# A Theory of IP's Negative Space

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## **ABSTRACT**

Several recent case studies have explored industries in what Kal Raustiala and Christopher Sprigman have described as intellectual property's "negative space": areas in which creation and innovation thrive without significant protection from intellectual property law. These include such diverse industries as fashion, cuisine, magic tricks, stand-up comedy, typefaces, open source software, sports, wikis, academic science and even roller derby pseudonyms. Most scholarship in the area has focused on case studies of particular industries and social movements that occupy IP's negative space. This Article looks deeper into the nature of IP's negative space itself, seeking a unifying theory of what makes a type of work well suited to IP's negative space. The emerging theory sheds light onto what may make a lack of protection preferable to protection for certain types of works and gives us a new tool for optimizing intellectual property law to promote creation and innovation.

Abstract	. 317
Introduction	318
I. What Is IP's Negative Space?	322
A. Map of IP's Negative Space	
1. Doctrinal No Man's Land	325
2. IP Forbearance	330
3. Use-Based Carve Outs	334
II. What Makes a Type of Work Well Suited to IP's Negative Space?	336
A. Some Helpful Non-Answers	337
1. The Fashion Cycle	337
2. Norms	
B. Identifying Commonalities	
1. Creation Driven by Rewards Not Tied to Exclusivity	

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318	COLUMBIA JOURNAL OF LAW & THE ARTS	[34:3
	a. The Value of Recognition	343
	b. Community Building	345
	c. First Mover Advantages and Network Effects	
	2. Exclusivity Would Harm Further Creation	
	3. High Public or Creator Interest in Free Access without	
	Risk to Incentives	350
	4. Reinvestment in Creation Preferable to IP Protection or	
	Enforcement	351
	a. The Cost of Obtaining Protection and Pursuing	
	Infringers	353
	b. The Potential Benefits of Pursuing Infringers	
III.	Normative Implications	
	A. Encourage Attribution	
	B. Permit "Productive Infringement"	
	C. Resist the Urge to Protect First and Ask Questions Later	
	D. Reduce the Cost of Obtaining and Enforcing IP Rights	
IV.	Conclusion	

## INTRODUCTION

American intellectual property law is grounded in incentive theory. By granting exclusivity to creators, the theory goes, intellectual property law enables them to profit from their work, thereby creating an incentive for them to create. For copyright and patent law, this rationale is enshrined in the Constitution: "Congress shall . . . 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."1 Trademark law, while based in the Commerce Clause, is traditionally justified by a similar goal of reducing consumer confusion and encouraging a healthy and competitive business environment.<sup>2</sup> Thus, the presumption underlying intellectual property ("IP") law is that people need monetary incentives to create, and exclusivity provides an avenue for reward. With exclusivity comes the ability to extract fees for one's work, and people will create more if they know that they can do so. As a result, according to incentive theory, if we want to promote creation, we must give creators exclusive rights.<sup>3</sup>

- 1. U.S. CONST. art. I, § 8, cl. 3.
- 2. See In re Trade-Mark Cases, 100 U.S. 82, 94–95 (1879).

<sup>3.</sup> See Diamond v. Chakrabarty, 447 U.S. 303, 307 (1980) (describing the objective of the patent monopoly as existing so that "[t]he productive effort thereby fostered will have a positive effect on society through the introduction of new products and processes of manufacture into the economy") (quoting Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 480 (1974)); United States v. Paramount Pictures, Inc., 334 U.S. 131, 158 (1948) ("The sole interest of the United States and the primary object in conferring the [copyright] monopoly lie in the general benefits derived by the public from the labors of authors. . . . [R]eward to the author or artist serves to induce release to the public of the products of his creative genius.") (internal quotations omitted). As articulated in these cases, the "incentive" of

IP's "negative space" defies this conventional wisdom. It takes its name from art, where "negative space" is the area surrounding a figure that makes the figure stand out: the background against which an object exists. In IP law, negative space is a series of nooks, crannies and occasionally oceans—some obscure, some vast—where creation and innovation thrive in the absence of intellectual property protection. In art, negative space is as important as the positive space: it defines the subject, and brings balance to a composition. It is, in the words of artist David Leggett, "the opposite of an identifiable object," but at the same time, it "help[s] define the boundaries of positive space." In IP law, negative space may do the same thing. Although the boundaries of IP's negative space are less clear, its very existence may help us gain a better understanding of IP law.

