gives-indie-labels-a-reprieve-for-now>.

But the story of Android is more complicated than that. For instance, for those wishing to have access to Google's suite of applications such as Google Maps, gMail, and others on their Android-powered devices, one must sign Google's so-called "Anti-Fragmentation" Agreement ("AFA").²⁴¹ Among other things, the AFA severely limits Android users' ability to modify Android in ways that Google does not approve.²⁴² Parties remain free to use Android without signing the AFA—Amazon has done precisely that with its own version of Android that powers its mobile devices—but in so doing they are cut off from a set of software programs that Android users have come to expect.²⁴³

In obtaining access to the suite of applications, users are also required to install the entire suite of software programs; no substitutes or deletions are permitted.²⁴⁴ For instance, if a party had its own search application but wanted the rest of the Google programs, it would have to preinstall Google's search application in spite of having its own in order to obtain access to the other Google applications.

Google has also at times restricted access to new releases of the Android software.²⁴⁵ Although Google has publicly committed itself to keeping Android "open" for anyone to use, such incidents may suggest that its commitment can occasionally waver based on presumably commercial self-interests.²⁴⁶

Hence, in providing Technological Patronage in the form of Android, Google has helped create the most popular mobile software platform in the world. But a darker side of such patronage is that this dominance has created certain, perhaps excessive dependencies in others that Google can then exploit to its own advantage. And it may make good commercial sense, in some cases, to do so.

But the larger theoretical point also remains true in the case of Android. That is, resolving this type of issue, if it does need resolution, probably lies in the province of antitrust law. Google's Technological Patronage remains capable of combining with copyright to produce a wide array of creative and innovative works—as it has previously—so long as the competitive landscape remains a healthy one. Some argue it is not so and have recently filed lawsuits to that effect, thereby mirroring in some respects earlier suits against Microsoft

241. Jon Brodtkin, *Google Blocked Acer's Rival Phone to Prevent Android "Fragmentation,"* ARSTECHNICA (Sept. 14, 2012, 9:15 PM MDT), <http://arstechnica.com/gadgets/2012/09/google-blocked-acers-rival-phone-to-prevent-android-fragmentation>.

242. *Id.*

243. Kevin C. Tofel, *What You Need to Know About Open Android and Google's Android Apps,* GIGAOM (Feb. 13, 2014, 10:29 AM PDT), <http://gigaom.com/2014/02/13/android-open-google-licensing-apps-services>.

244. *Id.*

245. *Google Restricts Access To Android Honeycomb,* INT'L BUS. TIMES (Mar. 25, 2011, 4:58 PM), <http://www.ibtimes.com/google-restricts-access-android-honeycomb-277271>.

246. *Id.*

on the basis of its bundling of its software programs.²⁴⁷ Time will tell if the courts and government ultimately agree.

D. *Antitrust Law to the Rescue?*

The preceding sections suggest that antitrust law, rather than copyright, may hold the keys to resolving situations where Technological Patrons act in ways that harm access to and production of creative and innovative works. The basis for that argument is that the problems, if they are problems, are ones of competition rather than rights under copyright.

But triggering antitrust action can be a high bar. For instance, in the case of the Amazon-Hachette spat, many experts suggest that antitrust activity is unlikely; Amazon is simply acting in its own self-interests in seeking to reap the greatest amount of profit from the bargain.²⁴⁸ In other words, the fight between the two is a standard-issue business battle, rather than an antitrust violation.²⁴⁹ In fact, Amazon engaged in similar behavior in 2010 with respect to another major publishing house, without triggering antitrust activity.²⁵⁰

Furthermore, U.S. antitrust law often focuses on behavior that raises prices for consumers; in Amazon's case, its efforts are actually geared towards lowering prices for e-Books, thereby further diminishing the likelihood of antitrust activity against it.²⁵¹ The same may also hold true in the YouTube-independent labels' fight.

The European Union has in some cases been a more fertile ground in terms of bringing successful antitrust actions in such scenarios. For instance, antitrust activity against Microsoft for bundling of its software programs was successful in Europe while largely failing in the U.S.²⁵² To that end, an association of independent music labels recently filed an antitrust complaint with the European Commission against YouTube based on its threats to remove the independent labels offerings from the free version of YouTube if the labels do not accede to YouTube's proposed terms for its subscription service.²⁵³

247. Paul Thurrott, *Google Seeks Dismissal of US-Based Android Antitrust Lawsuit*, WINDOWS IP PRO (July 14, 2014), <http://windowsitpro.com/paul-thurrotts-wininfo/google-seeks-dismissal-us-based-android-antitrust-lawsuit>.

248. Diane Bartz, *Amazon/Hachette Dispute Unlikely to Provoke Regulators, Experts Say*, REUTERS (May 29, 2014, 7:53 PM EDT), <http://www.reuters.com/article/2014/05/29/us-hachette-amazon-com-antitrust-idUSKBN0E92H620140529>.

249. *Id.*

250. *Id.*

251. Robert Levine, *How the Government Blew Its Chance to Rein in Amazon*, VANITY FAIR (June 2, 2014, 1:44 PM), <http://www.vanityfair.com/online/daily/2014/06/amazon-hachette-antitrust-backfire>.

252. See generally Sue Ann Mota, *Hide It or Unbundle It: A Comparison of the Antitrust Investigations Against Microsoft in the U.S. and the E.U.*, 3 PIERCE L. REV. 183 (2005) (comparing the relatively lenient outcome in the U.S. to the heftier fines in the E.U.).

253. Stuart Dredge, *Impala Files EC Antitrust Complaint Over YouTube Indie Label*

Independent labels have initiated similar actions in the U.S.²⁵⁴

It is beyond the scope of this Article to explore precisely how antitrust law may or may not be applied to address such scenarios, or how it may be reformed to do so. Instead, one of the critical points to stress is that copyright's growing interdependence with Technological Patronage in many cases does not appear to require significant changes to copyright law, even in cases where copyright's dependence on Technological Patronage may be excessive, as in some of the scenarios discussed above. At times in the past, expanding copyright in the face of technological advancement has been the response; the DMCA, which, among other things, instituted a variety of prohibitions against circumventing digital rights management ("DRM"), is one such example.

But with the types of Technological Patronage discussed above, addressing potential overdependence with expanded copyright protections seems like a solution that does not match the problem. The problems, if they exist at all, consist of market concentration that expanded copyright rights would do little if anything to alleviate. Such concerns are thus the proper domain of antitrust law, even if current incarnations of antitrust law do not adequately address them.

This point, indeed, supports the general argument of this Article: copyright is not a standalone system for facilitating creative activity, and conceiving of it as such leads to solutions to copyright issues that may often hinder rather than promote creativity. Instead, copyright is an important piece of a broader creative and innovative system, which system includes not only growing amounts of vital Technological Patronage, but antitrust law as well.

V. OTHER LEGAL IMPLICATIONS OF COPYRIGHT'S TECHNOLOGICAL INTERDEPENDENCIES

This Article has, among other things, argued that creative and innovative activities play an important role in facilitating one another. That is, creative activities often have the effect of triggering innovative activities, and vice-versa.

And yet, patent law and copyright law are typically conceived of as independent institutions with different purposes.²⁵⁵ Patent law is generally meant to incentivize and protect inventive and innovative activity, while

Licensing, THE GUARDIAN (June 27, 2014, 11:59 AM EDT), <http://www.theguardian.com/technology/2014/jun/27/impala-youtube-ec-complaint-indie-label-licensing>.

254. Andy Gensler, *Rich Bengloff on A2IM Indie Week, YouTube Licensing; Alleges Majors' Shady Streaming Terms*, BILLBOARDBIZ (June 17, 2014, 3:45 PM EDT), <http://www.billboard.com/biz/articles/news/indies/6121566/rich-bengloff-on-a2im-indie-week-youtube-licensing-alleges-majors>.

255. See Christopher Buccafusco et al., *Experimental Tests of Intellectual Property Law's Creativity Thresholds*, 92 TEX. L. REV. 1921, 1921-31 (2014) (laying out some of the basic differences, both in terms of implementation and purposes, between copyright and patent law).

copyright law aims to encourage and safeguard creative pursuits.²⁵⁶ While some commentators have identified certain commonalities between the two bodies of law in terms of how they go about achieving their separate purposes,²⁵⁷ or suggest that more such commonalities should exist,²⁵⁸ less typical are calls for either body of law to explicitly take into account and seek to facilitate the purposes of the other.²⁵⁹

This Article, in contrast, suggests that both copyright and patent law would be well-served in incorporating changes that facilitate the purposes of the other. In other words, because of the interdependencies between technological innovation and creative activity, the bodies of law meant to encourage each should explicitly acknowledge those interdependencies. Indeed, doing so would arguably unlock latent potential in spurring both creative and innovative efforts.

256. *Id.*

257. *See, e.g.*, WILLIAM M. LANDES & RICHARD A. POSNER, *THE ECONOMIC STRUCTURE OF INTELLECTUAL PROPERTY LAW* 294-300 (2003) (finding many similarities as well as differences between patent and copyright law).

258. *See generally* Irina Manta, *Reasonable Copyright*, 53 B.C. L. REV. 1303, 1340 (2012) (arguing that copyright law might be improved by adopting certain tenets of trademark law when assessing copyright infringement claims). *See generally, e.g.*, Asay, *supra* note 69, at 431 (proposing a conditional independent invention defense to patent infringement); Jeanne C. Fromer, *Claiming Intellectual Property*, 76 U. CHI. L. REV. 719 (2009) (arguing that patent law would do well to adopt claiming elements more typical of copyright law); Jeanne C. Fromer & Mark A. Lemley, *The Audience in Intellectual Property Infringement*, 112 MICH. L. REV. 1251 (2014) (arguing, among other things, that patent law would benefit by adopting some of copyright law's infringement analysis tenets); Maureen A. O'Rourke, *Toward a Doctrine of Fair Use in Patent Law*, 100 COLUM. L. REV. 1177 (2000) (proposing a fair use exception for patent law); Katherine J. Strandburg, *Patent Fair Use 2.0*, 1 UC IRVINE L. REV. 265 (2011) (same); Samson Vermont, *Independent Invention as a Defense to Patent Infringement*, 105 MICH. L. REV. 475 (advocating for adoption of an independent invention defense to patent infringement, similar to what already exists under copyright and trade secret law).

259. *But see generally* Michael A. Carrier, *Increasing Innovation Through Copyright Common Sense and Better Government Policy*, 62 EMORY L.J. 983 (2013) (setting forth a number of proposed reforms to copyright law that may help foster innovation); Peter DiCola, *Copyright Equality: Free Speech, Efficiency, and Regulatory Parity in Distribution*, 93 B.U. L. REV. 1837 (2013) (proposing that different distribution technologies should be treated equally under copyright law so as to avoid slowing innovation); Peter DiCola & David Touve, *Licensing in the Shadow of Copyright*, 17 STAN. TECH. L. REV. 397 (2014) (arguing that copyright shapes, constrains, and also presents opportunities for innovation); Lee, *supra* note 2 (arguing for "technological fair use"); Gregory N. Mandel, *To Promote the Creative Process: Intellectual Property Law and the Psychology of Creativity*, 86 NOTRE DAME L. REV. 1999 (2011) (arguing that an antecedent to artistic and technological innovation is creativity, and that intellectual property law generally, therefore, should not be implemented in ways that undermine creativity). These proposals, while advocating for measures under copyright law that may help avoid impeding innovation, nonetheless fall short of a call for explicitly incorporating into patent and copyright law measures meant to achieve the purposes of the other. That is, copyright should be reformed so that one of its primary goals is to facilitate innovation, not just avoid hampering it. And the same applies to patent law vis-à-vis copyright law.

Others have advocated measures that, if adopted, would arguably help achieve such purposes. For instance, Edward Lee has proposed a “technological fair use” defense to copyright infringement that more explicitly takes into account the technological landscape and its effects on digital content creation.²⁶⁰ Yet others have proposed expanding the experimental use defense under patent law, which, depending on how such a proposal were implemented, could better protect nascent creative activities that otherwise might infringe relevant patents.²⁶¹ And the list goes on.²⁶²

The point here is not to review in detail and either recommend or disavow such proposals, nor is it to make any additional specific proposals about how copyright should take into account the purposes of patent law, and vice-versa; doing so is beyond the scope of this Article. Instead, this Article suggests that exploring these and related proposals is a vital area for future research in order to better equip both patent and copyright law to facilitate the interdependencies between technological innovation and creative activity that this Article has highlighted.

Doing so may seem to some to overburden the separate bodies of law. After all, both copyright and patent law have enough to worry about, let alone having to try to address their effects on the purposes that the other body of law is meant to realize. But arguably many of each body of law’s problems arise in part by conceiving each of them as standalone systems sufficient in and of themselves to achieve their stated goals. This Article’s exploration of the interdependencies between the two suggests such is not the case.

Nor is it constitutionally required. If anything, in fact, the Constitution’s Intellectual Property Clause seems to treat patent and copyright law as interrelated. The Clause grants Congress the power to enact intellectual property law, reading in its entirety: “To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.” The Clause thus does not indicate that “Authors” are only relevant to the progress of “Science,” or that only Inventors are germane to the “useful Arts.” Instead, one reasonable—and, in light of this Article’s arguments, appropriate—interpretation of the text is that smartly securing and limiting rights to authors and inventors alike will have a productive impact on the progress of both “Science and the useful Arts.”²⁶³

260. Lee, *supra* note 2.

261. Rochelle Cooper Dreyfuss, *Does IP Need IP? Accommodating Intellectual Production Outside the Intellectual Property Paradigm*, 31 *CARDOZO L. REV.* 1437, 1469-70 (2010) (arguing that the experimental use defense to patent infringement should be expanded).

262. See *supra* note 259.

263. See Dotan Oliar, *The (Constitutional) Convention on IP: A New Reading*, 57 *UCLA L. REV.* 421, 463-64 (2009) (arguing for such a reading of the IP Clause).

CONCLUSION

This Article has argued that copyright, contrary to traditional accounts of its origins, is not an independent means by which to encourage creative activity. Indeed, ironically, the system that copyright was meant to displace—patronage—has resurfaced in a modern-day technological incarnation as a vital complement to copyright in spurring creative activity. That creative activity, in turn, helps trigger additional innovative activity. And the interdependencies between the two are only likely to grow as the world grows increasingly technological in nature.

This account thus suggests that, rather than undermining the creative industries, many forms of technological advancement are instead increasingly necessary to them. Hence, copyright's default response to technological advancement should not be preclusion, like it often has been, but instead inclusion. That inclusion does not require an "anything goes" attitude, but it should at least recognize the technological realities of the broader creative system. Indeed, as a matter of copyright theory, recognizing copyright's interdependencies will go a long way in addressing as a practical matter proposed solutions meant to enhance its creative proclivities.

None of this is meant to suggest that copyright is irrelevant to encouraging creative activity. It remains a vital piece of the puzzle. And, as suggested throughout, it is crucial to helping trigger vast amounts of technological innovation as well, which in turn expands copyright's capacities. But copyright remains only one piece. Recognizing the value and contributions of other pieces, and encouraging their advancement, therefore, should be a vital piece of any effective copyright policy. Indeed, these interdependencies, as well as the text of the Intellectual Property Clause itself, suggest that reforming both copyright and patent law to explicitly advance the purposes of each other is important and justified to unlocking each body of law's full potential.

Of course, not all is rosy in the relationship between Technological Patronage and copyright. As discussed above, at times Technological Patrons may overreach in ways that reduce access to and production of creative works. But in such cases, another piece of the puzzle—antitrust law—seems more appropriate than copyright to addressing issues that largely arise from market concentration. In other words, copyright certainly has an important role to play in the broader creative and innovative system. But overburdening it with tasks within that system that it is ill-fitted to perform not only fails to solve the perceived problems, but may create additional ones instead.

THE CRIMINAL COPYRIGHT GAP

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<http://stlr.stanford.edu/pdf/criminalcopyright.pdf>

ABSTRACT

Copyright law undergoes a criminalization process. Since the birth of criminal copyright in the 19th century, there has been a substantial increase in criminal copyright legislation. Copyright criminalization could lead to a paradigm shift toward a criminal-oriented law. However, legislation alone is insufficient to change the perception of copyright to a criminal-oriented law, as it also depends on practice. Thus, if enforcement is sporadic and relatively low, an increase of criminal legislation in copyright law does not mark a paradigmatic change towards a criminal copyright perception. Analyzing statistical data regarding criminal copyright prosecutions reveals that criminal prosecutions are still relatively rare. Although the massive increase of criminal copyright legislation should have led to a higher scale of enforcement, the current reality is that criminal prosecutions are scant, leading to a criminal copyright gap between legislation and enforcement.

This Article introduces the criminal copyright gap. It reviews the legislative history of copyright criminalization since its birth in 1897, while dividing the process into two separate phases: The Low-Tech Phase that took place in the end of the 19th century, and the High-Tech Phase. The High-Tech Phase is further divided into two sub-phases: an analog phase, which occurred in the beginning of the 1970s and lasted until 1992, and a digital phase, which occurred in the beginning of 1992 and is ongoing.

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After reviewing that history, I examine the practical aspects of copyright criminalization by analyzing statistical data on criminal copyright filings. I argue that statistical data reveal that the ongoing legislative process of copyright criminalization is not applied in practice, and thus I search for possible explanations of this criminal copyright gap. I opine that the criminal copyright gap leads to the conclusion that currently criminal copyright is not undergoing a paradigm shift. Finally, I conclude that although copyright law is not yet criminal-oriented, a paradigmatic shift toward a criminal copyright regime could occur in the near future, if enforcement of copyright infringements becomes more substantial.

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INTRODUCTION

Modern copyright, emerging in the 18th century, was initially a matter of civil law and did not contain criminal sanctions. Only in 1897, Congress criminalized copyright for the first time. This was the birth of *criminal copyright*. Ever since various countries first introduced criminal copyright there has been a substantial increase in criminal copyright legislation, leading to a criminalization of copyright law. The expansion of civil copyright laws to criminal laws. Since 1897, when Congress introduced criminal copyright for the first time, it has extended repeatedly and extensively to cover more types of works, more types of actions, and raised monetary and non-monetary sanctions.

The criminalization of copyright law is not disputed in academic literature. This process could possess various meanings. For example it could possibly lead to a paradigm shift towards a criminal-oriented law. Nevertheless, as this Article further argues, legislation is insufficient to change the perception of copyright as a criminal-oriented law. As the perception of criminal copyright also depends on practice and not solely on legislation, the increase of criminal legislation in copyright law could have different meanings, not necessarily resulting in a change of perception, or a paradigm shift, which will be difficult to achieve.

Statistical data regarding criminal copyright prosecutions between the fiscal years 1955 and 2012 reveals that criminal prosecutions are still relatively rare. Although the massive increase of criminal copyright legislation should

have led to more enforcement, the current reality is that criminal prosecutions are scant. This is the *criminal copyright gap*.

Apart from locating the criminal copyright gap, this Article strives to understand the various meanings of the gap and the reasons behind it. In order to evaluate the findings that criminal copyright prosecutions do not always align with legislation, I compare the findings to other possible trends which could explain this gap: decrease in overall criminal prosecution; increase of the number of individuals prosecuted; and an overall decrease in civil and criminal litigation. However, comparing further statistical data to address these hypotheses reveals that the criminal copyright gap is not linked to other possible trends and therefore exists on its own.

I thus offer several possible explanations of the criminal copyright gap, in accordance with political, economic, and social theories related to copyright infringement and enforcement: *First*, criminal legislation could be the result of international pressure to legislate but not necessarily enforce. *Second*, while criminal legislation could result from the lobbying of interest groups, such groups have less power to influence enforcement. *Third*, criminal copyright legislation aims to achieve deterrence simply or mostly by the legislative act, and the fact that criminal litigation does not increase does not necessarily indicate that criminalization failed. *Fourth*, criminal copyright is not designed to eliminate illegal infringements, but rather reduce them to a profitable level. *Fifth*, enforcement is problematic as the digital environment possesses many difficulties to enforcement agencies, such as detection, identifying suspects, cross-over jurisdictions, overseas operators, and prosecuting juveniles. *Sixth*, governmental guidelines of criminal copyright prosecutions either don't exist or are too vague for prosecutors. *Finally*, enforcement agencies might feel conflicted about criminal copyright, and individual feelings may override professionalism and "rule of law" norms. Thus, the criminal copyright gap is most likely caused by under-enforcement and is a result of various reasons, which most likely overlap in some instances. This Article strives to scrutinize the criminal copyright gap and understand its ramifications on the criminalization process of copyright law.

The Article proceeds as follows: Part I examines the history of copyright criminalization. I divide the criminalization process into two separate phases: The *Low-Tech Phase* that took place in the end of the 19th century; and the *High-Tech Phase*, which is further divided into two sub-phases: an *analog phase*, which occurred in the beginning of the 1970s and lasted until 1992, and a *digital phase*, which occurred in the beginning of 1992 and continues today. Part II examines the practical aspects of copyright criminalization. By analyzing statistical data on criminal copyright filings since 1955, I argue that the on-going legislative process of copyright criminalization is not applied in practice, and I search for the possible explanations of this *criminal copyright gap*. Finally, the last Part summarizes the discussion and concludes that criminal copyright is not currently undergoing a paradigm shift, but future changes in enforcement of copyright infringements could change this outcome.

I. COPYRIGHT CRIMINALIZATION

American copyright law grants right holders exclusive rights in their work, subject to several limitations and exceptions. If a person violates any of the exclusive rights, he or she is considered an infringer of the copyright.¹ Currently, copyright law provides both civil and criminal remedies to compensate right holders. The first federal copyright statute in 1790,² as amended in the course of the years, provided only civil remedies. Criminal provisions made their debut more than a century later,³ and even then, infringements were considered a private, economic wrongs, which should usually be handled through civil remedies.⁴

The introduction of criminal law into copyright occurred in two steps, which I call the *Low-Tech* and the *High-Tech Phases*. The *Low-Tech Phase* took place at the end of the 19th century, adding criminal procedures for profitable commercial-based infringements. The *High-Tech Phase* comprises of two sub-phases: an *analog phase*, that occurred in the beginning of the 1970s and lasted until 1992, mostly extending copyright protection to sound recordings and restructuring criminal rationales in copyright such as the mens rea requirement;⁵ and a *digital phase* that began in 1992, which mainly

1. 17 U.S.C. § 501(a) (2012).

2. See 1790 Copyright Act (Act of May 31, 1790), ch. 15, 1 Stat. 124 (repealed 1831). Under the 1790 Copyright Act, civil remedies included injunctions, destruction of infringing copies, and damages.

3. Although the 1790 Act did not contain a criminal provision per se, it contained a criminal-like provision which addressed unauthorized copying (“recording the title”) of a copyrighted map, chart, or book resulting in a civil fine of fifty cents for every sheet which was found in possession, with one-half of the penalties being paid to the United States. See *id.* § 2 (“[i]f any other person or persons, from and after the recording the title of any map, chart, book or books. . . shall also forfeit and pay the sum of fifty cents for every sheet which shall be found in his or their possession, either printed or printing, published, imported or exposed to sale, contrary to the true intent and meaning of this act, the one moiety thereof to the author or proprietor of such map, chart, book or books, who shall sue for the same, and the other moiety thereof to and for the use of the United States . . .”). See also Lori A. Morea, *The Future of Music in a Digital Age: The Ongoing Conflict Between Copyright Law and Peer-to-Peer Technology*, 28 CAMPBELL L. REV. 195, 209-10 (2006); James Lincoln Young, *Criminal Copyright Infringement and a Step Beyond: 17 U.S.C. § 506 (1976)*, 30 COPYRIGHT L. SYMP. (ASCAP) 157, 158 (1983) (referring to §2 of the 1790 Act as a “limited criminal infringement [provision]”).

4. See Steven Penney, *Crime, Copyright, and the Digital Age*, in WHAT IS A CRIME? CRIMINAL CONDUCT IN CONTEMPORARY SOCIETY 61, 61 (Law Comm’n of Canada ed., 2004) (arguing that copyright infringement was generally considered a private, economic wrong – pursued by copyright owners through private lawsuits and remedied by injunctions, damages, and other civil remedies); see also Alan N. Young, *Catching Copyright Criminals: R. v. Miles of Music Ltd.*, 5 I.P.J. 257, 257 (1990); ANDREW A. KEYES & CLAUDE BRUNET, COPYRIGHT IN CANADA: PROPOSALS FOR A REVISION OF THE LAW 185 (1977); Cal Becker, *Criminal Enforcement of Intellectual Property Rights*, 19 C.I.P.R. 183, 183 (2003).

5. See Piracy and Counterfeiting Amendments Act of 1982, Pub. L. No. 97-180, 96 Stat. 91 (codified as amended at 17 U.S.C. § 506(a) (2012), restructuring the criminal sanctions available under Title 17 and providing felony punishments for certain types of offenses under Title 18); Copyright Act of 1976, Pub. L. No. 94-553, 90 Stat. 2541 (codified

addresses criminal aspects of copyright-related activities on the Internet. During the low-tech phase and the analog high-tech phase, criminal copyright mainly targeted large-scale infringers, while the digital high-tech phase mainly targets relatively small-scale infringers. We are still within the digital phase.⁶

A. *The Low-Tech Phase*

Copyright criminalization began in 1897, when Congress passed three acts related to copyright law, one of which introduced criminal penalties for the first time.⁷ The Musical Public Performance Right Act addressed a public performance right for musical compositions, prescribing civil damages of \$100 for the first infringement and \$50 for subsequent infringements.⁸ The Act did not stop there. Introducing criminal penalties for the first time, the Act inserted a liability provision of willful unlawful performance or representation of a dramatic or musical composition for profit.⁹ The Act prescribed a

as amended at 17 U.S.C. § 506(a) (2012), changing the mens rea to “willfully and for purposes of commercial advantage or private financial gain” and increasing the penalties for criminal infringement); Sound Recording Act of 1971, Pub. L. No. 92-140, 85 Stat. 391 (extending copyright protection to sound recordings); Act of Dec. 31, 1974, Pub. L. No. 93-573, tit. I, § 102, 88 Stat. 1873 (1974) (adding criminal liability for knowingly and willfully aiding and abetting an infringement).

6. Further attempts to add additional copyright criminal layers followed, though not all were successful. *See, e.g.*, Stop Online Piracy Act (SOPA), H.R. 3261, 112th Cong. (2011). The bill would have imposed criminal penalties for infringing by means of digital networks the rights associated with public performances with a retail value of more than \$1000, and felony penalties if the retail value was more than \$2500, while under current copyright law, infringing public performances rights are subject to lower criminal penalties than reproductions or distributions rights. However, the bill was withdrawn. *See also* the 2010 Joint Strategic Plan on Intellectual Property Enforcement as an indicator of governmental efforts to “combat intellectual property theft”: Victoria Espinel, *Releasing the Joint Strategic Plan to Combat Intellectual Property Theft* (June 22, 2010, 11:15 AM), <http://www.whitehouse.gov/blog/2010/06/22/releasing-joint-strategic-plan-combat-intellectual-property-theft>; Todd Wasserman; *SOPA Is Dead: Smith Pulls Bill*, MASHABLE (Jan. 20, 2012), <http://mashable.com/2012/01/20/sopa-is-dead-smith-pulls-bill>.

7. The second Act, the Act of February 19, 1897, 29 Stat. 545, established the position of Register of Copyrights. The third Act, the Act of March 3, 1897, 2d Sess., 29 Stat. 694, amended the provisions on affixation of a false notice of copyright, so that the previous penalty of \$100 was also applied to anyone who knowingly issued, sold, or imported articles bearing a false notice of copyright. *See* WILLIAM F. PATRY, *PATRY ON COPYRIGHT* 284-85 (2009); Dorothy Schrader, *Music Licensing Copyright Proposals: An Overview of H.R. 789 and S. 28*, CRS REPORT FOR CONGRESS 2 (1998).

8. Musical Public Performance Right Act of Jan. 6, 1897, ch. 4, 29 Stat. 481 (1897). For the origins of the Musical Public Performance Right Act of 1897, see Zvi Rosen, *The Twilight of the Opera Pirates: A Prehistory of the Exclusive Right of Public Performance for Musical Compositions*, 24 *CARDOZO ARTS & ENT. L.J.* 1157 (2007). A public performance right in dramatic works was first enacted in 1856 (Act of August 18, 1856, 11 Stat. 138).

9. *See* Musical Public Performance Right Act, *supra* note 8. Criminal infringement was differentiated from civil infringement when it was pursued for purposes of commercial exploitation. In addition, the 1897 Act requirement of criminal intent, i.e., mens rea, requires a showing that the conduct was “willful” and for profit. *See* Mary Jane Saunders, *Criminal Copyright Infringement and the Copyright Felony Act*, 71 *DENV. U. L. REV.* 671, 673 (1994);

misdemeanor¹⁰ sanction of imprisonment for up to one year.¹¹

In 1909, as part of copyright law's general revision which repealed previous copyright legislation,¹² Congress continued its criminalization of copyright law, by extending criminal provisions to all copyright works, rather than just public performances, representations, or infringement of copyrighted dramatic or musical compositions, with the exception of sound recordings,¹³ and broadened the scope of liability to include any person who willfully aids or abets such infringement. The 1909 Act kept the mens rea requirement¹⁴ and added misdemeanor penalties to willful and for-profit infringement of all types of copyrighted works with up to one-year imprisonment and fines between \$100 and \$1000.¹⁵ In addition, in order to address concerns regarding making

Note, *The Criminalization of Copyright Infringement in the Digital Era*, 112 HARV. L. REV. 1705, 1706-07 (1999). Note that Congress chose to criminalize unauthorized performances of music and plays and not older media in United States copyright law such as books, maps and charts. See I. Trotter Hardy, *Criminal Copyright Infringement*, 11 WM. & MARY BILL RTS. J. 305, 315 (2002). Also note that other forms of copyright infringement, i.e., the unauthorized reproduction or distribution of a copyrighted work, were still resolved through civil litigation. See Lanier Saperstein, *Copyrights, Criminal Sanctions and Economic Rents: Applying the Rent Seeking Model to the Criminal Law Formulation Process*, 87 J. CRIM. L. & CRIMINOLOGY 1470, 1474 (1997) (citing Saunders, *supra* note 9, at 673).

10. Criminal acts in the United States fall into two categories: felonies and misdemeanors. Misdemeanors carry sentences of one year or less while felonies may result in prison sentences of more than one year. For more on the sentencing classification of offenses in the United States, see 18 U.S.C. § 3559 (2012).

11. See Musical Public Performance Right Act § 4966 (stating that “[i]f the unlawful performance and representation be willful and for profit, such person or persons shall be guilty of a misdemeanor and upon conviction be imprisoned for a period not exceeding one year.”); see also PATRY, *supra* note 7, at § 1:41.

12. See Copyright Act of 1909, ch. 320, 33 Stat. 1075-82 (1909).

13. *Id.* § 5. Although copyright protection for sound recordings was considered during the 1909 revision, it was eventually rejected. See Saunders, *supra* note 9, at 673.

14. See *supra* note 9 (the mens rea requirement of the Musical Public Performance Right Act of 1897).

15. The Copyright Act of 1909 § 28 provides,

Any person who willfully and for profit shall infringe any copyright secured by this Act, or who shall knowingly and willfully aid or abet such infringement, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by imprisonment for not exceeding one year or by a fine of not less than one hundred dollars nor more than one thousand dollars) or both, in the discretion of the court: Provided, however, that nothing in this Act shall be so construed as to prevent the performance of religious or secular works, such as oratorios, cantatas, masses, or octavo choruses by public schools, church choirs, or vocal societies, rented, borrowed, or obtained from some public library, public school, church choir, school choir, or vocal society, provided the performance is given for charitable or educational purposes and not for profit.

Section 29 of the Act states,

Any person who, with fraudulent intent, shall insert or impress any notice of copyright required by this Act, or words of the same purport, in or upon any uncopyrighted article, or with fraudulent intent shall remove or alter the copyright notice upon any article duly copyrighted shall be guilty of a misdemeanor, punishable by a fine of not less than one hundred dollars and not more than one thousand dollars. Any person who shall knowingly issue or sell any article bearing a notice of United States copyright which has not been copyrighted in this country, or who shall knowingly import any article bearing such notice or words of the same purport, which has not been copyrighted in this country, shall be liable to a fine of one

innocent infringers, such as school-children, accessories to criminal infringements, Congress reserved the “aiding and abetting” offense to cases of knowing and willfully infringements, and adopted a “for-profit” limitation.¹⁶

After 1909, copyright criminalization was on hold for a relatively long period. Between 1909 and 1971, despite various bills that proposed to revise the Copyright Act while suggesting the addition of criminal sanctions, criminal copyright remained unchanged.¹⁷ As technology continued to evolve in this time period, the reasons for this legislative gap are unknown. Until the high-tech phase, even though criminal copyright existed, it only provided relatively light punishments as it was classified as a misdemeanor (up to \$1000 fine or up to one-year imprisonment or both).¹⁸ In practice, law enforcers did not give criminal copyright a high priority.¹⁹

Within the broader context of copyright enforcement, the low-tech criminalization phase marks an attempt to use criminal sanctions to protect mainly against infringement of the public performance right. At that time, copyright enforcement played a modest role in the copyright regime.²⁰ To a large extent, copyright enforcement was manageable due to the high costs of infringement and the relatively high visibility of infringers.²¹ However, along with the technological advances, the copyright industry began to face another problem: unauthorized copying, commonly referred to as “piracy.” In the mid 1950s, Congress reacted to the new enforcement problem by drafting a comprehensive copyright reform to address the new enforcement measures needed to better protect content owners. This reform took over twenty years, mainly due to various controversies,²² which partially explains why Congress

hundred dollars.

16. See Schrader, *supra* note 7, at 3. However, as interpreted later by federal courts, the profit requirement need only be for the purpose of profit; actual profit need not be realized. See *United States v. Cross*, 816 F.2d 297, 301 (7th Cir. 1987) (stating that a conviction does not require that a defendant actually realize either a commercial advantage or private financial gain; it need only be for the purpose of financial gain or benefit, citing *United States v. Moore*, 757 F.2d 1228 (9th Cir. 1979), and stating that it is irrelevant whether there was an exchange for value so long as there existed the hope of some pecuniary gain); Hardy, *supra* note 9, at 316.

17. For a summary of such proposals, see Robert S. Gawthrop, *An Inquiry into Criminal Copyright Infringement*, reprinted in 20 COPYRIGHT L. SYMP. (ASCAP) 154, 156-57 (1972). For examples of criminal copyright proposed provisions between 1909 and 1971, see H.R. 12549, 71st Cong., (3d Sess. 1931); S. 5687, 71st Cong. (3d Sess. 1931); H.R. 10364, 72nd Cong., (1st Sess. 1932); S. 3043, 76th Cong. (3d Sess. 1940).

18. See Penney, *supra* note 4, at 62.

19. *Id.* at 62-63 (arguing that police did not make copyright infringers a high priority, and prosecutors were reluctant to proceed with charge); Kent Walker, *Federal Remedies for the Theft of Intellectual Property*, 16 HASTINGS COMM. & ENT. L.J. 681 (1994); Note, *supra* note 9, at 1710.

20. Peter S. Menell, *This American Copyright Life: Reflections on Re-Equilibrating Copyright for the Internet Age*, 62 J. COPYRIGHT SOC'Y U.S.A. 201, 210-14 (2014) (exploring copyright enforcement in the “analog age”).

21. *Id.*

22. For the full legislative history of the 1976 Copyright Act, see GEORGE S.

was silent on criminal copyright for such a long period.

B. *The High-Tech Phase*

The high-tech criminalization phase marks a change in criminal copyright perception. It was seemingly triggered by the growth of the record industry and the increase of “piracy,” counterfeiting, and bootlegging of music recordings.²³ Both the record companies and motion picture industries lobbied Congress to strengthen copyright protection and enforcement,²⁴ which resulted in the beginning of the high-tech criminalization phase, reintroducing criminal copyright legislation. For the purposes of the discussion here, I differentiate between two different stages of the high-tech criminalization phase: analog and digital, as they possess several different characteristics.

1. *Analog Phase*

In 1971, Congress awarded copyright protection to sound recordings,²⁵ while also reintroducing criminal copyright. Congress passed the Sound Recording Act of 1971, which criminalized willful, for-profit infringement of sound recordings, in order to reduce right holders’ perceived deprivation of income, and governmental tax revenues.²⁶

Congress further increased penalties for unauthorized copying of sound recordings in 1974.²⁷ The Act provided that a willful and for-profit infringement of copyright in sound recordings, or knowingly and willfully

GROSSMAN, *OMNIBUS COPYRIGHT REVISION LEGISLATIVE HISTORY* (2001); Peter S. Menell, *In Search of Copyright’s Lost Ark: Interpreting the Right to Distribute in the Internet Age*, 59 J. COPYRIGHT SOC’Y U.S.A. 1, 30-51 (2011) (exploring the legislative history of the 1976 Act).

23. Charles H. McCaghy & S. Serge Denisoff, *Pirates and Politics: An Analysis of Interest Group Conflict*, in *DEVIANCE, CONFLICT, AND CRIMINALITY* 297, 301-03 (S. Serge Denisoff & Charles H. McCaghy eds., 1973); Penney, *supra* note 4, at 63 (arguing that legislative attitudes toward infringement began to change in the 1970s due to the growth of the record industry in the postwar decades and which had resulted in substantial increases in the piracy, counterfeiting, and bootlegging of music recordings).

24. See Penney, *supra* note 4, at 61 (arguing that some copyright owners have pressed legislatures to adopt more punitive criminal sanctions for copyright infringement); Saunders, *supra* note 9, at 674-75.

25. See Sound Recording Act of 1971. United States Courts protected sound recordings even prior to legislation. See *Capitol Records, Inc. v. Spies*, 264 N.E.2d 874 (Ill. App. Ct. 1970) (holding that prevention of record piracy under state law was precluded by federal preemption doctrines); Robert P. Merges, *One Hundred Years of Solicitude: Intellectual Property Law, 1900-2000*, 88 CALIF. L. REV. 2187, 2197 (2000) (arguing that lobbying led to a series of court decisions protected sound recordings by the early 1970s).

26. See H.R. REP. NO. 487 (1971) at 2 (“The pirating of records and tapes is not only depriving legitimate manufacturers of substantial income, but of equal importance is denying performing artists and musicians of royalties and contributions to pension and welfare funds and Federal and State governments are losing tax revenues.”).

27. Act of Dec. 31, 1974, Pub. L. No. 93-573, 88 Stat. 1873 (1974); *Dowling v. United States*, 473 U.S. 207 (1985); Note, *supra* note 9, at 1708.

aiding or abetting such infringement, was subject to a fine of up to \$25,000 and/or imprisonment for up to one year. In addition, the Act provided that any subsequent offense was subject to a fine of up to \$50,000 and/or imprisonment for up to two years,²⁸ making a subsequent offense a felony.²⁹ However, as Congress perceived record “piracy” to primarily be an economic offense, it rejected a proposal to increase the available term of imprisonment to three years for a first offense and seven years for a subsequent offense.³⁰

As part of the new Copyright Act of 1976, Congress further criminalized copyright law.³¹ Under the Act’s criminalization, Congress loosened the mens rea requirement for criminal copyright infringement by replacing the “for profit” requirement to “for purposes of commercial advantage or private financial gain.”³² In addition, the Act increased criminal sanctions for copyright infringement.³³ Under a new section, a misdemeanor conviction of a criminal infringement, except those of sound recordings and motion pictures, is subject to a \$10,000 fine and/or up to one-year imprisonment.³⁴ As for the

28. The 1974 Act inserted a new subsection (b) to section 104, which stated that: Any person who willfully and for profit shall infringe any copyright provided by section 1(f) of this title [i.e., The Exclusive right to reproduce and distribute to the public by sale or other transfer of ownership, or by rental, lease, or lending, reproductions of the copyrighted work if it be a sound recording], or who should knowingly and willfully aid or abet such infringement, shall be fined not more than \$25,000 or imprisoned not more than one year, or both, for the first offense and shall be fined not more than \$50,000 or imprisoned not more than two years, or both, for any subsequent offense.

29. See Young, *supra* note 3, at 163 (noting that the 1974 copyright amendments of sound recordings meant that a willful and profit-motivated infringement was no longer merely a misdemeanor in all cases).

30. See H.R. REP. NO. 93-1581, at z. (1974), reprinted in 1974 U.S.C.C.A.N. 6849, 6852; *Dowling*, 473 U.S. 207 (1985); Note, *supra* note 9, at 1708.

31. Copyright Act of 1976, Pub. L. No. 94-553, 90 Stat. 2541.

32. 17 U.S.C. § 506(a) (1978). The 1976 Act clarified that a desire of financial gain is sufficient to qualify for criminal copyright infringement, and that the actual receipt of financial benefit is irrelevant. See Karen J. Bernstein, *Net Zero: The Evisceration of the Sentencing Guidelines Under the No Electronic Theft Act*, 27 N.E. J. ON CRIM. & CIV. CONFINEMENT 57, 67-69 (2001); *United States v. Cross*, 816 F.2d 297, 301 (7th Cir. 1987); Saperstein, *supra* note 9, at 1478; Saunders, *supra* note 9, at 674. However, some United States Courts rejected the defense that the defendant did not actually receive a benefit. See *United States v. Taxe*, 380 F. Supp. 1010, 1018 (C.D. Cal. 1974) (rejecting the defense of lack of realization of profit); Note, *supra* note 9, at 1708. Moreover, other scholars opine that the 1976 Act only changed the wording of the mens rea standard for criminal culpability, not actually altering or “loosening” the proof requirement. See, e.g., Lydia Pallas-Loren, *Digitization, Commodification, Criminalization: The Evolution of Criminal Copyright Infringement and The Importance of the Willfulness Requirement*, 77 WASH. U. L.Q. 835, 841 (1999) (arguing that “it is debatable whether this change in phraseology actually altered the proof required for criminal liability,” while referring to 4 NIMMER § 15.01 n.1.2 (1999)); Young, *supra* note 3, at 167 (arguing that the two phrases are meant to be substantially equivalent).

33. The increase of criminal copyright infringement fines is, among other things, argued to be linked to the prevailing inflation the United States economy at that time. For this argument, see Young, *supra* note 3, at 170.

34. 17 U.S.C. § 506(a) (1978). Note that minimum fines are absent from the United States Copyright Act as Congress wished to create conformity with the general pattern of the

infringement of sound recordings or motion pictures, the fine could rise to \$25,000. Convicted repeat infringers of sound recordings or motion pictures could face a \$50,000 fine and/or imprisonment for not more than two years.³⁵ Finally, upon conviction of criminal copyright infringement, the Act provided for the mandatory forfeiture, destruction, or disposition of all infringing copies or phonorecords and all implements, devices, or equipment used in the manufacture of such infringing copies or phonorecords.³⁶ Seemingly, the 1976 Act included a limited de-criminalization of copyright, as it eliminated the offense of aiding and abetting infringement.³⁷ However, it seems that Congress did so, as aiding and abetting was already governed by the provisions of U.S. Criminal Code.³⁸ Thus, the elimination of aiding and abetting infringement does not actually de-criminalized copyright law, but rather results from practical considerations.

In 1982, Congress introduced the Piracy and Counterfeiting Amendments Act.³⁹ Under the Act, Congress enacted copyright felony penalties for the first time for a first offense,⁴⁰ while removing criminal penalties from the Copyright Act and placing them in the criminal code.⁴¹ Felonies were imposed on “mass piracy” of sound recordings and audiovisual works. Mass piracy was linked to the reproduction or distribution of at least 1,000 phonorecords or copies infringing the copyright in one or more sound recordings over a 180-day period and for the reproduction or distribution of at least sixty-five copies of audiovisual works.⁴² Congress raised the penalty from a maximum fine of \$10,000 to a maximum fine of \$250,000 and/or up to five years’ imprisonment. Moreover, infringements involving between 100 to 999 copies of sound recordings, or seven to sixty-four audiovisual works, over a six-month period,

United States Criminal Code (18 U.S.C.). See *House Comm. On the Judiciary, Copyright Law Revision*, H.R. REP. NO. 1476, 94th Cong., 2d Sess. 163 (1976).

35. 17 U.S.C. § 506(a) (1978).

36. See *id.* § 506(b); Saperstein, *supra* note 9, at 1478. In a civil infringement, under 17 U.S.C. § 503(b) (2012), the destruction of infringing copies is in the court's discretion, while in a criminal infringement, the destruction is mandatory. See Young, *supra* note 3, at 128 (discussing the differences between the civil and criminal “destruction” provision in the 1976 Copyright Act); Saunders, *supra* note 9, at 675.

37. See Saunders, *supra* note 9, at 674.

38. 18 U.S.C. § 2 (1976) (“Whoever commits an offense against the United States or aids, abets, counsels, commands, induces or procures its commission, is punishable as a principal.”); see Young, *supra* note 3, at 169 (discussing the lack of the “aid or abet” provision in the 1976 Copyright Act).

39. Piracy and Counterfeiting Amendments Act of 1982, Pub. L. No. 97-180, 96 Stat. 91 (1982).

40. Prior to this Act, only a subsequent offense of copyright infringement which exceeded a one year imprisonment term was considered an offense. Saunders, *supra* note 9, at 674.

41. Copyright penalties shifted to 18 U.S.C. § 2319 (1982). Hardy, *supra* note 9, at 317.

42. 18 U.S.C. § 2319(b)(1)(A)-(B) (1982).

were subjected to up to \$250,000 and/or up to two years' imprisonment.⁴³ The mens rea element remained unchanged, requiring proof of commercial advantage or private financial gain. However, even after the 1982 amendments, the Copyright Act still considered most criminal offenses misdemeanors,⁴⁴ subject to a fine of up to \$25,000, and/or imprisonment for not more than one year.⁴⁵

In 1984, Congress passed legislation, which led to the creation of the Federal sentencing guidelines.⁴⁶ In the realm of Copyright law, the Sentencing Reform Act lowered the threshold requirement of the number of infringing copies to one copy of a sound recording, or between seven and sixty-five copies in motion pictures.⁴⁷ In addition, the Act raised the maximum prison sentence to five years if at least one thousand sound recordings or motion pictures were infringed.⁴⁸

In 1988, Congress introduced an amendment to the Money Laundering Control Act.⁴⁹ The 1988 amendment added copyright infringement as a specified unlawful activity for money laundering and created liability for any person who conducts a monetary transaction knowing that the funds derived through unlawful activity.⁵⁰ While the original 1986 Act did not list copyright infringement as a specified unlawful activity for money laundering, amendments made in 1988 targeted a broad range of illicit activities, including copyright infringement.⁵¹

2. Digital Phase

The digital criminalization sub-phase marks an increase of Congressional

43. Copyright infringements that do not fall into these categories remained the same, i.e., classified as misdemeanors and carrying fines of up to \$25,000 or up to one year imprisonment, or both. See Penney, *supra* note 4, at 63.

44. Except "mass piracy" of sound recordings and audiovisual works and a subsequent offense of willful and for profit copyright infringement in sound recordings.

45. 18 U.S.C. § 2319(b)(3) (1988); Saperstein, *supra* note 9, at 1480.

46. Sentencing Reform Act of 1984, Pub. L. No. 98-473, 98 Stat. 1987 (1984). See Lisa M. Seghetti & Alison M. Smith, *Federal Sentencing Guidelines: Background, Legal Analysis, and Policy Options*, CRS REPORT FOR CONGRESS 13 (2007).

47. Sentencing Reform Act of 1984.

48. See 18 U.S.C. 2319(b)(1) (1984); Bernstein, *supra* note 32, at 69.

49. In 1986, Congress enacted the Money Laundering Control Act as part of the Anti-Drug Abuse Act. See Money Laundering Control Act of 1986, Pub. L. No. 99-570, 100 Stat. 3207-22 (1986).

50. See Anna Driggers, *Money Laundering*, 48 AM. CRIM. L. REV. 929, 930 (2011) (describing the Money Laundering Control Act of 1986).

51. Anti-Drug Abuse Act of 1988, Pub. L. No. 100-690, § 6466, 102 Stat. 4181 (1988) (codified as amended at 18 U.S.C. § 1956 (2012)). For more information regarding the broad range of activities targeted by this Act, see James D. Harmon, Jr., *United States Money Laundering Laws: International Implications*, 9 N.Y.L. SCH. J. INT'L & COMP. L. 1, 10-12 (1988); More on money laundering and copyright infringement, see Ronald D. Coenen Jr., Jonathan H. Greenberg & Patrick K. Reisinger, *Intellectual Property Crimes*, 48 AM. CRIM. L. 849, 884 (2011).

involvement in copyright criminalization, both in actual legislation and in proposed bills.⁵² Moreover, the digital sub-phase reflects a crucial change in Congress's approach towards copyright infringers: Unlike the low-tech phase and the analog phase, the digital phase marks a legislative change from targeting large-scale to small-scale infringers.