Many areas of creation function in the absence of intellectual property protection. A smaller group—those residing in IP's negative space—are *enhanced* by that absence. Recent case studies have explored a number of these areas, which include such diverse industries as fashion, <sup>8</sup> cuisine, <sup>9</sup> magic tricks, <sup>10</sup> stand-up

incentive theory includes not only the incentive to create, but also the incentive to distribute. This stands to reason: even if creators would continue to create works without intellectual property protection, they could still opt to retain them as trade secrets or personal works; indeed, absolute secrecy is the only real guarantee that no one will copy one's work. Intellectual property provides a measure of safety against such copying; thus, one can say that even if it does not provide an incentive to create, intellectual property law may still provide an incentive to share such creations. As a result, when this Article discusses the concept of "creation" or "innovation," it includes not only the creation of a work or invention, but also the distribution of that work or invention to others.

- 4. See David Leggett, Enhancing Your Art with Negative Space, TUTORIAL 9 (Oct. 21, 2008), http://www.tutorial9.net/resources/enhancing-your-art-with-negative-space/.
- 5. See Kal Raustiala & Christopher Sprigman, The Piracy Paradox: Innovation and Intellectual Property in Fashion Design, 92 VA. L. REV. 1687, 1764 (2006) [hereinafter Raustiala & Sprigman, Piracy Paradox] (coining and defining the term "negative space" in the intellectual property context).
  - 6. Leggett, *supra* note 4.
- 7. In some ways, the "negative space" metaphor is a flawed one. Perhaps the greatest difficulty with the metaphor is its implication that IP's "negative space" contains *everything* that falls outside of intellectual property protection, when conventional scholarly wisdom defines IP's negative space as constituting only those areas of creation and innovation that *benefit* from a lack of intellectual property protection. Those that merely limp along, subsisting despite a lack of intellectual property protection, and those that are relatively unaffected by a lack of protection—while they may be in the background of IP law's metaphorical painting—do not fall into IP law's "negative space." Nor is the metaphor perfect in the sense that, as described below, the boundaries between IP's negative and positive space are not always clear cut. I take the metaphor as I have found it, however, and will exploit its rhetorical advantage: like negative space in art, IP's negative space permits us to see IP's positive space in a new light.
- 8. See generally Raustiala & Sprigman, Piracy Paradox, supra note 5 (arguing that copying in the fashion industry drives rather than chills innovation); Kal Raustiala and Christopher Sprigman, The Piracy Paradox Revisited, 61 STAN. L. REV. 1201 (2009) [hereinafter Raustiala & Sprigman, Revisited] (clarifying and expanding on the arguments explored in Piracy Paradox and responding to scholarly proposals for legislative reform).
- 9. See generally J. Austin Broussard, An Intellectual Property Food Fight: Why Copyright Law Should Embrace Culinary Innovation, 10 VAND. J. ENT. & TECH. L. 691 (2008) (arguing for copyright protection for chefs' innovative recipes as original works of authorship); Christopher J. Buccafusco, On the Legal Consequences of Sauces: Should Thomas Keller's Recipes Be Per Se Copyrightable?, 24 CARDOZO ARTS & ENT. L.J. 1121 (2007) (exploring the copyrightability of recipes and concluding that economic, public policy and cultural considerations counsel against extending copyright protection to

comedy, <sup>11</sup> typefaces, <sup>12</sup> open source software, <sup>13</sup> sports, <sup>14</sup> wikis, <sup>15</sup> academic science, <sup>16</sup> jambands, <sup>17</sup> hip hop mixtapes <sup>18</sup> and even roller derby pseudonyms. <sup>19</sup>

If we accept the premise of incentive theory, how can these areas exist? One answer is that the prospect of intellectual property protection is only an incentive for *some* creators. People and businesses create for all sorts of reasons. Some

recipes); Emmanuelle Fauchart & Eric von Hippel, Norm-Based Intellectual Property Systems: The Case of French Chefs, 19 ORG. SCI. 187, 187 (2008) (arguing that recipes are better protected by self-enforced social norms than by intellectual property law); Jessica Litman, The Exclusive Right to Read, 13 CARDOZO ARTS & ENT. L.J. 29, 44–45 (1994) (reexamining the bargain between copyright holders and the public that copyright entails and arguing that nascent industry can be stimulated by lack of copyright protection). See also Raustiala & Sprigman, Piracy Paradox, supra note 5, at 1768.

- 10. See generally Jacob Loshin, Secrets Revealed: How Magicians Protect Intellectual Property Without Law, in LAW AND MAGIC: A COLLECTION OF ESSAYS 123 (Christine A. Corcos ed., 2010) (describing the ways in which the magic community has developed social norms that protect intellectual property in the absence of IP law).
- 11. See generally Dotan Oliar & Christopher Sprigman, There's No Free Laugh (Anymore): The Emergence of Intellectual Property Norms and the Transformation of Stand-Up Comedy, 94 VA. L. REV. 1787 (2008) (arguing that intellectual property law is not a cost-effective way to protect creativity of stand-up comedians and that social norms provide a substitute for IP law).
- 12. See Blake Fry, Why Typefaces Proliferate Without Copyright Protection, 8 J. Telecomm. & High Tech. L. 425, 432–37 (2010) (arguing for the continued exclusion of typefaces from copyright protection and explaining why that exclusion does not prevent innovation). See generally Jacqueline D. Lipton, To © or Not to ©? Copyright and Innovation in the Digital Typeface Industry, 43 U.C. DAVIS L. REV. 143 (2009) (calling for Congress, the Copyright Office and courts to reexamine the issue of typeface copyrightability, and arguing for at most thin protection for digital typefaces).
- 13. See generally, Yochai Benkler, Coase's Penguin, or, LINUX and the Nature of the Firm, 112 YALE L.J. 369 (2002) (analyzing the economic and cultural implications of peer production of information)
- 14. See generally F. Scott Kieff, Robert G. Kramer & Robert M. Kunstadt, It's Your Turn, but It's My Move: Intellectual Property Protection for Sports "Moves," 25 SANTA CLARA COMPUTER & HIGH TECH. L.J. 765, 766, 774–76 (2009) (arguing that the use of IP rights in sports gives more bargaining power to a much broader range of athletes); Gerard N. Magliocca, Patenting the Curve Ball: Business Methods and Industry Norms, 2009 BYU L. REV. 875, 877 (2009) (arguing that "there should be a presumption against considering a process patentable subject matter under 35 U.S.C. § 101 when a norm can be found in the relevant industry against patenting the class of innovations at issue.").
- 15. See generally Jon Garon, Wiki Authorship, Social Media, and the Curatorial Audience, 1 HARV. J. SPORTS & ENT. L. 95 (2010) (arguing for a wiki model in which collaboration is encouraged but normative expectations of authorship are maintained).
- 16. See generally Katherine J. Strandburg, Curiosity-Driven Research and University Technology Transfer, in University Entrepreneurship and Technology Transfer: Process, Design, and Intellectual Property 93 (Gary D. Lubecap ed., 2005).
- 17. See generally 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, 653, 676–77 (2006) (describing the ways in which the jamband community uses social norms to enforce copyright law).
- 18. See generally Horace J. Anderson, Jr., "Criminal Minded": Mixtape DJs, the Piracy Paradox, and Lessons for the Recording Industry, 76 TENN. L. REV. 111, 114, 140–53 (2008) (extending Raustiala and Sprigman's "piracy paradox" from the fashion industry to mixtapes and arguing for a model that employs strategic forbearance of copyright enforcement).
- 19. See generally David Fagundes, Talk Derby To Me: Emergent Intellectual Property Norms Governing Roller Derby Pseudonyms (October 10, 2010) (unpublished manuscript) (on file with author) (investigating the extra-legal governance scheme used to protect derby names to explain the emergence of subcultural IP norms).

creators seek direct monetary benefit, some look to the prospect of future monetary benefit and for some, monetary benefit is irrelevant. While true, this answer tells us little about how negative spaces arise and how they can come to dominate entire industries. A more helpful answer is that, regardless of the desire for monetary benefit, exclusivity is only part of the incentive puzzle. This approach assumes that intellectual property protection *promotes* innovation and creation, but that intellectual property protection is not the *exclusive* driver of innovation and creation. For example, some creators may create out of a desire for recognition, an interest in community or an ability to avail themselves of first mover advantages or network effects. For each of these, exclusivity—at least as provided under current law—may be as much of a hindrance as a benefit.