The digital phase begins in 1992, when Congress introduced the Copyright Felony Act.⁵³ Congress imposed felony penalties for mass piracy of all types of copyrighted works,⁵⁴ including computer programs.⁵⁵ The Copyright Felony

52. To demonstrate the scope of proposed criminal copyright bills in the digital criminalization second phase, see, e.g., Intellectual Property Protection Act of 2002, H.R. 5057, 107th Cong. (2002) (targeted to amend the Federal criminal code to prohibit trafficking in a physical authentication feature that: is genuine but has been tampered with or altered without the authorization of the copyright owner to induce a third party to reproduce or accept distribution of a phono-record, a copy of a computer program, a copy of a motion picture or other audiovisual work, or documentation or packaging, where such reproduction or distribution violates the rights of the copyright owner; is genuine but has been or is intended to be distributed without the authorization of the copyright owner and not in connection with the lawfully made copy or phono-record to which it was intended to be affixed or embedded by the copyright owner; or appears to be genuine but is not); Author, Consumer, and Computer Owner Protection and Security (ACCOPS) Act of 2003, H.R. 2752, 108th Cong. (2003) (which, among other things, was designed to insert criminal penalties for placing works on computer networks, i.e., to criminalize willful infringement through P2P file-sharing networks); Artists' Rights and Theft Protection Act of 2003, S. 1932, 108th Cong. (2003) (proposing, among other things, to make the placement of a single copy of a prerelease copyrighted work in a P2P file-sharing software's share directory a felony); Piracy Deterrence and Education Act of 2004, H.R. 4077, 108th Cong. §§ 108-110 (2004) (proposed to "[E]nhance criminal enforcement of the copyright laws, to educate the public about the application of copyright law to the Internet, and for other purposes."); Intellectual Property Enhanced Criminal Enforcement Act of 2007, H.R. 3155, 110th Cong. § 5 (2007) (proposed to establish criminal violations for any attempt or conspiracy to commit criminal copyright infringement, with the same penalties as prescribed for the offense; and to increase the penalties for criminal copyright offenses, including: criminal copyright infringement; unauthorized recording of a motion picture; and trafficking in counterfeit goods or services); The Stop Online Piracy Act of 2011, H.R. 3261, 112th Cong. (2011) (proposed to expand the offense of criminal copyright infringement to include public performances of: copyrighted work by digital transmission, and work intended for commercial dissemination by making it available on a computer network; and expands the criminal offenses of trafficking in inherently dangerous goods or services to include: counterfeit drugs; and goods or services falsely identified as meeting military standards or intended for use in a national security, law enforcement, or critical infrastructure application).

53. Copyright Felony Act of 1992, Pub. L. No. 102-561, 106 Stat. 4233 (1992).

54. Except motion pictures and sound recordings that had required proof that the defendant had made at least one hundred copies. See Copyright Felony Act of 1992; Hardy, *supra* note 9, at 318.

55. The Senate proposed Bill 893 to impose criminal sanctions for willful violation of software copyright (S. 893, 102d Cong. (1991)). The bill was initiated by Senators Orrin Hatch and Dennis DeConcini, and at first was as part of an omnibus crime package. Applying only to software, the proposed bill provided that reproduction or distribution of fifty or more copies infringing the copyright in one or more computer programs (including any tape, disk, or other medium embodying such programs) over a 180-day period would be punishable with up to a five-year prison term and a \$250,000 fine, or a ten-year prison term

Act of 1992 lowered the thresholds for felony penalties: making of at least ten copies valued at more than \$2500 over a period of 180 days, increasing fines for individuals to \$250,000 and for organizations to \$500,000, or twice the gains from the offense.⁵⁶ First-time offenders could face five years imprisonment and repeat offenders could face up to ten years.⁵⁷ In case of criminal copyright infringement, which does not amount to mass piracy according to the law, the Act prescribed a misdemeanor sentence of up to one year.⁵⁸

In 1996, Congress enacted the Anticounterfeiting Consumer Protection Act.⁵⁹ The Act made trafficking in counterfeit goods or services an offense under the Racketeer Influenced and Corrupt Organizations Act (RICO), by adding to the list of racketeering activities:⁶⁰ section 2318 (trafficking in counterfeit labels for phonorecords, computer programs or computer program documentation or packaging and copies of motion pictures or other audiovisual works), section 2319 (criminal infringement of a copyright), and section 2319A (unauthorized fixation of and trafficking in sound recordings and music videos of live musical performances).⁶¹ The insertion of criminal copyright into RICO, increased the penalties for criminal organizations engaging in criminal copyright under the Copyright Act; conviction could amount to additional \$250,000 fine and an additional 20 years of imprisonment.⁶² In addition, the Act enabled law enforcement officials to prosecute large-scale organizations and instigate the seizure and forfeiture of nonmonetary personal and tangible property of the infringers.⁶³ Moreover, the 1996 Act amended section 2318 of

if the offense is a second or subsequent offense. The reproduction of more than ten but less than fifty copies within that same period would be punishable by a fine of up to \$250,000 and/or one year in prison. After a hearing by the Subcommittee on Intellectual Property and Judicial Administration, Representative Hughes suggested to expand the scope of the proposed bill, by an amendment to the Copyright Act, to apply felony provisions to willful infringement of all types of copyrighted works, and lowering the thresholds for imposing a felony liability. *See* Saunders, *supra* note 9, at 679; Saperstein, *supra* note 9, at 1481-82; H.R. REP. NO. 102-997, 102d Cong. (1992), *reprinted in* 1992 U.S.C.C.A.N. 3569.

56. Fines are set under 18 U.S.C. § 3571 (1992).

57. *Id.* §§ 2319(b)(1)-(2). *See also* S. REP. NO. 102-268 (1992); Penney, *supra* note 4, at 63; Note, *supra* note 9, at 1711.

58. 18 U.S.C. § 2319(b)(3) (1994).

59. Anticounterfeiting Consumer Protection Act of 1996, Pub. L. No. 104-153, 110 Stat. 1386 (1996).

60. 18 U.S.C. §1961(1)(B) (1996). In an effort to fight organized crime in the United States, RICO was enacted as title IX of the Organized Crime Control Act, Pub. L. 91-452, 84 Stat. 941 (1970).

61. Anticounterfeiting Consumer Protection Act of 1996.

62. 18 U.S.C. §§ 1963(a), 3571(b)(3) (1996). A criminal RICO violation is a separate offense from criminal copyright infringement. *See generally*, Julie L. Ross, *A Generation of Racketeers? Eliminating Civil RICO Liability for Copyright Infringement*, 13 VAND. J. ENT. & TECH. L. 55 (2010) (describing civil and criminal copyright infringement under RICO).

63. Grace Pyun, *The 2008 Pro-IP Act: The Inadequacy of the Property Paradigm in Criminal Intellectual Property Law and its Effect on Prosecutorial Boundaries*, 19 DEPAUL J. ART TECH. & INTELL. PROP. L. 355, 363-64 (2009).

the Federal criminal code, by extending trafficking in counterfeit labels to computer programs; computer program documentation; and packaging existing prohibitions and penalties applicable to trafficking in counterfeit labels affixed or designed to be affixed to phonorecords or copies of a motion picture or other audiovisual work.⁶⁴

Prior to 1997, in order to prosecute copyright infringement, the law required that the infringement be undertaken for commercial advantage or private financial gain. A landmark case on this matter proved that this provision was highly problematic for the enforcement of online activities involving copyright infringements, and ultimately had enormous ramifications for criminal copyright legislation.⁶⁵

In the early 1990s, David LaMacchia was a twenty-one year old student at the Massachusetts Institute of Technology (MIT). Between 1993 and 1994, using MIT's computer network, LaMacchia set up an electronic bulletin board ("BBS") named Cynosure (which had two versions), without commercial advantage or private financial gain.⁶⁶ LaMacchia encouraged his correspondents to upload popular software applications and computer games, which he transferred to a second encrypted address and made them accessible to download by other users with access to Cynosure, and by that, allegedly caused some right holders lost revenues.⁶⁷ As LaMacchia did not derive any financial benefit from his actions, he could not be prosecuted for criminal copyright infringement because the law required the infringement to be undertaken for commercial advantage or private financial gain. Unable to charge LaMacchia with criminal copyright infringement, on April 7, 1994, he was charged by a federal grand jury with conspiring with "persons unknown" to violate the wire fraud statute.⁶⁸ On September 30, 1994, LaMacchia brought

64. 18 U.S.C. § 2318 (1996).

65. *United States v. LaMacchia*, 871 F. Supp. 535 (D. Mass. 1994).

66. See Eric Goldman, *A Road to No Warez: The No Electronic Theft Act and Criminal Copyright Infringement*, 82 OR. L. REV. 369, 372 (2003) (discussing the LaMacchia case).

67. According to the indictment, LaMacchia's bulletin board system had as its object the facilitation "on an international scale" of the "illegal copying and distribution of copyrighted software" without payment of licensing fees and royalties to software manufacturers and vendors. The prosecutors alleged that LaMacchia's scheme caused losses of more than \$1,000,000 to software copyright holders. However, the prosecutor's loss estimate was unsupported. See *id.* at 372; Joseph F. Savage, Jr. & Kristina E. Barclay, *When the Heartland is "Outside the Heartland:" the New Guidelines for NET Act Sentencing*, 9 GEO. MASON L. REV. 373, 377 (2000).

68. 18 U.S.C. § 1343 (1994):

Whoever, having devised or intending to devise any scheme or artifice to defraud, or for obtaining money or property by means of false or fraudulent pretenses, representations, or promises, transmits or causes to be transmitted by means of wire, radio, or television communication in interstate or foreign commerce, any writings, signs, signals, pictures, or sounds for the purpose of executing such scheme or artifice, shall be fined under this title or imprisoned not more than 20 years, or both. If the violation occurs in relation to, or involving any benefit authorized, transported, transmitted, transferred, disbursed, or paid in connection with, a presidentially declared major disaster or emergency (as those terms are defined in section 102 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act

a motion to dismiss, arguing that the government had improperly resorted to the wire fraud statute as a copyright enforcement tool, referring to the Supreme Court's decision in *Dowling v. United States*.⁶⁹ The Massachusetts District Court dismissed the case against LaMacchia, while criticizing LaMacchia's actions,⁷⁰ holding that Congress never envisioned protecting copyrights under the wire fraud statute and indicating that it is the legislature, not the court, which is to define a crime and ordain its punishment.⁷¹

Following the LaMacchia case, Senator Leahy proposed the Criminal Copyright Improvement Act of 1995,⁷² which suggested criminal infringement sanctions for non-financial gain or commercial advantage use. The Criminal Copyright Improvement Bill aimed to impose criminal liability on copyright infringement for non-financial gain or commercial advantage use,⁷³ and also included an amendment to Section 2319 of Title 18, which expanded the types of activities for criminal copyright and increased the possible fine and imprisonment terms.⁷⁴ However, Congress never passed the bill because as the

(42 U.S.C. 5122)), or affects a financial institution, such person shall be fined not more than \$1,000,000 or imprisoned not more than 30 years, or both.

69. 473 U.S. 207 (1985). In *Dowling*, the Supreme Court held that a copyrighted musical composition impressed on a bootleg phonograph record is not property that is "stolen, converted, or taken by fraud" within the meaning of the National Stolen Property Act of 1934 (Pub. L. No. 73-246, 48 Stat. 794 (1934)). See, e.g., Elizabeth Blakey, *Criminal Copyright Infringement: Music Pirates Don't Sing the Jailhouse Rock When They Steal from the King*, 7 LOY. ENT. L.J. 417 (1987) (analyzing the United States Supreme Court decision in *Dowling*, while suggesting that the Court ignored the economic philosophy underlying United States copyright law). Prior to *Dowling*, United States courts extended the protections of the National Stolen Property Act to copyrighted goods. See, e.g., *United States v. Drebin*, 557 F.2d 1316, 1328 (9th Cir. 1977) (holding that copies of copyrighted motion pictures are considered goods or merchandise for purposes of the National Stolen Property Act); Coenen Jr., Greenberg & Reisinger, *supra* note 51, at 882-83 (discussing United States courts' rulings regarding copyright and the National Stolen Property Act).

70. LaMacchia's behavior was described as "heedlessly irresponsible, and at worst as nihilistic self-indulgent, and lacking in any fundamental sense of values." See *LaMacchia*, 871 F. Supp. at 545.

71. *Id.* at 545 (quoting *United States v. Wiltberger*, 18 U.S. 76 (1820)). The Court noted that it is Congress's prerogative to change the law if it wishes to criminalize such a behavior ("[c]riminal as well as civil penalties should probably attach to willful, multiple infringements of copyrighted software even absent a commercial motive on the part of the infringer. One can envision ways that the copyright law could be modified to permit such prosecution. But, it is the legislature, not the Court, which is to define a crime, and ordain its punishment."). *Id.*

72. Criminal Copyright Improvement Act of 1995, S. 1122, 104th Cong. (1995).

73. Mostly, the bill aimed to impose criminal liability on copyright infringement, by amending Section 506(a) of title 17, criminalizing acts of reproduction or distribution, including by transmission, or assisting others in such activities, of one or more copyrighted works, which have a total retail value of \$5000 or more.

74. Under the new proposed section, a person who committed an offense under section 506(a)(2) of title 17, regarding reproduction or distribution, including by transmission, or assisting others in such reproduction or distribution of one or more copyrighted works, which have a total retail value of more than \$10,000, could be imprisoned up to five years, and/or fined. Other infringers could face an imprisonment of up to one year, and/or a fine. In addition, in a second or subsequent felony offense, the bill set a punishment of up to ten

Senate Judiciary Committee failed to act upon it.⁷⁵

Along this line, the computer software industry, outraged by the acquittal of LaMacchia, lobbied for a legislative response so as to criminalize “computer theft” of copyrighted works, by the elimination of the profit requirement, in order to prevent the destruction of businesses, especially small ones, that depend on licensing agreements and royalties for survival.⁷⁶

After failing to enact the Criminal Copyright Improvement Act of 1995, Congress passed a similar statute entitled the No Electronic Theft (NET) Act,⁷⁷ which was signed by President Clinton on December 16, 1997, with a clear purpose to close the “loophole” highlighted in *United States v. LaMacchia*.⁷⁸

The NET Act addressed criminal copyright in several ways. First, it changed the definition of financial gain set in 17 U.S.C. § 101, to include the receipt (or expectation of receipt) of anything of value, including other copyrighted works, by inserting the following paragraph: “The term ‘financial gain’ includes receipt, or expectation of receipt, of anything of value, including the receipt of other copyrighted works.”⁷⁹

Second, the NET Act amended 17 U.S.C. § 506(a), which deals with criminal infringements.⁸⁰ Under the new section, criminal infringement was defined as any person who infringes a copyright willfully,⁸¹ either for purposes

years of imprisonment, and/or a fine. *See* Criminal Copyright Improvement Act of 1995, S. 1122, 104th Cong. § 2(d) (1995).

75. Another version of the Act was proposed again in 1997 in the United States Senate, but did not pass. *See* Criminal Copyright Improvement Act of 1997, S. 1044, 105th Cong. (1997); Note, *supra* note 9, at 1715.

76. *See* H.R. REP. NO. 105-339 (1996); *Copyright Piracy, and H.R. 2265, the No Electronic Theft (NET) Act: Hearings on H.R. 2265 Before the Subcomm. on Courts and Intellectual Prop. of the House Comm. on the Judiciary*, 105th Cong. (1997) (witnesses speaking before the committee included Greg Wrenn, Senior Corporate Counsel with Adobe System and Brad Smith of Microsoft, both speaking on behalf of the Business Software Alliance (BSA) and Sandra Sellers, Vice President of Intellectual Property Education and Enforcement for the Software Publishers Association); Michael Coblenz, *Intellectual Property Crimes*, 9 ALB. L.J. SCI. & TECH. 235, 249-50 (1999).

77. No Electronic Theft (NET) Act, Pub. L. No. 105-47, 111 Stat. 2678 (1997) (17 U.S.C. §§ 101, 506, 507; 18 U.S.C. §§ 2319, 2320; 28 U.S.C. § 1498 (1997)). The NET Act was not identical to the Criminal Copyright Improvement Act of 1995. For example, the Criminal Copyright Improvement Act of 1995 set a monetary threshold for non-commercially motivated criminal infringement at \$5000 and a felony threshold for a retail value in excess of \$10,000, both much higher than the No Electronic Theft (NET) Act provisions.

78. 871 F. Supp. 535 (D. Mass. 1994). The House Report, in the first draft of the NET Act (H.R. REP. NO. 105-339, at 3 (1997)), indicated:

The purpose of H.R. 2265, as amended, is to reverse the practical consequences of *United States v. LaMacchia*, 871 F. Supp. 535 (D. Mass. 1994) [hereinafter: LaMacchia], which held, *inter alia*, that electronic piracy of copyrighted works may not be prosecuted under the federal wire fraud statute; and that criminal sanctions available under Titles 17 and 18 of the U.S. Code for copyright infringement do not apply in instances in which a defendant does not realize a commercial advantage or private financial gain.

79. *See* No Electronic Theft (NET) Act § 2(a).

80. *Id.* § 2(b).

81. Although the NET Act states that evidence of reproducing and distributing

of commercial advantage or private financial gain, or by the reproduction or distribution, including by electronic means, during any 180-day period, of one or more copies or phonorecords of one or more copyrighted works, which have a total retail value of more than \$1000.⁸²

Third, the NET Act expanded the statute of limitation on criminal proceedings set in 17 U.S.C. § 507(a) by two years from three to five, in order to be consistent with most other criminal statutes.⁸³

Fourth, the NET Act clarified that reproduction or distribution by electronic means was included in the felony provisions and clarified that the retail value of \$2500 is a total retail value.⁸⁴ Doing so, the NET Act made explicit that reproduction and distribution of electronic copies via the Internet can qualify for criminal sanctions.⁸⁵

Fifth, the NET Act changed the punishments for criminal infringement. Under the Act, for infringements of more than \$1000, the punishment is imprisonment of up to one year and a fine, and for infringements of \$2500 or more, the punishment is imprisonment of up to three years and a fine. In case of a second or subsequent offense, which involves commercial advantage or private financial gain, the punishment includes imprisonment of up to six years.⁸⁶

Sixth, the NET Act enabled victims of copyright infringement to submit victim impact statements.⁸⁷ Under this provision, victims of copyright

copyrighted works does not, by itself, establish willfulness (*id.* § 2(b); Goldman, *supra* note 66, at 373), the interpretation of the term “willfully” is still unclear. Many Courts interpreted the language of the term “willfully” in the Copyright Act as proving that the accused specifically intended to violate copyright law. Other Courts held that the term “willful” refers only to intent to copy, not intent to infringe. For example, see *United States v. Moran*, 757 F. Supp. 1046 (D. Neb. 1991) (citing *United States v. Rose*, 149 U.S.P.Q. (BNA) 820 (S.D.N.Y. 1966) and holding that “willfully” means that in order to be criminal the infringement must have been a “voluntary, intentional violation of a known legal duty); Saunders, *supra* note 9, at 688; Hardy, *supra* note 9, at 319-20.

82. The punishment for this section is as provided under 18 U.S.C. § 2319 (1997).

83. DAVID GOLDSTONE, PROSECUTING INTELLECTUAL PROPERTY CRIMES 64 (2001) (arguing that the statute of limitations in the NET Act is consistent with most other United States criminal statutes).

84. By striking “with a retail value of more than \$2,500” and inserting “which have a total retail value of more than \$2,500.” See No Electronic Theft (NET) Act § 2(d)(2)(A); Pallas-Loren, *supra* note 32, at 846.

85. *Copyright Piracy, and H.R. 2265, the No Electronic Theft (NET) Act*, *supra* note 76, at 13.

86. See No Electronic Theft (NET) Act § 2(d); Goldman, *supra* note 66, at 373-74.

87. See No Electronic Theft (NET) Act § 3; 18 U.S.C. § 2319(d) (Supp. III 1997). Victims of a crime may introduce a victim impact statement, which describes the crime’s impact upon them and upon their family, at the sentencing or disposition of a trial. Victims include both producers and sellers of legitimate works affected by the defendant’s conduct. For more on victim impact statements, see, e.g., Phillip A. Talbert, *The Relevance of Victim Impact Statements to the Criminal Sentencing Decision*, 36 UCLA L. REV. 199 (1988); Kristin Henning, *What’s Wrong with Victims’ Rights in Juvenile Court?: Retributive Versus Rehabilitative Systems of Justice*, 97 CALIF. L. REV. 1107 (2009).

infringement can include information identifying the scope of injury and loss suffered, including an estimate of the economic impact of the offense on that victim. This information can be used as evidence for purposes of the sentencing guidelines.⁸⁸

Finally, the Act instructed the Sentencing Commission⁸⁹ to ensure that the applicable guideline range for a defendant convicted of a crime against intellectual property is sufficiently stringent to deter such a crime, and to ensure that the guidelines provide for consideration of the retail value and quantity of the items with respect to which the crime against IP was committed.⁹⁰

The NET Act marked a dramatic change in criminal copyright. Prior to the NET Act, copyright infringements for non-commercial purposes were not subject to criminal penalties. At least one scholar argued that the NET Act marks a paradigm shift in copyright law: Criminal copyright infringement is similar to physical theft, and the public should come to realize that.⁹¹

88. Pallas-Loren, *supra* note 32, at 849 (describing the NET Act criminal provisions).

89. Under the authority of the Sentencing Reform Act of 1984, Pub. L. No. 98-473, 98 Stat. 1987 (1984); and of the Sentencing Act of 1987, Pub. L. No. 100-182, § 21, 101 Stat. 1271 (1987) (including the authority to amend the sentencing guidelines and policy statements)

90. No Electronic Theft (NET) Act § 2(g) instructed the U.S. Sentencing Commission to ensure that the applicable guideline range for a defendant convicted of a crime against IP is sufficiently stringent to deter such a crime and ensure that the guidelines provide for consideration of the retail value and quantity of the items with respect to which the crime against IP was committed. Congress implemented § 2(g) in 1999, by enacting the Digital Theft Deterrence and Copyright Damages Improvement Act of 1999, Pub. L. No. 106-160, 113 Stat. 1774 (1999). Mostly, under the amendments, Congress increased the base level offense from a Level 6 to a Level 8, directed courts to consider the value of the infringed-upon item in calculating the loss in all cases, provided a two-level upward adjustment for cases involving manufacture, importation, and uploading of infringing items and impose mandatory offense levels of 12 in such cases, provided a two-level upward adjustment based on use of special skill in cases involving circumvention of technical protection measures to protect copyrighted works, and gave courts discretion in any case to apply an upward departure where the ordinary calculation would substantially understate the seriousness of the offense. See United States Sentencing Commission, *Intellectual Property/Copyright Infringement: Group Breakout Session Two*, 242 (2000), http://www.ussc.gov/Research_and_Statistics/Research_Projects/Economic_Crimes/200010_12_Symposium/tGroupTwoDayTwo.PDF. For more information regarding the Digital Theft Deterrence and Copyright Damages Improvement Act, see Coenen Jr., Greenberg & Reisinger, *supra* note 51, at 880-81; Goldman, *supra* note 66, at 378-81.

91. See Goldman, *supra* note 66, at 370 (arguing that by enacting the NET Act, Congress adopted a paradigm that criminal copyright infringement is like physical-space theft, specifically shoplifting, while citing 143 CONG. REC. S12689, S12691 (daily ed. Nov. 13, 1997) (statement of Sen. Leahy): "By passing this legislation, we send a strong message that we value intellectual property . . . in the same way that we value the real and personal property of our citizens. Just as we will not tolerate the theft of software, CD's, books, or movie cassettes from a store, so will we not permit the stealing of intellectual property over the Internet."). See also 143 CONG. REC. H9883, H9885 (daily ed. Nov. 4, 1997) (statement of Rep. Goodlatte) ("[i]magine the same situation occurring with tangible goods that could not be transmitted over the Internet, such as copying popular movies onto hundreds of blank tapes and passing them out on every street corner or copying personal software onto blank disks and freely distributing them throughout the world. Few would disagree that such

In 1998, Congress enacted the Digital Millennium Copyright Act (DMCA),⁹² which along with civil amendments to copyright statute, introduced new anti-circumventions rules, that affect both civil and criminal law.⁹³ The DMCA included several prohibitions: It required that no person shall circumvent a technological measure that effectively controls access to a protected work;⁹⁴ it provided limited exceptions to circumventions for academic institutions, nonprofit libraries, archives, law enforcement and other government activities,⁹⁵ as well as reverse engineering and encryption research exemptions to a list of activities;⁹⁶ and it prohibited trafficking in circumvention technology⁹⁷ and tampering with copyright management

activities are illegal and should be prosecuted. We should be no less vigilant when such activities occur on the Internet. We cannot allow the Internet to become the Home Shoplifting Network.”); and 143 CONG. REC. E1527 (daily ed. July 25, 1997) (statement of Hon. Howard Coble) (“[T]he public must come to understand that intellectual property rights, while abstract and arcane, are no less deserving of protection than personal or real property rights.”).

92. Digital Millennium Copyright Act (DMCA), Pub. L. No. 105-304, 112 Stat. 2860 (1998) (codified as amended at 17 U.S.C. §§ 512, 1201-1205, 1301-1332 and 28 U.S.C. § 4001 (2012)).

93. For instance, the DMCA inserted limitations on liability, often referred to as “safe harbors,” which shelter service providers from copyright infringement lawsuits. *See* 17 U.S.C. § 512 (1998). The first effort to regulate digital copying through U.S. copyright law was prior to the DMCA enactment, by the Audio Home Recording Act of 1992 (Pub. L. No. 102-563, 106 Stat. 4237 (1992)). However, this Audio Home Recording Act only established a technological solution to multi-generational digital copying while not generally prohibiting the circumvention of protective technology. *See* Stephen M. Kramarsky, *Copyright Enforcement in the Internet Age: The Law and Technology of Digital Rights Management*, 11 DEPAUL-LCA J. ART & ENT. L. & POL’Y 1, 17-22 (2001) (describing the Audio Home Recording Act of 1992 provisions).

94. To circumvent a technological measure means to descramble a scrambled work, to decrypt an encrypted work, or otherwise to avoid, bypass, remove, deactivate, or impair a technological measure, without the authority of the copyright owner. *See* 17 U.S.C. § 1201(a)(3)(A) (1998). For criticism on the anti-circumvention rules in the DMCA, see Pamela Samuelson, *Intellectual Property and the Digital Economy: Why the Anti-Circumvention Regulations Need to Be Revised*, 14 BERKELEY TECH. L.J. 519 (1999). However, the DMCA also notes that the prohibition will not apply to persons who are users of a copyrighted work which is in a particular class of works, if such persons are, or are likely to be in the succeeding three-year period, adversely affected by virtue of such prohibition in their ability to make non-infringing uses of that particular class of works set by the Librarian of Congress regulations exemptions. In addition, Libraries and educational institutions are permitted to circumvent protective measures prior to purchasing a work, and law enforcement and intelligence operations are also exempt from liability for the purpose of achieving the interoperability of computer programs and encryption research. *See* 17 U.S.C. § 1201 (2012); Penney, *supra* note 4, at 86.

95. 17 U.S.C. §§ 1201(d)-(j) (1998).

96. *Id.* §§ 1201(f)-(g). In addition, based on rulemaking recommendations from the Register of Copyrights, the DMCA provides for the Librarian of Congress to adopt three-year renewable exemptions for particular classes of copyrighted works from the DMCA’s prohibition on circumvention. *See id.* §§ 1201(a)(1)(B)-(E).

97. *See id.* § 1201(a)(2):

No person shall manufacture, import, offer to the public, provide, or otherwise traffic in any technology, product, service, device, component, or part thereof, that —

information.⁹⁸

These provisions may be compensated by civil remedies such as injunctions, actual damages, and statutory damages.⁹⁹ However, the DMCA went further. It provided criminal sanctions, limited to entities acting willfully, and for purposes of commercial advantage or private financial gain.¹⁰⁰ The maximum criminal penalties are \$500,000 and/or imprisonment for not more than five years, for a first offense, and \$1,000,000 and/or imprisonment for not more than ten years, for any subsequent offense. The DMCA sets an exception for criminal liability on a nonprofit library, archives, or educational institution,¹⁰¹ and sets a statute of limitation if a proceeding is commenced within five years after the cause of action arose.¹⁰²

In 2004, Congress enacted the Intellectual Property Protection and Courts Amendments Act.¹⁰³ The 2004 Act expanded criminal provisions to combat the trafficking of counterfeit IP products.¹⁰⁴ Specifically, the Act criminalized knowingly and unlawfully trafficking in a counterfeit or illicit label affixed to copyrighted goods, such as a phonorecord; a copy of a computer program; motion picture (or other audiovisual work); literary work; pictorial, graphic, or sculptural work; a work of visual art; counterfeit documentation or packaging.¹⁰⁵ Such offenses could be committed in the United States in

(A) is primarily designed or produced for the purpose of circumventing a technological measure that effectively controls access to a work protected under this title; (B) has only limited commercially significant purpose or use other than to circumvent a technological measure that effectively controls access to a work protected under this title; or (C) is marketed by that person or another acting in concert with that person with that person's knowledge for use in circumventing a technological measure that effectively controls access to a work protected under this title.

And *id.* § 1201(b)(1):

No person shall manufacture, import, offer to the public, provide, or otherwise traffic in any technology, product, service, device, component, or part thereof, that —

(A) is primarily designed or produced for the purpose of circumventing protection afforded by a technological measure that effectively protects a right of a copyright owner under this title in a work or a portion thereof; (B) has only limited commercially significant purpose or use other than to circumvent protection afforded by a technological measure that effectively protects a right of a copyright owner under this title in a work or a portion thereof; or (C) is marketed by that person or another acting in concert with that person with that person's knowledge for use in circumventing protection afforded by a technological measure that effectively protects a right of a copyright owner under this title in a work or a portion thereof.

98. *Id.* § 1202; Penney, *supra* note 4, at 65.

99. 17 U.S.C. § 1203 (1998).

100. *Id.* § 1204(a).

101. *Id.* § 1204(b).

102. *Id.* § 1204(c).

103. Intellectual Property Protection and Courts Amendments Act, Pub. L. No. 108-482, 118 Stat. 3912 (2004) (amending 18 U.S.C. § 2318); Miriam Bitton, *Rethinking the Anti-Counterfeiting Trade Agreement's Criminal Copyright Enforcement Measures*, 102 J. CRIM. L. & CRIMINOLOGY 67, 88 (2012); John R. Grimm, Stephen F. Guzzi & Kathleen Elizabeth Rupp, *Intellectual Property Crimes*, 47 AM. CRIM. L. REV. 741, 766 (2010) (describing the Act).

104. H.R. REP. NO. 108-600, at 4-5 (2004).

105. *See* Intellectual Property Protection and Courts Amendments Act. *See also* Grimm,

addition to those facilitated through the use of the mail or a facility of interstate or foreign commerce.¹⁰⁶ In addition, the Act provided for authorized forfeiture of equipment, devices, or materials used to manufacture, reproduce, or assemble counterfeit or illicit labels.¹⁰⁷ Under the criminal sanctions of the Act, counterfeit documentation or packaging is subject to a fine or imprisonment for not more than five years, or both.¹⁰⁸

In 2005, Congress enacted the Family Entertainment and Copyright Act.¹⁰⁹ The Act created a criminal penalty for the willful distribution of works being prepared for commercial distribution. Specifically, it prohibits any person from knowingly using or attempting to use an audiovisual recording device to transmit or make a copy of a motion picture or other audiovisual copyright protected work without the authorization of the copyright owner, from a performance of such work in a motion picture exhibition facility. The criminal sanctions for these actions were set to a fine and/or up to a three-year imprisonment. In cases of a second or subsequent offense, a convicted criminal infringer could face a fine and/or up to a six-year imprisonment.¹¹⁰

In 2008, following various propositions to amend the Copyright Act, Congress enacted the Prioritizing Resources and Organization for Intellectual Property Act of 2008 (PRO-IP Act).¹¹¹ The PRO-IP Act addressed criminal copyright by replacing the term “offense” with “felony,” eliminating IP misdemeanors.¹¹² In addition, the Act mandated a convicted offender to pay

Guzzi & Rupp, *supra* note 103, at 766 (describing the Intellectual Property Protection and Courts Amendments Act).

106. See 18 U.S.C. § 2318(c) (2004); Grimm, Guzzi & Rupp, *supra* note 103, at 766 (describing the Intellectual Property Protection and Courts Amendments Act).

107. 18 U.S.C. § 2318(d) (2004).

108. *Id.* § 2318(a)(1)(B).

109. Family Entertainment and Copyright Act of 2005, Pub. L. No. 109-9, 119 Stat. 218 (2005) (codified as 18 U.S.C. § 2319B (2012)). The Family Entertainment and Copyright Act of 2005 is divided into the Artist’s Rights and Theft Prevention Act of 2005 and Family Home Movie Act of 2005.

110. See 18 U.S.C. § 2319B(a) (2006).

111. Prioritizing Resources and Organization for Intellectual Property Act (PRO-IP Act), Pub. L. No. 110-403, 122 Stat. 4256 (2008). For examples of various propositions to amend the copyright Act, see the Intellectual Property Protection Act of 2007, proposed to Congress by Attorney General Alberto Gonzales in May 2007: Letter from Richard A. Hertling, Principal Deputy Assistant Att’y Gen., U.S. Dep’t of Justice, to Nancy Pelosi, Speaker, U.S. House of Representatives (May 14, 2007), http://www.justice.gov/archive/olp/pdf/ip_protection_act_2007.pdf. Although the proposition only advanced to a committee referral, some provisions were inserted in the 2008 Act. See Pyun, *supra* note 63, at 372-73 (describing the Intellectual Property Protection Act of 2007).

112. See PRO-IP Act § 208 (amending 17 U.S.C. § 506 (2008)). Regarding criminal IP, the Act broadened penalties for bodily harm and death resulting in criminal trafficking of counterfeit goods by adding a provision whereby an offender who knowingly or recklessly causes or attempts to cause serious bodily injury from intentionally trafficking counterfeit goods could face a fine, or up to twenty years’ imprisonment, or both. In addition, an offender who knowingly or recklessly causes or attempts to cause death from intentionally trafficking counterfeit goods, could face a fine, or up to a life sentence, or both. In

restitution to any victim of the offense as an offense against property and mandated restitution across the board for all IP crimes including unauthorized recordings of motion pictures and trade secrets under the Economic Espionage Act.¹¹³

Hence, criminal copyright in the United States has dramatically increased since it was first introduced in 1897. As described, the low-tech criminalization phase between 1897-1909, which marks the beginning of the process, did not make a significant change to U.S. copyright law, as criminal copyright did not extend to all copyrighted materials and was considered a misdemeanor. However, the high-tech criminalization phase, both analog and digital, marks a significant change toward a more criminal-oriented copyright law, as the scope and sanctions increased. More specifically, the digital criminalization phase is the most significant, both by the increase of penalties and the scope of the offenses. I argue that we are still within this phase, as criminalization of copyright law is likely to continue in the following years.

II. CRIMINAL COPYRIGHT PRACTICAL CHANGE

The on-going legislative process of copyright criminalization could lead to the assumption that copyright law is in the midst of a paradigm shift from civil to criminal copyright.¹¹⁴ Despite the ongoing legislative process of copyright criminalization, which—one could expect—would have led to an increase of criminal copyright litigation, practice might suggest that copyright in practice

addition, the Act extended forfeiture from counterfeiting items and all property used to commit the offenses to any property “constituting or derived from any proceeds obtained directly or indirectly as a result of the commission of” any criminal or civil counterfeiting offense. See PRO-IP Act §§ 205-206, (amending 18 U.S.C. §§ 2318, 2323 (2008)); Pyun, *supra* note 63, at 376-77 (describing the PRO-IP Act).

113. PRO-IP Act §§ 201, 207. In addition, Title III creates an IP Enforcement Coordinator (IPEC) to oversee an interagency IP enforcement advisory committee; Title IV provides the DOJ with a grant to assist them in investigating IP crimes, provide specialized training, and to promote the sharing of information and analyses between federal and state agencies concerning investigations and prosecutions of criminal copyright infringement. In addition, Title IV adds more specialized personnel in the CHIP and CCIP units of the DOJ and U.S. Attorney’s Office and requires that the FBI and Attorney General submit an annual report that includes statistics of investigations, arrests, prosecutions, and imposed penalties. Title V mandates a study conducted by the GAO to “help determine how the Federal Government could better protect the intellectual property of manufacturers.” See Pyun, *supra* note 63, at 377-79 (summarizing the PRO-IP Act Titles).

114. Paradigms are what the members of a scientific community share and conversely, a scientific community consists of men who share a paradigm. In the words of Thomas Kuhn:

[Paradigms] are the source of the methods, problem-field, and standards of solution accepted by any mature scientific community at any given time. As a result, the reception of a new paradigm often necessitates a redefinition of the corresponding science. Some old problems may be relegated to another science or declared entirely “unscientific.” Others that were previously non-existent or trivial may, with a new paradigm, become the very archetypes of significant scientific achievement.

THOMAS S. KUHN, *THE STRUCTURE OF SCIENTIFIC REVOLUTIONS* 176 (2d ed. 1970).

not only remains mostly a matter of civil law,¹¹⁵ but that criminal prosecutions are still relatively rare.¹¹⁶ It is important to note that criminalizing copyright does not necessarily imply that criminal copyright becomes the only responsive measure to copyright infringements, as it is not designed to be the sole or even primary tool to resolve the copyright infringement scheme. As noted by then-U.S. Attorney General Janet Reno, “Civil and administrative remedies will continue to be the primary tool for enforcement of IP rights. That makes sense. But there are some cases where the seriousness of the violation and the egregiousness of the conduct require imposition of a criminal penalty.”¹¹⁷ However, as a general argument, the increase of criminal copyright legislation should lead to a higher scale of enforcement, if copyright infringement does not cease, or at least substantially diminish.

In order to assess whether copyright law is undergoing a paradigm shift towards a criminal copyright paradigm, I seek to figure out whether the governmental understanding of copyright law has changed from a civil to a criminal perspective, by examining whether the enforcement of criminal copyright has increased in accordance with legislation. For this purpose, I

115. See Timothy D. Howell, *Intellectual Property Pirates: Congress Raises the Stakes in the Modern Battle to Protect Copyrights and Safeguard the United States Economy*, 27 ST. MARY'S L.J. 613, 646-47 (1996) (arguing that although criminal copyright laws have broadened in both their scope and use in the United States since 1897, the treatment of copyright infringement as a crime has remained less utilized than traditional civil remedies); Saperstein, *supra* note 9, at 1506 (arguing the imposition of criminal sanctions continues to remain the exception rather than the rule); Sharon B. Soffer, *Criminal Copyright Infringement*, 24 AM. CRIM. L. REV. 491 (1987) (arguing that prosecutions under the criminal statute have been relatively infrequent and are usually reserved for the most egregious violations); U.S. DEP'T OF JUSTICE, PROSECUTING INTELLECTUAL PROPERTY CRIMES 15-16 (4th ed. 2013), available at http://www.justice.gov/criminal/cybercrime/docs/prosecuting_ip_crimes_manual_2013.pdf (also arguing that “criminal copyright penalties have always been the exception rather than the rule”). For an argument that criminal copyright litigation should have increased due to criminal copyright legislation, see Hardy, *supra* note 9, at 305 (arguing that criminal copyright legislation will probably result in a substantial increase of criminal copyright cases).

116. See Kim F. Natividad, *Stepping It Up and Taking It to the Streets: Changing Civil & Criminal Copyright Enforcement Tactics*, 23 BERKELEY TECH. L.J. 469, 480 (2008) (arguing that the scale of criminal enforcement of copyright crime pales in comparison to civil enforcement efforts, as U.S. Department of Justice only files about 100 criminal IP cases per year). For this data, see JOHN GANTZ & JACK B. ROCHESTER, *THE PIRATES OF THE DIGITAL MILLENNIUM 207-08* (2005); Maggie Heim & Greg Geockner, *International Anti-Piracy and Market Entry*, 17 WHITTIER L. REV. 261, 267 (1995) (listing possible reasons why criminal actions is ineffective in some countries: a lack of criminal enforcement provisions in the copyright law; the police are corrupt or have other priorities; the prosecutors do not move cases through the courts; or the penalties are insignificant). See also Hardy, *supra* note 9, at 305 (arguing that, “To date, the bulk of the copyright case law has remained heavily a matter of civil law, with private party copyright owners as plaintiffs.”); Penney, *supra* note 4, at 61 (arguing that criminal copyright prosecutions are rare).

117. Janet Reno, *Statement by the Attorney General Symposium of the Americas: Protecting Intellectual Property in the Digital Age* (Sept. 12, 2000), <http://www.justice.gov/archive/ag/speeches/2000/91200agintellectualprop.htm>.

analyze and compare available statistical data regarding criminal and civil copyright litigation since criminal copyright was introduced.

A. *Criminal Copyright Prosecutions*

A possible indicator for the argument that thus far, the criminalization process in copyright could be merely a legislative act, is based on statistical data regarding criminal copyright prosecutions between the fiscal years 1955 and 2012.¹¹⁸ The data was gathered by applying two methods. First, data for 1955-2008 is based on the U.S. Attorneys' Annual Statistical Reports, which provide statistics of overall criminal prosecutions, and *inter alia*, criminal copyright prosecutions, including the number of defendants.¹¹⁹ Second, data for 2008-2012 is based on the Department of Justice's Annual Performance and Accountability Report,¹²⁰ which provides statistics of criminal copyright prosecutions including the number of defendants.

One caveat is that there are various factors to take into consideration when analyzing the findings. The data for 1897-1954 is absent, and thus the evaluation of criminal copyright prosecutions at that time is limited. However, the lack of official data for 1897-1954 does not hold a great significance for my evaluation, as although there are no official statistics on the number of criminal copyright prosecutions at that time, there are some indications that criminal copyright prosecutions were highly rare under the 1909 Act. For example, as the Supreme Court noted:

The first full-fledged criminal provisions appeared in the Copyright Act of 1909, and specified that misdemeanor penalties of up to one year in jail or a fine between \$100 and \$1,000, or both, be imposed upon "any person who

118. When criminal copyright was introduced in 1897, the fiscal year started on July 1, 1896, and ended in June 30, 1897. From the fiscal year of 1977, a fiscal year starts in October 1 and ends on September 30 of the next calendar year (Congressional Budget Act of 1974, Pub. L. 93-344, 88 Stat. 297 (1974) (currently codified at 31 U.S.C. § 1102) (2012)). The data refers to criminal copyright infringement, prosecuted under 17 U.S.C. § 104 (1955-1978, due to the Act of July 30, 1947, 61 Stat. 652 which codified the Copyright Act of 1909); 17 U.S.C. § 506 (1978-2011); and 18 U.S.C. § 2319 (1982-2011).

119. United States Attorneys' Annual Statistical Reports for 1955-2013 are available at *Annual Statistical Reports*, U.S. DEP'T OF JUSTICE, <http://www.justice.gov/usao/resources/annual-statistical-reports> (last visited Oct. 1, 2013). As the Reports stopped indicating criminal copyright infringements prosecutions in 2008 (they only mark zero), I only use the data until 2008.

120. Since 1996, Congress mandated a report of Department of Justice prosecutions of IP crimes brought under §§ 2318, 2319, 2319A and 2320 (2012) of Title 18 of the U.S. Code. *See* Anticounterfeiting Consumer Protection Act of 1996, Pub. L. No. 104-153, 110 Stat. 1386 (1996) (codified originally as 18 U.S.C. §2320(e), currently under 18 U.S.C. §2320(h) (2012); *see, e.g.*, U.S. DEP'T OF JUSTICE, FY 2004 PERFORMANCE AND ACCOUNTABILITY REPORT, APP. C (2004), <http://www.justice.gov/archive/ag/annualreports/pr2004/Appd/A-c.pdf> (last visited Oct. 1, 2013); U.S. DEP'T OF JUSTICE, FY 2012 PERFORMANCE AND ACCOUNTABILITY REPORT, APP. D (2012), <http://www.justice.gov/ag/annualreports/pr2012/app-d.pdf> (last visited Oct. 1, 2013).

willfully and for profit” infringed a protected copyright. This provision was little used.¹²¹

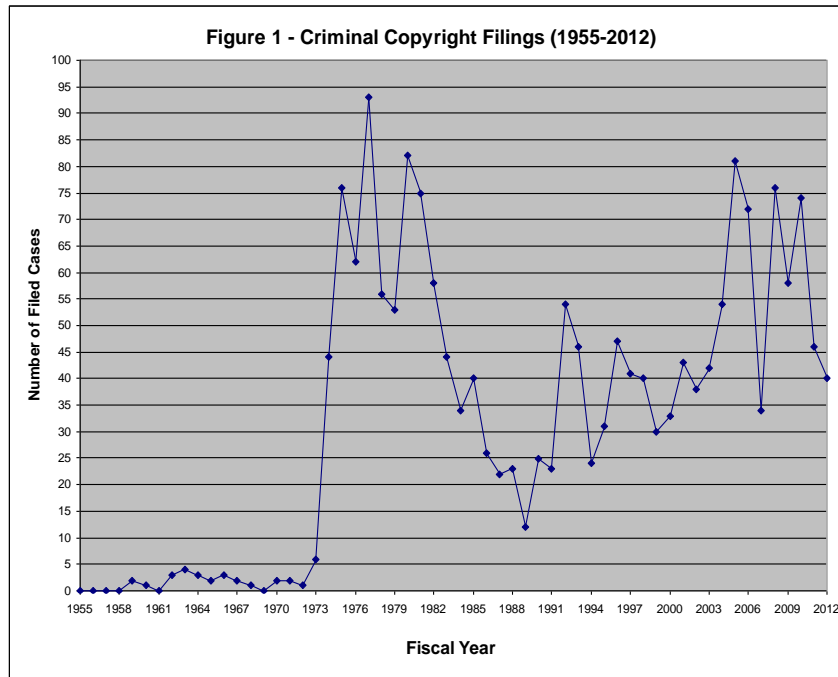
Also, as noted by Donald C. Curran, Register of Copyrights in 1985 in a Congressional hearing: “Although criminal sanctions have been available for copyright infringement since the 1909 Act, and in a quite limited way even before, these sanctions were seldom invoked before the 1970s.”¹²²

Thus, the official statistics between 1955-2012 are sufficient for the discussion of the criminal copyright gap, as prior to 1955 (and actually prior to 1970s) criminal prosecutions were very rare. The statistics are presented in Figure 1 (criminal copyright filings in the United States 1955-2012) (Aug. 31, 2012).¹²³

121. See *Dowling v. United States*, 473 U.S. 207, 221-22 (1985).

122. See *Civil and Criminal Enforcement of the Copyright Laws: Hearing on the Authority and Responsibility of the Federal Government to Protect Intellectual Property Before the Subcomm. on Patents, Copyrights and Trademarks of the S. Comm. on the Judiciary*, 99th Cong. 35 (1985) (statement of Donald C. Curran, active Register of Copyrights); see also WILLIAM STRAUSS, COMMITTEE ON THE JUDICIARY SUBCOMMITTEE ON PATENTS, TRADEMARKS, AND COPYRIGHTS, REMEDIES OTHER THAN DAMAGES FOR COPYRIGHT INFRINGEMENT 124 (March 1959), available at <http://www.copyright.gov/history/studies/study24.pdf> (arguing that the criminal section of the copyright act “has rarely been invoked” prior to 1959).

123. Figure 1 is processed from the statistical data I extracted from the United States Attorneys’ Annual Statistical Reports (1955-2008); and the Department of Justice’ Annual Performance and Accountability Report (2008-2012).