If these answers are true—and they surely are—it follows that some types of creation and innovation will need intellectual property protection more than others. In some areas or for some creators, intellectual property law could fall away completely and creation would continue unfazed, or even be enhanced. Other areas or creators might not survive without protection. Most are some sort of hybrid. This state of affairs has created a world in which some industries rely on intellectual property protection; others rely on extra-legal norms that echo intellectual property protection; others create contractual schemes that alter the terms of intellectual property protection; and still others thrive without any intellectual property protection.

What makes one industry need or want the protection provided by current intellectual property law, and another go without? And what does that tell us about the benefits and drawbacks of our current intellectual property laws? These questions are, as yet, unexplored in the negative space literature, which has thus far focused predominantly on case studies. This Article builds on those case studies to explore the nature of negative space itself, seeking a theory that defines what makes a type of work well suited to IP's negative space. This information, in turn, informs our understanding of which elements of the traditional intellectual property system work and which do not work—and how the current intellectual property system can improve.

To this end, the Article begins by defining intellectual property's negative space and creating a taxonomy of negative spaces. This taxonomy includes three

<sup>20.</sup> See, e.g., Dan L. Burk & Mark A. Lemley, *Policy Levers in Patent Law*, 89 VA. L. REV. 1575, 1586 (2003) (arguing that there are other ex post reward systems for creativity than intellectual property law, and that "[i]ndeed, it seems clear that at least some innovation would continue in the absence of any patent protection.").

<sup>21.</sup> We may never be sure that any industry truly *needs* intellectual property protection to drive creation and innovation. Would the pharmaceutical industry continue to create new drugs even without patent protection? Would artists continue to make and distribute popular music without copyright protection? Both industries are the subject of widespread copying and piracy, but have managed to survive, and even thrive. But it is safe to say that even if these (and most other) industries might be able to struggle through without intellectual property protection, they still benefit from it. By contrast, the industries and social movements at the core of this Article are those that seem to prefer or benefit from a lack of intellectual property protection under the current IP system.

<sup>22.</sup> See, e.g., Burk & Lemley, supra note 20; Fagundes, supra note 19.

categories: (1) doctrinal no man's land, where creations fall through the cracks of IP protection; (2) areas of IP forbearance, in which creators could receive protection, but elect either not to seek protection or not to pursue infringers; and (3) use-based carve outs, in which lawmakers have exempted certain types of intellectual property use from liability. Second, the Article explores what makes a certain type of creation particularly conducive to low-IP treatment. The Article determines that negative space is likely to arise under the following four overlapping conditions: (1) when creation is driven by something other than exclusivity-based financial gain; (2) when granting exclusivity would significantly harm or deter other creation or innovation; (3) when public or creator interest in free access to creations exceeds the risks of diminished exclusivity incentives; and/or (4) when creators prefer to reinvest in creation or innovation rather than investing in protection or enforcement of intellectual property. considerations in mind, the Article explores several observations about how intellectual property protection could be improved to provide additional incentives to create and innovate.

#### I. WHAT IS IP'S NEGATIVE SPACE?

Kal Raustiala and Christopher Sprigman, who coined the term IP's negative space, define the term as encompassing any "substantial area of creativity" in which intellectual property laws do not penetrate or provide only very limited propertization.<sup>23</sup> Put differently, the industries in IP's negative space exist in a "low-IP equilibrium," where intellectual property protection is absent, or largely so, but creation continues.<sup>24</sup> This does not mean that—as a cynical observer might comment—the ease of copying in today's technological age redefines every creative or inventive industry as negative space. Rather, the premise of negative space as I define it is that the absence of strong IP protection not only fails to hinder low-IP industries, but actually helps them thrive.