Analyzing the data reveals interesting results. First, during the low-tech criminalization phase, and up until the beginning of the analog high-tech phase (1955-1971), criminal copyright prosecutions were rare. Approximately twenty-six lawsuits were filed during a sixteen-year period. Donald C. Curran, as active Register of Copyrights of 1985, in a statement before the Subcommittee on Patents, Copyrights and Trademarks of the Committee on the Judiciary of the Senate, stated that the failure to use the 1897 and 1909 criminal sanctions until 1970, were due to four reasons: first, there was little legislative history to guide attorneys; second, due to a belief that federal civil remedies provided sufficient punishment to copyright infringers; third, due to a belief that criminal penalties are too slight to be effective deterrents; and finally, that liberalizing the right of defendants increased the burdens of criminal prosecutions, causing lawyers to opt for the surer civil field when possible.¹²⁴ I further analyze these and other possible reasons of the relatively low-rate of criminal copyright prosecutions in the section below.

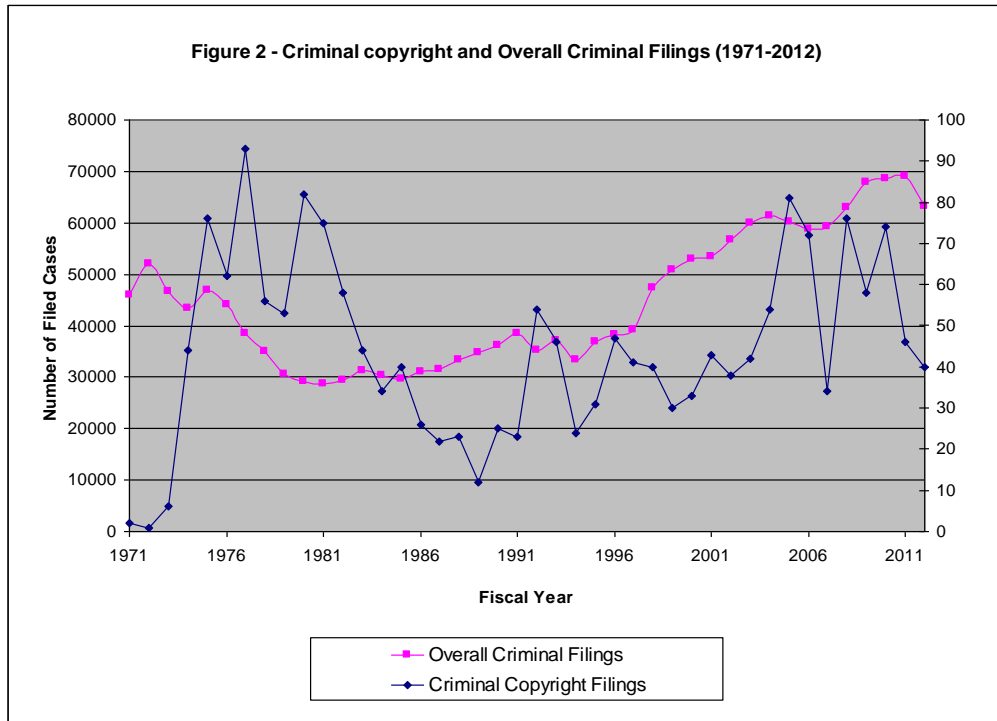
The rise in criminal prosecutions started in 1974, with the filing of forty-four criminal lawsuits in response to the legislation of the analog high-tech criminalization phase—that is, between 1971-1988—and continued to remain at the same level of prosecutions until 1985. However, between 1986-1991 there was a decrease in criminal copyright prosecutions. Moreover, the beginning of the digital high-tech phase in 1992 did not mark an increase in copyright prosecutions. Especially noteworthy, is that there was no substantial

124. See *Civil and Criminal Enforcement of the Copyright Laws*, *supra* note 122, at 35-36.

increase of litigation under the NET Act of 1997, contrary to what we could have expected from the massive lobbying that preceded the Act. It is not until 2005 that we can identify an increase in criminal copyright prosecutions, but only to resemble criminal prosecutions in the analog phase and not exceeding it.

In order to evaluate the findings that criminal copyright prosecutions do not always align with legislation, it is important to compare the findings to other possible trends which could explain this gap.

First, a decrease in criminal litigation could be a result of a decrease in overall criminal prosecution, due to, for example, governmental resources to prosecute in the same fiscal year. Hence, it is likely that a reduction of overall U.S. prosecutions led to a reduction of criminal copyright prosecutions. However, analyzing statistical data from the U.S. Attorneys' Annual Statistical Reports, which provides statistics of overall criminal prosecutions, illustrates that this is hardly the case.¹²⁵ As Figure 2 shows:

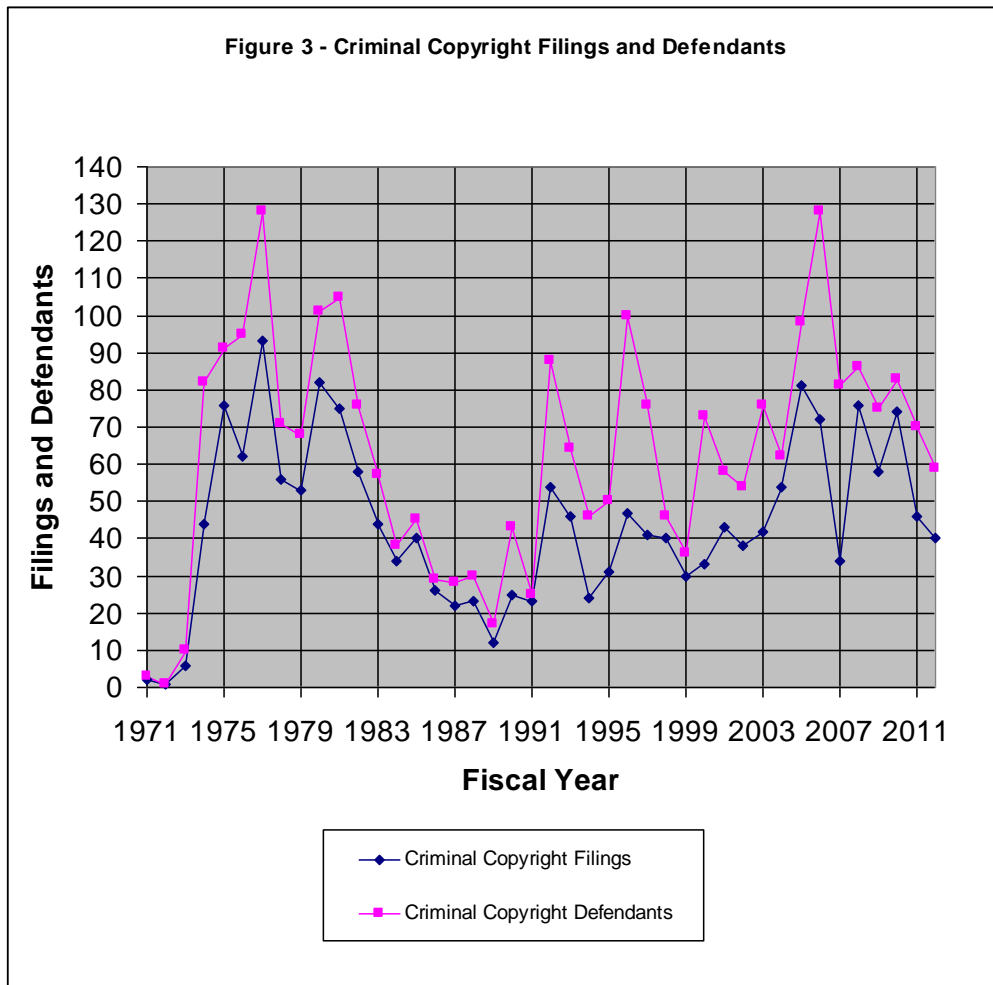


As Figure 2 indicates, criminal copyright prosecutions and overall criminal prosecutions in the high-tech criminalization phase do not overlap. Thus, this does not explain the reduction in criminal copyright prosecutions.

Second, since Figure 1 illustrates the number of filings rather than the number of individuals prosecuted, it is possible that although fewer cases were

125. United States Attorneys' Annual Statistical Reports for 1955-2012 are available at <http://www.justice.gov/usao/resources/annual-statistical-reports>.

filed, the filed cases contained more defendants, leading to a numerical rise in prosecuted defendants. For example, it is plausible that prosecutors did not increase the actual number of filed cases, but rather targeted larger operations of criminal copyright, and the filed cases involved more defendants than before. Thus, it is likely that prosecutions were targeted against large-scale operations of criminal copyright, leading to more convictions. However, as illustrated in Figure 3,¹²⁶ this is not the case:

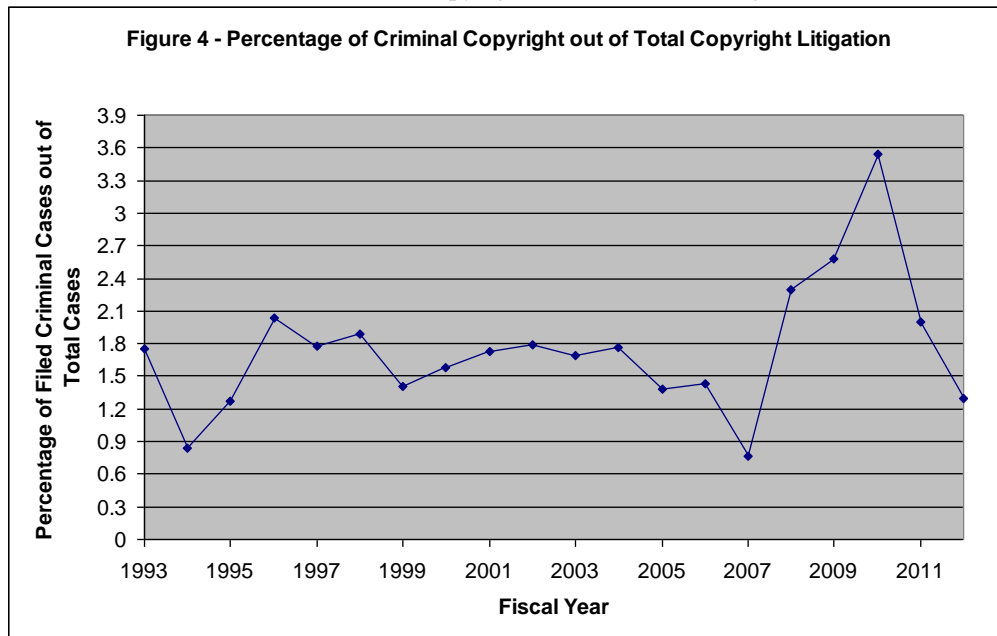


Although there is a rise in the number of accused in some fiscal years, namely, that some prosecutions involved more defendants. For example in 1974-1981, the number of defendants in fiscal years with lower filings were not higher than the number of defendants from previous fiscal years. Moreover,

126. Figure 3 is an illustration of processing the statistical data, which I obtained from two resources: The 1971-2007 statistical data is based on the United States Attorneys' Annual Statistical Reports. The data for 2008-2012 is based on the Department of Justice's Annual Performance and Accountability Report.

Figure 3 highlights that the number of defendants in 1977, which only marks the beginning of the high-tech criminalization phase, is higher than any other fiscal year.

Third, the decrease in criminal litigation could be the result of an overall decrease of civil and criminal litigation in those years. Hence, analyzing the ratio between civil and criminal copyright lawsuits should reveal whether criminal copyright takes a larger part of overall litigation annually and thus leads to the assumption that copyright is moving towards a paradigmatic change. Statistical data on civil copyright cases is taken from the *Judicial Business of the U.S. Courts* annual reports of 1997-2012, which provides data for the fiscal year ending on September 30 for the U.S. courts of appeal, district courts, and bankruptcy courts; the probation and pretrial services system; and other components of the federal Judiciary.¹²⁷ Analysis of statistical data from 1993-2012 of filed civil and criminal copyright are illustrated in Figure 4:



From 1996 to 2007, there was a decrease in the ratio between criminal copyright and civil copyright, suggesting that criminal copyright decreased during these years. On the other hand, between 2007-2010, there was an increase in the ratio between criminal copyright and civil copyright. These findings suggest that although there was an increase in the *civil-criminal copyright ratio* in recent years, it was only limited to a few years, while in other years, this ratio was in stagnation or even decreased. Thus, the decrease in criminal litigation is not a result of an overall decrease of civil and criminal litigation.

127. See *Judicial Business of the U.S. Courts*, U.S. COURTS (2013), <http://www.uscourts.gov/Statistics/JudicialBusiness.aspx> (last visited Oct. 1, 2013).

To conclude, using statistical data, I have examined criminal copyright prosecutions, in order to examine whether the criminalization process in copyright are merely or mostly a legislative act. The statistical data revealed interesting results. Part of the low-tech criminalization phase (1955-1971) was insignificant for criminal copyright perception, as both legislative acts and criminal enforcement measures were scarce. The more meaningful criminalization began with the high-tech criminalization phase, when along with the rise of criminal copyright legislative acts, there was a substantial rise in criminal prosecutions since 1974. Surprisingly, the insertion of the most criminal-oriented provisions into the copyright code with the passage of the NET Act, which was designed to “enable DOJ to prosecute several additional copyright infringement cases each year,”¹²⁸ along with the formation of more IP enforcement agencies and allocation of financial resources for the purposes of responding to copyright infringements via criminal law,¹²⁹ prosecutions did not rise (considering that implementing and enforcing the law is not immediate). After eliminating possible explanations of the criminal copyright gap such as a decrease in overall criminal prosecution; numerical rise in prosecuted defendants; and an overall decrease of civil and criminal copyright litigation, I conclude that there is a gap between the scope of criminal copyright liability and penalties and the infrequency of prosecution and punishment. I

128. The NET Act (No Electronic Theft (NET) Act, Pub. L. No. 105-47, 111 Stat. 2678 (1997)) was enacted in an expectancy to increase prosecutions of criminal copyright infringers. See the first draft of the NET Act (H.R. REP. NO. 105-339, at 6 (1997)): “based on information from the Department of Justice (DOJ), CBO expects that enacting this bill would enable DOJ to prosecute several additional copyright infringement cases each year.”

129. It appears that the Department of Justice actively tries to combat intellectual property criminal infringements. For example, as part of the DOJ strategy to combat intellectual property crimes, the DOJ has developed a team of specially-trained prosecutors who focus specifically on intellectual property crimes. First, a team of specialists which serve as a coordinating hub for national and international efforts against intellectual property theft, entitled the Criminal Division’s Computer Crime and Intellectual Property Section (CCIPS). Second, assigning specialized prosecutors entitled “Computer and Telecommunications Coordinators” (CTCs) to different United States Attorney’s Offices. Third, adding a “Computer Hacking and Intellectual Property” (CHIP) units in different cities where IP enforcement is especially critical. Fourth, creating the National Intellectual Property Law Enforcement Coordination Counsel (NIPLECC) to improve coordination of the different law enforcement agencies. In 2004, CCIPS, CHIP, and NIPLECC, along with other investigating and enforcement agencies developed the Strategy Targeting Organized Piracy (“STOP!”) Initiative, “to prosecute organized criminal networks that steal creative works from U.S. businesses and develop international interest in and commitment to the protection of intellectual property,” resulting in global large-scale action against piracy and counterfeiting networks. See *Finding and Fighting Fakes: Reviewing the Strategy Targeting Organized Piracy: Hearing Before the S. Subcomm. on Oversight of Government Management, the Fed. Workforce, and the District of Columbia of the S. Comm. on Homeland Security and Governmental Affairs*, 109th Cong. 76, 79-80 (2005); Hardy, *supra* note 9, at 323 (describing the growth of new programs in executive branch law enforcement agencies); Pyun, *supra* note 63, at 368-71 (describing the Department of Justice initiatives); U.S. DEP’T OF JUSTICE, REPORT OF THE DEPARTMENT OF JUSTICE’S TASK FORCE ON INTELLECTUAL PROPERTY 13 (Oct. 2004), http://www.justice.gov/olp/ip_task_force_report.pdf (last visited Oct. 1, 2013).

now turn to unveil the possible reasons for the criminal copyright gap, attempting to obtain better understandings of the criminalization process and of the gap.

B. *The Criminal Copyright Gap*

Statistical data indicates that the annual amount of criminal litigation is inconsistent. For example, criminal copyright litigation does not rise each year as expected from the massive criminal copyright legislation. I now turn to analyze this *criminal copyright gap* to understand its reasoning and possible ramifications.

The *criminal copyright gap* is a possible result of under-enforcement of criminal copyright law by the authorized law enforcement agencies. The reasons for under-enforcement of criminal activities in various legal fields are diverse.¹³⁰ Under-enforcement of criminal law can be a result of various reasons including favoritism or hostility to a specific group;¹³¹ official neglect; prioritizing resources/economic considerations; a conflict between enforcers and legislators over the meaning of the law and its appropriateness.¹³² Focusing on general reasons for under-enforcement of criminal law is insufficient on its own to provide a full understating of the criminal copyright gap. As each law has its unique characteristics, the criminal copyright gap should be examined through the uniqueness of copyright enforcement. Accordingly, I offer several possible explanations of the criminal copyright gap, in accordance with political, economic, and social theories related to copyright infringement and enforcement.

First, criminal legislation could be the result of an international pressure to legislate but not necessarily enforce the legislation. For example, the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPs) requires member states to provide for criminal procedures and penalties, along with enforcement procedures, but does not address the scale of enforcement.¹³³

130. For a comprehensive analysis of under-enforcement in criminal law, see Alexandra Natapof, *Underenforcement*, 75 *FORDHAM L. REV.* 1715, 1722-75 (2006).

131. Darryl K. Brown, *Street Crime, Corporate Crime, and the Contingency of Criminal Liability*, 149 *U. PA. L. REV.* 1295, 1302 (2001) (listing “race” as an example of discriminatory street crime enforcement); Tom Stacy & Kim Dayton, *The Underfederalization of Crime*, 6 *CORNELL J.L. & PUB. POL’Y* 247, 292 (1997) (describing the effects of the “race-to-the-bottom” theory, arguing, e.g., that poor neighborhoods are under policed);

132. For these, and more examples, see Natapof, *supra* note 130, at 1722.

133. Agreement on Trade-Related Aspects of Intellectual Property Rights art. 3, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, 1869 *U.N.T.S.* 299, 33 *I.L.M.* 1197 (1994) [hereinafter TRIPs], which requires member states to provide for criminal procedures and penalties, which should apply at least in cases of copyright piracy on a commercial scale. Although art. 41 obliges Member States to ensure that enforcement procedures are available under their law so as to permit effective action against any act of infringement of IP rights covered by the Agreement, it does not address the scale of enforcement. In addition, art. 41.5 of TRIPs states that “this Part does not create

Enforcement provisions in international agreements are either ineffective,¹³⁴ or crafted as broad legal standards rather than concrete rules that member states can interpret¹³⁵ and implement differently.¹³⁶ As long as international treaties and agreements focus mostly on legislation and refrain from obligatory enforcement measures, or do not craft obligatory narrow legal rules on IP enforcement, criminal legislation may to some extent become a dead letter, at least in some countries.¹³⁷ It is important to mention the existence of non-traditional international IP forums, usually private or public-private partnership, which are mostly aimed at IP enforcement.¹³⁸ Thus, there is also an international pressure to enforce the International Agreements and even add additional IP enforcement requirements to the existing agreements.

Second, criminal legislation is partly initiated by the lobbying of interest groups that influence legislation, and have little or no power to influence enforcement of legislation.¹³⁹ Thus, the lobbying of interest groups to impose

any obligation to put in place a judicial system for the enforcement of intellectual property rights distinct from that for the enforcement of law in general, nor does it affect the capacity of Members to enforce their law in general.”

134. For more on international IP agreements, e.g., TRIPs, and the reasons why they sometimes fail to provide effective global enforcement of IP rights, see Peter K. Yu, *TRIPs and Its Achilles' Heel*, 18 J. INTELL. PROP. L. 479 (2011).

135. Jerome H. Reichman & David Lange, *Bargaining Around the TRIPs Agreement: The Case for Ongoing Public-Private Initiatives to Facilitate Worldwide Intellectual Property Transactions*, 9 DUKE J. COMP. & INT'L L. 11, 35 (1998) (arguing that TRIPs “enforcement provisions are crafted as broad legal standards, rather than as narrow rules, and their inherent ambiguity will make it harder for mediators or dispute-settlement panels to pin down clear-cut violations of international law.”).

136. See, e.g., *id.* at 36 (arguing that the TRIPs enforcement level will probably disappoint rights holders in developed countries).

137. But see Peter K. Yu, *Enforcement, Economics and Estimates*, 2 W.I.P.O. J. 1, 1 (2010) (arguing that in recent years there is an increasing focus on IP enforcement standards at the international level which led to the negotiations of ACTA).

138. For example, The Global Congress on Combating Counterfeiting and Piracy is designed to produce recommendations mainly aimed at government authorities to step up enforcement mechanism and action. The Global Congress on Combating Counterfeiting and Piracy is convened by a public-private partnership with representatives from INTERPOL, the World Customs Organization (WCO), the World Intellectual Property Organization (WIPO), the International Chamber of Commerce/BASCAP initiative (ICC/BASCAP) and the International Trademark Association (INTA). See *About the Global Congress*, GLOBAL CONGRESS, <http://www.ccapcongress.net/about.htm> (last visited Oct. 1, 2013). For more examples of IP enforcement initiatives, see Viviana Muñoz Tellez, *The Changing Global Governance of Intellectual Property Enforcement: A New Challenge for Developing Countries*, in *INTELLECTUAL PROPERTY ENFORCEMENT: INTERNATIONAL PERSPECTIVES* 3, 9-10 (Li Xuan & Carlos M. Correa eds., 2009).

139. Different interest groups lobby for copyright criminalization. For example, the music, motion picture and computer industries lobbied Congress to strengthen copyright protection and enforcement in the high-tech criminalization phase, resulting in, e.g., the Sound Recording Act of 1971, Pub. L. No. 92-140, 85 Stat. 391 (1971), the Copyright Act of 1976, Pub. L. No. 94-553, 90 Stat. 2541 (1976), the Piracy and Counterfeiting Amendments Act of 1982, Pub. L. No. 97-180, 96 Stat. 91 (1982), and the No Electronic Theft (NET) Act, Pub. L. No. 105-47, 111 Stat. 2678 (1997). See Penney, *supra* note 4, at 63; Saunders, *supra* note 9, at 674-75. For a general review of the local and global political process of copyright

criminal sanctions on society is not necessarily applicable to enforcement agencies. As reported by a representative of right holders, at least until 2000 in the United States, the Walt Disney Company urged the federal prosecutors to prosecute criminal copyright and was rejected, even after the enactment of the NET Act in 1997.¹⁴⁰ As Peter Nolan, Senior Vice President/Assistant General Counsel of the Walt Disney Company indicated (after being asked, “has Disney actually sought a prosecutor to bring a case?”):

Oh, yes, and been declined on quite a few cases. In large part, it wasn't necessarily anything other than the offices having limited resources. I think this is, by the way, normal human thinking or management thinking. The U.S. Attorney says, “I have limited resources. I want to go after the person who is causing violence to my fellow citizens in my locality. I'm going to go after them rather than a copyright infringement which has a comparatively low guideline level, and as a result, I'm not going to bring it. I just don't have the manpower to do it or the money.” And then we as copyright owners decide to go civilly.¹⁴¹

However, there are few reports that indicate that some interest groups, such as the RIAA, meet with law enforcement agencies on a regular basis to assist them in copyright infringements detection. Thus, it seems that interest groups, to some extent, influence law enforcement agencies in combating copyright and trademark infringements.¹⁴²

Another political explanation for criminal copyright gap, although lacking any official evidence, is that the under-enforcement of copyright law is a result of intentional governmental instructions, as a compromise between political pressure by industries that desire strong copyright protection and industries that do not.¹⁴³ The under-enforcement of copyright law could also be a result of an intentional policy to refrain from public pressure and the formation of a “police state,” due to the nature of copyright infringements detection (which I further

protection, see Michael Birnhack, *Trading Copyright: Global Pressure on Local Culture, in THE DEVELOPMENT AGENDA: GLOBAL INTELLECTUAL PROPERTY AND DEVELOPING COUNTRIES* 363 (Neil Netanel ed., 2008).

140. No Electronic Theft (NET) Act, Pub. L. No. 105-47, 111 Stat. 2678 (1997).

141. *Intellectual Property/Copyright Infringement*, UNITED STATES SENTENCING COMMISSION 233 (2000), <http://www.ussc.gov/sites/default/files/pdf/research-and-publications/research-projects-and-surveys/economic-crimes/20001012-symposium/tGroupTwoDayTwo.pdf>.

142. See PAUL R. PARADISE, TRADEMARK COUNTERFEITING: PRODUCT PIRACY, AND THE BILLION DOLLAR THREAT TO THE U.S. ECONOMY 256 (1999) (arguing that the RIAA assist law enforcement, such as the Organized Crime Investigative Division (OCID) and “trains law enforcement and customs inspectors on how to identify counterfeit products, how to get in touch with the RIAA, and what legislation and statutes apply to music piracy”).

143. See Natapof, *supra* note 130, at 1741 (arguing that “the official choice to over- or under-police is subject as much to democratic pressures as technological ones and reflects governmental responsiveness to competing, legitimate claims over the Internet”); Edward K. Cheng, *Structural Laws and the Puzzle of Regulating Behavior*, 100 NW. U. L. REV. 655, 714-15 (2006) (arguing that “regulation of music piracy can be cast as a struggle between the music industry and electronic equipment manufacturers”).

explain), and the need to allocate many resources.¹⁴⁴

Third, it is plausible that copyright criminal legislation aims to achieve deterrence simply or mostly by the legislative act, and the fact that criminal litigation did not increase, does not necessarily indicate that criminalization failed.¹⁴⁵ For example, according to the House Report on the enactment of the NET Act, it was only expected to “enable DOJ to prosecute several additional copyright infringement cases each year.”¹⁴⁶ Hence, criminal copyright litigation was not supposed to increase dramatically even after the insertion of many criminal provision to copyright law. It might be the case that criminal legislation does deter copyright crimes, resulting in less litigation.

Moreover, achieving a deterrent effect from committing copyright crimes is not only quantitative but also qualitative; that is, even if the State does not raise its prosecution rate (quantities), or only slightly raises it, media attention on a single “newsworthy” case could potentially achieve the deterrence of committing copyright infringement,¹⁴⁷ and longer periods of imprisonment for every case could achieve the deterrent effect.¹⁴⁸ As Kevin Di Gregory, a DOJ representative, noted in Congress:

Even a handful of appropriate and well-publicized prosecutions under the NET Act is likely to have a strong deterrent impact, particularly because the crime in question is a hobby, and not a means to make a living. If these prosecutions are accompanied by a vigorous anti-piracy educational campaign sponsored by industry, and by technological advances designed to make illegal

144. Cheng, *supra* note 143, at 659 (arguing that “achieving enforcement levels necessary for effective deterrence may require unacceptably oppressive methods . . . [and] [h]aving thousands of traffic officers monitoring the streets (or the Internet) for illegal activity—essentially, the imposition of constant surveillance—conjures images of a police state”).

145. See Strauss, *supra* note 122, at 124 (arguing that the infrequency of criminal copyright prosecutions prior to 1959 “does not disprove its efficacy as a deterrent to willful and reckless infringements”). *But see* Hardy, *supra* note 9, at 323 (arguing that “whatever [criminal copyright] penalties and punishments are legislated must be enforced, or they will amount to little”).

146. See H.R. REP. NO. 105-339, at 6 (1997).

147. See Salil K. Mehra, *Software as Crime: Japan, the United States, and Contributory Copyright Infringement*, 79 TUL. L. REV. 265, 294 (2004) (arguing that criminal prosecutions for copyright infringement often get significant media attention and what tend to get the most attention are prosecutions whose target elicits surprise). In addition, criminal arrests, followed by media coverage, could potentially be sufficient to create deterrence due to fear of damage to reputation. See *id.* at 297. The author refers to an incident of criminal copyright infringement in Japan, in which the defendant lost her job and her home but only served twenty-two days in detention and paid a fine of less than \$1000. *Id.* (arguing that in Japan, where much of the penalty of criminal arrest is damage to reputation and collateral harm, the arrest itself tends to serve as the prosecution, which creates a substantial chilling affect before guilt or innocence is assessed); see also Aaron M. Bailey, *A Nation of Felons: Napster, the Net Act, and the Criminal Prosecution of File-Sharing*, 50 AM. U. L. REV. 473, 476 (2000) (“Prosecuting a select few infringers to set an “example” may discourage other potential infringers.”).

148. See, e.g., *Civil and criminal enforcement of the copyright laws*, *supra* note 122, at 43 (arguing that a trend towards longer periods of incarceration may exist).

copying more difficult, we are hopeful that a real dent can be made in the practice of digital piracy.¹⁴⁹

Qualitatively, criminal copyright succeeded to some extent. Consistent with Congress' objectives for the NET Act to prosecute commercial-scale "pirates,"¹⁵⁰ federal agents brought down "Pirates With Attitude" in 1999;¹⁵¹ broke the "DrinkorDie" software piracy ring in 2001;¹⁵² and prosecuted other computer software and motion pictures infringers.¹⁵³ Thus, under this reasoning, focusing on large-scale operations partly fulfill the intention behind criminal copyright legislation and, furthermore, could be sufficient to create deterrence against infringement. Moreover, targeting large-scale operations could emphasize the argument that criminal copyright mainly serves to complement the civil enforcement system.¹⁵⁴

However, it seems that this reasoning does not align with the current reality that criminal copyright legislation and copyright infringements have not ceased. Whether or not copyright infringements and counterfeiting rates are increasing annually is debatable and highly difficult to measure, if at all possible. Some data indicates that copyright infringements and counterfeiting rates are growing annually worldwide and specifically in the United States. For example, a study conducted by the International Planning and Research Corporation (IPRC), for the Software Alliance (BSA), a trade association mainly representing the software industry, showed that "software piracy" did not decrease in the U.S. from 1997 through 1999, and that global revenue losses to software piracy increased from \$11.3 billion in 1997 to \$12.2 billion in 1999.¹⁵⁵ Nevertheless, it is safe to argue that criminal legislation does not fully achieve deterrence simply by the legislative act, or at least not enough deterrence.¹⁵⁶

149. *Implementation of the "Net" Act and Enforcement Against Internet Piracy: Oversight Hearing Before the Subcomm. on Courts and Intellectual Prop., House Comm. on the Judiciary*, 106th Cong. 22 (1999) (statement of Kevin Di Gregory of the United States Department of Justice).

150. 143 CONG. REC. S12, 689 (daily ed. Nov. 13, 1997) (statement of Sen. Hatch) ("Again, the purpose of the bill is to prosecute commercial-scale pirates who do not have commercial advantage or private financial gain from their illegal activities. But if an overzealous prosecutor should bring and win a case against a college prankster, I am confident that the judge would exercise the discretion that he or she may have under the Sentencing Guidelines to be lenient. If the practical effect of the bill turns out to be draconian, we may have to revisit the issue.").

151. "Pirates With Attitude" operated 13 FTP (file transfer protocol) servers hosting over 30,000 software programs. Menell, *supra* note 20, at 323.

152. *Id.*

153. *Id.*; Goldman, *supra* note 66, at 381-92.

154. *See* Menell, *supra* note 20, at 329-30 (arguing that we should view public enforcement as complementary to civil enforcement).

155. *See* INT'L PLANNING & RESEARCH CORP., SEVENTH ANNUAL BSA GLOBAL SOFTWARE PIRACY STUDY 6 (2002), available at http://www.bsa.org/~media/Files/Research%20Papers/GlobalStudy/2002/Global_Piracy_Study_2002.pdf; Goldman, *supra* note 66, at 398-99 (discussing the IPRC study).

156. *See, e.g.*, Bitton, *supra* note 103, at 67-68 (arguing that the fact that in recent years counterfeiting rates have continuously grown suggest that the criminal enforcement systems

Fourth, criminal copyright is not designed to eliminate illegal infringements, but rather reduce them to a profitable level. Under this argument, enforcement of copyright does not rise, at least not substantially, as there is a “tolerance rate” in which copyright is still profitable for its right holders, and criminal copyright only aids in maintaining this rate.¹⁵⁷ Under this argument, right holders are not perusing actual enforcement as long as civil remedies are more appealing.¹⁵⁸ However, this is a weak argument in favor of under-enforcement, as even if such tolerance rate exists, it is unknown and unquantifiable, as this rate will vary between different right holders. Even if such tolerance rate could be measured, it will most likely be highly inaccurate and expensive to measure, as infringements rates most likely change rapidly.

Fifth, despite governmental efforts to increase the involvement of enforcement agencies in enforcement of criminal copyright offenses, actual enforcement is problematic as the digital environment poses many difficulties

in place have not significantly deterred or affected people’s behavior in this field); Elysia McMahan, *Top 5 Most Counterfeited Products in the World*, FIRST TO KNOW (Nov. 13, 2014), <http://firsttoknow.com/top-5-most-counterfeited-products-in-the-world> (last visited Feb. 15, 2015) (“Since 1982, the global trade in illegitimate goods has increased from \$5.5 billion to approximately \$600 billion annually.”). In the United Kingdom, file-sharing was reported to increase from £278 million in lost sales in 2003 to £414 million in lost sales in 2005. See ANDREW GOWERS, GOWERS REVIEW OF INTELLECTUAL PROPERTY (2006), available at <http://www.official-documents.gov.uk/document/other/0118404830/0118404830.pdf>. However, the true rates of copyright infringement are extremely difficult, if not impossible, to estimate, thus, this data should be examined carefully. See United States Government Accountability Office, *Observations on Efforts to Quantify the Economic Effects of Counterfeit and Pirated Goods*, REPORT TO CONGRESSIONAL COMMITTEES (2010), <http://www.gao.gov/new.items/d10423.pdf> (last visited Oct. 1, 2013) (“Generally, the illicit nature of counterfeiting and piracy makes estimating the economic impact of IP infringements extremely difficult, so assumptions must be used to offset the lack of data. Efforts to estimate losses involve assumptions such as the rate at which consumers would substitute counterfeit for legitimate products, which can have enormous impacts on the resulting estimates. Because of the significant differences in types of counterfeited and pirated goods and industries involved, no single method can be used to develop estimates. Each method has limitations, and most experts observed that it is difficult, if not impossible, to quantify the economy-wide impact.”); see also the 2010 Annual report by the International Federation of the Phonographic Industry (IFPI), which states that: although P2P piracy is the single biggest problem and did not diminish in 2009, the illegal distribution of infringing music through non-P2P channels is growing considerably. The research showed the biggest increases in usage for overseas unlicensed MP3 pay sites (47%) and newsgroups (42%). Other significant rises included MP3 search engines (28%) and forum, blog and board links to cyberlockers (18%). *IFPI Digital Music Report*, IFPI (2010), <http://www.ifpi.org/content/library/DMR2010.pdf> (last visited Oct. 1, 2013). See also Robin Fry, *Copyright Infringement and Collective Enforcement*, 2002 E.I.P.R. 516, 522 (2002) (“Given the fact that the legal protection is sufficient, the increasing presence of counterfeiting and piracy can only be explained by an insufficient enforcement situation.”).

157. See Ariel Katz, *A Network Effects Perspective on Software Piracy*, 55 U. TORONTO L.J. 155, 191 (2005) (arguing that “tolerating piracy can be profitable only as long as the rate of piracy is controlled . . . [and] may be profitable only as long as there are enough paying customers”).

158. See Strauss, *supra* note 122, at 124 (arguing that civil actions could be preferred by injured copyright owners since they offer a more lucrative result).

to enforcement agencies, such as detection,¹⁵⁹ identifying suspects,¹⁶⁰ cross-over jurisdictions, overseas operators and prosecuting juveniles.¹⁶¹ Take detection, for example. Detection of illegal file-sharing is not necessarily an easy task. It is important to first differentiate between civil and criminal detection, because they hold significant differences. In order to detect illegal file-sharing, right holders will usually connect to a peer-to-peer (P2P) network and search for their copyrighted materials. Once found, the right holders track the user's IP address. On the civil aspect, the right holder can apply for a subpoena to reveal the identity of the file-sharer to file a civil lawsuit.¹⁶² Even if some courts will not easily reveal the identity of the file-sharer, I still consider it a relatively easy and cheap method of detecting and filing a civil lawsuit.

Criminal actions are different. In order to pass the threshold of criminal liability, sharing a single song online will probably not be sufficient for prosecution. In order to pass the threshold, the file-sharer will have to be linked to other infringements in a set period, and only then, he or she could be liable for criminal prosecution. This raises three main problems.

The first problem is that it is almost impossible to analyze the file-sharer's

159. In a different context, see Cheng, *supra* note 143, at 656 (arguing that enforcement of sporadic and victimless offenses are extremely difficult to detect); Robert A. Kagan, *On the Visibility of Income Tax Violations*, in *TAXPAYER COMPLIANCE: SOCIAL SCIENCE PERSPECTIVES* 76, 76-78 (Jeffrey A. Roth & John T. Scholz eds., 1989) (suggesting the term "low-visibility" offenses).

160. Identifying criminal infringers could be proven as a challenge to potential prosecution: ISPs are currently not obliged to monitor their users online, as to protect their privacy; identifying infringing uses necessitates financial resources which are limited and are more complex: they need to pass a threshold of infringements to be considered criminal. "Protection of Privacy.—Nothing in this section shall be construed to condition the applicability of subsections (a) through (d) on—(1) a service provider monitoring its service or affirmatively seeking facts indicating infringing activity, except to the extent consistent with a standard technical measure complying with the provisions of subsection (i); or (2) a service provider gaining access to, removing, or disabling access to material in cases in which such conduct is prohibited by law." 17 U.S.C. § 512(m) (2012); Bailey, *supra* note 147, at 514-15 (arguing that identifying users for prosecution may raise much more complex legal questions than those raised by civil litigation, as the evidentiary standards for a criminal conviction are stricter than in civil suits); see also David R. Johnson & David Post, *Law and Borders: The Rise of Law In Cyberspace*, 48 *STAN. L. REV.* 1367 (1996).

161. The United States Department of Justice terminated federal criminal investigations under the NET Act, when it found the perpetrator was a juvenile and therefore not normally subject to federal prosecution. See *Implementation of the "Net" Act and Enforcement Against Internet Piracy*, *supra* note 149; see also Reno, *supra* note 117 (finding that "pirates" and counterfeiters have formed "transnational organized networks that are difficult to identify and require significant resources to investigate and prosecute").

162. See 17 U.S.C. § 512(h) (2012). However, it is not an easy task for courts to decide, due to a possible risk to fundamental human rights, such as free speech and the right to privacy. See Michael Birmhack, *Unmasking Anonymous Online Users in Israel*, 2 *HUKIM* 51, 82 (2010) [Hebrew]; see generally Eldar Haber, *The French Revolution 2.0: Copyright and the Three Strikes Policy*, 2 *HARV. J. SPORTS & ENT. L.* 297, 317 (2011); Lyrrisa Barnett Lidsky & Thomas F. Cotter, *Authorship, Audiences, and Anonymous Speech*, 82 *NOTRE DAME L. REV.* 1537 (2007).

allegedly illegal activities to see whether it amounts to criminal activity, without a database. Under this scenario, enforcement agencies must maintain and operate a database that contains information regarding every file-sharer's allegedly illegal activities. For this database to be effective, as detection of infringers is highly expensive, right holders must be willing and able to provide enforcement agencies with details on the alleged infringements and infringers, such as IP addresses. Only then, enforcement agencies might be able to decide whether an end-user passes a threshold for criminal prosecution.

The second problem is that an IP address relates usually to a household, meaning that there is no technological differentiation among different members of the household, it is almost impossible to analyze the database for members passing the threshold of infringement. If criminal prosecution will be filed against any household IP address that passes the threshold, then each alleged illegal activity must be analyzed separately, by different members of the household, to identify whether one of them passes the criminal threshold. This task is of course expensive and problematic,¹⁶³ and could perhaps be overcome by setting a very high threshold for the entire household, which will ensure that at least one of the household was engaging in criminal activity.¹⁶⁴

The third problem is that this method of detecting infringements is almost solely reserved for tracking P2P infringers. Thus, the perceivable outcome of the success of criminal prosecutions occurring by database identification is that users will either encrypt their actions or their IP addresses using various technologies and thus avoid getting caught, or use other methods of downloading and data consumption, such as websites that offer streaming of copyrighted materials, direct access to copyrighted materials, and instant messaging and chat software.¹⁶⁵

Thus, finding criminal infringers is a difficult task for law enforcement agencies, often lacking the ability to increase detection of criminal infringers.¹⁶⁶ In this case, the need for interest groups' private investigation and

163. It may require, for example, summoning of witnesses, searches in houses, seizures and examination of computers, etc. For this argument, see Alexander Peukert, *Why Do 'Good People' Disregard Copyright on the Internet?*, in CRIMINAL ENFORCEMENT OF INTELLECTUAL PROPERTY LAW 151, 160 (Christophe Geiger ed., 2012).

164. In Germany for example, criminal proceedings regarding copyright infringement only begins when a relatively high threshold is reached. As indicated by the German Ministry of Justice, public prosecutors investigate only if more than 700 works had been made available, and if a person without prior convictions had not uploaded more than 2500 works, "he or she would not be dispensed with preferment of public charges by a payment of a lump sum because 'the degree of guilt' would not require the opening of main proceedings." See *id.* at 160.

165. See Haber, *supra* note 162, at 323-24 (describing methods of avoiding copyright infringement detection over the Internet).

166. For example, after lack of convictions under the NET Act, No Electronic Theft (NET) Act, Pub. L. No. 105-47, 111 Stat. 2678 (1997), during the first eighteen months following its enactment, in a hearing of the House Judiciary Committee's Subcommittee on Courts and Intellectual Property in May 1999, Kevin Di Gregory of the United States Department of Justice pointed out several significant challenges to law enforcement: first,

cooperation with law enforcement agencies is crucial (much like in other criminal offenses), but, when it comes to taking active part in prosecution, the interest groups choose to be less active compared to their lobbying efforts to criminalize copyright.¹⁶⁷ Moreover, interest groups might be more interested to use the criminal law as leverage to settle civil lawsuits, without actual usage of the criminal sanctions; they can file a complaint on a person to law authorities, and meanwhile file a civil suit against that person, pressuring him to settle. After such settlement, some interest groups might be less motivated to aid law enforcement agencies in bringing that person to criminal justice.

It is worth noting that despite the difficulties posed by the digital environment, it is probably easier to catch a larger amount of criminal infringers than in the physical environment, due to detection technologies and methods.¹⁶⁸ Thus, this reason is insufficient on its own to explain the criminal

unlike physical-world copyright “piracy,” which requires expensive manufacturing equipment, storage facilities, and a distribution chain, including middlemen and retailers, illegal digital distribution of copyrighted works requires only a computer and an Internet account. *Implementation of the “Net” Act and Enforcement Against Internet Piracy*, *supra* note 149; *see also* Goldman, *supra* note 66, at 377-78 (describing the implementation of the NET Act hearing). Thus, the Internet “pirate” is a less obvious focus for a criminal investigation. *Implementation of the “Net” Act and Enforcement Against Internet Piracy*, *supra* note 149. Second, it is difficult to count the number of illegitimate copies made over the Internet and therefore calculate damages and losses. *Id.* Third, when copyright crimes occur over the Internet, where no specific United States Attorney has primary responsibility or jurisdiction, prosecutions often cut across prosecutors’ territories, leaving them without a crime to prosecute in their own district. *Id.* Fourth, investigating digital copyright piracy requires agents that are not only experienced criminal investigators, but also possess special technical skills, and thus are hard to retain. *Id.*

167. See, e.g., a reported telephone conversation with Joel Schoenfield, RIAA special antipiracy counsel that took place on April 9th, 1984. Schoenfield stated that “RIAA is selective in what they refer to Justice, turning over only the most egregious cases.” *See Civil and criminal enforcement of the copyright laws*, *supra* note 122, at 41; *id.* at 3 (statement of Victoria Toensing, Deputy Assistant Attorney General at the criminal division) (stating that “there has been a history of interest in copyright prosecutions in the Criminal Division,” and that Julian Greenspun, a member of the General Litigation Section “communicated to each industry [i.e., the record industry, the motion picture industry and the computer industry] an offer that if for some reason they found a certain U.S. attorney’s office was unable or did not wish to bring a certain prosecution that we had an offer in the Criminal Division, in the General Litigation Section, to review that case to see if it merited prosecution”). On the other hand, *see* Gregor Urbas, *Criminal Enforcement of Intellectual Property Rights: Interaction Between Public Authorities and Private Interests*, in *NEW FRONTIERS OF INTELLECTUAL PROPERTY LAW: IP AND CULTURAL HERITAGE, GEOGRAPHICAL INDICATIONS, ENFORCEMENT AND OVERPROTECTION* 303, 305 (Christopher Heath & Anselm Kamperman Sanders eds., 2005) (arguing that many industry bodies, e.g., the Motion Picture Association, the International Federation of Phonographic Industries and the Business Software Alliance, take an active role in providing intelligence and operational support in public enforcement activities).

168. In the digital environment, there are many ways to catch copyright infringers. For example, using port-based analysis that is based on the concept that many P2P applications have default ports on which they function, and administrators “observe the network traffic and check whether there are connection records using these ports.” Yimin Gong, *Identifying P2P Users Using Traffic Analysis*, SYMANTEC (July 20, 2005),

copyright gap.

Sixth, governmental guidelines of criminal copyright prosecutions either don't exist, or are too vague for prosecutors. Take the United States Attorneys Manual as an example: the Executive Office for United States Attorneys (EOUSA) publishes and maintains an internal manual for attorneys and other organizational units of the department concerned with litigation.¹⁶⁹ Until 1985, the manual did not guide criminal prosecutors to pursue criminal copyright infringements, at least not at a high-scale. For example, the 1984 revision to the manual stated that, "the existing Federal statutory scheme clearly contemplates enforcement primarily by civil means." In other words, the manual perceived criminal remedies as merely supplementary to civil copyright.¹⁷⁰

Due to concerns raised by representatives of the motion picture and recording industries that the 1984 manual might be constructed to permit declination of criminal copyright cases in favor of civil remedies,¹⁷¹ the Department of Justice revised the manual. The 1985 revision stated that, "all criminal copyright matters should receive careful attention by the United States Attorney." The revised section did not change since.¹⁷² However, it seems that this argument does not align with United States statistics of criminal copyright prosecutions; since 1985, there should have been a substantial rise in prosecutions, but no such rise is shown.

Seventh, enforcement agencies might feel conflicted about criminal copyright, exercising their prosecutorial discretion, and individual feelings may override professionalism and "rule of law" norms. As some parts of the public have little interest in imprisoning infringers without a profit motive,¹⁷³ especially when the infringers are young,¹⁷⁴ enforcement agencies might

<http://www.symantec.com/connect/articles/identifying-p2p-users-using-traffic-analysis>. The second method, known as protocol analysis, uses "an application or piece of equipment [that] monitors traffic passing through the network and inspects the data payload of the packets according to some previously defined P2P application signatures." *Id.*; see also Haber, *supra* note 162, at 323. Another method is by using DRM steganography, such as watermarks that can aid detect the Internet identity of the User Internet Protocol (IP) address. See *Information Hiding: Steganography & Digital Watermarking*, JJTC (last visited Jan. 15, 2014), <http://www.jjtc.com/Steganography>.

169. See *Mission and Functions*, UNITED STATES DEPARTMENT OF JUSTICE (last visited Oct. 1, 2013), <http://www.justice.gov/usao/eousa/mission.html>.

170. See *Civil and criminal enforcement of the copyright laws*, *supra* note 122, at 8 (statement of Senator Mathias).

171. *Id.* at 15-16 (statement of Victoria Toensing, deputy assistant attorney general at the criminal division).

172. United States Attorneys' Manual § 9-71.010 (2012).

173. See Jonathan Band & Masanobu Katoh, *Members of Congress Declare War on P2P Networks*, J. INTERNET L. (2003), <http://www.policybandwidth.com/publications/JBand-CongressP2PWar.pdf> (noting that enforcement of criminal copyright against non-commercial infringers has not been a priority for the Justice Department, which perceives that the public has little interest in seeing college students sent to prison merely because they traded songs on the Internet).

174. The United States Department of Justice recognized that the "NET Act defendants—because they tend to be young and acting without a profit motive—tend to

abstain from prosecuting most copyright infringement activities. Under these arguments, the criminal copyright gap occurs due to possible confliction with social and/or moral norms.¹⁷⁵

This possible explanation of the criminal copyright gap could be best explained from Meir Dan-Cohen's distinction between conduct and decision rules.¹⁷⁶ In his seminal work, Dan-Cohen identifies and distinguishes between two sets of legal rules: first, conduct rules, designed to guide the general public's behavior and second, decision rules, directed to the officials who apply conduct rules. By offering a model of *Acoustic Separation*,¹⁷⁷ Dan-Cohen exemplifies how society accommodates competing values at stake in criminal law and raises the issue of the legitimacy of selective transmission.