A growing body of scholarship has explored several industries that, scholars contend, exist in such low-IP equilibria.<sup>25</sup> Until now, however, IP's negative space has been discussed primarily on an industry by industry basis. In each case study, scholars have carved out particular commercial and creative situations in which the absence of strong intellectual property protection may work as a benefit to creation, and have explained how those industries prosper without substantial intellectual property protection.<sup>26</sup> Often, these systems rely on community norms to create a sort of "IP without IP" whose contours vary depending on the needs of the

<sup>23.</sup> Raustiala & Sprigman, *Piracy Paradox, supra* note 5, at 1764; Kal Raustiala & Christopher Sprigman, *Where IP Isn't*, VA. L. REV. BRIEF (Jan. 22, 2007), http://www.virginialawreview.org/inbrief.php?s=inbrief&p=2007/01/22/raustialasprigman [hereinafter Raustiala & Sprigman, *Where IP Isn't*].

<sup>24.</sup> Raustiala & Sprigman, Piracy Paradox, supra note 5, at 1764.

<sup>25.</sup> See, e.g., supra notes 8–19.

<sup>26.</sup> See generally id.

industry.<sup>27</sup> Thus, these case studies contribute to the scholarship regarding the emergence of Demsetzian norms in the intellectual property context, and fit well within the growing literature concerning the degree to which intellectual property law should respond to industry differences.<sup>28</sup> They do not, however, consider whether, and to what extent, the circumstances associated with IP's negative space may not be industry-dependent, and they do not say much about what might make any other industry—or any other creator or work—particularly well suited to low-IP treatment. Thus, the time is ripe for a "unified theory" of IP's negative space.

Moreover, despite the growth of literature concerning industries that appear to occupy IP's negative space, the boundaries of negative space itself remain relatively amorphous. Throughout the literature, IP's negative space has been identified more by example than by definition. In order to understand the way negative space arises and functions, and to draw normative conclusions from the existence of negative space in a general sense, we need to know not only what inhabits it, but also how to define its boundaries.

# A. MAP OF IP'S NEGATIVE SPACE

As the first step to understanding what makes a particular type of work well suited to IP's negative space, we must know what kinds of environments qualify as negative space. And in order to know what common threads contribute to the creation and perpetuation of negative spaces, we must know how it happens, as a matter of mechanics, that any areas of potential creation could end up with little or no intellectual property protection. Who decides whether a particular sort of work warrants intellectual property protection?

The answer provides a helpful rubric for conceptualizing negative spaces: once we know who is responsible for creating negative space, we can then begin to examine their motivations for doing so. To this end, I posit that IP's negative space can be divided into three low-IP categories. The first is created by lawmakers. The second is created by intellectual property creators. The third is created by users in cooperation with lawmakers.

<u>Doctrinal No Man's Land</u>: These are areas in which the bulk of creations fall completely or substantially outside the boundaries of intellectual property protection schemes. Doctrinal no man's land is most easily discussed with respect to particular industries. For example, one of the best analyzed areas of doctrinal no man's land is fashion design: most designs are not protected by copyright law

<sup>27.</sup> See, e.g., Fauchart & von Hippel, supra note 9, at 192–96 (describing norms among French chefs); Oliar & Sprigman, supra note 11, at 1812–31(describing norms among stand-up comics); Fagundes, supra note 19 (describing norms among roller derby participants).

<sup>28.</sup> Howard Demsetz, *Toward a Theory of Property Rights*, 57 AM. ECON. REV. 347 (1967). See generally, e.g., Burk & Lemley, supra note 20; Michael W. Carroll, One For All: The Problem of Uniformity Cost in Intellectual Property Law, 55 AM. U. L. REV. 845 (2006) (arguing that IP law must manage the costs imposed by giving patent and copyright owners the same rights); Stacey L. Dogan & Joseph P. Liu, Copyright Law and Subject Matter Specificity: The Case of Computer Software, 61 N.Y.U. ANN. SURV. AM. L. 203 (2005) (arguing that copyright doctrines should be adapted to deal with the special features of the computer software market).

(because they are functional), trademark law (because they have not acquired secondary meaning) or design patent law (because they are unregistered).<sup>29</sup> Other areas of doctrinal no man's land include electronic databases, cuisine, perfume and typeface design.<sup>30</sup>

<u>Areas of IP Forbearance</u>: These are areas in which putative intellectual property holders forego IP exclusivity by declining to seek protection, declining to pursue infringers or engaging in widespread royalty-free licensing. IP forbearance may exist on an industry-wide basis (as in the worlds of stand-up comedy, magic and roller derby pseudonyms) or may occupy partial industries (as in popular music, open source software and the copyleft movement).<sup>31</sup>

<u>Use-Based Carve Outs</u>: These are areas in which users have the opportunity to create negative space by virtue of lawmakers' decisions to exempt certain types of intellectual property use from infringement liability. These include copyright fair use; trademark fair use and nominative fair use; the narrow "experimental use" exceptions to patent infringement; and the statutory exemption for practice of patented medical or surgical techniques.<sup>32</sup> The negative spaces created by use-based carve outs may be industry specific (in, for example, the textbook and medical procedure industries) but are more likely to affect a cross section of intellectual property types.

The boundaries between these categories are more porous than this stark enumeration might suggest. For example, although the fashion industry exists largely in doctrinal no man's land, it also provides an example of IP forbearance. This is because most fashion designs are excluded from the margins of copyright and trademark law, but many are at least theoretically amenable to design patent protection.<sup>33</sup> Thus, most designs remain unpatented by designer choice as well as doctrinal exclusion.

The fashion industry also demonstrates how difficult it is to fix a precise boundary between IP's negative and positive spaces. The blurriness arises because IP's negative space is a *low*-IP zone rather than a *no*-IP zone. Although the fashion industry is considered a prime example of IP's negative space, it is not an IP-free realm. Certain elements of fashion—such as fabric patterns and cosmetic

Raustiala & Sprigman, Piracy Paradox, supra note 5, at 1698–1705.

<sup>30.</sup> See, e.g., Buccafusco, supra note 9, at 1124–27; Fry, supra note 12, at 430–36; Raustiala & Sprigman, Piracy Paradox, supra note 5, at 1770, 1772–73.

<sup>31.</sup> See Fagundes, supra note 19 (discussing roller-derby pseudonyms); Eric E. Johnson, Rethinking Sharing Licenses for the Entertainment Media, 26 CARDOZO ARTS & ENT. L.J. 391 (2008) (discussing copyleft and automatic licenses); Loshin, supra note 10 at 18–24 (discussing magic); Oliar & Sprigman, supra note 11, at 1794–1808 (discussing stand-up comedy). See generally Anderson, supra note 18 (discussing hip hop mixtapes); Benkler, supra note 13 (discussing open source software); Schultz, supra note 17 (discussing jambands).

<sup>32. 15</sup> U.S.C. § 1115 (2006) (defining classic "descriptive" trademark fair use); 17 U.S.C. § 107 (2006) (defining copyright fair use); 35 U.S.C. § 271(e) (2006) (defining experimental use exception); *Id.* § 287(c) (providing an exemption for practice of patented medical or surgical techniques); *see also* New Kids on the Block v. News Am. Publ'g., Inc., 971 F.2d 302, 308 (1992) (defining nominative fair use of a trademark).

<sup>33.</sup> See Raustiala & Sprigman, Piracy Paradox, supra note 5, at 1704–05.

ornaments—are protected by copyright.<sup>34</sup> Trademark law protects not only insignias, but also fashion designs themselves, to the extent that those designs acquire secondary meaning as source identifiers.<sup>35</sup> Design patents protect designs when makers elect to register them.<sup>36</sup>

To some extent, therefore, "negative space" in IP law is a misnomer when compared to its art school namesake: although low-IP environments can be distinguished from high-IP environments, they do not clarify the boundary of IP law. If anything, they obscure it. These areas are particularly ill defined at the margins where IP law could control, but does not or where IP law does control, but only sometimes. To determine what makes an environment "negative space," as opposed to merely an area protected or unprotected by intellectual property law, it will help to explore how each type of low-IP environment arises.

It is important to note that existence in a low-IP zone does not, in itself, render something "negative space." To qualify as existing in IP's negative space, an industry must not only exist in a low-IP environment, but must also thrive there. Thus, here I examine only what creates low-IP environments. In the following Section, I examine what might make something thrive in one. Put differently, here I examine who creates low-IP environments; in the next Section, I examine why they might wish to do so.