The criminal copyright gap could be explained to some extent under this model. Criminal copyright infringement, as a conduct rule, tells society not to infringe copyright, and that upon infringement, they could face a criminal sanction. Criminal copyright infringement, as a decision rule, should instruct law enforcement agencies on how to enforce infringements. But in this case, the two sets of rules are not necessarily in harmony, creating selective transmission. In other words, if the public and the officials receive different normative messages regarding criminal copyright infringements, selective transmission could occur. This could possibly explain the existence of low enforcement and, inter alia, the criminal copyright gap.

Thus, the criminal copyright gap is most likely caused by under-enforcement and is the result of many different reasons, which most likely overlap in some instances. The criminal copyright gap might have various ramifications on copyright criminalization. Mainly and most importantly, the

make more sympathetic defendants than those in most criminal cases, and that U.S. Attorney's Offices are naturally reluctant to bring such prosecutions." *Implementation of the "Net" Act and Enforcement Against Internet Piracy*, *supra* note 149. See, e.g., *Draft for a second act on copyright in the information society*, GERMANY MINISTRY OF JUSTICE 12 (Sept. 27, 2004), <http://www.urheberrecht.org/topic/Korb-2/bmj/760.pdf> (stating that "schoolyards should not be criminalized.").

175. See, e.g., Dan Kahan's explanation of the "sticky norms" problem. Kahan argues that a law which conflicts with a social norm could be counter-productive. Kahan further argues that severe penalties, in oppose to weak penalties, could likely cause governmental actors to override professionalism and "rule of law" norms due to individual feelings. See Dan M. Kahan, *Gentle Nudges vs. Hard Shoves: Solving the Sticky Norms Problem*, 67 U. CHI. L. REV. 607, 608 (2000); Cheng, *supra* note 143, at 660 (arguing "[d]isproportionate penalties provoke community outrage and ultimately may cause even greater underenforcement as police and prosecutors feel increasingly conflicted about the law's advisability").

176. See Meir Dan-Cohen, *Decisions Rules and Conduct Rules: On Acoustic Separation in Criminal Law*, 97 HARV. L. REV. 625 (1984). I am extremely grateful to Peter S. Menell for this suggestion.

177. Dan-Cohen exemplifies the Acoustic Separation model through an imaginary universe, in which two types of people exist: the public and officials. Each of the groups occupies a different, acoustically sealed chamber. The law is directed to both groups. In a different manner: the public is guided by conduct rules, while the officials provide guidelines for their decisions based on the law (decision rules). See *id.* at 630.

gap could turn criminal copyright legislation into almost a dead letter. As long as enforcement measures do not align with legislation, achieving criminal copyright goals will most likely be futile.

CONCLUSION

Whether the increase of criminal copyright legislation leads to a paradigm shift in copyright law is open to dispute. I argue that thus far, because the legal community's understanding of copyright law has not changed from a civil to a criminal perspective on copyright, a paradigm shift is not currently occurring. I argue that a paradigm shift cannot be merely legislative. Changing the perception of copyright law from civil to criminal requires structural changes in practice. Criminal copyright cannot be mostly a legislative act. Statistics reveal that criminal prosecution does not match the relatively massive insertion of criminal copyright in legislation. This criminal copyright gap between the scope of criminal copyright liability and the infrequency of prosecution and punishment, could be attributed to various reasons: international pressure to legislate criminal copyright without obliging its enforcement; political barriers and considerations; achieving deterrence through legislation and other means, or a "tolerance rate" of copyright infringements; difficulties to enforcement agencies; social, moral and economic considerations; and prioritization of law enforcement agencies.

This Article unveils the criminal copyright gap between legislation and enforcement of criminal copyright infringements. Among various ramifications of the criminal copyright gap, it mainly demonstrates one important issue: legislation alone is insufficient to create a paradigm shift, as enforcement of criminal copyright plays an important role in a paradigmatic change to criminal copyright.¹⁷⁸ Thus, copyright law is not yet criminal-oriented. Nevertheless, if enforcement of copyright infringement becomes more substantial in the following years, a paradigmatic shift towards a criminal copyright regime could occur.

178. Yu, *supra* note 137, at 1 (arguing that meaningful IP protection must be effectively enforced).

MISAPPROPRIATION AND THE MORALITY OF FREE-RIDING

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ABSTRACT

Concern about free-riding drives intellectual property law, especially its misappropriation doctrine. Freely enjoying goods that are costly to produce may be bad for society as a whole (because it weakens private incentives to create such goods) and also unfair to those who have created them (because they are not compensated for all the value they produced). In recent decades, courts in misappropriation disputes have focused exclusively on the incentives worry, believing the fairness worry yields an unbounded misappropriation doctrine that conflicts with and is preempted by copyright law.

But this view misunderstands the morality of free-riding. Whether free-riding is morally objectionable depends on the particular characteristics of the free-rider, not the fact of free-riding alone. And under copyright case law, that means the misappropriation doctrine can be based on ethics and yet not preempted. A better understanding of free-riding's moral dimensions helps repair a now broken doctrine, and more than that shores up intellectual property law's broader response to one of its driving concerns.

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INTRODUCTION

For the past few years, Rupert Murdoch has been on a crusade. In his sights are free-riders who purportedly lack all respect for the rights of others. To assemble or "aggregate" news items without permission, says Murdoch, is to commit "theft."¹ Those who build an entire business on news aggregation are "content kleptomaniacs."²

Admittedly, Murdoch's moral authority on this subject may be doubted.³ The popularity of his position, however, is plain to see. News aggregators, whose ranks have included *The Huffington Post* and Google News, often attract criticism when they try to profit from others' news stories for free. Such free-riding amounts to theft or piracy in the eyes of critics who are convinced that the work necessary to produce the news entitles the laborers to a property right in their product.

Ironically enough, in advancing this position, these critics are themselves enjoying the fruits of others' labors. No one worked harder than Melville Stone and his organization, the Associated Press, to popularize the view that news is property that is stolen or "misappropriated" when it is used freely.⁴ Stone set out to right what he saw as a clear moral wrong.⁵ And so he litigated the issue all the way to the Supreme Court, which he convinced to see things his way. In the famous 1918 case, *International News Service v. Associated Press*, he persuaded a majority of the Supreme Court to enjoin the free-riding of one of the

1. Mercedes Bunz, *Rupert Murdoch: 'There's No Such Thing as a Free News Story,'* THE GUARDIAN (Dec. 1, 2009, 12:58 PM), <http://www.theguardian.com/media/2009/dec/01/rupert-murdoch-no-free-news>.

2. Alistair Dawber, *Murdoch Blasts Search Engine "Kleptomaniacs,"* THE INDEPENDENT (Oct. 10, 2009), <http://www.independent.co.uk/news/media/online/murdoch-blasts-search-engine-kleptomaniacs-1800569.html>.

3. See Mike Masnick, *A Look at All the Sites Owned by Rupert Murdoch That "Steal" Content*, TECHDIRT (Nov. 11, 2009, 9:57 AM), <https://www.techdirt.com/articles/20091111/0049546883.shtml> (listing aggregator sites owned by Murdoch).

4. See, e.g., Douglas G. Baird, *The Story of INS v. AP: Property, Natural Monopoly, and the Uneasy Legacy of a Concocted Controversy*, in INTELLECTUAL PROPERTY STORIES 9, 11 (Jane C. Ginsburg & Rochelle Cooper Dreyfuss eds., 2006).

5. MELVILLE E. STONE, FIFTY YEARS A JOURNALIST 357 (1921) ("There were equities involved, and I had learned in the days when I studied law that there was no wrong which the arm of the chancellor was not long enough to reach.").

AP's main competitors on the theory that the free-riding was "unfair competition," even though it was lawful under the federal copyright statute.⁶ The Court thus recognized a "quasi property" right in the news among fellow members of the news industry.⁷ Because the Court thought it unethical for a newsgathering organization to "reap where it has not sown,"⁸ it established that such organizations may not copy their rivals' news for free.

This notion that free-riding is unethical has done much to influence the shape of modern intellectual property law. The AP and other news companies have used *INS* to sue those who try to profit from their news.⁹ Beyond the news, the *INS* misappropriation doctrine has generated novel rights in a variety of subject matter.¹⁰ Beyond the misappropriation doctrine in particular, still other expansions in intellectual property rights may be traced to an instinctual disapproval of free-riding.¹¹

But despite the influence that anti-free-riding sentiments have had, no one has offered much of a justification for them. Much criticism of free-riding is nothing more than name-calling. Nor has there been much pushback from the other side. Even those who reject the misappropriation doctrine readily concede that free-riding is morally dubious.¹² Almost no one in the debates over misappropriation, then, seriously questions the idea that free-riding is unethical.¹³

6. 248 U.S. 215, 233, 240 (1918).

7. *Id.* at 236.

8. *Id.* at 239.

9. *E.g.*, *Associated Press v. All Headline News Corp.*, 608 F. Supp. 2d 454 (S.D.N.Y. 2009); *Complaint, Associated Press v. Meltwater U.S. Holdings, Inc.*, No. 12 Civ. 1087 (S.D.N.Y. Feb. 14, 2012); Jonathan Stempel, *Dow Jones, Briefing.com Settle "Hot News" Lawsuit*, REUTERS (Nov. 16, 2010, 9:41AM), <http://www.reuters.com/article/2010/11/16/us-briefingcom-dowjones-hotnews-settleme-idUSTRE6AF37G20101116>.

10. *See infra* Part I.

11. *See, e.g.*, David J. Franklyn, *Debunking Dilution Doctrine: Toward a Coherent Theory of the Anti-Free-Rider Principle in American Trademark Law*, 56 HASTINGS L.J. 117, 132 (2004); Mark A. Lemley & Mark P. McKenna, *Owning Mark(et)s*, 109 MICH. L. REV. 137, 146–56 (2010).

12. *E.g.*, *Int'l News Serv. v. Associated Press*, 248 U.S. 215, 257 (1918) (Brandeis, J., dissenting) ("To appropriate and use for profit, knowledge and ideas produced by other men, without making compensation or even acknowledgement, may be inconsistent with a finer sense of propriety."); *id.* at 262 ("The injustice of such action is obvious."); Andrew Beckerman-Rodau, *Ideas and the Public Domain: Revisiting INS v. AP in the Internet Age*, 1 N.Y.U. J. INTELL. PROP. & ENT. L. 1, 22 (2011) ("Legally prohibiting free riding is facially appealing because it comports with notions of fairness."); Milton Handler, *Unfair Competition*, 21 IOWA L. REV. 175, 189 (1936).

13. One noteworthy exception is Wendy Gordon. *See* Wendy J. Gordon, *Harmless Use: Gleaning from Fields of Copyrighted Works*, 77 FORDHAM L. REV. 2411, 2423 (2009) [hereinafter Gordon, *Gleaning*]; Wendy J. Gordon, *On Owning Information: Intellectual Property and the Restitutionary Impulse*, 78 VA. L. REV. 149, 169 (1992) [hereinafter Gordon, *Restitutionary Impulse*]. Yet even she holds that a laborer is entitled to the fruits of his or her labor in a large range of the relevant cases. *See* Gordon, *Restitutionary Impulse, supra*, at 186–87 & n. 141 (arguing that, other things equal, someone owes compensation when (1) he deliberately uses another's product (2) without improving it (3) while knowing that the

To some degree, this lack of questioning is not as surprising as it first appears. Courts have mostly stopped formulating misappropriation doctrine in overtly moral terms. They have done so, at least in part, in response to the possible conflict between misappropriation and copyright law. Misappropriation is a state law doctrine.¹⁴ It is also arguably inconsistent with federal copyright law, which allows the copying of pure facts and only protects particular modes of expressing them.¹⁵ Copyright thus offers no assistance to newsgathering organizations like the AP when rivals copy their news. Misappropriation doctrine, on the other hand, can forbid the copying of factual information, and it departs from copyright law in further ways, too. When it does, it is potentially preempted by the federal copyright statute because federal law must prevail over state law in any conflict between them. Because of this conflict, courts started to turn away from ethics-focused accounts of misappropriation doctrine, which, in all fairness, have historically been broad and open-ended and so quite a threat to federal copyright policies.¹⁶ As the main legal issue in misappropriation cases became preemption, courts decided that they had no cause to think much about ethics-based accounts of the doctrine.

The turn away from ethics was cemented when the Second Circuit endorsed an alternative normative account of the doctrine. In *National Basketball Ass'n v. Motorola, Inc.*, the court announced that *INS* was “not about ethics” after all; it was about providing incentives for private parties to invest in making the news available to the public.¹⁷ Under *NBA*, free-riding is objectionable to the extent that it has negative consequences for society, regardless of whether it wrongs the plaintiff morally. In an effort to save some version of the doctrine from preemption, the court gave a novel, five-element test for a valid, non-preempted misappropriation claim, without any reliance on moral considerations.¹⁸ And ever since, the incentives-focused account of misappropriation

producer wants compensation for such use, and (4) the amount to be paid is less than the value he derives through the use).

14. The *INS* Court created misappropriation doctrine as a part of the general common law. After the Supreme Court abolished federal courts' general common law powers in *Erie R.R. Co. v. Tompkins*, 304 U.S. 64, 78 (1938), misappropriation doctrine has had to be addressed by individual states. See, e.g., *Capitol Records v. Mercury Records Corp.*, 221 F.2d 657, 663 (2d Cir. 1955); *Intermountain Broad. & Television Corp. v. Idaho Microwave, Inc.*, 196 F. Supp. 315, 321–22 (D. Idaho 1961); *Loeb v. Turner*, 257 S.W.2d 800, 803 (Tex. Civ. App. 1953).

15. See, e.g., *Feist Publ'ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 344–51 (1991) (holding that names, towns, and telephone numbers were not copyrightable.).

16. See, e.g., *Mayer v. Josiah Wedgwood & Sons, Ltd.*, 601 F. Supp. 1523, 1533–36 (S.D.N.Y. 1985) (“As for misappropriation, Mayer asserts that there is in fact an extra element that will save the action from preemption—commercial immorality. But it is hard to see how this is an extra element. . . . If, however, it is an extra element, it is not the type that would save the action from preemption.”).

17. 105 F.3d 841, 853 (2d Cir. 1997).

18. *Id.* at 852.

has set the terms of debate.¹⁹

That is not to say, however, that the debate ended with *NBA*. On the contrary, the Second Circuit has recently distanced itself from *NBA*'s formulation of the misappropriation doctrine. In *Barclays Capital, Inc. v. Theflyonthewall.com, Inc.*, the court rejected the circuit's homegrown five-element test as mere dictum, unnecessary to the outcome in *NBA*—and without so much as offering a replacement.²⁰ The court did indicate that some unspecified misappropriation claim, closely tracking the facts of *INS* itself, would probably avoid preemption.²¹ Thus the misappropriation doctrine survives alongside copyright, but no one knows in what form.²²

This article offers a solution to the misappropriation doctrine's preemption problem, and at the same time clarifies the doctrine's justification, by reexamining the morality of free-riding. As Part I demonstrates, courts have widely assumed that essentially all free-riding is morally objectionable. They have therefore thought that a misappropriation doctrine based on morality would have a sweeping breadth and so would clash with the policies embodied in federal copyright law. But no one has ever justified across-the-board moral disapproval of free-riding. As noted above, the ethics of free-riding has attracted little attention in legal circles. In philosophy, however, the situation is different. Many political philosophers have thought about the morality of free-riding, and they have generally found it to be impermissible far less often than the misappropriation case law presumes. Part II builds on insights from this philosophical literature to show that free-riding is unethical in a relatively narrow range of cases. As a result, turning misappropriation law back toward ethics would not yield a boundless doctrine in deep tension with copyright's aims.

In fact, misappropriation doctrine is *more* likely to avoid preemption when it is formulated in the right ethical terms than when it is formulated in terms of incentives. Part III advances the claim that, contrary to what courts have said, the misappropriation doctrine runs into insuperable preemption issues when it merely provides incentives for investment in copyrightable goods. By contrast, as Part IV shows, the misappropriation doctrine avoids preemption when it is rooted in a sounder understanding of the morality of free-riding. In short, ethics

19. See, e.g., *Confold Pacific, Inc. v. Polaris Indus., Inc.*, 433 F.3d 952, 960 (7th Cir. 2006); *Scranton Times, L.P. v. Wilkes-Barre Publ'g Co.*, No. 3:08-cv-2135, 2009 WL 585502 (M.D. Pa. Mar. 6, 2009); *X17, Inc. v. Lavandeira*, 563 F. Supp. 2d 1102, 1108–09 (C.D. Cal. 2007); *Fred Wehrenberg Circuit of Theatres, Inc. v. Moviefone, Inc.*, 73 F. Supp. 2d 1044, 1050 (E.D. Mo. 1999). But see, e.g., *Lowry's Reports, Inc. v. Legg Mason, Inc.*, 271 F. Supp. 2d 737, 756 (D. Md. 2003) (criticizing the *NBA* test).

20. 650 F.3d 876, at 898–901 (2d Cir. 2011).

21. *Id.* at 894, 905–06.

22. See, e.g., Shyamkrishna Balganes, *The Uncertain Future of "Hot News" Misappropriation After Barclays Capital v. Theflyonthewall.com*, 112 COLUM. L. REV. SIDEBAR 134, 135 (2012) (explaining that *Barclays* "did surprisingly little to clarify the scope, structure, or indeed analytical basis of [misappropriation] doctrine").

can tell us how to preserve misappropriation doctrine alongside copyright law and, more fundamentally, why such preservation is worthwhile to begin with.

I. THE MORAL CONVICTIONS BEHIND MISAPPROPRIATION DOCTRINE

Although the *NBA* opinion and some commentators deny that *INS* was grounded in fairness concerns,²³ the language of the opinion suggests otherwise. And certainly many ensuing misappropriation decisions were based expressly on moral views.²⁴ The *INS* Court's understanding of morality has been very important to the development of misappropriation doctrine, and it is worthwhile to examine the Court's thinking in depth.

The principal dispute in the *INS* case, at least by the time it reached the Supreme Court in 1918, was the International News Service's unauthorized copying of the Associated Press's news reporting.²⁵ The INS and the AP each represented members of the newspaper industry and were founded in order to facilitate the gathering and communication of news.²⁶ The news that each organization gathered, however, was meant for the exclusive benefit of that organization's paying members.²⁷ According to the AP's allegations, the INS had copied news from publicly accessible AP bulletins and sold it as the INS's own, without engaging in any independent investigation and with modest or no re-writing.²⁸ This, according to the AP, violated its "property" right in the valuable news it had gathered, and amounted to "piracy" and "unfair business competition."²⁹ The public interest factored into the AP's arguments in a secondary way: if one news organization simply copied from its rival, the public would "not get the benefit of news collected by two independent associations."³⁰

The Supreme Court agreed with the AP that the INS's copying was an un-

23. See, e.g., *Nat'l Basketball Ass'n v. Motorola, Inc.*, 105 F.3d 841, 853 (2d Cir. 1997); Gordon, *Gleaning*, *supra* note 13, at 2423 ("So, in *INS*, for all of its dicta about refraining from 'reap[ing] where [you] ha[ve] not sown,' the more applicable rule seems to be, you can't 'reap' if using the product of others' intelligence and effort is going to be so harmful to them as to make it impossible to get an important product to the public." (alterations in original) (footnotes omitted)).

24. There are even traces of the same views in cases that prefigured *INS*. See *Bd. of Trade v. Christie Grain & Stock Co.*, 198 U.S. 236, 250, 252 (1905); *Nat'l Tel. News Co. v. W. Union Tel. Co.*, 119 F. 294, 301 (7th Cir. 1902).

25. The AP had also complained that INS employees had bribed and induced AP members to break the terms of their membership agreements with the AP but by the time the case got to the Supreme Court, a string of clear victories on the bribery and inducement claims left only the bulletin-copying in dispute. See *Int'l News Serv. v. Associated Press*, 248 U.S. 215, 231–32 (1918).

26. *Id.* at 229.

27. *Id.* at 230.

28. *Id.* at 231.

29. *Id.* at 221, 223–24, 226.

30. *Id.* at 226.

fair act of piracy.³¹ By trying to benefit from the labor of its competitor, the INS was trying “to reap where it ha[d] not sown.”³² Worse still, given that this benefit enabled the INS to retain members or customers who otherwise might abandon it for the AP, the INS was in a sense benefiting at the AP’s expense and thus “appropriating to itself the harvest of those who [had] sown.”³³ For these reasons, the Court reasoned, a rival’s misappropriation of news at the time of its greatest commercial value was “unfair competition because [it was] contrary to good conscience.”³⁴ The Court did, however, stop short of recognizing a genuine property right in the news, which it said was “*publici juris*”—of public right.³⁵

Throughout its opinion, the Court’s condemned the INS’s free-riding on ethical grounds. It clearly believed the INS should not be permitted to copy from AP bulletins because depriving a business rival of value it had created through hard work was blatantly and inherently unfair.³⁶ The Court paid no real thought to the consequences of possible resolutions to the case for social welfare. It did not even endorse the AP’s concerns about the public’s interest in having multiple independent gatherers of news. Rather, the majority’s only mention of the practical consequences of a legal rule permitting copying was for the purpose of rebutting the INS’s suggestion that the AP’s publication of its news qualified as an abandonment of its property interests and impliedly authorized all others to use the published news freely.³⁷ The Court quite understandably found it unlikely that the AP would willingly agree to others’ free use of its news, which “would render publication profitless, or so little profitable as in effect to cut off the service.”³⁸ But aside from inferring that the AP did not intend to abandon its news for others’ use, the Court did not rest its decision on any observation along these lines. Thus *INS*’s clear concern was good ethics, not good incentives.³⁹

31. *See, e.g., id.* at 238, 239–40.

32. *Id.* at 239.

33. *Id.* at 239–40.

34. *Id.*

35. *Id.* at 234; *see also id.* at 235 (explaining that, outside of certain minor exceptions, “the news of current events may be regarded as common property”).

36. *See id.* at 240 (“The transaction speaks for itself, and a court of equity ought not to hesitate long in characterizing it as unfair competition in business.”); *cf. id.* at 245 (distinguishing the AP’s admitted use of rivals’ news for “tips” from the INS’s copying without further investigation on the grounds that the former manifested no “unconscientious or inequitable attitude towards its adversary”).

37. The Court also made a general observation that the INS and the AP were engaged in the news business in order to make a profit. *Id.* at 235 (describing parties’ business as selling newspapers “at a price that, while of trifling moment to each reader, is sufficient in the aggregate to afford compensation for the cost of gathering and distributing it, with the added profit so necessary as an incentive to effective action in the commercial world.”).

38. *Id.* at 241.

39. The same is true of *Gilmore v. Sammons*, 269 S.W. 861 (Tex. Civ. App. 1925), an early Texas case prohibiting misappropriation of news about construction work opportuni-

In the century since *INS*, the AP has successfully wielded the decision to protect its news in other factual settings. Starting in the early 1930s, the AP scored a few misappropriation victories against radio stations that were reading AP news stories over the airwaves.⁴⁰ In the most prominent of these cases, the Ninth Circuit gave voice to the *INS* majority's moral concerns in new circumstances, finding that the radio station's actions amounted to "piracy" and "purloining of [the AP's] fresh news" and hence "unfair competition."⁴¹ Here too the court focused more on what it called "the question of good conscience in an equity tribunal" than on the consequences for society as a whole, although it did discuss the public function of the press more than the Supreme Court had in *INS*.⁴²

More recently, the AP's lawyers have pursued misappropriation claims against websites that aggregate AP content along with other news.⁴³ Its main courtroom victory to date has been in an action against All Headline News, a company that collected news reports it found online and then sold them to other websites with occasional rewriting.⁴⁴ Since the *All Headline News* decision predates *Barclays* and relies on *NBA*, it is not certain that it remains a strong precedent for the AP going forward.⁴⁵ Regardless of the ultimate effect of *Bar-*

ties. There, the court said that the defendant's conduct "constituted an unfair and illegal interference with [the plaintiff's] business, and could have but one effect: that is, to deprive [the plaintiff] of a portion of his fairly earned profits and to divert the same to the coffers of [the defendant]." *Id.* at 863. The court did not discuss possible effects on social welfare at all.

40. *E.g.*, *Associated Press v. KVOS, Inc.*, 80 F.2d 575 (9th Cir. 1935), *rev'd on jurisdictional grounds*, 299 U.S. 269 (1936); *Veatch v. Wagner*, 109 F. Supp. 537 (D. Alaska 1953); *see also* *Associated Press v. KVOS, Inc.*, 9 F. Supp. 279, 285, 287 (W.D. Wash. 1934) (describing an unreported case from 1933 in which a South Dakota federal district judge, relying on *INS*, enforced the AP's "property right" in its news against radio broadcasters).

41. *KVOS, Inc.*, 80 F.2d at 582.

42. *Id.* at 581; *see also* *Pottstown Daily News Publ'g Co. v. Pottstown Broad. Co.*, 411 Pa. 383, 393-94 (1963) (interpreting copyright as principally concerned with encouraging creativity and misappropriation law as principally concerned with prohibiting wrongful "usurpation of a competitor's investment and toil").

43. *See, e.g.*, Complaint, *Associated Press v. Moreover Techs., Inc.*, No. 07 Civ. 8699 (S.D.N.Y. Oct. 9, 2007); *see also* *AP Settles Lawsuit Against Moreover and VeriSign*, AP.ORG (Aug. 8, 2008), <http://www.ap.org/Content/AP-in-the-News/Archive/AP-settles-lawsuit-against-Moreover-and-VeriSign>. In addition, Google voluntarily agreed to pay for a license to aggregate AP content. *See, e.g.*, Sarah Ellison & Christopher Lawton, *Google to License Content from AP for New Service*, WALL ST. J. (Aug. 4, 2006), <http://online.wsj.com/article/SB115464732326426336.html>. Besides pursuing misappropriation claims, the AP has also successfully invoked the misappropriation doctrine to support its demands that news aggregators take down excerpts from its stories. *See* Rogers Cadenhead, *AP Files 7 DMCA Takedowns Against Drudge Retort*, WORKBENCH (June 12, 2008, 3:26 PM), <http://workbench.cadenhead.org/news/3368/ap-files-7-dmca-takedowns-against-drudge>.

44. *Associated Press v. All Headline News Corp.*, 608 F. Supp. 2d 454, 457 (S.D.N.Y. 2009).

45. *Id.* at 461. *But cf.* *Barclays Capital, Inc. v. Theflyonthewall.com, Inc.*, 650 F.3d

clays, however, the AP continues to see misappropriation claims as a useful weapon against news aggregators.⁴⁶

Over the last century, the misappropriation doctrine has spread well beyond the news, too. That is hardly surprising given the *INS* opinion's sweeping condemnation of free-riding: in the Court's view, essentially everyone who freely benefits from a competitor's efforts, at the competitor's expense, has gained an unfair competitive advantage.⁴⁷ Obviously newsgathering is not the only industry where one can reap what one's competitors have sown.

It is no surprise, then, that courts have long applied *INS* beyond the context of news. Even those who resisted the growth of misappropriation doctrine had to admit that the Court's reasoning could not easily be confined on its own terms. As Douglas Baird has documented, Judge Learned Hand opposed *INS* on policy grounds and sought repeatedly to limit its holding to its facts, but privately he acknowledged that the principles adopted in *INS* carried over into other contexts.⁴⁸ In correspondence with fellow judges on the panel in *Cheney Bros. v. Doris Silk Corp.*⁴⁹—a case brought by a designer and manufacturer of silk fabrics—Judge Hand acknowledged “that on principle [*INS*] is hard to distinguish.”⁵⁰ The *Cheney Bros.* opinion makes practically the same confession, although it proceeds to distinguish *INS* anyway.⁵¹ Likewise with Judge Charles E. Clark's opinion in *RCA Manufacturing Co. v. Whiteman*, which also included Judge Hand on the panel.⁵² That case addressed a record company's efforts to prevent unauthorized radio broadcast of its records. Like Judge Hand years before, Judge Clark privately observed that *INS* applied perfectly well: “In principle, this case is entirely indistinguishable from [*INS*], and we might as well admit it. But we have conquered the *News* case before; it can be done again.”⁵³ And so the *RCA Manufacturing* court, following *Cheney Bros.*, de-

876, 906 (2d Cir. 2011) (hinting that the *All Headline News* case's refusal to dismiss the AP's misappropriation claim might have been correct because its facts were sufficiently close to the facts involved in *INS v. AP*).

46. Complaint at 2, *Associated Press v. Meltwater U.S. Holdings, Inc.*, (S.D.N.Y. 2012) (No. 12 Civ. 1087).

47. *Int'l News Serv. v. Associated Press*, 248 U.S. 215, 239–40 (1918).

48. Baird, *supra* note 4, at 33–34.

49. 35 F.2d 279 (2d Cir. 1929).

50. Baird, *supra* note 4, at 33 (quoting Memorandum from Learned Hand to Martin T. Manton & Thomas W. Swann (Oct. 8, 1929) (Learned Hand Papers, Harvard Law School Library)).

51. *Cheney Bros.*, 35 F.2d at 280 (“Although [*INS*] concerned another subject-matter—printed news dispatches—we agree that, if it meant to lay down a general doctrine, it would cover this case; at least, the language of the majority opinion goes so far. We do not believe that it did.”)

52. 114 F.2d 86 (2d Cir. 1940).

53. Baird, *supra* note 4, at 34 (quoting Memorandum from Charles E. Clark to Learned Hand & Robert P. Patterson (June 21, 1940) (Learned Hand Papers, Harvard Law School Library)).

nied the misappropriation claim by limiting *INS* to its facts.⁵⁴

Although *RCA Manufacturing* declined to expand *INS* to cover music recordings—which received no federal copyright protection of any sort until 1972⁵⁵—almost all other decisions on the issue came out the opposite way. Indeed, this was one of the areas where misappropriation doctrine flourished. As the *RCA Manufacturing* court itself noted, the Pennsylvania Supreme Court had just ruled in a record maker’s favor in a factually indistinguishable case.⁵⁶ Sometimes the facts varied slightly. In the 1950 New York case, *Metropolitan Opera Ass’n v. Wagner-Nichols Recorder Corp.*,⁵⁷ the defendant was recording the Met’s radio broadcasts and then selling the records to the public. The court interpreted misappropriation doctrine as providing an essentially unconstrained cause of action against immoral marketplace actors:

[The doctrine] originated in the conscience, justice and equity of common-law judges. It developed within the framework of a society dedicated to freest competition, to deal with business malpractices offensive to the ethics of that society. The theoretic basis is obscure, but the birth and growth of this branch of law is clear. It is an outstanding example of the law’s capacity for growth in response to the ethical as well as the economic needs of society. As a result of this background the legal concept of unfair competition has evolved as a broad and flexible doctrine with a capacity for further growth to meet changing conditions.⁵⁸

Although the court also thought that the defendant’s actions were “repugnant to the public interest,” its focus was on the perceived wrong that those actions did to the plaintiff.⁵⁹ Expanding upon the *INS* court’s agrarian imagery, the court concluded by mustering its equitable powers to enjoin “a business venture pur-

54. *RCA Mfg. Co.*, 114 F.2d at 90 (“[*INS*] really held no more than that a western newspaper might not take advantage of the fact that it was published some hours later than papers in the east, to copy the news which the plaintiff had collected at its own expense. In spite of some general language it must be confined to that situation.” (citing *Cheney Bros.*, 35 F.2d at 281)).

55. See Sound Recordings Act of 1971, Pub. L. No. 92-140, 85 Stat. 391, *repealed by* Copyright Act of 1976, Pub. L. No. 94-553, 90 Stat. 2541 (codified as amended in scattered sections of 17 U.S.C.); *cf.* 17 U.S.C. § 301(c) (2006) (explaining that pre-1972 sound recordings still receive no federal copyright protection).

56. *Waring v. WDAS Broad. Station, Inc.*, 194 A. 631 (Pa. 1937).

57. 199 Misc. 786, 790 (N.Y. Sup. Ct. 1950), *aff’d per curiam*, 279 A.D. 632 (N.Y. App. Div. 1951).

58. *Id.* at 792; *see also id.* at 796 (“The modern view as to the law of unfair competition does not rest solely on the ground of direct competitive injury, but on the broader principle that property rights of commercial value are to be and will be protected from any form of unfair invasion or infringement and from any form of commercial immorality, and a court of equity will penetrate and restrain every guise resorted to by the wrong-doer.”).

59. *Id.* at 802 (explaining that, in order to avoid a “travesty of justice,” “[e]quity will consider the interests of all parties coming within the arena of the dispute and admeasure the conflict in the scales of conscience and on the premise of honest commercial intercourse.”); *see also id.* at 805 (chastising defendants for “their unconscionable business practices and their invasion of the moral standards of the market place”).

posed to gather in the harvest the seeds of which were planted and nurtured by others at great expense and with consummate skill.”⁶⁰

The *Met Opera* case is often singled out for its zealous language, but neither its holding nor even its rhetoric was unique. Many music recordings cases struck a similar chord. Take for example, a decision by the South Carolina Supreme Court, which enjoined “parasitic acts” by record copyists who had been “reaping where they [had] not sown.”⁶¹ This court was following a neighbor in North Carolina, which approached record copying by simply asking, “Has the plaintiff’s legitimate business been damaged through acts of the defendants which a court of equity would consider unfair?”⁶² Or consider the Wisconsin Supreme Court’s professed understanding of *INS*-style unfair competition in the same setting: “The legal principles which are controlling here are simply the principles of old-fashioned honesty. One man may not reap where another has sown nor gather where another has strewn.”⁶³ In these cases and many others,⁶⁴ courts ruled against record copyists, who again had infringed no one’s copyright, simply to protect the original creator from what was believed to be a moral injury. The Second Circuit’s *RCA Manufacturing* decision was the outlier in this area; most record copying cases were decided on the same moral grounds as *INS*.⁶⁵

And musical recordings are far from the only sort of non-news work covered by the misappropriation doctrine. Even the fashion industry, which Judge Hand had tried to keep out of *INS*’s reach in *Cheney Bros.*,⁶⁶ and which still receives no direct copyright protection,⁶⁷ embraced misappropriation. The

60. *Id.* at 805.

61. *Columbia Broad. Sys., Inc. v. Custom Recording Co.*, 258 S.C. 465, 478 (1972).

62. *Liberty/UA, Inc. v. E. Tape Corp.*, 180 S.E.2d 414, 415 (N.C. Ct. App. 1971) (citations omitted).

63. *Mercury Record Prods., Inc. v. Econ. Consultants, Inc.*, 64 Wis. 2d 163, 176 (1974) (quoting *J. I. Case Plow Works v. J. I. Case Threshing Mach. Co.*, 162 Wis. 185, 201 (1916) (internal quotation marks omitted)).

64. *See generally, e.g.*, *Capitol Records v. Erickson*, 82 Cal. Rptr. 798 (App. 2d Dist. 1969); *Capitol Records v. Spies*, 130 Ill. App. 2d 430 (App. Ct. 1st Dist. 1970); *GAI Audio of N.Y., Inc. v. Columbia Broad. Sys., Inc.*, 340 A.2d 736 (Md. Ct. Spec. App. 1975); *Nat’l Broad. Co. v. Nance*, 506 S.W.2d 483 (Mo. Ct. App. 1974); *Columbia Broad. Sys., Inc. v. Melody Recordings*, 341 A.2d 348 (N.J. Super. Ct. App. Div. 1975); *Capitol Records v. Greatest Records*, 43 Misc. 2d 878 (N.Y. Sup. Ct. 1964).

65. *Cf. Capitol Records v. Mercury Records Corp.*, 221 F.2d 657, 663 (2d Cir. 1955) (observing that *RCA Manufacturing Co.* did not accurately reflect the law of New York).

66. *See also Fashion Originators Guild of Am. v. Fed. Trade Comm’n*, 114 F.2d 80, 84 (2d Cir. 1940) (L. Hand, J.) (“It may be unfortunate—it may indeed be unjust—that the law should not thereafter distinguish between ‘originals’ and copies; but until the copyright law is changed, or until the Copyright Office can be induced to register such designs as copyrightable under the existing statute, they both fall into the public demesne without reserve.” (citing *Cheney Bros. v. Doris Silk Corp.*, 35 F.2d 279 (2d Cir. 1929))), *aff’d*, 312 U.S. 457 (1941).

67. Some commentators, however, have advocated creating *sui generis* protection for fashion designs. *See, e.g.*, C. Scott Hemphill & Jeannie Suk, *The Law, Culture, and Econom-*

judge who decided *Met Opera* used the same *INS*-influenced reasoning and rhetoric to enjoin copyists from selling sketches of a famous designer's newest creations to other clothing makers.⁶⁸ Likewise, even though preemption doomed the plaintiff in the *NBA* case, which concerned unauthorized transmission of professional basketball game scores,⁶⁹ sporting event organizers have regularly had success against those who disseminate unauthorized photos or accounts of their events.⁷⁰ Yet another case forbade use of the plaintiff's Mutt and Jeff cartoon characters in the defendant's comic strips.⁷¹ And in Texas, not only can you make a decent living recording wild animal sounds, you can also rest assured of the misappropriation doctrine's protection.⁷²

Recently, a major source of misappropriation litigation has come from the unauthorized use of financial market indices, such as the Dow Jones Industrial Average. These indices measure the performance of a market and are often used to create financial products that help investors to diversify their holdings. It is not clear whether these indices can be copyrighted, since they are arguably purely factual in nature, rather than the products of creative decision making. But while courts have split over the copyrightability of financial market indices, they have agreed that one who makes unauthorized use of an established financial market index to create investment products may be liable for misappropriation.⁷³

In short, misappropriation doctrine has expanded much since *INS*—thanks in large part to the generality of early cases' moral disapproval of free-riding. And the doctrine maintains a healthy presence today alongside the core areas of intellectual property law. Many misappropriation cases concern the use of ma-

ics of Fashion, 61 STAN. L. REV. 1147, 1184–95 (2009).

68. *Dior v. Milton*, 9 Misc. 2d 425, 443 (N.Y. Sup. Ct. 1956) (“The defendants have embarked upon a hazardous enterprise which equity will not hesitate to strike down. Cast in its proper environment, we have here a business venture proposed to gather in the harvest, the seeds of which were planted and nurtured by others at great expense and with consummate skill.”), *aff'd without opinion*, 2 A.D.2d 878 (N.Y. App. Div. 1956).

69. *See Nat'l Basketball Ass'n v. Motorola, Inc.*, 105 F.3d 841, 843–44 (2d Cir. 1997).

70. *See, e.g., Pittsburgh Athletic Co. v. KQV Broad. Co.*, 24 F. Supp. 490 (W.D. Pa. 1938) (Major League Baseball broadcasts); *Madison Square Garden Corp. v. Universal Pictures, Co.*, 255 A.D. 459 (N.Y. App. Div. 1938) (boxing match photographs); *Mut. Broad. Sys., Inc. v. Muzak Corp.*, 177 Misc. 489 (N.Y. Sup. Ct. 1941) (World Series broadcasts).

71. *Fisher v. Star Co.*, 231 N.Y. 414, 433 (1921) (“The only purpose that another than respondent can have in using the figures or names of ‘Mutt’ and ‘Jeff’ is to appropriate the financial value that such figures and names have acquired by reason of the skill of the respondent.”).

72. *See U.S. Sporting Prods., Inc. v. Johnny Stewart Game Calls, Inc.*, 865 S.W.2d 214 (Tex. App. 1993).

73. *Compare Chi. Bd. Options Exch. v. Int'l Sec. Exch., L.L.C.*, 2012 IL App. 102228, ¶¶ 25, 55 (holding that plaintiffs' stock market indices fell outside the scope of copyright law but were unlawfully misappropriated by defendants who used them to create index options), *with BanxCorp v. Costco Wholesale Corp.*, 723 F. Supp. 2d 596, 606–09, 614 (S.D.N.Y. 2010) (refusing to dismiss either plaintiff's misappropriation claim or its copyright claim).

terial that, like the news or fashion designs, is not copyrightable for one reason or another. Other times misappropriation claims supplement colorable copyright claims,⁷⁴ or even give trademark claims a boost.⁷⁵ As noted in the Introduction, courts have shied away from explicitly relying on a moral critique of free-riding because that critique is widely thought to lead to misappropriation's preemption by copyright law.⁷⁶ Yet although misappropriation and morality are now officially divorced, some judges still may be moved by the kind of moral disapproval that was so influential earlier in the doctrine's history.⁷⁷ Given the current uncertainty over the doctrine's ongoing viability and its potential for further development,⁷⁸ it is worth examining the doctrine's moral basis more carefully.

II. FREE-RIDING AND MORAL PERMISSIBILITY

Despite its historical and continuing importance, the moral argument against misappropriation has been underdeveloped. Perhaps many think the argument is straightforward enough. Whenever legal scholars do discuss the ethical dimensions of *INS*, they typically cite John Locke and move on. This Part argues that Locke's discussion of natural property rights provides no obvious support for critics of free-riding and then turns to more developed literature in political philosophy to make the case that free-riding is actually unfair only in limited circumstances.

74. See, e.g., *Roy Export Co. v. Columbia Broad. Sys., Inc.*, 672 F.2d 1095, 1098–99 & n.6, 1106–07 (2d Cir. 1982) (upholding award of \$410,000 in compensatory and punitive damages for misappropriation claim based on defendants use of plaintiffs' film clip montage in addition to award of \$312,281 in compensatory, punitive, and statutory damages for copyright infringement of montage and underlying film clips); *Associated Press v. All Headline News Corp.*, 608 F. Supp. 2d 454, 457, 461–62 (S.D.N.Y. 2009) (noting that defendant had not moved to dismiss the AP's copyright infringement claim and refusing to dismiss the AP's Digital Millennium Copyright Act claim).

75. See, e.g., *ITC Ltd. v. Punchgini, Inc.*, 880 N.E.2d 852 (N.Y. 2007) (explaining that New York misappropriation law allows trademark owners to prevent unfair competition in the form of unauthorized use of their goodwill).

76. See *supra* text accompanying notes 14–22.

77. One can occasionally catch a whiff of such disapproval even in very recent decisions. See, e.g., *Chi. Bd. Options Exch.*, 2012 IL App. 102228, ¶ 53 (“We share the circuit court’s puzzlement at ‘how [defendant’s] failure somehow entitles it to profit for free from the efforts, skills, and reputation of the [plaintiff] Index Providers.’”).

78. Some have argued that common law doctrines like misappropriation are perennially popular among intellectual property plaintiffs, partly because they afford a possible source of relief when statutory law is slow to catch up with novel forms of copying. See, e.g., Bruce P. Keller, *Condemned to Repeat the Past: The Reemergence of Misappropriation and Other Common Law Theories of Protection for Intellectual Property*, 11 HARV. J.L. & TECH. 401, 428 (1997).

A. *Locke's Limits*

It is controversial to claim that Locke's rather complex arguments justify intellectual property ownership no less than tangible property ownership.⁷⁹ Of course, if Locke's labor theory does justify intellectual property ownership, free-riding on someone's intellectual labor might indeed violate their rights.⁸⁰ But discussions of the ethics of *INS* typically do not develop the claim that misappropriation violates a Lockean natural right of intellectual property ownership. Rather, they ground the *INS* majority's position in a much more general (purportedly) Lockean principle "that there [is] something inherently wrong with reaping where another ha[s] sown"⁸¹ or "that individuals and entities ought to be rewarded with exclusive rights to the economic returns generated by their own enterprise and effort."⁸² In other words, commentators often read Locke as committed to the same sweeping disapprobation of free-riding as the *INS* majority.⁸³

But Locke really cannot be read as asserting that freely benefiting from the labors of others is necessarily immoral. Although he would surely condemn the person who steals the crops that another individual has planted for his or her own nourishment—literally taking another's fruits—Locke seems to find nothing objectionable in reaping what another has sown when doing so does not interfere with the latter's use and enjoyment of what he or she has grown.⁸⁴ Rather, he says that laboring on natural resources gives an individual "*no Right, farther than his Use* call[s] for any of them, and they might serve to afford him Conveniences of Life."⁸⁵ In fact, Locke expressly provides his own example of

79. Compare, e.g., ROBERT P. MERGES, JUSTIFYING INTELLECTUAL PROPERTY 48–66 (2011) (describing intellectual property's general success in satisfying Locke's conditions for private ownership), and Justin Hughes, *The Philosophy of Intellectual Property*, 77 GEO. L.J. 287, 300 (1988) (same), with Edwin C. Hettinger, *Justifying Intellectual Property*, 18 PHIL. & PUB. AFF. 31, 51 (1989) (describing intellectual property's failure to satisfy Locke's conditions for private ownership), and Seana Valentine Shiffrin, *Lockean Arguments for Private Intellectual Property*, in NEW ESSAYS IN THE LEGAL AND POLITICAL THEORY OF PROPERTY 138, 156–57 (Stephen R. Munzer ed., 2001) (same).

80. Elsewhere, however, I argue that Locke's labor theory does *not* justify intellectual property ownership in the way it justifies tangible property ownership. Michael E. Kenneally, *Intellectual Property Rights and Institutions: A Pluralist Account* 16–72 (May 5, 2014) (unpublished Ph.D. dissertation, Harvard University), available at <http://ssrn.com/abstract=2310986>.

81. STUART BANNER, *AMERICAN PROPERTY* 89 (2011).

82. Diane Leenheer Zimmerman, *Information as Speech, Information as Goods: Some Thoughts on Marketplaces and the Bill of Rights*, 33 WM. & MARY L. REV. 665, 722 (1992).

83. But see Gordon, *Restitutionary Impulse*, *supra* note 13, at 167 ("Unlike most observers, I do not trace the restitutionary claim primarily to natural law or Lockean labor theory.")

84. On this point, see A. JOHN SIMMONS, *THE LOCKEAN THEORY OF RIGHTS* 277 (1992) and Thomas Scanlon, *Nozick on Rights, Liberty, and Property*, 6 PHIL. & PUB. AFF. 3, 21–23 (1976) (book review).

85. JOHN LOCKE, *TWO TREATISES OF GOVERNMENT* bk. II, § 37, at 295 (Peter Laslett

a situation in which reaping what another person has sown would be permissible:

Whatsoever [the laborer] tilled and reaped, laid up and made use of, before it spoiled, that was his peculiar Right; whatsoever he enclosed, and could feed, and make use of, the Cattle and Product was also his. But if either the Grass of his Inclosure rotted on the Ground, or the Fruit of his planting perished without gathering, and laying up, *this part of the Earth, notwithstanding his Inclosure, was still to be looked on as Waste, and might be the Possession of any other.*⁸⁶

Here Locke claims that if a laborer has cultivated land in the state of nature by enclosing it and planting on it, but his crops are going to waste, another person may claim the land to make good use of it, regardless of the first person's improvements. Locke does not take the very broad view that reaping where another has sown is *ipso facto* impermissible.

Perhaps so many commentators interpret Locke otherwise because of his emphasis on labor's tendency to increase the value of natural resources considerably.⁸⁷ According to Locke's theory of value, "*labour makes the far greatest part of the value of things, we enjoy in this World.*"⁸⁸ He estimates that ninety or even ninety-nine percent of the value of things useful to human beings is attributable to labor.⁸⁹ And it might seem natural to think (and to think that Locke himself thinks) that when some resource's value is due to a particular person's efforts, that person ought to capture the value for which her efforts are responsible.⁹⁰ But closer attention to this part of Locke's discussion supports a contrary interpretation. His point in these passages is only that, once developed through labor, land is vastly more productive and therefore contributes disproportionately more to the survival and comfort of humanity.⁹¹ This claim that labor makes land far more valuable than it would otherwise be is important to Locke because it helps him contend that acquiring land by laboring on it does not make everyone else worse off.⁹² If the acquirer is increasing the land's

ed., Cambridge Univ. Press 1988) (1689).

86. *Id.* bk. II, § 38, at 295 (emphasis added).

87. See Adam Mossoff, *Saving Locke from Marx: The Labor Theory of Value in Intellectual Property Theory*, 29 SOC. PHIL. & POL'Y 283, 293 (2012) (explaining how it is "widely accepted that the ubiquitous references within Anglo-American property law to 'securing the fruits of one's labors' [are] an explicit invocation of Lockean property theory, particularly to the labor theory of value that functions as a central premise within Locke's justification for property rights").