# 1. Doctrinal No Man's Land

Recent scholarship has exploded with case studies of industries that thrive in the low-IP conditions of doctrinal no man's land.<sup>37</sup> In these industries, scholars observe, intellectual property law provides minimal, if any, protection for the core product or process that supports the industry, but the lack (or constructive lack) of intellectual property protection seems to promote creation rather than hinder it.<sup>38</sup>

One of the most recognized pockets of doctrinal no man's land—and the origin of the term "negative space"—is fashion design. Oppyright law does not protect against copying most fashion designs because, as clothing, the fashion designs are deemed functional. Thus, copyright protects only those rare elements of a

- 34. See id. at 1699-1700.
- 35. See id. at 1700-04.
- 36. See id.

37. See supra notes 8–19. For the most part, these case studies have examined these low-IP pockets on an industry by industry basis. This stands to reason. It is much more practical, for example, to observe the workings of the fashion industry than it is to assess the effect of copyright's nonfunctionality requirement on creation more generally. See 17 U.S.C. § 101 (2006) (providing copyright nonfunctionality requirement).

- 38. See supra notes 8–19.
- 39. See generally, e.g., C. Scott Hemphill & Jeannie Suk, The Law, Culture, and Economics of Fashion, 61 STAN. L. REV. 1147 (arguing for a limited right against design copying); Raustiala & Sprigman, Piracy Paradox, supra note 5; Lisa J. Hedrick, Note, Tearing Fashion Design Protection Apart at the Seams, 65 WASH. & LEE L. REV. 215 (2008) (cautioning against adding copyright protection for fashion designs).
- 40. 17 U.S.C. § 101 (excluding "useful articles," namely articles "having an intrinsic utilitarian function that is not merely to portray the appearance of the article or to convey information," from

garment's design that are physically and conceptually separable from the garment's function as clothing, such as fabric patterns and logos. (The same is true of other fashion products, such as shoes, handbags, hats and eyeglasses.) Trademark law has a similar nonfunctionality requirement. In addition, because fashion designs are product configurations, trademark law does not protect against copying even the nonfunctional elements unless they have acquired "secondary meaning" as source identifiers. Design patent law can protect fashion designs, assuming they are registered, but even for designs that are sufficiently distinct from the prior art to qualify for design patent protection, registration can take longer than the fashion cycle would permit: by the time a patent issues on a particular design, it can easily have gone out of style. Thus, under U.S. law, fashion designs often fall between the cracks of IP protection.

Furniture designs—aside from those few popular and distinctive enough to acquire secondary meaning as source identifiers—fall through the same cracks. <sup>47</sup> Indeed, although trademark law provides protection for any nonfunctional product configuration that achieves secondary meaning as a source identifier, and design patent law provides protection for the ornamental elements of registered industrial designs, scholars have repeatedly asserted that the field of industrial design is a low-IP environment. <sup>48</sup> These scholars assert that the barriers to receiving

copyright protection).

41. *Id.* ("[T]he design of a useful article . . . shall be considered a [copyrightable] work only if, and only to the extent that, such design incorporates pictorial, graphic, or sculptural features that can be identified separately from, and are capable of existing independently of, the utilitarian aspects of the article.").

- 43. See TrafFix Devices, Inc. v. Mktg. Displays, Inc., 532 U.S. 23, 33 (2001) (explaining that a design element is functional, and thus not protectable by trademark law, if it is "essential to the use or purpose of the article" or if it "affects the cost or quality of the article").
- 44. See Wal-Mart Stores, Inc. v. Samara Bros., Inc., 529 U.S. 205, 212 (2000) (explaining that product configurations cannot be "inherently distinctive" and thus are not protected as trade dress until they have acquired secondary meaning as source identifiers). It is possible for a fashion design to acquire distinctiveness, but in light of the rapid transformation of original ideas into fashion trends of similar looking items, it is quite rare. See Raustiala & Sprigman, Where IP Isn't, supra note 23, at 3 (discussing and demonstrating the difficulty of acquiring secondary meaning even in such signature designs as the "Chanel" jacket and the Christian Louboutin platform pump).
  - 45. See Raustiala & Sprigman, Piracy Paradox, supra note 5, at 1704–05.
- 46. The same is not always true outside the United States. The European Union has a system of low-formality registration that results in "pervasive but unutilized regulation": although designers could take advantage of European protections, they often do not. See Raustiala & Sprigman, Piracy Paradox, supra note 5, at 1741–42. But see Silvia Beltrametti, Evaluation of the Design Piracy Prohibition Act: Is the Cure Worse than the Disease? An Analogy with Counterfeiting and a Comparison with the Protection Available in the European Community, 8 Nw. J. Tech. & Intell. Prop. 147, 148 (2010) (suggesting that European designers' use of the design protection system is growing). Australia and New Zealand have similar, and similarly underutilized, systems. See generally Rob Batty, There Goes My Outfit: Copyright in the Fashion Industry in Australia and New Zealand, 15 New Zealand L. & Bus. Q. 8 (2009).
  - 47. See Raustiala & Sprigman, Piracy Paradox, supra note 5, at 1769.
  - 48. See, e.g., Orit Fischman Afori, Reconceptualizing Property in Designs, 25 CARDOZO ARTS &