88. LOCKE, *supra* note 85, bk. II, § 42, at 297.

89. See *id.* bk. II, § 40, at 296.

90. See, e.g., LAWRENCE C. BECKER, PROPERTY RIGHTS 35 (1977) (understanding Locke to be arguing that "one is entitled to the whole of the value one's labor adds to things, and . . . the other expected benefits as well").

91. See, e.g., LOCKE, *supra* note 85, bk. II, § 37, at 294.

92. See *id.* bk. II, § 33, at 291 ("Nor was this *appropriation* of any parcel of *Land*, by improving it, any prejudice to any other Man, since there was still enough, and as good left."); *id.* bk. II, § 37, at 294 ("This is certain, that in the beginning, before the desire of hav-

productivity, a limited amount goes a very long way—at least until human beings start to accumulate vast stores of imperishable wealth through the adoption of money.⁹³ And so Locke claims that one laborer’s appropriation of some piece of land actually benefits the rest of humanity because the laborer can make do acquiring much less land than he would need to exploit in an undeveloped commons: “he, that incloses Land and has a greater plenty of the conveniencys of life from ten acres, than he could have from an hundred left to Nature, may truly be said, to give ninety acres to Mankind.”⁹⁴

In fact, if Locke had thought that laborers deserved compensation for *all* the value that their work created, he would have had to maintain that the enterprising person who labors productively in the state of nature for his own benefit would be entitled to further reward, proportionate to the benefit everyone else receives from the relative increase in available natural resources. Locke never suggests the land-appropriating laborer deserves compensation for the ninety undeveloped acres he makes available to others.⁹⁵ Once again, then, it is hard to see how his position could possibly be that freely benefiting from another’s labors is morally suspect.

The only indication that Locke thought free-riding morally suspect is his remark that “the benefit of another’s Pains” is something a non-laborer has “no right to.”⁹⁶ But even this statement is not really a condemnation. To say that a person has *no right* to something does not necessarily imply that the person acts wrongly if she obtains the thing anyway. Strictly speaking, saying a person has no right to something is only to say that no one is obligated to provide it to him or to let him have it, and hence that the person cannot claim his rights have

ing more than man needed had altered the intrinsic value of things, which depends only on their usefulness to the life of man; or had agreed, that a little piece of yellow metal, which would keep without wasting or decay, should be worth a great piece of flesh, or a whole heap of corn; though men had a right to appropriate, by their labour, each one to himself, as much of the things of nature, as he could use: yet this could not be much, nor to the prejudice of others, where the same plenty was still left to those who would use the same industry.”); *cf. id.* bk. II, § 27, at 288 (indicating that his argument for natural property rights proceeds only under the assumption that the laborer leaves “enough, and as good . . . in common for others”).

93. *Id.* bk. II, § 36, at 293 (“This I dare boldly affirm, That the same *Rule of Propriety*, (*viz.*) that every Man should have as much as he could make use of, would hold still in the World, without straitning any body, since there is Land enough in the World to suffice double the Inhabitants had not the *Invention of Money*, and the tacit Agreement of Men to put a value on it, introduced (by Consent) larger Possessions, and a Right to them.”); *see also id.* bk. II, § 48, at 301.

94. *Id.* bk. II, § 37, at 294.

95. Locke does say that in Spain the productivity of the person who develops formerly unused land is so great that other “Inhabitants think themselves beholden to him.” *Id.* bk. II, § 36, at 293. But he does not say the Spaniards are right to think this or that they actually are obligated to compensate the productive laborer.

96. *Id.* bk. II, § 34, at 291.

been violated just because others prevented him from having it.⁹⁷ And the surrounding context indicates that this was Locke's meaning, for he claims no one has a right to the benefit of another's pains simply to support his conclusion that the rest of humanity has no basis to "complain" when the laborer acquires a natural resource from the commons for his or her exclusive use.⁹⁸

In two places—his implicit denial that the land-cultivator deserves extra reward for having increased the productivity of the earth's resources and his explicit endorsement of mitigating another's wastefulness—Locke implicitly rejects a broad condemnation of free-riding. So to understand the morality of free-riding, one must provide more than a token citation to Locke's labor theory. And really this is not surprising, for free-riding as such was not Locke's concern. Perhaps his arguments can yet be developed to guide courts in intellectual property free-riding disputes, but such a project will require no small amount of work.

B. *Contemporary Insights*

Unlike Locke, contemporary political philosophers have reflected on the ethics of free-riding at length. It all started with H.L.A. Hart's innovative argument that individuals are morally obligated to obey the law because free-riding is unfair. Hart claimed, in essence, that when a group of people restrict their activities according to a set of rules, including legal rules, any person who benefits from their compliance with those rules owes it to them to comply with the same rules, regardless of whether he or she consented to the rules.⁹⁹ John Rawls then endorsed this argument and developed it further: if "a mutually beneficial and just scheme of social cooperation" imposes some costs on its intended beneficiaries, some of whom are tempted to obtain the benefits without bearing the costs, the "person who has accepted the benefits of the scheme is bound by a duty of fair play to do his part and not to take advantage of the free benefit by not cooperating."¹⁰⁰ But this Hart/Rawls "principle of fairness" (or

97. On Wesley Hohfeld's famous account of jural relations, for example, *A* has no right (or, *A* has a "no-right") against *B* that *B* perform some action *X* if and only if *B* has a privilege, as far as *A* is concerned, not to perform *X* (or, if and only if *B* has no duty to *A* to perform *X*). See, e.g., WESLEY NEWCOMB HOHFELD, *FUNDAMENTAL LEGAL CONCEPTIONS AS APPLIED IN JUDICIAL REASONING* 38–39 (Walter Wheeler Cook ed., 1919).

98. LOCKE, *supra* note 85, bk. II, § 34, at 291 ("He that had as good left for his Improvement, as was already taken up, needed not complain . . . If he did, 'tis plain he desired the benefit of another's Pains, which he had no right to . . .").

99. H.L.A. Hart, *Are There Any Natural Rights?*, 64 *PHIL. REV.* 175, 185–86 (1955).

100. John Rawls, *Legal Obligation and the Duty of Fair Play*, in *LAW AND PHILOSOPHY* 3, 10 (Sidney Hook ed., 1964); see also John Rawls, *Justice as Fairness*, 67 *PHIL. REV.* 164, 179–80 (1958). But later, in *A Theory of Justice*, Rawls argued that political obligation's primary source was not the principle of fairness but a "natural duty" of justice—a duty, that is, that every person has to support and comply with just institutions that apply to him or her and to take reasonable measures in furtherance of just arrangements not yet in existence. See

“fair play”)¹⁰¹ was forcefully challenged by Robert Nozick in his book *Anarchy, State, and Utopia*, and philosophers have been debating the permissibility of free-riding ever since.

Nozick’s challenge came by way of counterexample. Imagine a neighborhood that happens to have a public address system the residents wish to use to broadcast material that might benefit the community.¹⁰² They devise a plan whereby everyone shares broadcasting responsibilities equally. On one day per year, each of the neighborhood’s 365 residents must sign up to broadcast music, stories, jokes, news, or anything else of his or her choosing for the edification of those who want to listen. All but one of the neighborhood residents willingly go along with this plan and take their turn in the broadcast booth. But a single resident chooses not to, even though he previously chose to take in some of his neighbors’ enjoyable broadcasts. Nozick wonders whether this free-rider has violated any moral obligation, and concludes he has not.¹⁰³ If Nozick’s view about this example is right, the Hart/Rawls principle of fairness is not, at least not in its original formulation.¹⁰⁴ For if the individual who free-rides on the public address system acts permissibly, not every mutually beneficial cooperative scheme generates positive obligations for those who accept benefits made possible by others’ rule-following.

Nozick proceeded too quickly from this counterexample to his ultimate conclusion that the principle of fairness cannot be fixed to ground an enforceable, nonconsensual duty to obey the law.¹⁰⁵ And so a number of philosophers have disputed Nozick’s bold claims about political obligation, but they have mostly accepted his position that the free-riding in the public address system example is morally permissible. They have instead resisted Nozick by working to formulate new versions of an anti-free-riding principle that would avoid condemning free-riding in the public address system example.¹⁰⁶ To do so, however, they have needed not only to work around one particular example, they have had to address Nozick’s deeper problem with critics of free-riding. After advancing the public address system hypothetical and several others,

JOHN RAWLS, A THEORY OF JUSTICE 97–100, 301–03, 310 n.13 (rev. ed. 1999).

101. The two philosophers’ versions of the principle of fairness are not identical, but for the purposes of this Article, the differences do not matter.

102. ROBERT NOZICK, ANARCHY, STATE, AND UTOPIA 93 (1974).

103. *Id.* at 95.

104. Rawls’s formulation might survive unscathed, however, if the Nozickian broadcasting scheme does not qualify as “just” because it asks too much of those it obligates given the benefits it supplies in return. I am grateful to T.M. Scanlon for suggesting this possibility.

105. See NOZICK, *supra* note 102, at 95.

106. See, e.g., Richard J. Arneson, *The Principle of Fairness and Free-Rider Problems*, 92 ETHICS 616, 617–23 (1982); Garrett Cullity, *Moral Free Riding*, 24 PHIL. & PUB. AFF. 3, 8–22 (1995); George Klosko, *Presumptive Benefit, Fairness, and Political Obligation*, 16 PHIL. & PUB. AFF. 241, 245–53 (1987); Scanlon, *supra* note 84, at 15–17; A. John Simmons, *The Principle of Fair Play*, 8 PHIL. & PUB. AFF. 307, 319–33 (1979).

Nozick said:

You may not decide to give me something, for example a book, and then grab money from me to pay for it, even if I have nothing better to spend the money on. You have, if anything, even less reason to demand payment if your activity that gives me the book also benefits you; suppose that your best way of getting exercise is by throwing books into people's houses, or that some other activity of yours thrusts books into people's houses as an unavoidable side effect. Nor are things changed if your inability to collect money or payments for the books which unavoidably spill over into others' houses makes it inadvisable or too expensive for you to carry on this activity with this side effect. One cannot, whatever one's purposes, just act so as to give people benefits and then demand (or seize) payment. Nor can a group of persons do this.¹⁰⁷

Nozick's approach is thus to adopt the perspective of the one who is considering whether to perform the action that will create the benefits for others. Nozick asks what gives that person, at that time, a right to insist later on that those others pay for the benefits they have received. In other words, when a benefit-provider chooses freely to engage in an activity, why should she count on the support of those who stand to benefit? With this approach, understanding the morality of free-riding requires figuring out when benefit-providers would have a justified expectation that their beneficiaries will compensate them.

C. *An Expectations-Focused Approach to the Morality of Free-Riding*

Of course there are a few easy cases in which the benefit-provider's reliance on others' contribution would be readily justified and the benefit-recipient indeed would have a duty to contribute. Consider promises. If the benefit-recipient has assured the benefit-provider that he would pay for the benefits received, the benefit-provider is justified in relying on the promise. And no doubt a benefit-recipient can justify the benefit-provider's expectations of contribution through other sorts of voluntary acts besides making a promise. One such example, perhaps relevant in the misappropriation context,¹⁰⁸ would be the

107. NOZICK, *supra* note 102, at 95.

108. Richard Epstein and Henry Smith have argued that the INS's free-riding was objectionable at least in part because it violated the news industry's own customs (although they are more interested in the custom's possible positive effects on social welfare rather than in whether violating the custom was morally impermissible). See Richard A. Epstein, *International News Service v. Associated Press: Custom and Law as Sources of Property Rights in News*, 78 VA. L. REV. 85, 94–102, 106 (1992); Henry E. Smith, *Equitable Intellectual Property: What's Wrong with Misappropriation?*, in *INTELLECTUAL PROPERTY AND THE COMMON LAW* 42, 54–55, 57–58 (Shyamkrishna Balganesh ed., 2013); see also Shyamkrishna Balganesh, *"Hot News": The Enduring Myth of Property in News*, 111 COLUM. L. REV. 419, 444 (2011) (claiming that the news industry as a whole observed norms against free-riding). It would indeed have been opportunistic and wrongful for the INS to encourage customary norms that benefited it only to ignore them when doing so served its interests. Nonetheless, other misappropriation cases cannot be explained on the basis of custom, nor did the

benefit-recipient who has previously fostered norms against free-riding and insisted that others comply. Such a person's subsequent violation of the same anti-free-riding norms would indeed be unfair.

But in the hard cases—and likely the most crucial cases for the misappropriation doctrine—the benefit-recipient has done nothing in advance to directly encourage expectations of compensation. The question in these cases is whether the benefit-provider can count on compensation simply on the ground that she provided a benefit that someone else willingly accepted.¹⁰⁹

Here is one reason for thinking, with Nozick, that the answer is no: a free-rider's choice to accept a benefit may depend on the fact that the benefit was available for free (or at discount) because of the other party's actions. Put another way, the free-rider could well have justified expectations of his or her own, and these justified expectations could be what prompts her choice to free-ride. One cannot simply assume such expectations are *unjustified*, of course, because that would beg the question against the free-rider by assuming in advance that free-riding is morally objectionable. To the extent a free-rider can truthfully say that he accepted the benefit only because (he thought) it was available for free, the person who makes the benefit available to him might not be justified in counting on his payment.

And it seems such situations are likely to arise quite often in free-riding disputes. Imagine a person looking for something to do. She might find entertainment at a movie theater, make progress on a work project, learn something new, purchase any number of useful objects, and so on. She could perceive good reasons to act in each of those ways, and likely would be acting perfectly reasonably if she chose any one of them. Such situations arise all the time,¹¹⁰ and part of her having real freedom to make her own choices derives from that fact.¹¹¹ Now imagine she makes a choice in large part because other people's

INS opinion rely on customary norms to decide that the *INS*'s free-riding was fundamentally unfair. See *Int'l News Serv. v. Associated Press*, 248 U.S. 215, 242–45 (1918) (discussing news-industry norms for the purpose of evaluating *INS*'s unclean hands defense). It is not even certain that the alleged news-industry norms against free-riding were settled and universally recognized or that the *INS* itself encouraged them. In fact, the only evidence of those norms in the *INS* case was the self-serving insistence of the AP. See Epstein, *supra*, at 97–98 (using the AP's brief to identify the relevant custom); cf. Baird, *supra* note 4, at 24–25 (explaining how the particular customary norm that the AP invoked worked “greatly” in its own favor). In the end, then, perhaps the *INS* should not be faulted for violating norms that it had previously fostered. Cf. Jennifer E. Rothman, *The Questionable Use of Custom in Intellectual Property*, 93 VA. L. REV. 1899, 1974 (2007) (observing that judicial reliance on customs is most difficult to justify when the customs are being wielded “against those who did not participate in their development”).

109. For emphasis on the willing acceptance aspect of the question, see Simmons, *supra* note 106, at 324–27, 334.

110. See JOSEPH RAZ, *Incommensurability and Agency*, reprinted in *ENGAGING REASON* 46, 65 (1999) (“In typical situations, reason does not determine what is to be done. Rather it sets a range of eligible options before agents, who choose among them . . .”).

111. See John Finnis, *Natural Law and Legal Reasoning*, 38 CLEV. ST. L. REV. 1, 10

acts have made one option look especially attractive here and now. She always stands to benefit, for instance, from a good game of Frisbee golf, or “frolf.” Of course that does not mean she seeks out a game every single time she finds herself with nothing to do. Yet if she happens to be in the park when a friendly group invites her to join their Frisbee golf game, she may well choose to stay and play on account of their invitation.¹¹²

In such a case, would she incur a duty to compensate her fellow frolfers at the end of their game? That seems an awfully extreme position. It would be odd if the players tallied up the total benefits each derived from the game and felt they had to offset the benefits each made available to the others so all could settle their accounts. It would also be odd if the last-minute invitee were expected to provide payment for the benefit she received because, in the end, her presence proved not to increase the other players’ enjoyment of their game on net. It is simply too routine an occurrence—one person influencing someone else’s actions by presenting new opportunities to benefit—for humanity to insist that all benefits received ought to be paid back to whoever made them possible. If failing to provide such compensation were always an impermissible kind of free-riding, we would constantly be racking up (and canceling out) debts to one another. Mercifully, no one proposes free-riding scruples so extreme. Nor do normal people invariably demand (or offer) compensation for the benefits they provide (or accept from) others. In some cases, then, it seems perfectly fine to accept benefits that others have made possible without paying them back.

Of course, even though some free-riding decisions seem backed by a justified expectation that the benefit can be accepted for free, that does not mean all are. Suppose the free-rider would have sought out the benefit in question even if he had to do so at personal expense, simply because that particular benefit was that important to him. In such cases the free-rider could not say, in his defense, that he accepted the benefit solely because he thought it was available for free. And so the benefit-provider would have a justified expectation of payment in that sort of case—not because of the free-rider’s mere acceptance of the benefit, but because of his preexisting and decisive reasons to bear costs to obtain it.¹¹³ Given the characteristics of the benefit and of the free-rider, it would have been unreasonable for him not to seek out the benefit at some personal cost. Therefore, the benefit-provider is not requesting any payment the free-rider could reasonably have avoided had the free-riding opportunity not arisen.

Focusing on both parties’ justified expectations in free-riding disputes sug-

(1990) (“[O]ne has a morally significant choice just where one really does have reasons for alternative options; for then the choice can be *free*, no factor but the choosing itself *settling* which alternative is chosen.”).

112. See, e.g., *Seinfeld: The Summer of George* (NBC television broadcast May 15, 1997).

113. This discussion will assume that the benefit in question is something it is permissible for the recipient to have. If it is wrong for her to obtain the benefit, it is a separate question whether obtaining it *through free-riding* is an additional wrong.

gests the following ethical bottom line: a free-rider who obtains something she already had decisive reason to seek at her own expense bears an obligation to contribute something if asked by the party whose investment created the free-riding opportunity.¹¹⁴

This expectations-focused approach to the ethics of free-riding does an excellent job explaining the examples that crop up in the philosophical literature. In every example where free-riding is deemed permissible, the benefit obtained seems to be one the free-rider lacked decisive reason to pursue independent of the free-riding opportunity. Of course Nozick's public address system example fits this description, for the free-rider in that example (presumably) would not have found it exceptionally important to organize his neighbors' broadcasts. Consider some additional examples from Richard Arneson: a typical benefit-recipient would not be obligated, he believes, to contribute to cooperative schemes that give gifts to neighborhood residents on their birthdays, communicate pleasant and edifying messages via skywriting, or provide exposure to very stylish fashions.¹¹⁵ The average beneficiary of such arrangements would not have had a decisive reason to try to obtain the benefits had the arrangements not been in place. By contrast, nearly all examples of intuitively objectionable free-riding involve benefits that the free-rider had overwhelming reason to acquire *ex ante*.¹¹⁶ Such benefits include protection from mortal threats,¹¹⁷ breathable air,¹¹⁸ and drinkable water.¹¹⁹ Other examples involve benefits that are indispensable, not for everyone, but for at least those particular individuals whose free-riding is being scrutinized. So, if a fisherman depends on a particu-

114. The proposal here comes closest to George Klosko's rule against free-riding. His rule is significantly more lenient, however, because he would condemn only free-riding to obtain goods that *everybody* needs—that is, goods “that can be presumed to be necessary for an acceptable life for all members of the community.” Klosko, *supra* note 106, at 247.

115. See Arneson, *supra* note 106, at 618, 620–21. Some of Arneson's cases are arguably counterexamples to Wendy Gordon's view that it is wrong not to contribute when one accepts a benefit deliberately, without improving it, while knowing that the benefit-providers are demanding compensation less than the value that the benefit-recipient has received. See Gordon, *Restitutionary Impulse*, *supra* note 13, at 169–70.

116. The only apparent exceptions are misleading because they involve free-riding behavior that is morally impermissible for independent reasons. Kent Greenawalt's example of housing development residents who use the development's tennis courts without abiding by the official rules for contributing to their upkeep seem criticizable simply because they are violating a landowner's property right. See KENT GREENAWALT, *CONFLICTS OF LAW AND MORALITY* 123–24 (1987). By contrast, if the example involved some opportunity for recreation that a group of individuals maintained on the unowned open seas, it would be far less convincing. And Garrett Cullity's example of the person who literally free-rides on public transit may be a case of using something that the free-rider in fact did have decisive reason to work for—namely, a cheap and reliable means of transportation—or else of failing to contribute to providing a good that must be provided for reasons of distributive justice. See Cullity, *supra* note 106, at 6.

117. See Klosko, *supra* note 106, at 249–50.

118. See *id.* at 250.

119. See *id.*; Simmons, *supra* note 106, at 325–26.

lar source for fish that is being threatened by pollution, he has decisive reason to work to reverse the decline in water quality.¹²⁰ Similarly, a mariner who must navigate at night has decisive reason to support the construction and maintenance of lighthouses while the land-bound might not.¹²¹

Free-riding is therefore unfair and morally impermissible in only a limited range of circumstances. When the benefit-recipient has a decisive reason to obtain the benefit even at a cost to herself, independent of the opportunity to obtain the benefit by free-riding, and the benefit-provider seeks compensation for his or her own investment in making the benefit available, free-riding is impermissible.¹²² But if the benefit-recipient's reasons for obtaining the benefit are largely based on the benefit-provider's own actions and the recipient has done nothing to encourage the provider's expectation of contribution, free-riding is unobjectionable.

An expectations-focused approach to the morality of free-riding suggests the misappropriation case law has taken a serious wrong turn by condemning essentially all free-riding. Yet someone might wonder about the equation of free-riding and misappropriation. Misappropriators, the objection might go, seem to *take something* that belongs to others, seem to "appropriate" someone else's "harvest," as the *INS* Court would put it.¹²³ It is misleading to say *INS* merely benefited from the AP's efforts for free.¹²⁴ So (on this objection) comparisons to free-riding examples from the philosophical literature are inapt.

The challenge for this objection, however, is to identify what it was that the *INS* took and to explain why the *INS* was forbidden to take it. Of course, the *INS* did not take the news itself away from anybody. The AP still had full ability to transmit information to its members, and the AP's members still had full ability to use it in their papers. Nor can the objection be that the *INS* took licensing revenues from the AP. That would scarcely distinguish misappropriation from free-riding: both would simply amount to benefiting without paying.¹²⁵ And the question would remain why the AP was entitled to those

120. See Cullity, *supra* note 106, at 11.

121. See DAVID GAUTHIER, *MORALS BY AGREEMENT* 96–97 (1987).

122. This article will set aside the important question of what the proper amount of compensation should be. The answer is surely complicated and depends on background conditions of distributive justice and perhaps other factors, too. The foregoing analysis does suggest, however, that the compensation should not exceed the costs that the benefit-recipient had independent reason to bear for the benefit being provided. In this respect, the proper remedy for morally objectionable free-riding would seem limited at the upper end to the free-rider's unjust enrichment.

123. *Int'l News Serv. v. Associated Press*, 248 U.S. 215, 239 (1918).

124. Cf. Gordon, *Gleaning*, *supra* note 13, at 2420 ("In most of the cases where the 'reap without sowing' command has been recognized, like *INS*, the situation isn't simply one where the defendant has benefited without paying. Rather, the benefit is taken at the expense of the plaintiff.").

125. The objection would also fail to explain the wrongfulness of the *INS*'s actions. Depriving the AP of licensing revenues is wrongful only if it had a right to them. Insisting on

revenues.

Perhaps the INS could be accused of taking away customers from the AP and its members. If the INS had not copied news from the AP, more newspaper readers would have purchased copies of AP members' publications, and some INS subscribers might ultimately have tried to gain membership in the INS's more dependable rival. But did the AP or its members have a right to this patronage? Such a right would be something of an anomaly, given the moral and legal norms that generally give competitors great leeway to act in ways that hurt one another's economic interests. According to these background norms, the competitors' interests are not the only relevant ones. Members of the consuming public themselves have strong interests in robust competition, and so restrictions on competition (besides those that involve deception or harm to consumers) are rather rare.¹²⁶ To be sure, such consumer interests can be weakened in particular circumstances—for instance, when the consumers are contractually obligated to give their business to the aggrieved competitor. In circumstances like that, inducing consumers to violate their contractual obligations in such situations may be improper. Indeed, such inducement amounts to a tort: tortious interference with contract.¹²⁷ But in the misappropriation context, the defendant does nothing to induce wrongdoing by the consuming public unless members of the public are themselves obligated not to use the misappropriated material without compensation. And the consuming public is not obligated to abstain from using that material unless it is morally impermissible for them to free-ride. Thus, once again, it is hard to see how the wrongfulness of misappropriation can be teased apart from the wrongfulness of free-riding. Because philosophical analysis suggests free-riding is morally impermissible in only a specific subset of cases, it follows that courts in misappropriation cases have been too indiscriminate in their ethical disapproval of free-riders.

III. MISAPPROPRIATION'S COPYRIGHT PREEMPTION PROBLEM

Lately, courts have been abandoning ethics-based approaches to the misappropriation doctrine. They have done so, ostensibly, on the ground that ethics inevitably leads to misappropriation's preemption by federal copyright law.¹²⁸ In the process, these courts have suggested that an incentives-based approach to the doctrine stands a better chance of avoiding preemption. As this Part shows,

such a right reformulates the anti-free-riding conclusion but does not justify it.

126. When a competitor's purpose is nothing other than harming his rival, the latter may have a valid complaint. *See, e.g., Tuttle v. Buck*, 119 N.W. 946, 948 (Minn. 1909) (“[W]hen a man starts an opposition place of business, not for the sake of profit to himself, but regardless of loss to himself, and for the sole purpose of driving his competitor out of business . . . he is guilty of a wanton wrong and an actionable tort.”).

127. *See, e.g., Charles E. Carpenter, Interference with Contract Relations*, 41 HARV. L. REV. 728, 764–68 (1928) (collecting cases).

128. *See supra* notes 14–22 and accompanying text.

however, even incentives-based approaches to the misappropriation doctrine face a serious challenge in the Copyright Act's preemption provision. After explaining the challenge and the reasons why incentives-based approaches are unlikely to overcome it, the Part proceeds to identify the characteristics that misappropriation doctrine would need to have to avoid preemption.

A. *The "Qualitative Difference" Requirement*

The U.S. Constitution empowers Congress to enact copyright legislation¹²⁹ and preempts contrary state law under the Supremacy Clause.¹³⁰ For these purposes, even state laws that thwart federal copyright policy implicitly are preempted.¹³¹ But in most cases, the copyright preemption analysis centers around the Copyright Act's express preemption provision. Section 301 of the Copyright Act preempts virtually¹³² all "legal and equitable rights" recognized by state law if they (1) concern "works of authorship that are fixed in a tangible medium of expression and come within the subject matter of copyright" and (2) are "equivalent to any of the exclusive rights within the general scope of copyright."¹³³

129. U.S. CONST. art. I, § 8, cl. 8.

130. *Id.* art. VI, cl. 2.

131. *See* *Compco Corp. v. Day-Brite Lighting, Inc.*, 376 U.S. 234, 237 (1964); *see also* *Sears, Roebuck & Co. v. Stiffel Co.*, 376 U.S. 225, 231 (1964) ("Just as a State cannot encroach upon the federal patent laws directly, it cannot, under some other law, such as that forbidding unfair competition, give protection of a kind that clashes with the objectives of the federal patent laws."). Some courts once thought *INS* claims fell under this sort of implied conflict preemption. *See, e.g.,* *Columbia Broad. Sys., Inc. v. DeCosta*, 377 F.2d 315, 318–19 (1st Cir. 1967). But the Supreme Court later moved toward a narrower implied conflict analysis in the course of upholding a California statute criminalizing unauthorized record duplication. *Goldstein v. California*, 412 U.S. 546, 570 (1973); *see also* *Mercury Record Prods., Inc. v. Econ. Consultants, Inc.*, 64 Wis. 2d 163, 178–79 (1974) (invoking *Goldstein* to find misappropriation claims not preempted); *cf.* *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141, 165 (1989) ("Our decisions since *Sears* and *Compco* have made it clear that the Patent and Copyright Clauses do not, by their own force or by negative implication, deprive the States of the power to adopt rules for the promotion of intellectual creation within their own jurisdictions."). Some scholars point out that courts should consider obstacle preemption in addition to the Copyright Act's express preemption provisions. *See, e.g.,* Mark A. Lemley, *Beyond Preemption: The Law and Policy of Intellectual Property Licensing*, 87 CALIF. L. REV. 111, 143 & n.138 (1999); Maureen A. O'Rourke, *Drawing the Boundary Between Copyright and Contract: Copyright Preemption of Software License Terms*, 45 DUKE L.J. 479, 534–35 (1995); *cf.* *Sprietsma v. Mercury Marine*, 537 U.S. 51, 65 (2002) ("Congress' inclusion of an express pre-emption clause does *not* bar the ordinary working of conflict pre-emption principles" (internal quotation mark omitted)).

132. The statute does not preempt state rights relating to any pre-1978 dispute or to buildings. *See* 17 U.S.C. § 301(b)(2), (4) (2006).

133. *Id.* § 301(a); *see also id.* § 301(b)(1), (3) ("Nothing in this title annuls or limits any rights or remedies under the common law or statutes of any State with respect to . . . subject matter that does not come within the subject matter of copyright as specified by sections 102 and 103, including works of authorship not fixed in any tangible medium of ex-

The first condition for preemption, *the subject matter requirement*, requires that a preempted right cover the types of works that fall within copyright's domain.¹³⁴ If a work as a whole comes within the scope of copyright law, the subject matter requirement is satisfied even if the state law rights only protect elements of the work that are uncopyrightable, such as mere ideas or facts.¹³⁵ Because misappropriation claims usually concern the copying of copyrightable works or their parts, the subject matter requirement is usually satisfied in misappropriation cases.¹³⁶ The second preemption condition, *the equivalency requirement*,¹³⁷ is trickier to apply.

For a state law right to be equivalent to a copyright right, it must prohibit the sort of act that would "in and of itself" infringe copyright.¹³⁸ In other words, the state law right must violate the copyright owner's exclusive right to copy the work, to create new works deriving from it, to disseminate copies of it publicly, or to perform or display it publicly.¹³⁹ Then, if the state law right does, say, prohibit the copying of copyrightable material, it still is not equivalent to a copyright right if it depends on some "extra element" that is not necessarily present in copyright infringement.¹⁴⁰ So, for instance, when the state law duty not to copy is contingent on the duty-holder's having contractually promised not to copy, the equivalency requirement is not satisfied because the right depends on an extra element—namely, the existence of an enforceable contract

pression; or . . . activities violating legal or equitable rights that are not equivalent to any of the exclusive rights within the general scope of copyright as specified by section 106.”)

134. *See, e.g.*, *Briarpatch Ltd. v. Phoenix Pictures, Inc.*, 373 F.3d 296, 305 (2d Cir. 2004) (“The subject matter requirement is satisfied if the claim applies to a work of authorship fixed in a tangible medium of expression and falling within the ambit of one of the categories of copyrightable works.”).

135. *See, e.g.*, *Montz v. Pilgrim Films & Television, Inc.*, 649 F.3d 975, 979 (9th Cir. 2011) (en banc); *United States ex rel. Berge v. Bd. of Trs. of Univ. of Ala.*, 104 F.3d 1453, 1463 (4th Cir. 1997) (“[T]he shadow actually cast by the Act’s preemption is notably broader than the wing of its protection.”).

136. *See, e.g.*, *Barclays Capital, Inc. v. Theflyonthewall.com, Inc.* 650 F.3d 876, 878–79, 902 (2d Cir. 2011) (investment recommendations within written research reports); *Nat’l Basketball Ass’n v. Motorola, Inc.*, 105 F.3d 841, 848–50 (2d Cir. 1997) (facts about sports games); *X17, Inc. v. Lavandeira*, 563 F. Supp. 2d 1102 (C.D. Cal. 2007) (photographs). *But see Chi. Bd. Options Exch. v. Int’l Sec. Exch., L.L.C.*, 2012 IL App. 102228, ¶ 25 (holding that plaintiffs’ stock market indices were not copyright subject matter).

137. It is also called the “general scope requirement,” but “equivalency requirement” is a less confusing name because the subject matter requirement concerns copyright’s ambit and therefore, in a sense, its scope. Sometimes when courts engage in preemption analysis they discuss copyright’s “scope” and it is not immediately obvious whether they are addressing the subject matter requirement or the equivalency requirement.

138. *E.g.*, *Computer Assocs. Int’l, Inc. v. Altai, Inc.*, 982 F.2d 693, 716 (2d Cir. 1992) (citing *Harper & Row, Publishers, Inc. v. Nation Enters.*, 723 F.2d 195, 200 (2d Cir. 1983), *rev’d on other grounds*, 471 U.S. 539 (1985)).

139. *See* 17 U.S.C. § 106 (2006).

140. *E.g.*, *Computer Assocs. Int’l*, 982 F.2d at 716.

under contract law—that copyright’s duty not to copy does not depend on.¹⁴¹

In the *NBA* case, the complaint against defendant Motorola was focused on its copying and dissemination of information about NBA basketball games.¹⁴² In this way, the misappropriation claim was *prima facie* equivalent to a copyright claim. It complained of the sort of acts—copying and distributing material falling within copyright law’s scope—that in and of themselves would be copyright-infringing. But the equivalency analysis did not end there. The *NBA* court proceeded to identify three extra elements that it said would have to be proved in an *INS* misappropriation claim, but not in a copyright claim: “(i) the time-sensitive value of factual information, (ii) the free-riding by a defendant, and (iii) the threat to the very existence of the product or service provided by the plaintiff.”¹⁴³ Because of these three necessary extra elements, the court concluded that the misappropriation and copyright claims were not equivalent for preemption purposes. Beyond those three elements, the *NBA* court identified two more necessary conditions for a valid misappropriation claim: the factual information must be generated or collected by the plaintiff at some expense and the defendant must use the information to compete directly with a product or service of the plaintiff.¹⁴⁴ All told, a successful, non-preempted misappropriation claim according to the *NBA* court consisted of five elements:

In our view, the elements central to an *INS* claim are: (i) the plaintiff generates or collects information at some cost or expense; (ii) the value of the information is highly time-sensitive; (iii) the defendant’s use of the information constitutes freeriding on the plaintiff’s costly efforts to generate or collect it; (iv) the defendant’s use of the information is in direct competition with a product or service offered by the plaintiff; (v) the ability of other parties to free-ride on the efforts of the plaintiff would so reduce the incentive to produce the product or service that its existence or quality would be substantially threatened.¹⁴⁵

As noted earlier, however, the Second Circuit recently cast aside this five-element test. According to the court’s decision in *Barclays*, the five elements identified in *NBA* may not in fact suffice for a valid, non-preempted *INS* claim, and *NBA*’s contrary statements are mere dicta.¹⁴⁶ At present, the only respect in which the five-element test remains binding precedent in the Second Circuit is that one of its elements—free-riding by the defendant—is still necessary for a successful misappropriation claim based on the copying of copyright’s subject

141. See, e.g., *Forest Park Pictures v. Universal Television Network, Inc.*, 683 F.3d 424, 431–32 (2d Cir. 2012) (collecting cases).

142. *Nat’l Basketball Ass’n v. Motorola, Inc.*, 105 F.3d 841, 848–50 (2d Cir. 1997).

143. *Id.* at 853.

144. *Id.* at 852.

145. *Id.*

146. See *Barclays Capital, Inc. v. Theflyonthewall.com, Inc.*, 650 F.3d 876, 898–901 & n.32 (2d Cir. 2011).

matter.¹⁴⁷ Apart from that requirement, it remains a mystery what combination of facts would give rise to a valid, non-preempted misappropriation claim where the subject matter requirement is satisfied.

The *Barclays* decision is hard to defend as a reading of *NBA*.¹⁴⁸ But it is now the law, and the *NBA* five-element test is not—at least in the very important Second Circuit. Aside from its questionable interpretation of *NBA*, though, *Barclays* at least has the virtue of sweeping away *NBA*'s doubtful claim that the three identified extra elements saved misappropriation doctrine from preemption.

As Judge Raggi noted in her *Barclays* concurrence, *NBA*'s three extra elements do little to help misappropriation claims avoid equivalency with copyright claims.¹⁴⁹ When it comes to establishing non-equivalency in copyright preemption analysis, not just any additional element will do. For example, although one may infringe a copyright without any intention to do so,¹⁵⁰ adding an intent element to a cause of action that is otherwise equivalent to an action for copyright infringement does not create an extra element of the right sort: such an element, courts have determined, “alter[s] the action’s scope but not its nature.”¹⁵¹ Only elements that alter “the action so that it is *qualitatively* different from a copyright infringement claim” are extra elements that establish non-equivalence and allow the action to avoid preemption.¹⁵² In other words, the

147. *Id.* at 902.

148. The *Barclays* court only paid attention to half of the *NBA* holding. In *NBA*, the court used its five-element test to reject two misappropriation claims brought by the NBA, holding that the NBA could not establish all five elements for either claim. *Nat'l Basketball Ass'n*, 105 F.3d at 853. First, the *NBA* court rejected the NBA's argument that Motorola misappropriated its rights in NBA games or the broadcasts of those games, because the NBA could not show that Motorola competed with it in the market for basketball games or for basketball game broadcasts. *Id.* at 853–54. For this claim, the NBA could not establish element four: Motorola was not using the allegedly misappropriated material “in direct competition with” the NBA's goods or services. *Id.* at 852. Second, the *NBA* court rejected the NBA's argument that Motorola misappropriated its rights in its communications about its games—“e.g., box-scores in newspapers, summaries of statistics on television sports news, and real-time facts to be transmitted to pagers”—because the NBA could not show that Motorola was free-riding on any of those communications. *Id.* at 853. For this claim, the NBA could not establish element three of the court's five-element test: Motorola was not using the allegedly misappropriated material in a way that constituted free-riding on the NBA's “costly efforts to generate or collect it.” *Id.* at 852. Discussing only the second of these rejections, the *Barclays* court was plainly wrong to say, “The *NBA* panel did not decide the case before it on the basis of the presence or absence of direct competition, which it thought to be an element of the preemption inquiry but did not depend upon in its analysis.” *Barclays*, 650 F.3d at 906. Judge Raggi's *Barclays* concurrence, which denied that *NBA*'s five-element test was dictum, offered a much better reading of the case. *See id.* at 907 (Raggi, J., concurring).

149. *Barclays*, 650 F.3d at 909–11 (Raggi, J., concurring).

150. *See, e.g.*, *Buck v. Jewell-LaSalle Realty Co.*, 283 U.S. 191, 198 (1931).

151. *Mayer v. Josiah Wedgwood & Sons, Ltd.*, 601 F. Supp. 1523, 1535 (S.D.N.Y. 1985).

152. *Id.*

extra elements must make the state law claim “different in kind” from a copyright claim.¹⁵³ Every circuit applies this qualitative difference standard when deciding whether extra elements found in a state law claim make it non-equivalent to a copyright infringement claim.¹⁵⁴ And though the Second Circuit itself had done so before *NBA*,¹⁵⁵ the *NBA* court neglected to explain how the extra elements it identified made a hot-news misappropriation claim qualitatively different from a copyright claim. In fact, it did not even mention the requirement that extra elements establish a qualitative difference.

So do *NBA*'s three extra elements create a qualitative difference between misappropriation and copyright claims? The first extra element, the misappropriated material's time-sensitive value, does not. To some degree the value of any copyrightable material is time-sensitive because its popularity with consumers will vary over time. Moreover, the value of much copyrighted material is, like the news, most heavily concentrated in the period immediately after its initial release. Although the value of news may be more time-sensitive than usual, whatever difference exists here is a clear difference in degree, not a qualitative difference or difference in kind.

The second extra element fares no better. All unauthorized copying involves some sort of free-riding.¹⁵⁶ At first glance, though, *NBA* seems to draw a line between free-riding and what might be called discounted-riding. The court emphasized that Motorola had spent its own resources to collect the information for its pagers even though it did not pay the NBA anything.¹⁵⁷ So while Motorola avoided having to invest in producing the underlying games, the information did not come to it *free*. But if free-riding really occurs only

153. See, e.g., *Alcatel USA, Inc. v. DGI Techs., Inc.*, 166 F.3d 772, 789 (5th Cir. 1999); *Waits v. Frito-Lay, Inc.*, 978 F.2d 1093, 1100 (9th Cir. 1992); *Balt. Orioles, Inc. v. Major League Baseball Players Ass'n*, 805 F.2d 663, 677 n.26 (7th Cir. 1986).

154. See, e.g., *Tire Eng'g & Distrib., LLC v. Shandong Linglong Rubber Co.*, 682 F.3d 292, 311 (4th Cir. 2012); *Montz v. Pilgrim Films & Television, Inc.*, 649 F.3d 975, 980 (9th Cir. 2011) (en banc); *Stuart Weitzman, LLC v. Microcomputer Res.*, 542 F.3d 859, 864 n.5 (11th Cir. 2008); *Cambridge Literary Props., Ltd. v. W. Goebel Porzellanfabrik*, 510 F.3d 77, 102 (1st Cir. 2007); *La Resolana Architects, PA v. Clay Realtors Angel Fire*, 416 F.3d 1195, 1199 n.2 (10th Cir. 2005); *Toney v. L'Oreal USA, Inc.*, 406 F.3d 905, 910 (7th Cir. 2005); *Stromback v. New Line Cinema*, 384 F.3d 283, 301 (6th Cir. 2004); *Briarpatch Ltd. v. Phoenix Pictures, Inc.*, 373 F.3d 296, 305 (2d Cir. 2004); *Carson v. Dynegy, Inc.*, 344 F.3d 446, 456 (5th Cir. 2003); *Bowers v. Baystate Techs., Inc.*, 320 F.3d 1317, 1324 (Fed. Cir. 2003); *Dun & Bradstreet Software Servs., Inc. v. Grace Consulting, Inc.*, 307 F.3d 197, 217–18 (3d Cir. 2002); *Sturdza v. United Arab Emirates*, 281 F.3d 1287, 1304 (D.C. Cir. 2002); *Nat'l Car Rental Sys., Inc. v. Computer Assocs. Int'l, Inc.*, 991 F.2d 426, 431 (8th Cir. 1993).

155. E.g., *Computer Assocs. Int'l, Inc. v. Altai, Inc.*, 982 F.2d 693, 716–17 (2d Cir. 1992).

156. Cf. Jane C. Ginsburg, *Copyright, Common Law, and Sui Generis Protection of Databases in the United States and Abroad*, 66 U. CIN. L. REV. 151, 162 (1997) (arguing that “free-riding . . . may be a pejorative description of copying, but it is still copying.”).

157. *Nat'l Basketball Ass'n v. Motorola, Inc.*, 105 F.3d 841, 854 (2d Cir. 1997).

when the free-rider bears no costs at all, there may be no such thing as a free ride. Even the INS spent resources having employees collect and copy news from the AP's bulletins. More importantly, on an incentives-based account of misappropriation, why should it matter whether the defendant spent *nothing*? The relevant question is the effect of the defendant's actions on the availability of socially beneficial goods. The concern is not whether the defendant's copying saves him from every expense, but with whether it saves him enough of the usual expenses (1) that he no longer has adequate incentives to make socially beneficial investments on his own or (2) that his competitors who bear the usual expenses are so disadvantaged that they cannot afford to continue making their socially beneficial investments.¹⁵⁸ For the *NBA* court, a free-riding element cannot furnish a difference in kind because on an incentives-based account the extent or degree of the free-riding is what gives rise to the problem.

The third of *NBA*'s extra elements—"the threat to the very existence of the product or service provided by the plaintiff"¹⁵⁹—also seems, at first glance, to be an either/or element, and so possibly the source of a qualitative difference.¹⁶⁰ Either the effect of the defendant's free-riding is so great that the plaintiff no longer provides its goods and services, or it is not. But once again, this first impression is misleading, and for a pair of reasons. First, threats are not the same thing as the harm that they threaten. Threats characteristically represent a chance of harm, and chance is always a matter of degree. Second, the incentives-based account is not concerned only with threats to *the existence* of the misappropriation plaintiff's goods and services. The public is harmed not just by the absence of a good, but also by having not enough or a slightly inferior version of it.¹⁶¹ The *NBA* court itself recognized this point: in other parts of its opinion, it described this element as satisfied whenever "the existence *or*

158. Richard Epstein considers these two possible effects when distinguishing between objectionable and innocuous degrees of free-riding that were present in the *INS* case. The AP had admitted to using its rivals' news items to get tips that it subsequently investigated for itself. This behavior is also a form of free-riding, or at least discounted-riding, but it is not as extreme a form as the INS's copying of others' news without going to the trouble of an independent investigation. Epstein argues that getting to-be-investigated tips from others does not confer enough of an advantage to diminish anyone's incentives to gather news. But, he says, copying facts without independent investigation probably does. See Epstein, *supra* note 108, at 101–02.

159. *Nat'l Basketball Ass'n*, 105 F.3d at 853.

160. *But see* Ginsburg, *supra* note 156, at 162 ("[W]hether the copying threatens to put the claimant out of business . . . has more to do with the extent of the damage wrought by defendant's copying than with the nature of the rights.").

161. As Judge Richard Posner has explained:

The question is not whether Dow Jones abandons its index, AP its war reporting, the USGA its handicapping, or the NBA its sponsorship of professional basketball; the question is how far these activities may be curtailed if free riding, even on ancillary or derivative products, is allowed.

Richard A. Posner, *Misappropriation: A Dirge*, 40 HOUS. L. REV. 621, 637 (2003).

quality” of the plaintiff’s goods or services is threatened.¹⁶² If the quality of goods and services is a matter of degree, then so too is the amount their quality is impaired.¹⁶³

In short, none of the extra elements identified in *NBA* is the sort of extra element that helps misappropriation avoid preemption. None makes misappropriation claims qualitatively different from copyright claims. One might wonder, though, whether it is possible to formulate misappropriation in some other way that incorporates qualitatively different extra elements while still maintaining an incentives-based approach overall.

Although this sort of breakthrough is conceivable, the prospect seems dim. The *NBA*’s specific test is, analytically, a very strong statement of the incentives-based approach. After all, that is a large source of its appeal.¹⁶⁴ The preemption difficulty, moreover, is rooted not in some shortcoming of the *NBA* court’s particular proposal, but in the ultimate purpose of the incentives-based approach. Any effort to formulate misappropriation doctrine in terms of incentives is going to need to focus, like the *NBA* court, on the magnitude of the social harm that would follow the free-riding at issue—but of course that is copyright’s primary concern too. As the Supreme Court has interpreted it, copyright’s “ultimate aim” is to promote the public good by providing special incentives to private parties.¹⁶⁵ On incentives-based approaches, misappropriation claims pursue the very same goal as copyright claims, and so we should not expect the elements of the two claims to exhibit fundamental differences.¹⁶⁶ And as will become clear in the next section, incentives-focused formulations

162. See *Nat’l Basketball Ass’n*, 105 F.3d at 845, 852 (emphasis added).

163. See, e.g., Posner, *supra* note 161, at 637 (describing “the output effects” of misappropriators’ free-riding as “a continuous phenomenon” rather than a “dichotomous” one).

164. See, e.g., Richard A. Epstein, *The Protection of “Hot News”: Putting Balganesch’s “Enduring Myth” About International News Service v. Associated Press In Perspective*, 111 COLUM. L. REV. SIDEBAR 79, 86 (2011) (praising the *NBA* opinion as excellent, notwithstanding doubts about the particular outcome of the case).

165. *Twentieth Century Music Corp. v. Aiken*, 422 U.S. 151, 156 (1975); see also *Mazer v. Stein*, 347 U.S. 201, 219 (1954) (“The economic philosophy behind the clause empowering Congress to grant patents and copyrights is the conviction that encouragement of individual effort by personal gain is the best way to advance public welfare . . .”).

166. This sort of point was made decades ago in a pre-*NBA* discussion of misappropriation claim preemption:

The “goal” underlying copyright law is the same as that driving the tort of misappropriation: balancing the need to provide economic incentives for authorship against the preservation of the freedom to imitate. Given the identical goals of the tort of misappropriation and the Copyright Act, we would be inclined to hold that § 301 always preempts the tort of misappropriation.

We hesitate to go so far, though, because Congress clearly intended to preserve some form of the tort of misappropriation.

Nash v. CBS, Inc., 704 F. Supp. 823, 834 (N.D. Ill. 1989), *aff’d on other grounds*, 899 F.2d 1537 (7th Cir. 1990). The court proceeded to cite section 301’s legislative history to hold that hot news claims were not preempted; it did not attempt to justify that result analytically. See *id.* at 835.

of misappropriation doctrine stand even less a chance of avoiding preemption given what counts as a qualitative difference in the copyright preemption case law.

B. *The Qualitative Difference Between In Rem and In Personam Rights*

Ever since the Seventh Circuit upheld a standard form software license agreement in *ProCD, Inc. v. Zeidenberg*,¹⁶⁷ courts have routinely held that contractual duties are different in kind from copyright duties—even when they forbid the copying of material falling within copyright’s scope. In that case, the plaintiff had sold a software database of telephone directory information, and to use the software the defendant had to agree (among other things) not to resell the information for commercial gain.¹⁶⁸ The *ProCD* case is well known for declaring this sort of license agreement effective under state contract law, but it further held that the plaintiff’s contract right was not preempted by the copyright statute because rights created by a contract are not equivalent to the rights created by copyright law. The latter, according to *ProCD*, “restrict the options of persons who are strangers to the author.”¹⁶⁹ But as far as contract terms are concerned, “strangers may do as they please, so contracts do not create ‘exclusive rights’” in the sense that copyright law creates exclusive rights.¹⁷⁰ The *ProCD* court thus identified a contractual right as non-equivalent to a copyright right because the former binds only those who have promised to respect it while the latter is “a right against the world.”¹⁷¹ Since *ProCD*, many courts have endorsed these grounds for declaring contract rights not equivalent to copyright claims.¹⁷² The Second Circuit, for instance, recently declared a contract claim qualitatively different from a copyright claim because it “asserts rights only against the contractual counterparty, not the public at large.”¹⁷³

In taking this approach to the equivalency requirement in contract cases,

167. 86 F.3d 1447 (7th Cir. 1996).

168. *See id.* at 1450, 1452.

169. *Id.* at 1454.

170. *Id.* (quoting 17 U.S.C. § 106 (2006)); *see also id.* (“Someone who found a copy of [the plaintiff’s software] on the street would not be affected by the shrinkwrap license—though the federal copyright laws of their own force would limit the finder’s ability to copy or transmit the application program.”).

171. *Id.* at 1454.

172. *See, e.g.,* *Montz v. Pilgrim Films & Television, Inc.*, 649 F.3d 975, 979 (9th Cir. 2011) (en banc) (describing an implied-in-fact contract as “unlike a copyright that is a public monopoly” (citing *ProCD*, 86 F.3d at 1454)); *Lipscher v. LRP Publ’ns, Inc.*, 266 F.3d 1305, 1318 (11th Cir. 2001) (“[C]laims involving two-party contracts are not preempted because contracts do not create exclusive rights, but rather affect only their parties.” (citing *ProCD*, 86 F.3d at 1454–55)).

173. *Forest Park Pictures v. Universal Television Network, Inc.*, 683 F.3d 424, 431 (2d Cir. 2012) (citing *ProCD*, 86 F.3d at 1454); *see also id.* at 433 (“A claim for breach of a contract including a promise to pay is qualitatively different from a suit to vindicate a right included in the Copyright Act and is not subject to preemption.”).

these courts are relying on a distinction commonly used by legal theorists to contrast property and contract rights: property rights are rights *in rem* and contract rights are rights *in personam*.¹⁷⁴ As John Austin said, *in rem* rights avail “against persons generally” and *in personam* rights avail against determinate persons.¹⁷⁵ This distinction occasionally surfaces in discussions of misappropriation because the *INS* majority itself seemed to rely on it. The Court stressed that it was recognizing only a “*quasi* property” interest in news—a right against one business competitor, not a right against the whole world:

The question here is not so much the rights of either party as against the public but their rights as between themselves. And although we may and do assume that neither party has any remaining property interest as against the public in uncopyrighted news matter after the moment of its first publication, it by no means follows that there is no remaining property interest in it as between themselves. . . . Regarding the news, . . . it must be regarded as *quasi* property, irrespective of the rights of either as against the public.¹⁷⁶

Unfortunately, the court did not much explain its conception of quasi-property rights, and so its relation to the *in rem/in personam* distinction is not entirely straightforward. That is partly because the distinction itself is not entirely straightforward. But clarifying the distinction between *in rem* and *in personam* rights will also help clarify what makes a state law claim qualitatively different from a copyright infringement claim.

There are two principal ways of interpreting the distinction between *in rem* and *in personam* rights. Wesley Hohfeld, writing at roughly the time of the *INS* decision, explained the distinction in terms of the size and open-endedness of the class of duty-holders bound by the correlative right: *in rem* rights are held by one person against “persons constituting a very large and indefinite class of people, while *in personam* rights avail “against a single person (or single group of persons)” or “a few definite persons.”¹⁷⁷ This view of the distinction appears congenial to the *INS* majority’s holding that misappropriation creates something short of a full *in rem* property right, for the quasi-property right recognized by the court does not correlate with obligations held by “a very large and indefinite class of people.”¹⁷⁸ Only people who compete with the AP are bound. But such an understanding of the *in rem/in personam* distinction still would not provide a qualitative difference between the *in rem* rights of copyright law and the rights recognized by *INS* because both numerosity and indefiniteness of a duty-holder class vary by degree.¹⁷⁹ Even in *INS*, the class of

174. See, e.g., Thomas W. Merrill & Henry E. Smith, *The Property/Contract Interface*, 101 COLUM. L. REV. 773, 776–77 (2001).

175. 1 JOHN AUSTIN, LECTURES ON JURISPRUDENCE 369–70 (Robert Campbell ed., 5th ed. 1885).

176. *Int’l News Serv. v. Associated Press*, 248 U.S. 215, 236 (1918).

177. HOHFELD, *supra* note 97, at 72.

178. *Id.*

179. See, e.g., Merrill & Smith, *supra* note 174, at 786.

newsgathering competitors who like the INS are obligated not to reap what the AP sows, while not numerous relative to the total population of possible reapers, is hardly well defined.¹⁸⁰ On the contrary, it seems an open-ended class, and furthermore the rules for classifying a free-rider as a competitor are hardly bright-line. For that matter, the class of users who had agreed to the terms of the software agreement in *ProCD* was potentially rather large, but relatively definite. So the Hohfeldian interpretation of the *in rem/in personam* distinction does not actually help identify a qualitative difference between copyright claims and state law claims and therefore does not save the latter from preemption.

But the second understanding of *in rem/in personam* distinction provides a more useful conceptual tool for copyright preemption analysis. Albert Kocourek, responding to Hohfeld's account, devised a counterexample to Hohfeld's claim that *in rem* rights involve a large number of duty-holders holding more or less the same duty.¹⁸¹ Kocourek identified the possibility of *in rem* rights that imposed duties on only a small class of persons—such as the right of a property owner that a single individual not trespass on her land after the owner had granted easements to everyone else in her jurisdiction except that one individual.¹⁸² Kocourek therefore proposed the following definition: “a right *in rem* is one of which the essential investitive facts do not serve directly to identify the person who owes the incident duty.”¹⁸³ And, conversely, an *in personam* right is simply a right the essential investitive facts of which *do* serve directly to identify the person who owes the incident duty.¹⁸⁴ Unlike Hohfeld's version of the *in rem/in personam* distinction, this version does not turn on matters of degree: either the right is grounded in facts about the duty-holder's identity or it is not.

Putting the Kocourek proposal in terms of duties, one might say that a duty corresponding to an *in personam* right is *agent-specific* because it comes to bind the duty-holder in virtue of facts about his or her identity or other personal characteristics. So, for example, a contractual duty not to copy ProCD's facts is

180. See Balganes, *supra* note 108, at 435.

181. Coincidentally, it may in fact have been *INS* that precipitated Kocourek's skepticism about Hohfeld's account. In a case comment that Kocourek authored while serving as a law review editor, he set out to interpret the *INS* Court's concept of quasi-property in terms of the *in rem/in personam* distinction and at first supposed that the court's quasi-property right was *in personam* because there appeared to be only one duty-holder, the *INS*. Comment on Recent Case, *International News Service v. Associated Press*, 39 *S. Ct. 68* (1918), 13 *ILL. L. REV.* 708, 715 (1919). But Kocourek ultimately concluded that the right was nevertheless *in rem*. *Id.* at 716. On his reading, the rule established in *INS* was, “No one shall compete with another by systematically appropriating and selling the ideal things (whether objects of property or not, so long as they are vendible) produced by the other.” *Id.* at 719 (emphasis omitted).

182. Albert Kocourek, *Rights in Rem*, 68 *U. PA. L. REV.* 322, 332–33 (1920).

183. *Id.* at 335 (emphasis omitted).

184. *Id.*

agent-specific because its existence is grounded in the duty-holder's having assented to the contract.¹⁸⁵ Many legal duties are agent-specific in this sense. Parents have agent-specific duties to their children in virtue of their identity as the children's parents. Common carriers have agent-specific duties to exercise the utmost care toward their passengers in virtue of their identity as common carriers. Rescuers have agent-specific duties to exercise reasonable care in virtue of having voluntarily assumed the duty by intervening. But many other legal duties are not agent-specific, such as the duty not to kidnap someone and the duty not to infringe a copyright. In determining that contractual rights were not equivalent to copyright's rights against the world, the *ProCD* court seemed to have something like the concept of agent-specific duties in mind. And contract duties are indeed agent-specific while copyright duties are not. The agent-specificity of contractual duties, therefore, is the qualitative difference that distinguishes breach of contract from copyright infringement.

The idea that agent-specific legal duties can avoid preemption is supported by other copyright decisions as well. Consider claims based on a breach of a fiduciary duty or a breach of confidence. Such claims involve agent-specific duties because they depend on a special kind of relationship between the right-holder and the duty-holder, which the right-holder does not have with the rest of the world. And courts have indeed found such claims qualitatively different from copyright claims.¹⁸⁶ By contrast, tortious interference with contract—which involves a duty that is not agent-specific because *everyone* is prohibited from intentionally inducing third parties to break their contracts with others—is preempted.¹⁸⁷

The concept of agent-specific duties thus helps explain why some state law claims are qualitatively different than copyright claims, but it does not offer much help for incentives-focused formulations of misappropriation doctrine. There is no straightforward way to derive agent-specific duties from that sort of justification. If the aim of misappropriation doctrine is to prevent actions that imperil the availability of certain public goods, anyone whose actions have that unwelcome result will be duty-bound irrespective of facts about them in particular. In theory, the best way to promote the availability of certain public goods could be to create and enforce agent-specific duties. But there is no reason to

185. See Michael E. Kenneally, *Commandeering Copyright*, 87 NOTRE DAME L. REV. 1179, 1237 (2012) (“[T]he license only imposed a duty not to copy the directory on specific individuals who were in privity with ProCD.”).

186. See, e.g., *Montz v. Pilgrim Films & Television, Inc.*, 649 F.3d 975, 981 (9th Cir. 2011) (en banc); *Computer Assocs. Int'l, Inc. v. Altai, Inc.*, 982 F.2d 693, 717 (2d Cir. 1992).

187. See, e.g., *Harper & Row, Publishers, Inc. v. Nation Enters.*, 723 F.2d 195, 201 (2d Cir. 1983), *rev'd on other grounds*, 471 U.S. 539 (1985). But see *Star Patrol Enters., Inc. v. Saban Entm't, Inc.*, No. 95-56534, 1997 WL 683327 (9th Cir. Oct. 23, 1997) (stating that claims for inducing breach of contract are generally not equivalent to copyright claims while noting that there was no circuit precedent directly on point).

assume that a substantively defensible incentives-focused formulation of misappropriation could be built around agent-specific duties. The *NBA* court, for instance, did not propose an agent-specific duty not to misappropriate when it prohibited *anyone* from free-riding on the right-holder's investments in time-sensitive information to produce a directly competing product, when having the ability to free-ride would threaten the right-holder's incentives to create the product in the first place.¹⁸⁸ This *NBA* duty is complex and perhaps even narrow, but it does not bind duty-holders in virtue of facts about their individual identities or other personal characteristics, and so it does not correlate to an *in personam* right that qualitatively differs from copyright.

Shyamkrishna Balganesch's nuanced account of the misappropriation doctrine may be the rare attempt to combine a focus on incentives with agent-specific duties. In Balganesch's view, misappropriation is fundamentally concerned with providing incentives to produce public goods.¹⁸⁹ He also argues, however, that the doctrine imposes duties only on the right-holder's direct competitors,¹⁹⁰ and his conception of this direct competitor limitation does seem to make misappropriation duties agent-specific: one cannot tell whether a defendant is a direct competitor of the plaintiff without considering the defendant's particular characteristics.¹⁹¹ Even so, this combination of agent-specific duties and an incentives focus is somewhat unstable. By Balganesch's own lights, the justification for the direct competitor limitation derives from highly contingent features of the public good in question. He finds the direct competitor limitation warranted because it was socially beneficial, in *INS*, to encourage the parties to cooperate with each other in the production of the relevant public good.¹⁹² On an incentives-focused account, however, such cooperation is worth encouraging only to the extent that it increases the availability of the public good. It is not at all clear which sorts of misappropriated goods are best produced through cooperation between competitors and which are not, and courts are particularly ill-equipped to make such calls. Even assuming the news was such a good in 1918, misappropriation doctrine continues today in different circumstances and extends to many other goods besides the news. Thus, although Balganesch's proposal may help support the result in *INS* at the time the case was decided, its generalizability and usefulness to the doctrine today are open to doubt.¹⁹³

By contrast, as the next Part argues, a sound ethics-focused formulation of the doctrine can successfully ground the duty not to misappropriate in particu-

188. *Nat'l Basketball Ass'n v. Motorola, Inc.*, 105 F.3d 841, 852 (2d Cir. 1997).

189. *See* Balganesch, *supra* note 108, at 454–55.

190. *See id.* at 435–36.

191. *See id.* at 474.

192. *See id.*

193. This result, it should be noted, seems consistent with Balganesch's own aims. *See id.* at 497 (describing the misappropriation doctrine as “a structural solution unique to the peculiarities of one industry”).

lar facts about the free-rider's personal characteristics. In this way, an ethics-based account of the doctrine not only justifies the doctrine's existence; it also preserves the doctrine from preemption going forward.

IV. REFORMULATING MISAPPROPRIATION DOCTRINE IN ETHICAL TERMS

Part II argued that free-riding is not unfair across the board, but rather only when the free-rider would have had a decisive reason to obtain the benefit at his or her own expense if no free-riding opportunity had arisen. This understanding of the morality of free-riding points the way forward for a new formulation of misappropriation doctrine in ethical terms. And because this formulation would focus on the defendant's particular reasons for obtaining the misappropriated material, and thus on the defendant's personal characteristics, the duties it imposed would be agent-specific and so would avoid preemption.

Without question, though, it is not always easy for one person to determine when another has decisive reason to pursue some good. The doctrine would be easier to apply in practice if it employed a more familiar concept that third-parties, especially courts, could wield more easily. A good candidate would be *need*, for if a person needs something, he or she usually has decisive reason to pursue that thing even at some personal cost. Just think of some of the examples that were discussed above. People generally need a safe water supply and protection from violent threats, but many do not need exposure to the latest fashions or pleasant sky-writing.¹⁹⁴ Having a need for something is thus a pretty good indication that one has a decisive reason to pursue it at some cost. So courts in misappropriation cases should be on the lookout for free-riders who are attempting to obtain a benefit that they already had need of, because it is in those cases that free-riding is likely unfair.

Consider again the *INS* case. The proposed account handily explains why this case has seemed to many observers to involve morally objectionable behavior. It turns out the news the *INS* copied was news it would have needed to report irrespective of the AP's having presented a tempting opportunity for free-riding. In his dissent, Justice Brandeis explains that the *INS* litigation arose after the *INS* suddenly lost its access to European news, which it sorely needed because World War I was underway.¹⁹⁵ When the litigation reached the Supreme Court, the AP's evidence indicated the *INS* had really only copied news relating to the war.¹⁹⁶ Because, as the AP claimed, this news was "of the great-

194. See *supra* notes 115–119 and accompanying text.

195. *Int'l News Serv. v. Associated Press*, 248 U.S. 215, 263 (1918) (Brandeis, J., dissenting). Justice Brandeis also hints at the reason for the *INS*'s loss of access: the British and French governments were displeased by the *INS* newspapers' reporting, and so they prohibited the *INS* from using their transatlantic telegraph lines. See *id.*; see also Baird, *supra* note 4, at 26–27 & n.42.

196. See Baird, *supra* note 4, at 22 n.28.

est importance and of intense interest to the newspaper reading public,"¹⁹⁷ it is safe to say that the INS, a newsgathering agency responsible for distributing the most important news to its subscribers, independently needed the news it copied from the AP.¹⁹⁸ And it further seems likely the INS would have had decisive reason to spend resources to obtain the war news if it had not found a way to free-ride on the AP's efforts. Thus the Court was right to conclude that the INS had behaved unethically, although it did not adequately explain the rationale behind that conclusion.¹⁹⁹

On this understanding of *INS* and the relevant ethical issues, a misappropriation-based unfair competition claim should succeed when the defendant freely uses an intangible good that the plaintiff produced at some expense and the defendant independently needed. Because this account of the duty not to misappropriate turns on the defendant's particular need for the good, it imposes an agent-specific duty grounded in the defendant's personal characteristics, and so survives preemption.²⁰⁰ The specific free-riding punished in *INS* could therefore have been prohibited by a formulation of misappropriation doctrine that would avoid preemption by the federal copyright statute.

But note that misappropriation cases rarely involve this sort of genuinely unethical free-riding. Most misappropriating free-riders seem to have decided to obtain the resource because it was there for the taking. Recall that in the *NBA* case Motorola was sued for providing real-time statistical updates for professional basketball games.²⁰¹ It is quite unlikely that if the NBA had not already been in existence, Motorola would have felt a need to organize a professional basketball league to generate game scores and other information that it could then transmit to customers for profit. Motorola developed its product only because NBA games already existed (and were so popular that there was a demand for timely statistical updates). The company, then, was the sort of free-rider whose decision to accept a benefit depended on the benefit-provider's having made it available.²⁰² Accordingly, this article's proposal supports the outcome in *NBA* too.

Many other decisions, however, probably should have come out the other way, including the successful misappropriation claim in the *Met Opera* case

197. See *Int'l News Serv.*, 248 U.S. at 263 (Brandeis, J., dissenting).

198. See, e.g., Epstein, *supra* note 108, at 105 ("Pirating stories became necessary to keep INS papers in competition with their AP rivals . . ."); cf. Baird, *supra* note 4, at 27 ("INS's need for a source of war news had disappeared by the time the case came to the Supreme Court, as the censorship ban had been lifted well before then.")

199. It is, however, a separate question whether the Court should have remedied this wrongdoing through an injunction rather than an award of monetary relief. The question of what the standard remedy for misappropriation should be is beyond the scope of this article. For a persuasive argument in favor of a monetary remedy in *INS*, see Epstein, *supra* note 108, at 117–19.

200. See *supra* Part III.B.

201. *Nat'l Basketball Ass'n v. Motorola, Inc.*, 105 F.3d 841, 843 (2d Cir. 1997).

202. See *supra* section II.C.

where the defendant was found liable for copying the Met's radio broadcasts.²⁰³ There was no indication in that case that the defendant needed and would have paid for the performances that the Met broadcasted if the opera company had not been broadcasting them freely. On the contrary, it seems the defendant chose to record those performances only because the broadcasts were already scheduled to happen.

Even in the news aggregating cases that seem factually nearest to the original *INS* dispute, much copying seems to be of material the aggregator did not independently need. One suspects All Headline News had no great need for the stories it allegedly misappropriated.²⁰⁴ These boasted such titles as "8 Foot Alligator That Killed Elderly Woman Captured in Georgia Pond Police Say" and "Inspection Squads to Seek Out Dirty Toilets in Malaysian State's Tourist Spots."²⁰⁵

Aside from *INS* itself, the closest example of a misappropriation claim that should have succeeded under this article's proposal would come from the dispute over unauthorized use of financial indices.²⁰⁶ A company whose business consists of selling a variety of investment products probably *does* need a product that allows investors to hedge against systemic risk running throughout an entire market. If the best way of producing such a product is by using a market index,²⁰⁷ the company further will have to have a market index on hand. Even here, though, it is doubtful that the company would *ex ante* need any particular index, like the Dow Jones Industrial Average or the S&P 500, unless some such index constituted the only reliable way to measure overall market performance.²⁰⁸

In all events, a plausible ethics-based approach to misappropriation will justify a relatively narrow set of claims. The set will certainly be smaller than would be produced by unreflective appeal to courts' intuitive conceptions of "commercial immorality," especially since some judges seem to think all free-

203. See *supra* notes 57–60 and accompanying text.

204. See *generally* *Associated Press v. All Headline News Corp.*, 608 F. Supp. 2d 454 (S.D.N.Y. 2009).

205. First Amended Complaint at 18–19, *Associated Press v. All Headline News Corp.*, 608 F. Supp. 2d 454 (S.D.N.Y. 2009) (No. 08 Civ. 323). The other news stories seem only slightly more important: they contained information about a university speaking invitation from Mahmoud Ahmadinejad to George Bush; a Sri Lankan sea battle; AOL layoffs; and a Brazilian surrogate mother who had given birth to her own grandchildren. *Id.*

206. See *supra* note 73 and accompanying text.

207. *Cf.* *Bd. of Trade v. Dow Jones & Co.*, 98 Ill. 2d 109, 113 (1983) ("An investor who holds a diversified stock portfolio may 'hedge' against systematic risk by entering into a stock index futures contract predicting that the market index would decline.").

208. In the most recent Illinois case, the defendant had in fact spent its resources creating a market index of its own, but that index evidently did not have a lot of name recognition. *Chi. Bd. Options Exch. v. Int'l Sec. Exch., L.L.C.*, 2012 IL App. 102228, ¶ 12. So in using better-known indices like the S&P 500, the defendant's actions seem mostly like an unobjectionable response to an opportunity that already existed rather than an effort to avoid bearing costs it had a preexisting decisive reason to be willing to bear.

riding is morally suspect.

It might still be objected, though, that the aim of prohibiting unethical competitive behavior is not itself sufficient normative support for misappropriation doctrine. If misappropriation doctrine does nothing more than protect commercial actors from unfair mistreatment by their rivals, why bother? The law understandably turns a blind eye to many other forms of unfairness, often because the costs of trying to eradicate unfairness can be very high. According to this objection, it may not be in society's interest to have misappropriation doctrine given the ethics-based account of its ends. By contrast, it is easy to see the value of a misappropriation doctrine that provides socially beneficial incentives.

This objection overstates the conflict between the current proposal and incentives-based accounts of misappropriation. It is certainly true that the proposed formulation of the doctrine rests on moral considerations and not economic ones, but that does not mean it will have negative economic consequences overall.²⁰⁹ On the contrary, it is quite possible that the proposal would produce socially beneficial incentives. By preventing misappropriation when the free-rider had an independent need for the misappropriated material, the proposal gives special incentives to invest in producing material that is especially important to potential free-riders' personal welfare. And since the focus of misappropriation doctrine is on free-riders who are engaged in commerce, these incentives would indirectly be based on the welfare of the consuming public the free-rider aims to serve. Put simply, the proposed account is likely to provide an extra incentive when the benefit is central to the well-being of many within society.

Of course that is not to say the proposal perfectly overlaps the best incentives-oriented formulation. In individual cases, the proposal will surely result in outcomes that the incentives-based approach considers wrong. For one thing, a society's *independent* need for some intangible good like news does not always determine how much the resource contributes to social welfare. A resource can be extremely beneficial to society even if no one had decisive reason to create it initially. Indeed, the boldest, least foreseeable innovations can have the greatest social value. And so a different account of misappropriation doctrine might identify superior incentives for investing in intangible resources.²¹⁰

When it comes to contributing to social welfare, however, this article's ethics-based approach does have one advantage over the *NBA* test and other formulations in terms of incentives. Recall that the incentives-based approach cares most about the effect of the defendant's free-riding on the availability of

209. Cf. Henry E. Smith, *An Economic Analysis of Law Versus Equity* (March 27, 2012) (unpublished manuscript), available at <http://www.law.uchicago.edu/files/files/Smith%20paper.pdf>.

210. But if, as Part III argued, no such account survives existing copyright preemption doctrine, this possibility does not weigh very heavily against the Article's proposal.

the plaintiff's socially valuable goods.²¹¹ The defendant, however, is not well placed to make a predication about the likely consequences for the plaintiff's business. The essential facts for such a prediction likely lie with the plaintiff. So on the incentives-based approach, a potential misappropriation defendant will have some difficulty determining his or her potential legal liability, and therefore will need to incur added expenses to obtain the key information.²¹² By contrast, the defendant is the party best situated for determining whether, in free-riding, he would be obtaining a benefit that was necessary from his own point of view. Although courts may ultimately dispute a defendant's claim not to have needed the benefit, the defendant nevertheless holds the information on which the court's ultimate conclusion will be based. In this way, the proposal defended here does not force duty-holders to spend their resources on lots of new information for the sake of determining whether they will incur misappropriation liability. In other words, this proposal avoids information costs that are a central feature of incentives-based accounts.²¹³

Ultimately, no one knows for sure how to formulate misappropriation doctrine to maximize social welfare. Given the current state of the empirical evidence, it is not clear precisely what incentives encourage the best investments in information or other intellectual goods without excessively restricting the public's access to those goods.²¹⁴ Without some way of identifying the optimal set of misappropriation incentives, one should not simply oppose all ethics-centered formulations of misappropriation because the incentives they produce *might* not prove best overall. If such a formulation is plausible enough on its

211. See *Nat'l Basketball Ass'n v. Motorola, Inc.*, 105 F.3d 841, 852–53 (2d Cir. 1997). See also *McKevitt v. Pallasch*, 339 F.3d 530, 534–35 (7th Cir. 2003) (Posner, J.) (identifying the expected negative effect of the defendant's free-riding on the plaintiff's goods and services as the most important element in the *NBA* analysis).

212. Alternatively, the defendant might refrain from engaging in the free-riding, regardless of whether the free-riding would prove socially harmful. This chilling effect would also be an unwelcome result from society's perspective.

213. Prospective misappropriation *plaintiffs*, on the other hand, might still have to invest in information in order to determine whether their rights have been violated. They might not always know when the benefit was one that the defendant independently needed. The *NBA* court's incentives-based formulation has its own version of this problem, however, since prospective plaintiffs must determine whether the defendant had engaged in acts meeting the Second Circuit's definition of free-riding. And that definition is anything but clear. See Balganes, *supra* note 22, at 140 (faulting the *Barclays* majority for not "answering a rather fundamental question about the nature of 'free riding' on which it placed all its normative emphasis" (emphasis omitted)).

214. Not everyone agrees that society needs a misappropriation doctrine to provide special incentives. See, e.g., Posner, *supra* note 161, at 638–39, 641. Even in core areas of intellectual property, it is hard to tell what combination of incentives optimally balances the law's twin goals of encouraging investment and allowing access. See, e.g., RONALD A. CASS & KEITH N. HYLTON, *LAWS OF CREATION: PROPERTY RIGHTS IN THE WORLD OF IDEAS* 45 (2013); MERGES, *supra* note 79, at 2–3; William Fisher, *Theories of Intellectual Property*, in *NEW ESSAYS IN THE LEGAL AND POLITICAL THEORY OF PROPERTY* 168, 181 (Stephen R. Munzer ed., 2001).

own terms—if it really does protect commercial actors from unfair mistreatment by their rivals—and does not appear to impose unacceptable social costs, that is support enough.

CONCLUSION

This article has argued that the misappropriation doctrine should once again be formulated in overtly ethical terms to combat unfair types of competition. Contrary to conventional wisdom, such a formulation stands a better chance of avoiding preemption by copyright law than the incentives-based approach that has supplanted it. But for its part the original version of courts' ethics-based approach to misappropriation also stands in need of improvement. The common belief that free-riding is more or less always unethical cannot be defended. Free-riding, the article has argued, is unethical only in limited circumstances—namely, when the free-rider is attempting to obtain a benefit that he or she already had decisive reason to pursue at some personal expense. Misappropriation claims should therefore succeed only when the defendant needed the misappropriated material before he or she contemplated getting it through free-riding on the plaintiff's efforts.

The misappropriation doctrine in particular benefits a great deal from a reexamination of the moral permissibility of free-riding, but so too does intellectual property law more generally. Many who wonder about the proper scope of intellectual property rights are tempted to make—in Rochelle Dreyfuss's memorable phrasing—the “if value, then right” assumption.²¹⁵ Free-riding just seems fishy, on this view, because it means that someone who did not work to produce a social good will receive a benefit that could have gone to the party who did put in the work. Scholars have offered economic reasons for thinking that is not necessarily a problem.²¹⁶ But it is also worth emphasizing that free-riding is not always a moral problem either. Commonplace concerns about free-riding, like the ones Rupert Murdoch and other critics of news aggregation try to tap into, have an unmistakable moral flavor. Moreover, it may be these moral convictions that ultimately move the law the most.²¹⁷ If lawmakers are to avoid making bad intellectual property law, they need a firm grasp on not just the economics of free-riding, but its morality too.

215. Rochelle Cooper Dreyfuss, *Expressive Genericity: Trademarks as Language in the Pepsi Generation*, 65 NOTRE DAME L. REV. 397, 405–06 (1990).

216. Mark A. Lemley, *Property, Intellectual Property, and Free Riding*, 83 TEX. L. REV. 1031, 1046–50 (2005).

217. Cf. Harvey S. Perlman, *Taking the Protection-Access Tradeoff Seriously*, 53 VAND. L. REV. 1831, 1834 (2000) (“If we have no solid ground upon which to answer [intellectual property’s fundamental economic] question, should we be surprised if the claims for expanding property rights continue to erode the claims of those who ask for the right to ‘reap where they have not sown?’”).

INTELLECTUAL PROPERTY INFRINGEMENT AS VANDALISM

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ABSTRACT

Defenders of strong intellectual property rights often maintain that intellectual property infringement is theft and that the sanctions associated with it ought to be high. Others are skeptical of the property comparison and think that much lower sanctions are appropriate. In this Article, we argue that a careful analysis demonstrates: 1) that intellectual property infringement can be analogized to a property crime, but 2) that the more analogous crime is vandalism or trespass rather than theft. This categorization takes the rhetorical punch out of the property comparison.

In addition to analyzing the natures of the various offenses, this Article investigates the sanction regimes for different property violations and finds that not only are maximum statutory sanctions generally higher for intellectual property infringement than for vandalism and trespass, but they are also usually

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higher than for theft. Bringing intellectual property infringement in line with property offenses, therefore, would actually result in a decrease in sanctions.

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INTRODUCTION

In one of the better-known ads that seek to draw attention to the gravity of intellectual property (IP) infringement, viewers are told: “You wouldn’t steal a car. You wouldn’t steal a handbag. You wouldn’t steal a television. You wouldn’t steal a movie. Downloading pirated films is stealing. Stealing is against the law. Piracy. It’s a crime.”¹ Often without much subtlety, content owners have for years tried to convince society that copyright infringement amounts to the same immoral behavior as the theft of tangible goods. Owners seek to emphasize the fact that infringers take things of value and that, just like society does not tolerate this in the context of physical property, it should not have to tolerate it for intellectual property.² The rhetoric of these content

1. *Piracy It's a Crime*, YOUTUBE (Dec. 4, 2007), <https://www.youtube.com/watch?v=HmZm8vNHBSU>. Ironically, it is unclear whether this warning against copyright infringement was uploaded to YouTube with permission. The video was used as a trailer screened in movie theaters and was developed in collaboration between the Motion Picture Association of America (MPAA) and the Intellectual Property Office of Singapore (IPOS). *Be HIP at the Movies*, IPOS (July 27, 2004), http://web.archive.org/web/20040804074635/http://www.ipos.gov.sg/main/newsroom/media_rel/mediarelease1_270704.html.

2. For a discussion of this trend, see Neil Weinstock Netanel, *Impose a Noncommercial Use Levy to Allow Free Peer-to-Peer File Sharing*, 17 HARV. J.L. & TECH. 1, 22 (2003) (criticizing the content industries for using “the rhetoric of private property to

owners is not novel; to the contrary, the term “property” has been applied in relation to IP throughout American history, although the frequency of its use remains disputed.³

On the other side of this debate stand a number of scholars and activists who are quick to point out the multitude of differences between intellectual property infringement and theft.⁴ When an object is stolen, the owner is completely deprived of it, whereas the owner retains an integral copy of a work when intellectual property infringement occurs.⁵ Unlike in the case of regular theft, the intellectual property owner can also continue to sell copies of this work to willing buyers, provided the market will bear it.⁶ Furthermore, to the

support their lobbying efforts and litigation”).

3. See generally Justin Hughes, *Copyright and Incomplete Historiographies: Of Piracy, Propertization, and Thomas Jefferson*, 79 S. CAL. L. REV. 993 (2006); Adam Mossoff, *What is Property? Putting the Pieces Back Together*, 45 ARIZ. L. REV. 371, 426 (2003) (“Copyright is defined and protected in the American legal system as a property right within the domain of intellectual property. Therefore, to connect copyright to the broader concept and institutional definition of property better grounds this legal doctrine within our legal system as such.”). See also Richard A. Epstein, *Liberty Versus Property? Cracks in the Foundations of Copyright Law*, 42 SAN DIEGO L. REV. 1 (2005) (showing the parallels between the benefits and costs of the property system as compared to those of the copyright system). For a discussion of the relationship between property law and patent law, see, e.g., Adam Mossoff, *The Trespass Fallacy in Patent Law*, 65 FLA. L. REV. 1687 (2013).

4. See generally STUART P. GREEN, 13 WAYS TO STEAL A BICYCLE: THEFT LAW IN THE INFORMATION AGE (2012) [hereinafter “GREEN, 13 WAYS”]. One of us has reviewed this work previously. See Irina D. Manta, *13 Ways to Steal a Bicycle: Theft Law in the Information Age by Stuart Green*, 4 IP L. BOOK REV. 11 (2014). This scholarly discussion takes place in the context of a broader debate about the value of propertizing IP. See, e.g., Michael A. Carrier, *Cabining Intellectual Property Through a Property Paradigm*, 54 DUKE L.J. 1, 4-5 (2004) (“As IP has lost its balance, it has increasingly come to resemble property. . . . Many courts and companies today unquestioningly view property as justifying absolute rights of exclusion and a total lack of limits on IP holders.”); David Fagundes, *Crystals in the Public Domain*, 50 B.C. L. REV. 139, 140 (“Every great story has a villain, and in the story told by enthusiasts of the public domain, that villain is property.”); Jessica Litman, *The Public Domain*, 39 EMORY L.J. 965, 971 (1990) (criticizing the treatment of IP as property); Michael J. Madison, *Legal-Ware: Contract and Copyright in the Digital Age*, 67 FORDHAM L. REV. 1025, 1143 n.76 (accusing the propertization of IP rights of driving up transaction costs). But see Adam Mossoff, *Is Copyright Property?*, 42 SAN DIEGO L. REV. 29, 34 (2005) (stating the possibility that “the Internet exceptionalists’ complaint about extending copyright to digital media is, at the same time, neither informative nor instructive—unless one’s goal is to restructure universally the concepts and legal rules for all property entitlements in American society”). This Article specifically focuses on the “theft” rather than the slightly different “piracy” label. For a discussion of the historical development of the latter, see generally ADRIAN JOHNS, *PIRACY: THE INTELLECTUAL PROPERTY WARS FROM GUTENBERG TO GATES* (2010).

5. See, e.g., JAMES BOYLE, *THE PUBLIC DOMAIN: ENCLOSING THE COMMONS OF THE MIND* 62-63 (2008) (warning against the idea that “theft is theft” and explaining that while IP infringement creates losses, society should at most define new crimes to deal with those losses rather than apply the theft label), available at <http://thepublicdomain.org/thepublicdomain1.pdf>.

6. Indeed, even in situations that do not involve infringement, intellectual property owners will frequently grant nonexclusive licenses to multiple entities or individuals. See, e.g., Kenneth Ayotte & Henry Hansmann, *Legal Entities as Transferable Bundles of*

extent that the owner suffers a loss at the hands of the IP infringer, that loss is difficult to calculate.⁷ Not every infringer would have bought the work had he lacked the opportunity to infringe.⁸ At the same time, nobody can say with certainty about herself—even assuming perfect honesty—which works she would have bought in a zero-infringement world because the impulse to rationalize one’s actions in this setting is strong.

The sphere that discusses intellectual property infringement is thus mostly split between two camps. One of them believes that infringement is theft and concludes that, if it is theft, the criminal sanctions and harsh civil sanctions that we have on the books are warranted. The other side denies that infringement is theft, sometimes downplays the gravity of infringement behavior, and generally believes that the level of sanctions that American IP law provides is unjustified.

This Article argues that the dichotomy that these two camps endorse is faulty, and that the question of whether intellectual property infringement parallels violations of property law requires more nuanced analysis before it can influence the calibration of sanctions for intellectual property infringement.⁹ This Article shows that there is little meaningful difference between intellectual property infringement and property violations, but that the question of whether infringement is “theft” has led to the creation of an unnecessarily confusing and polarized discussion framework.¹⁰ While many scholars are correct to state that intellectual property infringement is not and cannot be literally the same as theft for the reasons briefly delineated earlier in this Introduction, such infringement bears significant similarities to and few distinctions from lesser property-related offenses such as vandalism or, in some cases, trespass.

If one accepts the idea that IP infringement does at times parallel property violations, albeit not necessarily theft per se, the startling realization emerges that IP laws actually may punish wrongdoers more harshly than property law punishes defendants for equivalent offenses. After creating an analytical model

Contracts, 111 MICH. L. REV. 715, 750-51 (2013) (discussing some of the corporate issues that arise from such licenses).

7. Eric Goldman, *A Road to No Warez*, 82 OR. L. REV. 369, 426-30 (2003) (analyzing the difficulties inherent in infringement-related calculations of true losses).

8. *Id.* at 427.

9. Previous scholarly work has grappled with questions along those lines. *See, e.g.*, Carrier, *supra* note 4 (suggesting that propertization can also serve limiting functions); Fagundes, *supra* note 4 (describing how propertization can provide greater legal clarity); Hughes, *supra* note 3, at 1054 (explaining that propertization should not be confused with commodification). This Article, however, is the first to focus on the infringement end of propertization and place such behavior on the spectrum of offenses that we criminalize in the world of tangible property.

10. Justin Hughes has stated that terms such as “theft” and “piracy” are often used loosely when we “sense that something ‘belongs’ to someone through some mechanism—whether legal, ethical, or social” even when no strict concept of property is in place. *See* Hughes, *supra* note 3, at 1010. He also believes that while the Founders did not enshrine the idea of property into the constitutional protection of IP, historical evidence suggests that notions of property provided a backbone for this constitutional framework. *See id.* at 1026.

to determine the content of “equivalence” in this context, this Article demonstrates that adopting a truly property-oriented IP legal regime may actually mandate a view of lowered criminal and civil sanctions. By doing so, this Article shows how a rigorous understanding of what can be termed the “proPERTIZATION” of IP may require a downward adjustment of today’s punishments and other sanctions, especially in the area of copyright law.

The Article first sets out in Part I the main theories regarding the relationship between intellectual property infringement and property law violations and shows some of the flaws in the arguments both for and against the proPERTIZATION of IP. Part II analyzes the criminal and civil frameworks under which American law punishes intellectual property and property offenses and points out the disparities between the two structures that result in the harsher punishment of intellectual property infringement. The final Part concludes.

I. INTELLECTUAL PROPERTY INFRINGEMENT AS THEFT

This Part examines how courts, scholars, content owners, and activists have treated the relationship between intellectual property infringement and property theft so far. As this Part demonstrates, both sides of the debate have generally provided an incomplete understanding of this relationship, which has led to a deadlock in the discourse on the topic. First, it is useful to analyze the arguments that have been made in favor of treating intellectual property infringement as theft. This Article will mainly focus on copyright in its discussions of intellectual property because (1) copyright infringement has been subject to theft rhetoric the most frequently and (2) that area of the law provides the richest statutory framework to which to draw comparisons.

A. *You Wouldn’t Steal a Movie*

Content owners and organizations that seek strong protections for copyrighted goods have used the theft label for a long time and continue to do so. The Recording Industry Association of America (RIAA) explains prominently on its website that while copyright infringement is “commonly known as ‘piracy,’ . . . that’s too benign of a term to adequately describe the toll that music theft takes on the enormous cast of industry players working behind the scenes to bring music to your ears.”¹¹ The American government has often endorsed this same language, and the Federal Bureau of Investigation (FBI) states that “[p]reventing intellectual property theft is a priority of the FBI’s criminal investigative program.”¹² The government, in conjunction with

11. RIAA, *Who Music Theft Hurts*, http://www.riaa.com/physicalpiracy.php?content_selector=piracy_details_online (last visited June 28, 2014).

12. FBI, *It’s an Age-Old Crime: Stealing*, http://www.fbi.gov/about-us/investigate/white_collar/ipr/ipr (last visited June 28, 2014).

MTV, also produced a music video that made the point unambiguously by showing artist Addie Brownlee singing in a New York City subway station as spectators take coins out of her guitar case.¹³ A narrator states: “When you download music illegally, you are stealing from musicians, songwriters, and people like Addie who are denied payment for work that is rightfully theirs.”¹⁴ In the United Kingdom, a trade organization named The Federation Against Copyright Theft (FACT) was established in 1983 and continues to operate in the interest of content owners.¹⁵

The key reason that content owners and their associates use the rhetoric of theft is that they want to emphasize the gravity of the conduct. The average downloader might tell herself that it makes little to no difference in the grand scheme of things if she illegally downloads music or movies, or if she shares such materials with friends and even a few strangers.¹⁶ Basically everybody, however, understands the concept of theft and has been raised to understand, often axiomatically, that stealing is wrong.¹⁷ Stealing can be defined in a few different ways, all of which have their advantages and flaws.¹⁸ For instance, within one understanding, stealing represents the taking of something that is not one’s own.¹⁹ This quickly becomes circular, however, if one focuses on the fact that the law determines what is one’s own, and the law may or may not do so in a way that is optimal or moral.²⁰ Even property law does not deal in absolutes,

13. Ted Johnson, *Effort Designed to Raise Awareness of Copyright Theft*, VARIETY (Nov. 30, 2011), <http://variety.com/2011/biz/news/government-unveils-anti-piracy-campaign-1118046785/>.

14. *See id.* The video is available at NCPC, *It Hurts*, YOUTUBE (Nov. 29, 2011), <https://www.youtube.com/watch?v=O0BC5kuDS5A>.

15. *About FACT*, FACT, <http://www.fact-uk.org.uk/about/> (last visited June 28, 2014).

16. *See* Geraldine Szott Moohr, *The Crime of Copyright Infringement: An Inquiry Based on Morality, Harm, and Criminal Theory*, 83 B.U. L. REV. 731, 771-73 (2003) (providing explanations for why many people do not view illegal downloading as immoral).

17. *See* JOHN HOSPERS, *HUMAN CONDUCT: PROBLEMS OF ETHICS* 12 (2d ed. 1982) (“Americans generally believe that stealing is wrong and that being caught and punished for stealing is all right, provided the punishment isn’t too severe . . .”); Robert Justin Lipkin, *Beyond Skepticism, Foundationalism and the New Fuzziness: The Role of Wide Reflective Equilibrium in Legal Theory*, 75 CORNELL L. REV. 811, 866 (1990) (“[T]he intuition that stealing is wrong expresses our desire not to let others interfere with our ownership or use of property.”).

18. For a discussion of the definition of theft as a matter of historical development, see Michael A. Tigar, *The Right of Property and the Law of Theft*, 62 TEX. L. REV. 1443 (1984).

19. Roscoe Pound described this idea in the early twentieth century as one that had existed for a long time. Roscoe Pound, *The End of Law as Developed in Juristic Thought*, 27 HARV. L. REV. 605, 613 (1914). *See also* GREEN, 13 WAYS, *supra* note 4, at 73 (“The essence of theft and other property offenses is that they involve an offender’s (wrongfully) causing harm to another’s interests in, and rights to, property.”).

20. *See* Yochai Benkler, *Constitutional Bounds of Database Protection: The Role of Judicial Review in the Creation and Definition of Private Rights in Information*, 15 BERKELEY TECH. L.J. 535, 591 (2000) (“[S]tating that a law is needed because ‘theft’ will be rampant unless we pass the very law that converts what is now privileged use into ‘theft’ is circular.”). Adherents of natural rights theory may argue that there is a concept of “one’s own” that predates legal definitions. For a natural rights approach to intellectual property,

and American law has doctrines that permit easements or the taking of property through adverse possession.²¹ Theft can also be defined as the taking of something of value from another party, but that does not resolve what constitutes “taking” and, again, which value that other party should be able to capture for himself in the first place.²²

If one were to ask content owners and other proponents of the “IP infringement as theft” theory to explain their views in greater detail, they would cite a number of factors that create parallels between the two types of violations. The IP owner, just like the property owner, generally mixes her labor with pre-existing materials to provide society with goods and help it flourish.²³ She will sometimes, however, only do so if provided with a critical mass of remuneration, or at least that remuneration will affect her level of productivity and of her efforts to distribute her work.²⁴ For the intellectual property owner, large-scale illegitimate distribution of her works economically creates the same effect as a horde of potato thieves does for a farmer. In the farmer’s case, there will be nothing left to buy if all the potatoes are gone. In the infringer’s case, even though the song will still “be” there in the end, few people may want to buy it if they can obtain it at zero cost elsewhere.²⁵

Looking at it from the other end, the potato thief ends up with a good for which he provided no labor or other valuable effort in exchange. Thieves, by

see 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). See generally Katrina Miriam Wyman, *Problematic Private Property: The Case of New York Taxicab Medallions*, 30 YALE J. ON REG. 125 (2013) (arguing that the property regime is a creature of the state and subject to the political influence of interest groups, which results in a mix of efficient and inefficient laws).

21. See generally Deepa Varadarajan, *Improvement Doctrines*, 21 GEO. MASON L. REV. 657 (2014). For an analysis of the relationship between trademark law and adverse possession, see Jake Linford, *Trademark Owner as Adverse Possessor: Productive Use and Property Acquisition*, 63 CASE W. RES. L. REV. 703 (2012).

22. See Stuart P. Green, *Plagiarism, Norms, and the Limits of Theft Law: Some Observations on the Use of Criminal Sanctions in Enforcing Intellectual Property Rights*, 54 HASTINGS L.J. 167, 216 (2002) (discussing the problems with the “thing of value” approach to theft).

23. For a discussion of Lockean notions of intellectual property related to this idea, see Justin Hughes, *The Philosophy of Intellectual Property*, 77 GEO. L.J. 287, 296-330 (1988).

24. See, e.g., Shyamkrishna Balganesh, *Foreseeability and Copyright Incentives*, 122 HARV. L. REV. 1569, 1571 (2009) (“Copyright law’s principal justification today is the economic theory of creator incentives.”). Other scholars have noted that non-monetary incentives to create exist as well. See generally Jeanne C. Fromer, *Expressive Incentives in Intellectual Property*, 98 VA. L. REV. 1745 (2012). Professor Peter DiCola’s argues, on the basis of empirical research, that copyright leads to a winner-take-all outcome and that most musicians do not benefit from the current legal regime. Peter DiCola, *Money from Music: Survey Evidence on Musicians’ Revenue and Lessons About Copyright Incentives*, 55 ARIZ. L. REV. 301 (2013).

25. The empirical evidence on the effect of illegal file sharing on music sales is mixed. See, e.g., Derek E. Bambauer, *Exposed*, 98 MINN. L. REV. 2025, 2050 (2014) (presenting the results of several studies on the matter and concluding that “[t]he evidence is unclear”) (citations omitted).

definition, free ride on others' efforts.²⁶ Similarly, the IP infringer is just a few clicks away from illicit goods that he can obtain without, in turn, contributing to society.²⁷ Had the infringer not downloaded the property illegally, for example, one of two things would have happened. For one, he may have bought the good legally and the owner would have made money.²⁸ Alternatively, he may not have bought the good at all. In this second scenario, while the intellectual property owner would have felt no financial difference, the infringer would not have been free riding and would not have had the opportunity to distribute that good to people who *would* have purchased the good legally but for this opportunity.²⁹ There is a further possible loss that arises from the fact that intellectual property can—contrary to popular wisdom—be rivalrous at times. In the case of trademarks, the fact that many people use fake Louis Vuitton bags will disincentivize legitimate buyers from buying that brand if they value exclusivity or fear being viewed as potential infringers themselves.³⁰ In the copyright world, some legitimate buyers of concert tickets may no longer be willing to pay the same amount of money for what should have been an exclusive show if they know that illegal tapings of that show will circulate later.³¹ The more rivalrous intellectual property turns out to be in a given case, the more it resembles property and the more its infringement parallels theft.

26. Stuart P. Green, *Introduction: Symposium on Thirteen Ways to Steal a Bicycle*, 47 *NEW ENG. L. REV.* 795, 812 (2013) (describing ways in which thieves are free riders). This has also led Professor Green to draw parallels between intellectual property infringement and unjust enrichment. See GREEN, 13 WAYS, *supra* note 4, at 256.

27. Some scholars have discussed how, within the community of illegal downloaders, another form of free riding takes place among many users, which is to take files from others but not share any in turn—though this failure to redistribute reduces some of the legal culpability. See Lior Jacob Strahilevitz, *Charismatic Code, Social Norms, and the Emergence of Cooperation on the File-Swapping Networks*, 89 *VA. L. REV.* 505, 571-72 (2003) (discussing the factors that lead to this behavior).

28. See GREEN, 13 WAYS, *supra* note 4, at 255-56 (analyzing the issue of such lost profits within a theft framework). The case law and U.S. Federal Sentencing Guidelines recognize the complexity of optimally calculating the infringement amount in instances of copyright or trademark infringement. See, e.g., *United States v. Trang Doan Hoang*, 536 Fed. Appx. 583, 587-90 (6th Cir. 2013) (interpreting and applying the Guidelines on this subject).

29. Raymond Shih Ray Ku, *Grokking Grokster*, 2005 *WIS. L. REV.* 1217, 1254 (suggesting that a significant number of illegal downloaders fall into this category). This is not to say that this scenario could *never* occur with tangible property, such as if someone steals rotten, worthless potatoes from a farmer. We would like to thank Greg Dolin for his comments on this subject.

30. See Irina D. Manta, *Hedonic Trademarks*, 74 *OHIO ST. L.J.* 241, 247-49 (2013). See generally Shahar J. Dillbary, *Famous Trademarks and the Rational Basis for Protecting Irrational Beliefs*, 14 *GEO. MASON L. REV.* 605 (2007); Deborah R. Gerhardt, *Consumer Investment in Trademarks*, 88 *N.C. L. REV.* 427 (2010).

31. This may not be the case for everyone because some concert goers will feel better knowing that a performance they plan to attend will also end up online.

B. *I Didn't Actually Take That Movie*

There has been strong opposition to the idea that the harm to an intellectual property owner that originates in infringement can be equated to the plight of the potato farmer in the example used above. For one, critics have suggested that the intellectual property owner retains the original work at all times even if it is infringed, whereas theft deprives an owner of a good, including the ability to enjoy it himself or sell it to someone else.³² Second, it is virtually impossible to remove *all* value from a good even through a large-scale infringement operation, which again distinguishes this scenario from theft.³³ Third, the individual culpability of a given infringer tends to be much smaller than the culpability of a thief.³⁴ Even if an infringer would have bought an artist's work, she would have perhaps paid a few dollars in most cases given the high proportion of infringement that consists of illegal file sharing. Thus, a few dollars is the most that the IP owner is likely to lose. While many infringers together can occasion a large loss to a copyright owner, the infringers each tend only to chip away at the value of the work. Put differently, few infringers can truly be called the "cause" of a loss in this context, which is not true of thieves.³⁵

Some have argued that, from a safety perspective, intellectual property infringement also tends to involve a much lower risk to the public than theft does because the latter could lead to physical altercations and the like.³⁶ From a moral standpoint, a number of scholars have questioned what it means to say that what has become routine behavior for many is genuinely reprehensible. Scholars have argued that current intellectual property law makes infringers out of everyone, even people who do not engage in blatant behaviors like illegal

32. See GREEN, 13 WAYS, *supra* note 4, at 256.

33. See *id.* We acknowledge, given that these kinds of offenses operate on a continuum, that the greater a percentage of the value an infringer takes, the more he begins to approximate the theft scenario.

34. See *id.* at 256-57.

35. See *id.*

36. See Christine Hurt, *Of Breaches of the Peace, Home Invasions, and Securities Fraud*, 44 AM. CRIM. L. REV. 1365, 1377 (2007) (explaining how property crimes such as robbery "threaten the sanctity of home and hearth"). This is, of course, not true of all property crimes. For instance, one exception is the electronic theft of bank funds. It is also worth noting that the concept of self-help does exist in intellectual property law, as evidenced by the various security measures that owners implement to protect their goods. See Christopher Buccafusco & Jonathan S. Masur, *Innovation and Incarceration: An Economic Analysis of Criminal Intellectual Property Law*, 87 S. CAL. L. REV. 275 (2014) (arguing that criminal sanctions in intellectual property serve the purpose of limiting the amount of self-help in which owners engage via digital rights management technologies that hamper legitimate users). Lastly, there is the possibility that the risk of physical altercation provides a deterrent to potential criminals in the property context in a way that does not occur in intellectual property. We would like to thank the participants of the Intellectual Property Law Colloquium at the St. John's University School of Law for the helpful discussion on this topic.

downloading.³⁷ Tying that in with theft and the fact that the thief is generally viewed as an outcast of society who disrespects its rules, a concept of vast proportions of the population as thieves is puzzling.³⁸

C. *The Courts' Views on Intellectual Property Infringement as Theft*

The most significant judicial pronouncement on whether intellectual property infringement represents a form of theft came in *Dowling v. United States*,³⁹ in which the Supreme Court ruled that a National Stolen Property Act (NSPA) provision that criminalized the interstate transportation of stolen property could not be used to punish actions involving bootleg records.⁴⁰ The defendant in the case had transported bootleg phonorecords with copyrighted musical compositions by Elvis Presley, and the government argued that this unauthorized use of the musical compositions turned the phonorecords into goods that were “stolen, converted or taken by fraud” as understood by the NSPA.⁴¹ The Court rejected this interpretation and stated that “the copyright owner . . . holds no ordinary chattel. A copyright, like other intellectual property, comprises a series of carefully defined and carefully delimited

37. See, e.g., JOHN TEHRANIAN, INFRINGEMENT NATION: COPYRIGHT 2.0 AND YOU (2011) (describing the disconnect between copyright law and the norms of most Americans). Recent research suggests that even when it comes to illegal downloading, almost half of Americans—and as many as 70% of those aged eighteen to twenty-nine—likely engage in the behavior. See Joe KARAGANIS, *Copyright Infringement and Enforcement in the US*, AM. ASSEMBLY 2 (Nov. 2011), available at <http://piracy.americanassembly.org/wp-content/uploads/2011/11/AA-Research-Note-Infringement-and-Enforcement-November-2011.pdf>. See generally Mark F. Schultz, *Reconciling Social Norms and Copyright Law: Strategies for Persuading People to Pay for Recorded Music*, 17 J. INTELL. PROP. L. 59 (2009).

38. Some scholars have argued that instead of asking courts to mete out punishments, content owners should focus more attention on changing societal norms to encourage people to obey the law in the name of principles such as reciprocity. See Mark F. Schultz, *Fear and Norms and Rock & Roll: What Jambands Can Teach Us About Persuading People to Obey Copyright Law*, 21 BERKELEY TECH. L.J. 651 (2006). In any case, a number of experts believe that attempts to “make an example” of individuals guilty of infringement often meet with societal resistance and prove counterproductive in combating the behavior. See, e.g., Ben Depoorter et al., *Copyright Backlash*, 84 S. CAL. L. REV. 1251 (2011). See generally PAUL H. ROBINSON & JOHN M. DARLEY, *JUSTICE, LIABILITY & BLAME: COMMUNITY VIEWS AND THE CRIMINAL LAW* (1996) (reviewing the empirical evidence regarding laws that are disconnected from community norms); Paul H. Robinson & John M. Darley, *Intuitions of Justice: Implications for Criminal Law and Justice Policy*, 81 S. CAL. L. REV. 1 (2007) (arguing that criminal law should not try to reform people’s intuitions of justice); Paul H. Robinson et al., *Realism, Punishment & Reform [A Reply to Braman, Kahan, and Hoffman, “Some Realism About Punishment Naturalism”]*, 77 U. CHI. L. REV. 1611, 1613 (2010) (“[W]hatever the source of the judgments of justice, they are deeply embedded and not easily modified.”).

39. 473 U.S. 207 (1985).

40. One of us discussed this case in previous work. See Irina D. Manta, *The Puzzle of Criminal Sanctions for Intellectual Property Infringement*, 24 HARV. J.L. & TECH. 469, 477-79 (2011) [hereinafter “Manta, Puzzle of Criminal Sanctions”].

41. 473 U.S. at 214-15.

interests to which the law affords correspondingly exact protections.”⁴² Hence, the Court stated, copyright could not be equated with offenses such as theft, conversion, or the like.⁴³ The Court specified that an infringer can neither physically control an asset nor altogether prevent the owner from using it.⁴⁴ The Court also emphasized that criminalizing copyrighted materials in this manner did not seem to have been Congress’s intent.⁴⁵ The dissent, however, argued that the defendant’s acts corresponded to forms of theft, conversion, and unauthorized use.⁴⁶

Not all lower courts have followed *Dowling* in the context of theft. In particular, some courts have endorsed the view that intangible property can actually be stolen. Emphasizing the post-*Dowling* Congressional amendment to the NSPA that added the term “transmits”⁴⁷ to newly cover electronic transfers in commerce, a few courts held that the transfer of electronic documents⁴⁸ or interstate transportation of stolen software⁴⁹ met the NSPA’s requirements. One decision even stated several times that a defendant “physically stole” software when he loaded his employer’s software program onto his laptop computer and then transported the program in electronic form on his computer in interstate and international commerce.⁵⁰ In that case, simply copying a program was enough for the defendant’s actions to qualify as theft.

These types of cases suggest that either (1) the lower courts have failed to follow *Dowling*, (2) some lower courts believe that the addition of the “transmits” language significantly changes the message of *Dowling*, or (3) *Dowling* did not truly reject the idea that intangible goods protected by copyright or by other types of intellectual property can be stolen or converted.⁵¹ The Supreme Court may eventually decide a case that will clarify its understanding of this area of the law, although the addition of the “transmits” term appears to suggest that in Congress’s opinion, the improper taking and transfer of intellectual property fits in with other property-related crimes like theft.⁵² In the meantime, courts certainly continue to fairly casually refer to “intellectual property theft” as a concept.⁵³

42. *Id.* at 216.

43. *Id.* at 217-18.

44. *Id.* at 217.

45. *Id.* at 220-26.

46. *Id.* at 232 (Powell, J., dissenting).

47. 18 U.S.C.A. § 2314 (West 2013).

48. *See, e.g.*, *United States v. Farraj*, 142 F. Supp. 2d 484, 490 (S.D.N.Y. 2001).

49. *See, e.g.*, *United States v. Alavi*, No. CR07-429-PHX-NVW, 2008 WL 1971391, at *2 (D. Ariz. May 2, 2008). *But see* *United States v. Brown*, 925 F.2d 1301, 1307 (10th Cir. 1991) (explaining that the *Dowling* holding removed every form of intangible property from the purview of the NSPA).

50. *Alavi*, 2008 WL 1971391, at *2.

51. *See* *Manta*, *Puzzle of Criminal Sanctions*, *supra* note 40, at 479.

52. *Id.*

53. A search on June 28, 2014 of the ALLCASES database on Westlaw revealed thirty-one instances in which a court used the phrase “intellectual property theft” or “ip

D. *Proper Propertization: IP Infringement as Vandalism or Trespass*

The difficulties that have arisen in the debate over whether intellectual property infringement is theft originate in a number of causes. Content owners know that the message “intellectual property infringement is [a property offense lesser than theft]” does not pack the same rhetorical punch as their current statements. Opponents of the present rhetoric, however, are correct when they point out that infringement rarely removes all value, which distinguishes it from theft.⁵⁴ Meanwhile, there are other types of offenses against physical property that characterize actions resulting in the partial reduction of the value of goods. The most prominent of these is vandalism.⁵⁵ Vandalism involves the destruction rather than removal of property. “The idea behind criminal punishments for offenses such as vandalism and conversion is that ownership extends further than the simple holding of legal title to a good and the ability to transfer such title.”⁵⁶ The concept of vandalism does not suffer from the majority of flaws that open up to attack the analogy to theft. Vandalism, by definition, does not require a complete removal of the good or of its value. The owner may still retain the ability to sell or license the good. Additionally, in some cases, both intellectual property infringement and vandalism have the potential to enhance rather than reduce the value of goods.⁵⁷

theft.” A Google search of the phrase “intellectual property theft” yields 219,000 results and of the phrase “ip theft” 122,000 results. Mark Lemley notes that the phrase “intellectual property” itself has observed an increase in use in judicial opinions. See Mark A. Lemley, *Property, Intellectual Property, and Free Riding*, 83 TEX. L. REV. 1031, 1033-34 (2005).

54. See *supra* note 33 and accompanying text.

55. See Manta, *Puzzle of Criminal Sanctions*, *supra* note 40, at 475.

56. *Id.*

57. Art vandalism is a great example of a crime in which an action crosses over from property into the realm of what copyright protects and which can result in either increased or decreased value. In a recent case involving vandalism against a graffiti work—which is generally viewed as its own form of vandalism—a man was subject to prosecution for defacing a Banksy creation. See Sheila V. Kumar, *Man Charged with Second-Degree Felony for Vandalizing Banksy Graffiti*, WALL ST. J. (Aug. 19, 2014), <http://blogs.wsj.com/law/2014/08/19/man-charged-with-second-degree-felony-for-vandalizing-banksy-graffiti/>. Meanwhile, Banksy’s original graffiti vandalism often results in huge gains for building owners. See, e.g., Scott Reyburn, *Disputed Banksy Mural Sells for More Than \$1.1 Million*, BLOOMBERG (June 3, 2013), <http://www.bloomberg.com/news/2013-06-02/disputed-banksy-mural-sells-for-more-than-1-1-million.html>. When it comes to intellectual property infringement, illegal downloading can allow users to discover music or TV shows and can then lead to increased purchases and hence profits for copyright owners. See, e.g., Thomas W. Joo, *Remix Without Romance*, 44 CONN. L. REV. 415, 475 (2011) (“Similarly, some copyright commentators defend unauthorized file sharing of copyrighted music on the ground that illegal downloads expose listeners to new music and thus have a positive marketing effect.”) (citation omitted); Mike Hohnen, *Study Confirms Illegal Downloads Increase Music Sales*, MUSICFEEDS (Mar. 22, 2013), <http://musicfeeds.com.au/news/study-confirms-illegal-downloads-increase-music-sales/>; Sean Michaels, *Study Finds Pirates 10 Times More Likely to Buy Music*, GUARDIAN (Apr. 21, 2009), <http://www.theguardian.com/music/2009/apr/21/study-finds-pirates-buy-more-music>.

Of course, no analogy is perfect. Vandalism results in physical damage, while infringement does not affect the quality of the original good. Moreover, vandalism generally does not lead to monetary free riding, although it may bring non-financial enjoyment to the vandal. What generally matters most to the intellectual property owner, however, is the status of his good's value.⁵⁸ Just as infringement can lower the value of an intangible good, so too can vandalism lower the value of a tangible one. One may further argue that vandalism *must* result in damage to be actionable. Indeed, there may be cases in which another form of property violation may provide an even better parallel, and that is trespass.

There is usually no requirement that trespass actually create damage, and it can occur both on land and against chattels. The moral culpability of an illicit downloader of copyrighted goods—for those who wish to focus on the issue from that angle—will generally lie, at most, somewhere between that of a vandal and of a trespasser. We say “at most” because we recognize that vandals and trespassers may also make property owners feel unsafe, which is usually not the case with intellectual property infringers.⁵⁹ The offenses covered by the Digital Millennium Copyright Act (DMCA), which involve the circumvention of technological protection devices as well as the production and dissemination of anti-circumvention technologies, may provide a particularly apt analogy to trespass because they, too, involve a possible “intrusion” that may not carry actual economic harm.⁶⁰

Having the public and courts use the mental model of vandalism or trespass as they think about copyright infringement poses some difficulties for the content owner, especially in the context of non-commercial infringement. One big problem that content owners face is the cost of pursuing infringers.⁶¹ Indeed, the “thief” label precisely obscures the important fact that no single perpetrator of non-commercial infringement is responsible for much damage at

58. There are certainly exceptions, however, in that some IP owners view infringement as a larger moral issue. In the context of alleged intellectual property infringement by a competitor, Steve Jobs told his biographer: “I will spend my last dying breath if I need to, and I will spend every penny of Apple’s \$40 billion in the bank, to right this wrong. I’m going to destroy Android because it’s a stolen product. I’m willing to go thermonuclear war on this.” Josh Lowensohn, *Jobs’ ‘Thermonuclear War’ Quote Fair Game in Court, Judge Says*, CNET (June 1., 2012), <http://www.cnet.com/news/jobs-thermonuclear-war-quote-fair-game-in-court-judge-says/>. We thank Brian Lee for his comments on this subject.

59. See *supra* note 36 and accompanying text.

60. For a discussion of the criminal sanctions contained in the DMCA, see the text accompanying notes 118-19, *infra*. See generally Adam Mossoff, *The Trespass Fallacy in Patent Law*, 65 FLA. L. REV. 1687 (2013) (explaining why trespass may not be as different from patent infringement as some critics have posited). One difference worth noting between copyright infringement and offenses such as vandalism and trespass is that the latter two generally do not occur on as large a scale. We would like to thank Chris Beauchamp for his comments on this topic.

61. See, e.g., Mark A. Lemley & R. Anthony Reese, *Reducing Digital Copyright Infringement Without Restricting Innovation*, 56 STAN. L. REV. 1345, 1352 (2004) (acknowledging the cost of copyright enforcement).

all.⁶² At most, that perpetrator is a vandal or trespasser, and how much of a punishment does an individual like that deserve? How much should he owe a content owner by way of restitution?⁶³ Indeed, how much damage does a single *commercial* infringer cause? Even she is more of a vandal than a thief for the reasons delineated above.

The next Part of this Article will analyze the statutory framework surrounding property violations and contrast it with the laws that punish copyright infringement. This analysis will show that, while individual perpetrators are more culpable in theft scenarios and occasionally even in vandalism ones, copyright infringers frequently risk incurring higher penalties for their offenses than they would incur for the equivalent property violation.

II. THE STATUTORY FRAMEWORKS OF PROPERTY VIOLATIONS AND COPYRIGHT INFRINGEMENT

Most regulation of property violations is a creature of state law, while copyright law lives in the federal domain. Subpart II.A. will use relevant examples from state jurisdictions to make its case about the current status of the law of property violations in the United States. Subpart II.B. will then discuss the key statutes that deal with copyright infringement. As will become apparent in Subpart II.C., the law does not actually treat copyright infringers like trespassers, vandals, or sometimes even thieves. Rather, it often treats them *worse* than if they had committed property violations of that sort.

A. *Sanctions for Theft, Vandalism, and Trespass in the State and Federal Systems*

This Subpart will examine the current state of sanctions for property law violations in the United States. It will analyze both conventional theft statutes and statutes that criminalize the destruction or damage of property, such as by vandalism, as well as laws relating to trespass. Since most criminal laws of this type are in the province of the states rather than that of the federal government, this Article will focus on the laws of some of the largest jurisdictions in the United States, namely California, New York, and Texas.⁶⁴

California divides theft into two categories: grand theft and petty theft. If a defendant is convicted of grand theft—defined as theft of money, labor, or real or personal property with a value over \$950⁶⁵—, she may be punished by imprisonment in a county jail not exceeding one year and a fine of \$5,000.⁶⁶

62. See *supra* note 34 and accompanying text.

63. Note that this Article uses the term “desert” as part of a larger utilitarian framework rather than a retributivist one.

64. We provide two appendices at the end of this Article that list the statutes for all states as well as the maximum sanctions for the hypotheticals we discuss.

65. CAL. PENAL CODE § 487 (West 2013).

66. *Id.* § 489.

Petty theft includes all other acts of theft⁶⁷ and can be punished by a maximum of six months imprisonment in county jail and a \$1,000 fine.⁶⁸

Meanwhile, vandalism is prosecuted under California Penal Code Section 594, which states that if one maliciously defaces, damages, or destroys another person's property without the consent of the owner, one is subject to penalties of up to one year in jail and \$50,000 in fines.⁶⁹ In some cases, the defendant is also required to pay restitution to the victim, which may exceed the value of the property damaged. For example, in *In re Alexander A.*, the defendant was forced to pay approximately four times the value of the property to return it to its pre-vandalism state.⁷⁰ In short, the maximum base penalty for both general property damage and property theft in California is one year in jail, with possible additional time for various aggravating circumstances.

In New York, the classifications of theft and the potential sentences have many more gradations and depend upon the amount of money that a stolen item is worth. If the property involved in a theft is valued at over \$1,000 but less than \$3,000, then the crime is grand larceny in the fourth degree.⁷¹ Grand larceny in the fourth degree is a class E felony,⁷² and it is punishable by up to four years in prison.⁷³ If the property's value is greater than \$3,000 but no more than \$50,000, then the crime is grand larceny in the third degree⁷⁴ and is punishable by up to seven years in prison.⁷⁵ If the value of the property is greater than \$50,000 but not more than \$1,000,000, then the crime is grand larceny in the second degree⁷⁶ and is punishable by up to fifteen years in prison.⁷⁷ Finally, if property valued over \$1,000,000 is stolen, then the crime is grand larceny in the first degree⁷⁸ and is punishable by imprisonment for up to twenty-five years.⁷⁹

The law in New York treats damage or destruction of personal property in a way similar to theft, but with different thresholds and punishments. Destroying property with a relatively low value is deemed criminal mischief in the fourth degree⁸⁰ and is punishable by up to one year's imprisonment.⁸¹ If one destroys property with the damage totaling more than \$250, one commits

67. *Id.* § 488.

68. *Id.* § 490.

69. *Id.* § 594.

70. *In re Alexander A.*, 120 Cal. Rptr. 3d 724, 727 (Cal. 4th Dist. Ct. App. 2011).

71. N.Y. PENAL LAW §155.30 (McKinney 2014).

72. *Id.*

73. *Id.* § 70.00.

74. *Id.* § 155.35.

75. *Id.* § 70.00.

76. *Id.* § 155.40.

77. *Id.* § 70.00.

78. *Id.* § 155.42.

79. *Id.* § 70.00.

80. *Id.* § 145.00.

81. *Id.* § 70.15.

criminal mischief in the third degree (a class E felony)⁸² and faces a possible sentence of four years in prison.⁸³ If the damage exceeds \$1,500, one commits criminal mischief in the second degree⁸⁴ and faces up to seven years in prison.⁸⁵

Finally, in Texas, a sliding scale is used to determine an appropriate punishment for damage to personal property, with the amount of damage done dictating increased punishments again. If someone damaged someone else's property and the damage is less than \$50, then she has committed the class C misdemeanor of criminal mischief,⁸⁶ and she will face a potential punishment of a fine not to exceed \$500.⁸⁷ The same crime is a class B misdemeanor if the amount of pecuniary loss is \$50 or more but less than \$500,⁸⁸ in which case it carries a possible sentence of both a fine not to exceed \$2,000 and confinement in jail for up to 180 days.⁸⁹ If the amount of damage is between \$500 and \$1,500, then the person has committed a class A misdemeanor⁹⁰ and could face both a fine not to exceed \$4,000 and confinement in jail for up to one year.⁹¹

The next level of punishment in Texas is called a "state jail felony" and results if the amount of pecuniary loss is \$1,500 or more but less than \$20,000,⁹² in which case the defendant may be fined up to \$10,000 and sentenced to confinement in a state jail for any term of not more than two years.⁹³ A felony of the third degree occurs if the amount of pecuniary loss is at least \$20,000 but no more than \$100,000⁹⁴ and carries with it a maximum sentence of imprisonment of not more than ten years and a fine not to exceed \$10,000.⁹⁵ The next gradation of felony is a felony of the second degree. This involves an amount of pecuniary loss of \$100,000 or more but less than \$200,000⁹⁶ and carries a maximum sentence of imprisonment of not more than twenty years and a maximum fine of \$10,000.⁹⁷ Finally, a felony of the first degree exists if the amount of pecuniary loss is \$200,000 or more.⁹⁸ Such an offense could carry a sentence as high as imprisonment for life or for any term

82. *Id.* § 145.05.

83. *Id.* § 70.00.

84. *Id.* § 145.10.

85. *Id.* § 70.00.

86. TEX. PENAL CODE ANN. § 28.03 (West 2013).

87. *Id.* § 12.23.

88. *Id.* § 28.03.

89. *Id.* § 12.22.

90. *Id.* § 28.03.

91. *Id.* § 12.21.

92. *Id.* § 28.03.

93. *Id.* § 12.35.

94. *Id.* § 28.03.

95. *Id.* § 12.34.

96. *Id.* § 28.03.

97. *Id.* § 12.33.

98. *Id.* § 28.03.

of not more than ninety-nine years in addition to a \$10,000 fine.⁹⁹ Penalties for actual property theft also vary depending upon the value of the stolen goods. In fact, the severity of the punishment is the same whether the property has been damaged or stolen. For example, theft is a class C misdemeanor if the value of the property stolen is less than fifty dollars, and a felony of the first degree if said property has a value of \$200,000 or more.¹⁰⁰

To sum up, in the states examined here, the maximum penalties for theft range from a sentence of six months and a \$1,000 dollar fine for petty theft in California to a sentence of ninety-nine years or life and a \$10,000 fine for stealing something worth more than \$200,000 in Texas. Similarly, crimes involving property damage have a maximum sentence of one year's imprisonment for a small amount of damage to property in New York and ninety-nine years in prison and a \$10,000 fine in Texas if the damage is over \$200,000.

There are also federal statutes that deal with thefts of various types. For example, in special maritime or territorial jurisdictions of the United States, if someone steals property worth more than \$1,000, that person may be fined and sentenced to imprisonment for up to five years.¹⁰¹ If the value of the item stolen is less than \$1,000, the maximum imprisonment term is lowered to one year.¹⁰² If someone steals from the United States (or any department/agency of the United States), then the punishment for stealing goods worth less than \$1,000 remains the same at one year's imprisonment.¹⁰³ If the value of the stolen goods is more than \$1,000, however, the maximum is increased to ten years' imprisonment and a fine.¹⁰⁴ One other example involving federal law deals with the theft of mail. If someone steals a letter from the post office (in any of a number of ways), that individual may be punished by a fine and imprisonment for up to five years.¹⁰⁵

A different type of property offense often punished by the states is that of trespass. In California, basic trespass occurs when one enters upon any land belonging to someone else that is either surrounded by a fence or has no trespassing signs posted, and then refuses to leave when asked to do so.¹⁰⁶ This offense is punishable by a fine not to exceed \$100 for the first offense and by a fine of up to \$1,000 and imprisonment for six months for all subsequent offenses.¹⁰⁷ In Texas, trespassing involves going onto someone else's property without consent with the knowledge that entry was forbidden and refusing to

99. *Id.* § 12.32.

100. *Id.* § 31.03.

101. 18 U.S.C.A. § 661 (West 2013).

102. *Id.*

103. *Id.* § 641.

104. *Id.*

105. *Id.* § 1708.

106. CAL. PENAL CODE § 602 (West 2013).

107. *Id.*

leave when asked.¹⁰⁸ Violators of this Texas law may face a maximum sentence of a \$2,000 fine and confinement in jail for up to 180 days.¹⁰⁹ In New York, a person commits trespass if she knowingly enters or remains unlawfully on any premises.¹¹⁰ If found guilty of this violation, she may be sentenced to a maximum prison sentence of fifteen days.¹¹¹ In some circumstances, the federal government will also prosecute trespassers. For example, if someone goes onto any national forest land while it is closed to the public without the authority to do so, he may be fined and imprisoned for up to six months.¹¹²

B. *Sanctions for Copyright Infringement*

Federal law criminalizes the reproduction and distribution of copyrighted work.¹¹³ This offense occurs if a defendant reproduces or distributes, during any 180-day period, one or more copies of one or more copyrighted works, which together have a total retail value greater than \$1,000.¹¹⁴ The defendant may face a possible punishment of imprisonment for no more than one year, and the punishment may increase to five years in prison if the retail value is over \$2,500.¹¹⁵ He may also be imprisoned for up to ten years if it is his second offense.¹¹⁶

Other federal crimes do not have any monetary values attached to them. For example, if a defendant records or distributes music without the consent of the owner, she may be subject to imprisonment for no more than five years for her first offense and no more than ten years for any second or other subsequent offense.¹¹⁷ There are also several violations to which criminal sanctions can attach under the Digital Millennium Copyright Act. One offense consists of circumventing or providing the means for others to circumvent various technological copyright protection measures.¹¹⁸ If a defendant is convicted of circumventing copyright measures, she may be fined up to \$500,000,

108. TEX. PENAL CODE ANN. § 30.05 (West 2013).

109. *Id.* § 12.22.

110. N.Y. PENAL LAW § 140.05 (McKinney 2014).

111. *Id.* § 70.15.

112. 18 U.S.C.A. § 1863 (West 2013).

113. For a discussion of the political process that resulted in many of the copyright laws we have today, see Jessica D. Litman, *Copyright, Compromise, and Legislative History*, 72 CORNELL L. REV. 857 (1987). See also Pamela Samuelson & Tara Wheatland, *Statutory Damages in Copyright Law: A Remedy in Need of Reform*, 51 WM. & MARY L. REV. 439 (2009) (critiquing on due process grounds the current system of statutory sanctions in copyright law).

114. 17 U.S.C.A. § 506(1)(B) (West 2014). One of us has discussed the constitutional problems inherent in the way that this and other statutes have been applied. See Irina D. Manta, *Intellectual Property and the Presumption of Innocence*, 56 WM. & MARY L. REV. 1745 (2015).

115. 18 U.S.C.A. § 2319(b) (West 2013).

116. *Id.* § 2319(b)(2).

117. *Id.* § 2319A(a).

118. 17 U.S.C.A. § 1201(a) (West 2014).

imprisoned for up to five years, or both for the first offense, and she could then be fined up to \$1,000,000 and imprisoned for ten years for any subsequent offense.¹¹⁹

While criminal sanctions tend to impose greater hardship on individuals than civil ones do, copyright law involves the possibility of significant civil statutory sanctions worth mentioning here.¹²⁰ In most copyright infringement lawsuits, plaintiffs can elect to receive statutory damages of \$750 to \$30,000 per work rather than actual damages.¹²¹ If the infringement is deemed to have been willful, the statutory damages award can rise to as high as \$150,000 per work.¹²² A few copyright cases have attained national attention for their staggering total statutory awards. In one such case, a Minnesota woman named Jammie Thomas was ordered to pay \$1.92 million in damages for willfully and illegally sharing twenty-four copyrighted songs; these damages were later reduced to \$222,000.¹²³ Meanwhile, Boston University student Joel Tenenbaum was ordered to pay \$675,000 for illegally sharing thirty songs.¹²⁴

C. *Disparity and Disconnect*

While, as discussed above, a number of scholars and content owners advocate for intellectual property to receive the same level of protection as property, few would openly say that, as a theoretical matter, it should receive *more*. In the discussions about intellectual property as property, the concept of property is generally viewed as a ceiling in that category. One would therefore expect that when it comes to sanctions, intellectual property infringement would at most be punished at the same level as property violations. This Article has shown that intellectual property infringement bears the most resemblance to vandalism and trespass. In the realm of sanctions, however, not only are the statutory criminal and civil sanctions generally higher for intellectual property infringement than those for vandalism, but they are also higher than those for downright property theft.¹²⁵

119. *Id.* § 1204.

120. As Kenneth Mann has discussed, depending on the circumstances, civil sanctions that—intentionally or not—take a punitive form have the potential to cause as much disruption to an individual's life as criminal sanctions. See Kenneth Mann, *Punitive Civil Sanctions: The Middleground Between Criminal and Civil Law*, 101 YALE L.J. 1795, 1798 (1993).

121. 17 U.S.C.A. § 504(c)(1) (West 2012).

122. *Id.* § 504(c)(2).

123. See Greg Sandoval, *Appeals Court Sides with RIAA, Jammie Thomas Owes \$222,000*, CNET (Sept. 11, 2012, 9:25 AM), <http://www.cnet.com/news/appeals-court-sides-with-riaa-jammie-thomas-owes-222000/>.

124. *Sony BMG Music Entm't v. Tenenbaum*, 660 F.3d 487, 515 (1st Cir. 2011). Some scholars have argued that the current system of statutory sanctions goes so far in its lack of proportionality as to be unconstitutional. See Samuelson & Wheatland, *supra* note 113, at 466-68.

125. This is not to say that the statutory maxima for theft are always higher than those for vandalism.

One of the ways to make a comparison is to imagine a hypothetical good of a certain value and examine how it would be treated under the laws that relate to intellectual property versus property. As will become apparent, this exercise is not without its problems and perils, but it is informative nonetheless. Let us assume that an individual distributes a song illegally to 1001 other individuals. The song would normally cost \$1 to download legally. Had all 1001 individuals who obtained illegal copies bought the song in a legitimate fashion, its owner would have earned \$1,001.¹²⁶ That being said, in this type of situation, undoubtedly not all 1001 people would have actually bought the song, so the harm to the song owner would be lower.¹²⁷ Furthermore, one could argue that this distribution may constitute a proximate cause for future redistributions, which would bring about greater harm. The extent of this redistribution and of the role that the initial distributor played in its causation are difficult to predict, as is the number of people who would or would not have bought a given song legally. As a matter of approximation, let us therefore proceed with the figure of \$1,001 for the harm (the high end) but with no regard for subsequent harm involving redistribution. Indeed, that is the figure that copyright law would use to evaluate the gravity of the offense. Whether the action was taken for profit or not, a person guilty of this violation could go to prison for up to a year¹²⁸ and be fined up to \$100,000.¹²⁹ If that individual distributed the song to 2501 people (thus causing a potential harm of \$2,501), she would face a maximum sentence of five years if she did it for profit or three years if she did not.¹³⁰ She could also be fined up to \$250,000.¹³¹

What do maximum sentences look like in the context of theft and vandalism for offenses that deprive an owner of \$1,001 and \$2,501 of his property, respectively? Here are the maximum figures for theft:

Theft	<i>\$1,001</i>	<i>\$2,501</i>
<i>California</i>	One year prison, \$5,000 fine	One year prison, \$5,000 fine
<i>New York</i>	Four years prison, \$5,000 or double profits fine	Four years prison, \$5,000 or double profits fine
<i>Texas</i>	One year prison, \$4,000 fine	Two years prison, \$10,000 fine

As one can see, the possible fines for intellectual property offenses vastly outpace the fines for property offenses. When it comes to prison offenses, the

126. To simplify, this hypothetical will assume that a single entity owns the song and profits from its sales.

127. See Goldman, *supra* note 7, at 427-28 (discussing the problems that lie with the assumption that each infringement represents a lost sale).

128. 18 U.S.C.A. § 2319(c)(3) (West 2013).

129. *Id.* § 3571(b)(5).

130. *Id.* § 2319.

131. *Id.* § 3571(b)(3).

sentences on the intellectual property side are the same as or higher than all but one of the six possibilities in the table above (New York at \$1,001 has a higher prison sentence). Meanwhile, here are the figures for vandalism:

Vandalism	<i>\$1,001</i>	<i>\$2,501</i>
<i>California</i>	One year, \$50,000	One year, \$50,000
<i>New York</i>	Four years	Seven years
<i>Texas</i>	One year, \$4,000	Two years, \$10,000

Again, the fines for intellectual property offenses greatly exceed any of the fines for vandalism. The prison sentences are generally either the same or higher for intellectual property offenses, except in New York where vandalism leads to higher maximum prison sentences at both values.

When it comes to offenses under the DMCA, as mentioned previously, the maximum penalty for a first offense is a five-year prison sentence and \$500,000 in fines (figures that are not connected in the statute to the size of the economic harm). Here is the comparison to trespass on land:

Trespass	Penalty
<i>California</i>	\$100 fine
<i>New York</i>	Fifteen days in prison, \$250 fine
<i>Texas</i>	180 days in prison, \$2,000 fine

Both the maximum prison sentence and fines that the DMCA carries are much greater than the possible penalties for trespass.

Overall, the pattern emerges that we do not actually treat intellectual property like property but rather often provide the option of harsher punishments for offenses against IP rights—sometimes dramatically so—than for those against tangible or real property rights. This disparity is made even more extreme when one considers the differences in the commission of the physical acts required for property offenses as opposed to those typically related to intellectual property infringement. For instance, to return to our earlier hypothetical, distributing a song to thousands of people need only take a few mouse clicks. Within seconds, an individual can make himself eligible for the highest sanctions under the criminal copyright laws. Within a few more seconds, he may have committed a second, separate offense that carries its own penalties. Meanwhile, stealing or vandalizing high-value goods generally takes quite a bit of effort and time (and may also involve the use of force).¹³² When

132. For a discussion of the relationship between theft and violence, see *supra* note 36. Some have argued that the ease with which computer-related offenses can be committed militates for raising sanctions in that context to create “cost deterrence.” See Neal Kumar Katyal, *Criminal Law in Cyberspace*, 149 U. PA. L. REV. 1003, 1006 (2001). One counter-argument in the copyright context, however, is the issue that larger sentences are

we consider the situation focusing on mens rea, the illicit distributor of files may act maliciously for five seconds and then realize that he acted inappropriately.¹³³ Of course, shared files usually cannot be recovered.¹³⁴ With copyright infringement, a mens rea of very short duration can incur significant sanctions. After violations are committed and discovered, a prosecutor in a copyright case has a lot of discretion in how to stack charges and persuade offenders, who are intimidated by the high maximum punishments they face, to agree to harsh plea bargains.¹³⁵

The disparities that we see between the property and intellectual property regimes may not be driven by a reasoned conclusion that intellectual property infringement is worse for society or more morally culpable than theft. Rather, as an initial matter, sanctions are often higher across contexts at the federal level than the state level for similar offenses.¹³⁶ Second, owners of copyrighted (and trademarked) goods have over the years exerted a lot of pressure on the political process to maximize sanctions through a variety of bills.¹³⁷ While the

increasingly in tension with community norms and actually create a backlash in individuals' responses to laws perceived as unfair. *See supra* note 38. It is also worth noting that while difficulty of detection may have once been a stronger argument in favor of high sanctions, many copyright infringers are now more easily identifiable than before. *See, e.g.*, Brendan Sasso, *Internet Providers Sent 1.3 Million Warnings to Alleged Pirates*, NAT'L J. (May 28, 2014), <http://www.nationaljournal.com/tech/internet-providers-sent-1-3-million-warnings-to-alleged-pirates-20140528> (explaining how the first ten months of the "six strikes" Copyright Alert System yielded 1.3 million infringement warnings, of which only 265 were challenged and no more than 47 were deemed erroneous). *See generally* Richard J. Gilbert & Michael L. Katz, *When Good Value Chains Go Bad: The Economics of Indirect Liability for Copyright Infringement*, 52 HASTINGS L.J. 961, 963-68 (2001) (discussing the costs and benefits of various legal regimes in the area of illegal downloads). We appreciate Orin Kerr's and Brian Lee's comments on this topic.

133. Because mouse clicks happen so rapidly, many copyright infringers are unable to abort their attempts and avail themselves of the abandonment defense that arises in other legal contexts. *See generally* Robert E. Wagner, *A Few Good Laws: Why Federal Criminal Law Needs a General Attempt Provision and How Military Law Can Provide One*, 78 U. CIN. L. REV. 1043, 1070 (2010).

134. *See* Jake Linford, *A Second Look at the Right of First Publication*, 58 J. COPYRIGHT SOC'Y U.S.A. 585, 638-43 (2011). This issue also arises in non-property contexts such as criminal libel and slander. We would like to thank Jake Linford for his comments on this subject. We would also like to note that in at least some scenarios involving theft of physical objects, the goods may be recovered later. We thank Andres Sawicki for his related remarks.

135. One of us has discussed this issue in the context of the story of Aaron Swartz, who faced severe charges based on information offenses and committed suicide before his trial. *See* Irina D. Manta, *The High Cost of Low Sanctions*, 66 FLA. L. REV. 157, 194-200 (2014).

136. For example, Rachel Barkow has suggested that the states are more aware of the costs surrounding incarceration and other forms of law enforcement and therefore often take a more moderate approach. *See* Rachel E. Barkow, *Federalism and the Politics of Sentencing*, 105 COLUM. L. REV. 1276, 1301 (2005). Indeed, as mentioned previously, federal theft and vandalism offenses are also punished more harshly, although that may stem in part from the federal government's strong desire for self-protection.

137. *See* Manta, *Puzzle of Criminal Sanctions*, *supra* note 40, at 505-12 (providing a public choice analysis of criminal sanctions in intellectual property).

argument that intellectual property should be treated like property has been used many times to continue to increase sanctions, this Part shows that bringing intellectual property fully in line with property in the arena of sanctions would actually likely mean that the sanctions for intellectual property violations should be decreased rather than increased.

CONCLUSION

The goal of this Article is to demonstrate the counterintuitive effect that a consistent approach to the propertization of IP has on related sanctions. We have argued that the rhetorical move of using the concept of property to increase sanctions and deploy harsher enforcement techniques stands in contrast to the actual structure of our system of property sanctions. In short, we often punish intellectual property violations with greater vigor than we would equivalent property offenses. Should our realization enter the legal mainstream, we predict a decrease in property language on the part of intellectual property owners because the instrumental value of that rhetoric would decrease if the goal of the speakers is simply broader and deeper protection. In the end, we agree with those who say that there are significant commonalities between property and intellectual property. Unlike many of the other advocates of that view, however, we are not invested in a particular outcome when it comes to sanctions. Rather, our goal is the promotion of productivity and free enterprise. Establishing optimal sanctions for property, intellectual property, or other legal regimes ultimately requires a more fine-grained analysis than that with which general labels can ever provide us.

APPENDICES

APPENDIX 1: VALUE OF THEFT/DAMAGE \$1,000.01 TO \$2,500.00 (STATUTE IN PARENTHESES)¹³⁸

State	Theft Value \$1,000.01 or more	Theft Penalty ¹³⁹	Vandalism Value \$1,000.01 or more	Vandalism Penalty	Trespass Value ¹⁴⁰ \$1,000.01 or more	Trespass Penalty
Alabama (Ala. Code)	\$500-\$2,500 (§13A-8-3)	10 years, \$15,000 (§13A-5-6) (§13A-5-11)	\$500-\$2,500	1 year, \$6,000 (§13A-5-7) (§13-5-12)	(§13A-7-2)	1 year, \$6,000 (§13A-5-7) (§13-5-12)
Alaska (AS)	\$750-\$25,000 (§11.46.130)	5 years, \$50,000 (§12.55.15) (§12.55.035)	More than \$750 (§11.46.482)	5 years, \$50,000 (§12.55.125) (§12.55.035)	(§11.46.320)	1 year, \$10,000 (§12.55.135) (§12.55.035)
Arizona (A.R.S.)	\$1,000- \$1,999 (§13-1802)	1.5 years, \$150,000 (§13-702) (§13-801)	Less than \$1,500 (§13-1604)	1.5 years, \$150,000 (§13-702) (§13-801)	(§13-1504)	1.5 years, \$150,000 (§13-702) (§13-801) or 6 months, \$2,500 (§13-707) (§13-802)
Arkansas (A.C.A.)	\$1,000.01- \$4,999 (§5-36-103)	6 years, \$10,000 (§5-4-401) (§5-4-201)	\$1,000.01- \$5,000 (§5-38-203)	6 years, \$10,000 (§5-4-401) (§5-4-201)	(§5-39-203)	90 days, \$1,000 (§5-4-401)
California (Cal. Pen. Code)	\$950 or more (§487)	1 year, \$5,000 (§489)	\$400 or more (§594)	1 year, \$10,000 (§594)	(§601)	1 year, \$2,000 (§601)
Colorado (C.R.S.A.)	\$750-\$1,999 (§18-4-401)	1 year, \$1,000 (§18-1.3-505)	\$1,000- \$4,999 (§18-4-501)	18 months, \$100,000 (§18-1.3-401)	(§18-4-502)	3 years, \$100,000 (§18-1.3-401)

138. Each state's relevant statutes are listed in parentheses. Several states list penalties separately from the crimes themselves, which is why several penalty provisions may be listed. *See, e.g.*, Alabama's Theft Penalty, Ala. Code § 13A-8-3.

139. All penalties state maximum prison or jail sentences and maximum fines.

140. The majority of trespass statutes do not specify an amount of damage. In those instances, the statute for criminal trespass is simply cited.

Connecticut (C.G.S.A.)	\$1,000 or more (§53a-125)	1 year, \$2,000 (§53a-26) (§53a-42)	\$250.01- \$1,500 (§53a- 116)	1 year, \$2,000 (§53a-26) (§53a-42)	(§53a-107)	1 year, \$2,000 (§53a-26) (§53a-42)
Delaware (11 Del. C.)	Less than \$1,500 (§841)	1 year, \$2,300 (§4206)	More than \$1,000 (§811)	1 year, \$2,300 (§4206)	(§823)	1 year, \$2,300 (§4206)
District of Columbia (DC ST)	\$1,000 or more (§22-3212)	10 years, \$25,000 (§22-3212) (§22- 3571.01)	(§22-312.01)	180 days, at least \$250, \$1,000 max (§22- 3312.04) (§22- 3571.01)	(§22-3301)	1 year, \$2,500 (§22-3301) (§22-3571.01)
Florida (F.S.A.)	\$300-\$4,999 (§812.014)	5 years, \$5,000 (§775.082) (§775.08)	\$1,000.01 or more (§806.13)	5 years, \$5,000 (§775.082) (§860.13) (§775.083)	(§810.09)	1 year, \$1,000 (§775.082) (§775.083)
Georgia (Ga. Code Ann.)	\$1,500 or less (§16-8-12)	1 year, \$1,000 (§17- 10-3)	More than \$500 (§16-7-23)	5 years (§16-7-22)	\$500 or less (§16-7-21)	12 months, \$1,000 (§17-10- 3)
Hawaii (HRS)	\$300.01 (§708-831)	5 years, \$10,000 + \$1,000 min (§706-660; §706-640) (§708-831)	\$500.01 (§708-822)	\$2,000 (§706-663) (§706-640)	(§708-813)	1 year, \$2,000 (§706-663) (§706-640)
Idaho (I.C.)	\$1,000.01 or more (§18-2407)	20 years, \$10,000 (§18-2408)	\$1,000.01 or more (§18-7001)	1 year, \$1,000 (§08-7001)	(§18-7011)	6 months, \$1,000 (§18-7011)
Illinois (ILCS)	\$500.01- \$10,000 (720 ILCS 5/16-1)	5 years, \$25,000 (720 ILCS 5/5-7.5- 40) (720 ILCS 5/5-4.5-50)	\$300.01- \$10,000 (720 ILCS 5/21-1)	3 years, \$25,000 (720 ILCS 5/5-7.5-45) (720 ILCS 5/5-4.5-50)	(720 ILCS 5/21-3)	1 year, \$2,500 (720 ILCS 5/5- 4.5-55)
Indiana (IC)	\$750-\$49,999 (§35-43-4-2)	3 years, \$10,000 (§35-50-2-7)	\$750-\$49,999 (§35-43-1-2)	1 year, \$5,000 (§35-50-3-2)	\$750-\$49,999 (§35-43-2-2)	3 years, \$10,000 (§35-50-2-7)
Iowa (I.C.A.)	\$1,000.01- \$10,000 (§714.2)	5 years, \$7,500 (§902.9)	\$1,000.01- \$10,000 (§716.4)	5 years, \$7,500 (§902.9)	\$200.01 or more (§716.8)	1 year, \$1,875 (§903.1)

Kansas (K.S.A.)	\$1,000- \$24,999 (§21-5801)	7 months, \$100,000 (§21-6611) (§21-6804)	\$1,000- \$24,999 (§21-5813)	\$100,000 (§21-6611) (§21-6804)	(§21-5808)	6 months, \$1,000 (§21-6602) (§21-6611)
Kentucky (KRS)	\$500-\$9,999 (§514.030)	5 years, \$10,000 (§532.020) (§534.0)	\$1,000 or more (§512.020)	5 years, \$10,000 (§532.020) (§534.030)	(§511.060)	1 year, \$500 (§532.020) (§534.040)
Louisiana (LSA-RS)	\$500-\$1,499 (LSA- R.S.§67)	10 years, \$3,000 (LSA- R.S.§67)	Simple criminal damage at property \$500- \$49,999(LSA -R.S. §14:56)	2 years, \$1,000 (LSA-R.S. §14-56)	(LSA-R.S. §63)	30 days, \$500 (LSA-R.S. §63)
Maine (Title 32 M.R.S.A.)	\$1,000.01- \$10,000 (§353)	5 years, \$5,000 (§1252) (§1301)	(§806)	1 year, \$2,000 (§1252) (§1301)	(§402)	1 year, \$2,000 (§1252) (§1301)
Maryland (MD Code, Criminal Law)	\$1,000- \$9,999 (§7-104)	10 years, \$10,000 (§7-104)	\$1,000 or more (§6-301)	3 years, \$2,500 (§6-301)	(§6-402)	90 days, \$500(§6-402)
Massachusetts (M.G.L.A.)	More than \$250 (266 §30)	5 years OR 2 years, \$25,000 (266 §30)	(266 §127)	Greater of \$1,500 or 3x value OR 2.5 years (266 §127)	(266 § 120)	30 days, \$100 (266 §120)
Michigan (M.C.L.A.)	\$1,000- \$19,999 (§750.356)	5 years, greater of \$10,000 or 3x value (§750.356)	\$1,000- \$19,999 (§750.377a)	5 years, greater of \$10,000 or 3x value (§750.377a)	(§750.552)	30 days, \$250 (§750.552)
Minnesota (M.S.A.)	\$1,000.01- \$4,999 (§609.52)	5 years, \$10,000 (§609.52)	More than \$1,000 (§609.595)	5 years, \$10,000 (§609.595)	(§609.605)	90 days, \$1,000 (§609.03)
Mississippi (Miss. Code Ann.)	\$1,000- \$4,999 (§97-17-41)	5 years, \$10,000 (§97-17-41)	\$1,000.01- \$4,999 (§97-17-67)	5 years, \$10,000 (§97-17-67)	(§97-17-87)	6 months, \$500 (§97-17-87)
Missouri (RSMo)	\$500-\$24,999 (§570.030)	7 years, greater of \$5,000 or 2x value (§570.030) (§558.011) (§560.011)	More than \$750 (§569.100)	4 years, greater of \$5,000 or 2x value (§558.011) (§569.100) (§560.011)	(§569.140)	6 months, \$500 (§558.011) (§560.016)

Montana (MCA)	\$1,500 or less (\$45-6-301)	6 months, \$1,500 (\$45-6-301)	\$1,500 or less (\$45-6-101)	6 months, \$1,500 (\$45-6-101)	(\$45-6-203)	6 months, \$500 (\$45-6-203)
Nebraska (Neb.Rev.St.)	\$500-\$1,500 (\$28-518)	5 years, \$10,000 (\$28-105)	\$500-\$1,499 (\$28-519)	1 year, \$1,000 (\$28-106)	(\$28-520)	1 year, \$1,000 (\$28-106)
Nevada (N.R.S.) ¹⁴¹	\$650.01- \$3,499 (\$205.222)	5 years, \$10,000 (\$193.130)	\$250-\$4,999 (\$206.330)	364 days, \$2,000 (\$193.140)	(\$206.140)	Value of damage, at least 6 months, \$1,000 (\$206.140) (\$193.150)
New Hampshire (N.H. Rev. Stat)	\$1,000.01- \$1,500 (\$637:11)	7 years, \$4,000 (\$651:2)	\$100.01- \$1,500 (\$634:2)	1 year, \$2,000 (\$651:2)	\$1,500 or less (\$635:2)	1 year, \$1,200 (\$651:2)
New Jersey (N.J.S.A.)	\$500.01- \$74,999 (\$2C:20-2)	5 years, \$15,000 (\$2C:43-6 (\$2C:43-3)	\$500.01- \$1,999 (\$2C:17-3)	18 months, \$10,000 (\$2C:43-6 (\$2C:43-3)	(\$2C:18-3)	18 months, \$10,000 (\$2C:43-6) (\$2C:43-3)
New Mexico (N.M.S.A. 1978)	\$500.01- \$2,500 (\$30-16-1)	18 months, \$5,000 (\$31-18-15)	More than \$1,000 (\$30-15-1)	18 months, \$5,000 (\$31-18-15)	(\$30-14-1.1)	Double appraised value of damage (\$30-14-1.1)
New York (McKinney's Penal Law)	More than \$1,000 (\$155.30)	4 years (\$70.00) (no fine specified \$80.00)	More than \$250 (\$145.05)	4 years (\$70.00) (no fine specified \$80.00)	(\$140.15)	1 year, \$1,000 (\$70.15) (\$80.00)
North Carolina (N.C.G.S.A.)	Larceny of goods More than \$1,000 (\$14-72)	8 years (\$15A-1340.17) fines appear to be discretionary (\$15A-1361 et seq.)	Vandalism statutes are specific to agriculture, public facilities, and other unique categories (e.g. §14-132)	6 months, \$1,000 (\$14-3) (\$15A-1340.23)	More than \$200(\$14-160)	1 year, discretionary fine (\$14-3) (\$15A-1340.23)
North Dakota (NDCC)	\$1,000.01 or more (\$12.1-23-05)	5 years, \$10,000 (\$12.0-32-01)	\$100-\$2,000 (reckless damage More than \$2,500) (\$12.1-21-05)	1 year, \$3,000 (\$12.1-32-01)	(\$12.1-22-03)	1 year, \$3,000 (\$12.1-32-01)

141. Nevada has separate statutes for theft and larceny; larceny statutes are cited herein.

Ohio (R.C.)	\$1,000- \$7,499 (§2913.02)	1 year, \$2,500 (§2929.14) (§2929.18)	\$1,000 or more (§2909.05)	1 year, \$2,500 (§2929.14) (§2929.18) (§2905.05)	(§2911.21)	30 days, \$250 (§2929.24) (§2929.28)
Oklahoma (21 OkI.Stat.Ann)	\$500 or more (§1705)	5 years, \$5,000 (§1705)	\$1,000 or more (§1760)	2 years, \$1,000 (§9)	(§1835)	30 days, \$500 (§1835)
Oregon (O.R.S.)	\$1000 or more (§164.055)	5 years, \$125,000 (§161.605) (§161.625)	\$1000.01 or more (§164.365)	5 years, \$125,000 (§161.605) (§161.625)	(§164.255)	1 year, \$6250 (§161.615) (§161.635)
Pennsylvania (Pa.C.S.A.)	\$50-\$1999.99 (§3903)	5 years, \$10,000 (§1103) (§1101)	\$1000.01- \$5,000 (§3304)	2 years, \$5,000 (§1103) (§1101)	(§3503)	1 year, \$2,500 (§1103) (§1101)
Rhode Island (Gen. Laws)	\$1,500 or less (§11-41-5)	1 year, \$500 (§11-41-5)	(§11-44-1)	1 year, \$1,000 (§11-44-1)	(§11-44-26)	1 year, \$1,000 (§11-44-26)
South Carolina (Code)	\$2,000 or less (§16-13-30)	30 days, \$1,000 (§16-13-30)	\$2,000 or less (§16-11-520)	30 days, \$1,000 (§16-11-520)	(§16-11-600)	30 days, \$100 (§16-11-520)
South Dakota (SDCL)	\$1,000.01- \$2,500 (§22-30A-17)	2 years, \$4,000 (§22-6-1)	\$1,000.01- \$2,500 (§22-34-11)	2 years, \$4,000 (§22-6-1)	(§22-35-5)	1 year, \$2,000 (§22-6-2)
Tennessee (T.C.A.)	\$1,000- \$9,999 (§39-14-105)	12 years, \$5,000 (§40- 35-111)	\$1,000- \$9,999 (§39-14-105)	12 years, \$5,000 (§40-35-111)	(§39-14-406)	6 months, \$500 (§40-35-111)
Texas (V.T.C.A.)	\$500-\$1,499 (§31.03)	1 year, \$4,000 (§12.21)	\$500-\$1,499 (§28.03)	1 year, \$4,000 (§12.21)	(§30.05)	1 year, \$4,000 (§12.21)
Utah (U.C.A.)	\$500-\$1,499 (§76-6-412)	1 year, \$2,500 (§76- 3-204) (§76-3-301)	\$500-\$1,499 (§76-6-106)	1 year, \$2,500 (§76-3-204) (§76-3-301)	(§76-6-206)	1 year, \$2,500 (§76-3-204) (§76-3-301)
Vermont (V.S.A.)	\$900.01 or more (§2501)	10 years, \$5,000 (§2501)	More than \$1,000 (§3701)	5 years, \$5,000 (§3701)	(§3705)	3 years, \$2,000 (§3705)
Virginia (VA Code Ann.)	\$5 or more from the person, \$200 or more not from the person (§18.2-95)	20 years, \$2,500 (§18.2-95)	\$1,000 or more (§18.2-137)	5 years, OR 2 years and \$2,500 (§18.2-10)	(§18.2-121)	1 year, \$2,500 (§18.2-11)

Washington (RCWA)	\$750.01- \$5,000 (§9A.56.030)	5 years, \$10,000 (§9A.20.020)	\$750 or more (§9A.48.080)	5 years, \$10,000 (§9a.20.021)	(§9A.52.070)	364 days, \$5,000 (§9.92.020)
West Virginia (W.Va. Code)	\$1,000 or more (§61-3-13)	10 years, \$2,500 (§61-3-13)	Less than \$2,500 (§61-3-30)	1 year, \$500 (§61-3-30)	Knowing (§61- 3B-2)	\$100 (§61-3B-2)
Wisconsin (W.S.A.)	\$2,500 or less (§943.20)	9 months, \$10,000 (§939.51)	Less than \$2,500 (§943.01)	9 months, \$10,000 (§939.51)	(§943.13)	9 months, \$10,000 (§939.51)
Wyoming (W.S.)	\$1,000 or more (§6-3-402)	10 years, \$10,000 (§6-3-402)	\$1,000 or more (§6-3-201)	10 years, \$10,000 (§6-3-201)	(§6-3-303)	6 months, \$750 (§6-3-303)

APPENDIX 2: VALUE OF THEFT/DAMAGE \$2,500.01 OR MORE (STATUTE IN PARENTHESES)

State	Theft Value \$2,500.01 or more	Theft Penalty	Vandalism Value \$2,500.01 or more	Vandalism Penalty	Trespass Value \$2,500.01 or more	Trespass Penalty
Alabama (Ala. Code)	\$2500.01 or more (§13A-8-4)	20 years, \$30,000 (§13A-5-6) (§13A-5-11)	More than \$2500 (§13A-7-21)	10 years, \$15,000 (§13A-5-6) (§13A-5-11)	(§13A-7-2)	1 year, \$6000 (§13A-5-7) (§13-5-12)
Alaska (AS)	\$750-\$25,000 (§11.46.130)	5 years, \$50,000 (§12.55.15) (§12.55.035)	More than \$750 (§11.46.482)	5 years, \$50,000 (§12.55.125) (§12.55.035)	(§11.46.320)	1 year, \$10,000 (§12.55.135) (§12.55.035)
Arizona (A.R.S.)	\$2,000- \$2,999 (§13-1802)	2 years, \$150,000 (§13-702) (§13-801)	\$1,500-\$9,999 (§13-1604)	2 years, \$150,000 (§13- 702) (§13-801)	(§13-1504)	1.5 years, \$150,000 (§13- 702) (§13-801) or 6 months, \$2,500 (§13-707) (§13- 802)
Arkansas (A.C.A.)	\$1,000.01- \$4,999(§5- 36-103)	6 years, \$10,000 (§5-4-401) (§5-4-201)	\$1,000.01- \$5,000 (§5-38-203)	6 years, \$10,000 (§5-4-401) (§5-4-201)	(§5-39-203)	90 days, \$1,000 (§5-4-401) (§5- 4-201)
California (Cal. Pen. Code)	\$950 or more (§487)	1 year, \$5,000 (§489)	\$400 or more (§594)	1 year, \$10,000 (§594)	(§601)	1 year, \$2,000 (§601)
Colorado (C.R.S.A.)	\$2,000- \$4,999 (§18-4-401)	18 months, \$100,000 (§18-1.3-401)	\$1,000-\$4,999 (§18-4-501)	18 months, \$100,000 (§18-1.3-401)	(§18-4-502)	3 years, \$100,000 (§18- 1.3-401)
Connecticut (C.G.S.A.)	\$2,000 or more (§53a-124)	5 years, \$5,000 (§53a-35a) (§53a-41)	\$1,501 or more (§53a-115)	5 years, \$5,000 (§53a-35a) (§53a-41)	(§53a-107)	1 year, \$2,000 (§53a-26) (§53a-42)
Delaware (11 Del. C.)	\$1,500 or more (§841)	2 years, value of property (§4205) (§4106)	More than \$1,000 (§811)	1 year, \$2,300 (§4206)	(§823)	1 year, \$2,300 (§4206)
District of Columbia (DC ST)	\$1000 or more (§22- 3212)	10 years, \$25,000 (§22-3212) (§22- 3571.01)	Defacing Public or Private Property (§22-3312.01)	180 days, at least \$250, \$1,000 max (§22-3312.04) (§22-3571.01)	(§22-3301)	1 year, \$2,500 (§22-3301) (§22-3571.01)

Florida (F.S.A.)	\$300-\$4,999 (\$812.014)	5 years, \$5,000 (\$775.082) (\$775.083)	\$1,000.01 or more (\$806.13)	5 years, \$5,000 (\$775.082) (\$860.13) (\$775.083)	(\$810.09)	1 year, \$1,000 (\$775.082) (\$775.083)
Georgia (Ga. Code Ann.)	\$1500.01- \$4,999 (\$16-8-12)	5 years, min \$1,000 (\$16-8-12)	More than \$500 (\$16-7-23)	5 years (\$16-7-22)	\$500 or less (\$16-7-21)	12 months, \$1,000 (\$17-10-3)
Hawaii (HRS)	\$300.01 (\$708-831)	5 years, \$10,000 + \$1,000 min (\$706-660) (\$706-640) (\$708-831)	\$1500.01 (\$708-820)	5 years, \$10,000 (\$706- 660) (\$706- 640)	(\$708-813)	1 year, \$2,000 (\$706-663) (\$706-640)
Idaho (I.C.)	\$1,000.01 or more (\$18-2407)	20 years, \$10,000 (\$18-2408)	\$1,000.01 or more (\$18-7001)	1 year, \$1,000 (\$08-7001)	(\$18-7011)	6 months, \$1,000 (\$18-7011)
Illinois (ILCS)	\$500.01- \$10,000 (720 ILCS 5/16-1)	5 years, \$25,000 (720 ILCS 5/5-7.5- 40) (720 ILCS 5/5-4.5- 50)	\$300.01- \$10,000 (720 ILCS 5/21-1)	3 years, \$25,000(720 ILCS 5/5-7.5- 45) (720 ILCS 5/5-4.5-50)	(720 ILCS 5/21-3)	1 year, \$2,500 (720 ILCS 5/5- 4.5-55)
Indiana (IC)	\$750-\$49,999 (\$35-43-4-2)	3 years, \$10,000 (\$35-50-2-7)	\$750-\$49,999 (\$35-43-1-2)	1 year, \$5,000 (\$35-50-3-2)	\$750- \$49,999 (\$35-43-2-2)	3 years, \$10,000(\$35- 50-2-7)
Iowa (I.C.A.)	\$1,000.01- \$10,000 (\$714.2)	5 years, \$7,500 (\$902.9)	\$1,000.01- \$10,000 (\$716.4)	5 years, \$7,500 (\$902.9)	\$200.01 or more (\$716.8)	1 year, \$1,875 (\$903.1)
Kansas (K.S.A.)	\$1,000- \$24,999 (\$21-5801)	\$100,000 (\$21-6611) (\$21-6804)	\$1,000- \$24,999 (\$21-5813)	\$100,000 (\$21- 6611) (\$21- 6804)	(21-5808)	6 months, \$1,000 (\$21-6602) (\$21-6611)
Kentucky (KRS)	\$500-\$9,999 (\$514.030)	5 years, \$10,000 (\$532.020) (\$534.030)	\$1,000 or more (\$512.020)	5 years, \$10,000 (\$532.020) (\$534.030)	(\$511.060)	1 year, \$500 (\$532.020) (\$534.040)
Louisiana (LSA-RS)	\$1,500 or more (LSA-R.S. §67)	10 years, \$3,000 (LSA-R.S. §67)	Simple criminal damage at property \$500- \$49,999 (LSA-R.S. §14:56)	2 years, \$1,000 (LSA-R.S. §14-56)	(LSA-R.S. §63)	30 days, \$500 (LSA-R.S. §63)
Maine (Title 32 M.R.S.A.)	\$1,000.01- \$10,000 (\$353)	5 years, \$5,000 (\$1252) (\$1301)	More than \$2000 (\$805)	5 years, \$5,000 (\$1252) (\$1301)	(\$402)	1 year, \$2,000 (\$1252) (\$1301)

Maryland (MD Code, Criminal Law)	\$1,000- \$9,999 (\$7-104)	10 years, \$10,000 (\$7-104)	\$1,000 or more (\$6-301)	3 years, \$2,500 (\$6-301)	(\$6-402)	90 days, \$500 (\$6-402)
Massachusetts (M.G.L.A.)	More than \$250 (266 §30)	5 years OR 2 years, \$25,000 (266 §30)	(266 §127)	10 years, Or the greater of \$3,000 or \$3x value AND 2.5 years	(266 § 120)	30 days, \$100 (266 §120)
Michigan (M.C.L.A.)	\$1,000- \$19,999 (\$750.356)	5 years, greater of \$10,000 or 3x value (\$750.356)	\$1,000- \$19,999 (\$750.377a)	5 years, greater of \$10,000 or 3x value (\$750.377a)	(\$750.552)	30 days, \$250 (\$750.552)
Minnesota (M.S.A.)	\$1,000.01- \$4,999 (\$609.52)	5 years, \$10,000 (\$609.52)	More than \$1,000 (\$609.595)	5 years, \$10,000 (\$609.595)	(\$609.605)	90 days, \$1,000 (\$609.03)
Mississippi (Miss. Code Ann.)	\$1,000- \$4,999 (\$97-17-41)	5 years, \$10,000 (\$97-17-41)	\$1,000.01- \$4,999 (\$97-17-67)	5 years, \$10,000 (\$97- 17-67)	(\$97-17-87)	6 months, \$500 (\$97-17-87)
Missouri (RSMo)	\$500-\$24,999 (\$570.030)	7 years, greater of \$5,000 or 2x value (\$570.030) (\$558.011) (\$560.011)	Property Damage 1st Degree More than \$750 (\$569.100)	4 years, greater of \$5,000 or 2x value (\$558.011) (\$569.100) (\$560.011)	(\$569.140)	6 months, \$500 (\$558.011) (\$560.016)
Montana (MCA)	More than \$1,500 (\$45-6-301)	10 years, \$50,000 (\$45-6-301)	More than \$1,500 (\$45-6-101)	10 years, \$50,000 (\$45-6-101)	(\$45-6-203)	6 months, \$500 (\$45-6-203)
Nebraska (Neb. Rev. St.)	More than \$1,500 (\$28-518)	20 years, \$25,000 (\$28- 105)	\$1,500 or more (\$28-519)	5 years, \$10,000 (\$28-105)	(\$28-520)	1 year, \$1,000 (\$28-106)
Nevada (N.R.S.) ¹⁴²	\$650.01- \$3,499 (\$205.222)	5 years, \$10,000 (\$193.130)	\$250-\$4,999 (\$206.330)	364 days, \$2,000 (\$193.140)	(\$206.140)	Value of damage, at least 6 months, \$1,000 (\$206.140) (\$193.150)
New Hampshire (N.H. Rev. Stat)	More than \$1,500 (\$637:11)	15 years, \$4,000 (\$651:2)	More than \$1,500 (\$634:2)	7 years, \$4,000 (\$651:2)	More than \$1,500 (\$635:2)	7 years, \$4,000 (\$651:2)

142. Nevada has separate statutes for theft and larceny; larceny statutes are cited herein.

New Jersey (N.J.S.A.)	\$500.01- \$74,999 (§2C:20-2)	5 years, \$15,000 (§2C:43-6) (§2C:43-3)	\$2,000 or more (§2C:17-3)	5 years, \$15,000 (§2C:43-6) (§2C:43-3)	(§2C:18-3)	18 months, \$10,000 (§2C:43-6) (§2C:43-3)
New Mexico (N.M.S.A.)	\$2,500.01- \$25,000 (§30-16-1)	3 years, \$5,000 (§31-18-15)	More than \$1,000 (§30-15-1)	18 months, \$5,000 (§31-18-15)	Any damage to property (§30-14-1.1)	Double appraised value of damage
New York (McKinney's Penal Law)	More than \$1,000 (§155.30)	4 years (§70.00) (no fine specified §80.00)	More than \$1,500 (§145.10)	7 years (§70.00) (no fine specified §80.00)	(§140.15)	1 year, \$1,000 (§70.15) (§80.00)
North Carolina (N.C.G.S.A.)	More than \$1,000 (§14-72)	8 years (§15A- 1340.17) fines appear to be discretionary (§15A-1361 et seq.)	Vandalism statutes are specific to agriculture, public facilities, and other unique categories (e.g. §14-132)	6 months, \$1,000 (§14-3) (§15A- 1340.23)	More than \$200 (§14-160)	1 year, discretionary fine (§14-3) (§15A-1340.23)
North Dakota (NDCC)	\$1,000.01 or more (§12.1-23-05)	5 years, \$10,000 (§12.0-32-01)	\$2,000.01- \$10,000 (§12.1-21-05)	5 years, \$10,000 (§12.0-32-01)	(§12.1-22- 03)	5 years, \$10,000 (§12.0-32-01)
Ohio (R.C.)	\$1,000- \$7,499 (§2913.02)	1 year, \$2,500 (§2929.14) (§2929.18)	\$1,000 or more (§2909.05)	1 year, \$2,500 (§2929.14) (§2929.18) (§2905.05)	(§2911.21)	30 days, \$250 (§2929.24) (§2929.28)
Oklahoma (21 Okl. Stat. Ann)	\$500 or more (§1705)	5 years, \$5,000 (§1705)	\$1,000 or more (§1760)	2 years, \$1,000 (§9)	(§1835)	30 days, \$500 (§1835)
Oregon (O.R.S.)	\$1,000 or more (§164.055)	5 years, \$125,000 (§161.605) (§161.625)	\$1,000.01 or more (§164.365)	5 years, \$125,000 (§161.605) (§161.625)	(§164.255)	1 year, \$6,250 (§161.615) (§161.635)
Pennsylvania (Pa.C.S.A.)	\$2,000.01 or more (§3903)	7 years, \$15,000 (§1103) (§1101)	\$1000.01- \$5,000 (§3304)	2 years, \$5,000 (§1103) (§1101)	(§3503)	1 year, \$2,500 (§1103) (§1101)
Rhode Island (Gen. Laws)	\$1,500.01 or more (§11-41-5)	10 years, \$5,000 (§11- 41-5)	(§11-44-1)	1 year, \$1,000 (§11-44-1)	(§11-44-26)	1 year, \$1,000 (§11-44-26)
South Carolina (Code)	\$2,000.01- \$9,999.99 (§16-13-30)	5 years, mandatory discretionary fine (§16-13- 30)	\$2,000.01- \$9,999 (§16-11-520)	5 years, mandatory discretionary fine (§16-11-520)	(§16-11- 600)	30 days, \$100 (§16-11-520)

South Dakota (SDCL)	\$2,500.01- \$5,000 (§22-30A-17)	5 years, \$10,000 (§22- 6-1)	\$2,500.01- \$5,000 (§22-34-1)	5 years, \$10,000 (§22- 6-1)	(§22-35-5)	1 year, \$2,000 (§22-6-2)
Tennessee (T.C.A.)	\$1,000- \$9,999 (§39-14-105)	12 years, \$5,000 (§40- 35-111)	\$1,000-\$9,999 (§39-14-105)	12 years, \$5,000 (§40- 35-111)	(§39-14- 406)	6 months, \$500 (§40-35-111)
Texas (V.T.C.A.)	\$1,500- \$19,999 (§31.03)	2 years, \$10,000 (§12.35)	\$1,500 - \$19,999 (§28.03)	2 years, \$10,000 (§12.35)	(§30.05)	1 year, \$4,000 (§12.21)
Utah (U.C.A.)	\$1,500- \$4,999 (§76-6-412)	5 years, \$5,000 (§76- 3-203) (§76-3-301)	\$1,500-\$4,999 (§76-6-106)	5 years, \$5,000 (§76-3-203) (§76-3-301)	(§76-6-206)	1 year, \$2,500 (§76-3-204) (§76-3-301)
Vermont (V.S.A.)	\$900.01 or more (§2501)	10 years, \$5,000 (§2501)	More than \$1,000 (§3701)	5 years, \$5,000 (§3701)	(§3705)	3 years, \$2,000 (§3705)
Virginia (VA Code Ann.)	\$5 or more from the person, \$200 or more not from the person (§18.2-95)	20 years, \$2,500 (§18.2-95)	\$1,000 or more (§18.2-137)	5 years, OR 2 years and \$2,500 (§18.2- 10)	(§18.2-121)	1 year, \$2,500(§18.2- 11)
Washington (RCWA)	\$750.01- \$5,000 (§9A.56.030)	5 years, \$10,000 (§9A.20.020)	\$750.01- \$5,000 (§9A.48.080)	5 years, \$10,000 (§43.06.230) (§9.92.010)	(§9A.52.070)	364 days, \$5,000 (§9.92.020)
West Virginia (W.Va. Code)	\$1,000 or more (§61-3-13)	10 years, \$2,500 (§61-3-13)	\$2,500 or more (§61-3-30)	10 years, \$2,500 (§31-3- 30)	(§61-3B-2)	12 months, \$500 (§61-3B-2)
Wisconsin (W.S.A.)	\$2,500.01- \$5,000 (§943.20)	3 years & 6 months, \$10,000 (§939.50)	More than \$2,500 (§943.01)	3 years & 6 months, \$10,000 (§939.50)	(§943.13)	9 months, \$10,000 (§939.51)
Wyoming (W.S.)	\$1,000 or more (§6-3-402)	10 years, \$10,000 (§6- 3-402)	\$1,000 or more (§6-3-201)	10 years, \$10,000 (§6-3-201)	(§6-3-303)	6 months, \$750 (§6-3-303)

FUNCTIONAL CLAIMING AND THE PATENT BALANCE

David J. Kappos & Christopher P. Davis

CITE AS: 18 STAN. TECH. L. REV. 365 (2015)
<http://stlr.stanford.edu/pdf/functionalclaiming.pdf>

ABSTRACT

If someone were to tell you that fax machines, remote printers, and even email were all patented as far back as 1840—and by a single inventor—you probably would not believe it. Indeed, you would be in good company; the Supreme Court essentially agreed with that sentiment in a landmark decision in 1853.¹ Samuel Morse, best remembered for inventing the telegraph, proved that even great inventors are susceptible to claiming inventions that far exceed their actual contributions to the knowledge pool. The Court, in otherwise upholding Morse’s claims to telegraph technology, invalidated his claim to all “use of . . . electro-magnetism, however developed, for marking or printing intelligible characters, signs, or letters, at any distances . . .”—a claim that would cover each of the above-listed modern technologies, and many more.

The rejection of Morse’s overbroad claim demonstrated the Supreme Court’s general aversion to unbounded patents, and a specific wariness toward functional claiming—the practice of describing an invention according to what it does rather than what it is. The central premise of the patent system, and the key to its operability as an innovation engine, is balance. The public foregoes short term benefits offered by immediate exploitation of an invention in exchange for a more robust knowledge pool—and thus more inventions—in the long term. Crucial to maintaining this balance is ensuring that an inventor is given exclusivity only as to her actual invention. Functional claiming tests this balance.

Unfettered approval of functional claims risks granting exclusivity over not only the new and useful solution to a problem that is disclosed in a patent, but to every means of solving that problem—whether or not known, or even conceivable, to the inventor. And this can be exactly the effect when patents like Morse’s attempt to claim a device so broadly in terms of its function that the function itself—meaning the result caused by operation of the device—is captured by the claim. Where such a claim is afforded patent protection, the inventor obtains a right that is not commensurate with her contribution to the knowledge pool; the public is short-changed in the patent bargain.

1. O’Reilly v. Morse, 56 U.S. 62, 112 (1853).

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A BRIEF INTRODUCTION TO THE WORKINGS OF § 112(F)

Though the practice is accompanied by risk of overbroad protection, functional claiming also confers benefits on the patent system. The statutory provision for functional claiming, § 112(f),² plays an important role in maintaining the patent system's balance. Section 112(f) states:

An element in claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

Section 112(f) narrows the scope of protection afforded to patentees employing functional claims by limiting the literal scope of the claims to the structure, material, or acts specifically disclosed in the specification. The provision is an acknowledgement of the difficulty with which innovation is articulated; it balances the Patent Act's requirement of particular and distinct claiming against the inherent limitations of language. Rather than strictly requiring structural language for every element of a claim, patentees are given the opportunity to include "means-plus-function" (or "step-plus-function") claim elements and claims which utilize functional language read in conjunction with the specification to determine the scope of the claim's limitations. The alternative—an inflexible requirement that claims exclusively use structural language—could in some cases be so limiting as to eviscerate the system's incentivizing purpose for certain inventions. A system that rewarded only inventions easily expressed in structural language would discourage investment in vital technologies where functional expression is indispensable.

I. OPPORTUNITIES FOR ABUSE

Problematically, court interpretations of the statutory provision for functional claiming have produced confusion over just how the provision is invoked—or, in some cases, perfunctorily triggered. This confusion in turn has encouraged opportunistic behavior. By using amorphous language that may or

2. Before passage of the America Invents Act in 2011, this provision was embodied in § 112, paragraph 6. The statutory language in both versions is literally equivalent. For consistency, the provision is referred to throughout by its current statutory reference.

may not be construed as “means-plus-function” by a court, it is possible for a patentee to effectively defer the choice as to whether and how § 112(f) applies until a lawsuit arises—and then elect a stance depending on the circumstances of litigation.³ In this scenario, the drafter will utilize functional language in the patent prosecution phase, leaving the patent examiner to decide whether the language triggers special analysis under § 112(f). If the dubious language goes unchallenged in patent examination, then the claim that issues can subsequently be read on virtually any structure that, through litigation, is found to achieve the claimed function.

For its part, the Federal Circuit has attempted to define rules for the invocation of § 112(f). Traditionally, patentees purposefully availing themselves of the opportunity to use means-plus-function claiming would do so by expressly using the word “means” in the claim element. Thus, the Federal Circuit established a semi-magic word (“means”) whose inclusion in a claim supports a rebuttable presumption that § 112(f) applies, and whose absence supports a rebuttable presumption that § 112(f) does not apply.⁴ The presumptions are rebuttable because courts have recognized the potential to purposefully dodge § 112(f) (or, conversely, be unwittingly trapped by it)⁵ through selective diction.

A common tactic to evade § 112(f)’s reach—or at least preserve an argument for its inapplicability—is the use of so called “nonce” words. Nonce words are substitutes for the word “means” that facially suggest structure but, in fact, merely describe function. The U.S. Patent and Trademark Office (PTO) has supplied a non-exhaustive list of these non-structural, generic placeholders: “mechanism for,” “module for,” “device for,” “unit for,” “component for,” “element for,” “member for,” “apparatus for,” “machine for,” and “system for.”⁶ Apart from the most obvious examples, however, distinguishing a nonce word from a structurally informative word can be a nuanced endeavor. This is because many structural devices take their names from the functions they perform (e.g. “filter,” “brake,” “clamp,” “screwdriver,” “lock,” etc.).⁷ On one level, a screwdriver is merely a “mechanism for” driving screws, but to one skilled in the relevant art, the word “screwdriver” suggests specific structural limitations: though one conceivably could use a hammer to drive a screw, a carpenter would be expected to recognize the difference. Thus, whether or not

3. Stephen Winslow, *Means for Improving Modern Functional Patent Claiming*, 98 GEO. L.J. 1891, 1900 (2010).

4. *EnOcean GmbH v. Face Int’l Corp.*, 742 F.3d 955, 958 (Fed. Cir. 2014).

5. In *Cole v. Kimberly-Clark Corp.*, the Federal Circuit found the patent’s drafter to be “clearly enamored of the word ‘means,’” having used the word fourteen times in a single claim. However, the structural language accompanying the elements (i.e. “perforation means”) prevented their meeting the statutory requirements for means-plus-function claiming. 102 F.3d 524, 531 (Fed. Cir. 1996).

6. MANUAL OF PATENT EXAMINING PROCEDURE § 2181 (9th ed. 2014).

7. *Greenberg v. Ethicon Endo-Surgery, Inc.*, 91 F.3d 1580, 1583 (Fed. Cir. 1996).

§ 112(f) will apply—which bears on crucial determinations of validity under the Patent Act’s disclosure, novelty and nonobviousness requirements—depends on whether a person having ordinary skill in the relevant art would recognize a term as providing specific structural guidance or, in the alternative, merely incanting a device’s function.

II. JUDICIAL TREND: MINIMIZATION OF § 112(F)’S APPLICATION

In recent years, courts have demonstrated a formalistic tendency to find § 112(f) inapplicable in the absence of the semi-magic word “means.” The Federal Circuit has stated that the presumption against § 112(f)’s applicability in the word’s absence is “a strong one that is not readily overcome.”⁸ As the strength of the presumption has solidified, there is a risk that the Federal Circuit, in its pursuit of predictability, has exalted form over substance and invited drafting gamesmanship antithetical to the purpose of § 112(f).

In 2014’s *EnOcean GmbH v. Face International Corp.*, the Federal Circuit found the term “receiver” to have a structural meaning distinct from a functional term that appeared elsewhere in the claims that, linguistically, is strikingly similar: “means for receiving.”⁹ The court held that a person of skill in the relevant art would read structural limitations into the term “receiver” as used in the phrases “receiver for receiving” (or “receiver adapted to receiving”) radiofrequency signals, thereby removing the claim from § 112(f)’s domain. The opinion relied on precedent to state that disputed terms need not be limited to a *single* structure in order to be sufficiently structural to evade § 112(f), so long as the relevant *class* of structures conforming to a “receiver” is well known by a person of ordinary skill.¹⁰ The court did find, on the other hand, that a claim utilizing the term “means of receiving” was a means-plus-function claim, and thus required structural limitations to be detailed in the specification. In finding that requirement satisfied, the court pointed to the specification’s description of “a typical scenario” in which the frequency is “received by a single receiver.”¹¹ Thus, the word “receiver” was found not only to convey sufficient structure for the purposes of escaping § 112(f) when appearing in the claims, but so structurally informative as to sufficiently limit a mean-plus-function claim when appearing in the specification. The Federal Circuit put substantial stock into the absence of the word “means,” finding extrinsic evidence and expert testimony persuasive despite an unavoidably overt linguistic similarity between “receiver” and “means of receiving.”

The court also afforded substantial weight to the absence of the word

8. *Lighting World, Inc. v. Birchwood Lighting, Inc.*, 382 F.3d 1354, 1358 (Fed. Cir. 2004).

9. *EnOcean GmbH*, 742 F.3d at 955.

10. *Id.* at 960 (quoting *Linear Tech. Corp. v. Impala Linear Corp.*, 379 F.3d 1311, 1322 (Fed.Cir.2004)).

11. *Id.* at 961.

“means” in 2013’s *Power Integrations, Inc. v. Fairchild Semiconductor International, Inc.*¹² The disputed claim included the language “a *soft start circuit* that provides a signal . . .”—a term that the court admitted entailed a “broad class of structures” but found nonetheless to escape the purview of § 112(f).¹³ The court reasoned that the straightforwardness of the circuit’s function weighed heavily in favor of finding sufficient structure to avoid the interpretive strictures of means-plus-function claiming.¹⁴ Yet this determination of functional straightforwardness apparently was not crucial to the decision. The court also refused to apply § 112(f) to another use of the term “soft start circuit” despite acknowledging that its “function description [was] less illuminating” than in the previous claim.¹⁵ While it cited other justifications, the dominant thrust of the court’s logic was clearly a strong aversion to applying § 112(f) in the absence of the word “means.” The result: a claim term having no intrinsic meaning beyond the function described, with no requirement enforced to provide structural clarity through the specification.

In 2012’s *Flo Healthcare Solutions, LLC v. Kappos*, the Federal Circuit demonstrated that the presumption against § 112(f)’s applicability to claims lacking the word “means” is strong enough even to overcome the use of terms characteristically recognized as nonce words. The case centered on the term “height adjustment mechanism.” Both parties agreed that the term pointed to a means-plus-function claim (the parties’ disagreement involved whether the specification provided sufficient structural limitations to support the means-plus-function claim’s validity). Nevertheless, despite the parties’ agreement regarding the claim’s functional nature, the Federal Circuit found that the term did not invoke § 112(f) in the first place.¹⁶ The court noted that when the claim drafter has not “signaled his intent to invoke [§ 112(f)] by using the term ‘means,’” the court will not find a means-plus-function claim unless the limitation “essentially is devoid of *anything* that can be construed as structure.”¹⁷ The court relied on the surrounding language and found that the noun “adjustment” (as defined in the Random House Dictionary) modified the more generic “mechanism” to imbue it with sufficient structure and escape § 112(f). The court went on to equate the term “height adjustment mechanism” to other devices that take their names from the functions they perform, as enumerated in *Greenberg*.¹⁸ The argument that a “height adjustment mechanism” designates structure to a similar extent as do the terms “clamp” and “screwdriver” is tenuous at best. Other characteristic nonce words recently found by the Federal Circuit and district courts to be sufficiently modified as to

12. 711 F.3d 1348 (Fed. Cir. 2013).

13. *Id.* at 1365.

14. *Id.*

15. *Id.* at 1366.

16. *Flo Healthcare Solutions, LLC v. Kappos*, 697 F.3d 1367, 1373 (Fed. Cir. 2012).

17. *Id.* at 1374 (emphasis added).

18. *Id.*

avoid § 112(f) include “modernizing device,”¹⁹ “computing unit,”²⁰ “control unit,”²¹ “flexible element,”²² “deflection device,”²³ “tensioning component,”²⁴ “storage device,”²⁵ “call handling module,”²⁶ and “event naming module,”²⁷ among numerous others.²⁸

In recent years, instances in which the Federal Circuit has found a means-plus-function claim in the absence of “means” language have been exceedingly rare.²⁹ And there is scant guidance from the bench on how the presumption against applying § 112(f) in such absence is to be overcome. 2008’s *Welker Bearing Co. v. PHD, Inc.* provided some insight into the threshold for overcoming the presumption.³⁰ The claim at issue included as an element “a mechanism for moving” a finger along a straight line.³¹ The court noted the particularly synonymous relationship between the words “means” and “mechanism” and further noted that “no adjective endows the claimed ‘mechanism’ with a physical or structural component.”³² The court described the “unadorned term” as “simply a nonce word” and even suggested modifiers that would have moved the claim out of § 112(f)’s reach: “finger displacement mechanism,” “lateral projection/retraction mechanism,” or “clamping finger actuator.”³³

In 2013’s *Regents of the University of Minnesota v. AGA Medical Corp.*, the portion of a claim reading “a self-expanding structure exhibiting a spring-like behavioural [*sic*] component for moving the member between a compressed orientation . . . and an expanded orientation” was upheld as a means-plus-function element, even though it was “not drafted in standard

19. *Inventio AG v. Thyssenkrupp Elevator Ams. Corp.*, 649 F.3d 1350, 1358–59 (Fed. Cir. 2011).

20. *Id.* at 1359–60.

21. *LG Elecs., Inc. v. Bizcom Elecs., Inc.*, 453 F.3d 1364, 1372 (Fed. Cir. 2006), *cert. granted*, 553 U.S. 617 (2007) (overruled on other grounds).

22. *Volcano Corp. v. St. Jude Med.*, No. 13–687-RGA, 2014 WL 266155, at *3–4 (D. Del. Jan. 24, 2014).

23. *Medtronic, Inc. v. Edwards Lifesciences Corp.*, No. 11–1650 (JNE/JSM), 2013 WL 2147909, at *6–7 (D. Minn. May 16, 2013).

24. *Id.* at *10–11.

25. *VPS, LLC v. SmugMug, Inc.*, No. 10 CV 2142, 2012 WL 5471012, at *11–12 (N.D. Ill. Nov. 9, 2012).

26. *High Point SARL v. Sprint Nextel Corp.*, No. 2:09-CV-02269-CM-DJW, 2012 WL 3158838, at *7–11 (D. Kan. Jan. 24, 2012).

27. *Mesh Comm, LLC v. PEPCO Energy Servs.*, No. RDB-09–2804, 2010 WL 5463934, at *10–11 (D. Md. Dec. 29, 2010).

28. *See generally* 1 ANNOTATED PATENT DIGEST § 8:19 (2014).

29. *See id.* § 8:18.

30. 550 F.3d 1090, 1090 (Fed. Cir. 2008).

31. *Id.* at 1094.

32. *Id.* at 1096.

33. *Id.*

means-plus-function language.”³⁴ But the Federal Circuit declined to articulate what factors contributed to overcoming the presumption against functional claiming, instead simply noting the trial court’s determination—and the parties’ agreement—that § 112(f) applied.

2014 saw two Federal Circuit decisions that reveal tension within the court concerning the strength of the presumption against applying § 112(f) in the absence of “means.” In *Robert Bosch, LLC v. Snap-On, Inc.*, the earlier of the two decisions, Judges Prost, Taranto, and Hughes unanimously ruled for § 112(f)’s applicability to the claim terms “program recognition device” and “program loading device.”³⁵ The opinion cited precedent identifying “device” as a nonce word and further noted that the surrounding words failed to offer any structural guidance, but rather merely identified the functions to be performed by the device. The court distinguished the “devices” at issue in *Bosch* from precedential “devices” found to avoid invocation of § 112(f) based on the presence of structural language in dependent claims and the specification of the latter that the court found lacking in the former.

Subsequently, in *Williamson v. Citrix Online, LLC*, Judges Moore and Linn, over the dissent of Judge Reyna, reestablished the high bar for overcoming the presumption that *Bosch* appeared to have lowered. Central to the majority and minority opinions was the extent to which adjectival modifiers might remove otherwise purely functional language from the reach of § 112(f). In overruling the finding of a means-plus-function claim despite the absence of “means” language, the majority pointed to the district court’s focus on the word “module” and failure to consider the expression “*distributed learning control module*” as a whole.³⁶ The dissent conceded that the presence of modifiers can change the meaning of a claimed nonce word, but argued that the modifiers in this case failed to provide any structural significance to the nonce word “module.”³⁷ Remarkably, the majority went as far as to suggest that the word “module” (almost universally recognized as a nonce word) might itself carry structural meaning, citing as error the district court’s failure to appreciate “the structure-connoting meaning of the word ‘module’ reflected in dictionaries.”³⁸ The majority opinion seemed to deemphasize what previously would be a compelling argument for interpreting a claim as means-plus-function in the absence of the word “means”: substantial reliance on nonce words. The drafting takeaway from recent Federal Circuit case development is that the court seems

34. 717 F.3d 929, 940–41 (Fed. Cir. 2013).

35. 769 F.3d 1094, 1096 (Fed. Cir. 2014). The court also found the presumption for § 112(f)’s applicability to a claim based on the presence of the word “means” where that word was used in the phrase “by means of” as opposed to the “classic phrase ‘means for.’” *Id.*

36. *Williamson v. Citrix Online*, 770 F.3d 1371, 1378–79 (Fed. Cir. 2014) (emphasis added).

37. *Id.* at 1383.

38. *Id.* at 1379–80.

willing to forgive virtually any borderline functional language so long as the word “means” is nowhere to be found and, when utilized, nonce words are not wholly unmodified. Dicta in *Williamson* suggests that now even naked nonce words may find sanctuary from § 112(f)—if only the right dictionary can be produced.

III. THE RISKS FROM RESTRICTIVE APPLICATION OF § 112(F)

The Federal Circuit’s strong resistance to applying § 112(f) without abundantly clear indication of the drafter’s intent to invoke functional claiming does provide a measure of adjudicatory predictability. But what is gained in terms of courtroom predictability must be juxtaposed against what is lost in the practice of invention: cognizable boundaries. Because structural limitations from the specification are not read into the claim in situations where § 112(f) does not apply, other innovators operating in the same space as those making ambiguously functional claims are forced to struggle to define the outer bounds of these minimally structural claim elements. Amorphous functional language will necessarily sustain a penumbra surrounding the structural limitations of the claimed invention. As such, through borderline functional claiming, some may achieve protections that outweigh their actual contributions to the knowledge pool. The result is to discourage investment in neighboring technology that otherwise might have significantly greater appeal. By punting on close-call claims, the Federal Circuit is simply risk-shifting. When a claim escapes the scope of § 112(f), the burden of interpreting the ambiguity—and the risk of misinterpretation—falls on other innovators.

IV. CONFORMING BORDERLINE CASES TO PATENT NORMS

The key to avoiding damage from functional language disguised as structural language is dutiful application of concurrent patent validity doctrines. Thus, when a “receiver” is found to be sufficiently structural to avoid treatment as a means-plus-function claim, it is vital that written description, enablement, novelty, and nonobviousness analysis be performed rigorously on the claim. As to novelty and non-obviousness, any reference containing a “receiver” should be deemed prior art covering the applicable claim element under § 102 or § 103. If no detail is provided in the claim to specify how the “receiver” integrates with other elements of the claim, any analysis under § 103 should give all due respect to *KSR International Co. v. Teleflex Inc.*³⁹ in permitting combination of the “receiver” reference with other prior art.

Equally important to reining in the disruptive potential of amorphous functional language is rigorous enforcement of the § 112 disclosure requirements. Requiring that an inventor enable her invention strips amorphous

39. 550 U.S. 398 (2007).

functional language of much of its pernicious potential. A broadly claimed “receiver” must be supported by a written description sufficient to enable an artisan to make and use the claimed subject matter employing any receiver. Were Morse allowed in his time under modern-day § 112(f) to claim all use of electromagnetic means for printing at a distance—covering not only telegraphic communications, but also modern technology such as email—his claim would nonetheless fail for lack of enablement. He would have enabled one species of electromagnetic means for printing at distance (the telegraph) but not the entire genus.

Courts must also vigorously apply the § 112 requirement of claim definiteness. Prior to *Nautilus, Inc. v. Biosig Instruments, Inc.*,⁴⁰ many borderline cases evaded strict scrutiny under claim definiteness doctrine due to the liberal “insolubly ambiguous” standard adhered to by the Federal Circuit.⁴¹ But since the Supreme Court’s ruling on the “insolubly ambiguous” standard, in the future, merely referencing a class of structures—as the Federal Circuit has found apparent nonce words to do—without meaningfully disclosing the structural limitations of that class is less likely to withstand the new higher standard of claim definiteness. After *Nautilus*, claims having multiple meanings are invalid if the specification fails to inform, with reasonable certainty, one skilled in the art of the scope of the invention.⁴² The claim definiteness doctrine has suddenly become a powerful antidote to uncertainty surrounding the outer borders of claims. If applied cogently to functional language disguised as structural, the doctrine could sap the opportunistic drafting tactic of its power.

CONCLUSION

The enduring challenge of the patent system is maintaining its balance. This requires carefully calibrated adjustments to compensate for rules that can create obstacles to obtaining patents for worthy inventions, as well as to close loopholes that permit oversized protections. Congress’s decision in 1952 to expressly allow functional claiming, and to retain it in 2011, demonstrates a commitment to removing a linguistic impediment to patenting. But the evolution of means-plus-function claiming, and the opportunity for drafting that essentially skirts § 112(f) while retaining the practical benefits of functional language, demonstrates that recalibration is in order. Fortunately, the proper remedy does not require new legislation or even new judge-made doctrine. The PTO and the federal courts can protect the patent system’s balance through routine application of extant patent validity doctrine.

Allowing nonce words and otherwise purely functional claims to evade

40. 134 S. Ct. 2120 (2014).

41. *See, e.g., Exxon Research & Eng’g Co. v. United States*, 265 F.3d 1371, 1373 (Fed. Cir. 2001).

42. *See generally Nautilus*, 134 S. Ct. 2120.

§ 112(f)'s reach is bad policy, and adjudicators should be vigilant in this regard. But by closely adhering to the precepts of novelty, nonobviousness, and disclosure doctrine, the PTO and the courts can address the risk of amorphous functional language. When §§ 102, 103, and 112 are smoothly interoperating within the patent system, amorphous functional claiming will find no safe refuge from a strong, balanced patent system.