<sup>42.</sup> See, e.g., Eliya, Inc. v. Kohl's Dep't Stores, 2006 WL 2645196, at \*8–12 (S.D.N.Y. Sept. 13, 2006) (explaining that shoes, as functional items, are useful articles and their design is therefore not protectable by copyright law).

protection—the functionality bar for copyright, the secondary meaning requirement for trade dress and the registration formality for design patents—are sufficiently stringent as to exempt large swaths of industrial design from protection.<sup>49</sup> These barriers mean that even in the areas in which industrial design does not reside in doctrinal no man's land, it is often the subject of IP forbearance.

Cuisine—both recipes and actual food—also fall into doctrinal no man's land.<sup>50</sup> Most large-scale food companies protect their recipes as trade secrets, but chefs more readily publish or share their recipes.<sup>51</sup> Although such recipes are fixed in a tangible medium of expression, they fall through the cracks of IP protection: the nonfunctional elements of a cookbook—descriptions, and even word choice in instructions—are protectable, but the recipes themselves (which consist of ingredients, proportions and procedures) are functional, and therefore escape copyright protection.<sup>52</sup> And although some recipes could conceivably be patented, most are probably not different from the prior art in a way that would justify patent protection.<sup>53</sup> The tangible and consumable results of these recipes, known as "built" food, also evade protection.<sup>54</sup> Perfumes fall through similar doctrinal gaps as cuisine.<sup>55</sup> Many perfume formulas are protected as trade secrets or patented as chemical formulas, but because the same fragrance can be created using different chemical formulations, reverse engineering of scents is both feasible and

ENT. L. J. 1105, 1116–25 (2008) (arguing that industrial design exists in a doctrinal no man's land). Notable exceptions to this principal are semiconductors and boat hulls, whose industrial designs are subject to sui generis statutory copyright protection. *See* Semiconductor Chip Protection Act of 1984, 17 U.S.C. §§ 901–04 (2006); Vessel Hull Design Protection Act of 1998, 17 U.S.C. §§ 1301–32 (2006).

<sup>49.</sup> See, e.g., Afori, supra note 48, at 1116–25.

<sup>50.</sup> See generally Broussard, supra note 9 (arguing that original recipes created by chefs should be copyrightable); Buccafusco, supra note 9 (finding that the expansion of copyright law to include culinary dishes would be unnecessary and inappropriate in light of the Constitution's goals); Fauchart & von Hippel, supra note 9 (using French chefs as a means to explain the existence and prevalence of social norms-based intellectual property systems, which serve as a complement to and substitute for law-based intellectual property systems); Litman, supra note 9, at 44–46 (providing a cursory look at the relationship between fashion and copyright law, which mirrors copyright law's disconnect with the culinary arts); see also Raustiala & Sprigman, Piracy Paradox, supra note 5, at 1768 (characterizing food as another of intellectual property law's "negative spaces").

<sup>51.</sup> See Buccafusco, supra note 9, at 1149.

<sup>52.</sup> See Fauchart & von Hippel, supra note 9, at 188 (identifying social norms that function as quasi-IP to protect a chef's interests: 1) "a chef must not copy another chef's recipe innovation exactly"; 2) "if a chef reveals recipe-related secret information to a colleague, that chef must not pass the information on to others without permission"; and 3) "colleagues must credit developers of significant recipes [or techniques] as the authors of that information."); see also Buccafusco, supra note 9, at 1151–54 (discussing "culture of hospitality" among chefs paired with strong and internally enforced norms "assigning credit to innovators and blame to plagiarists"). But cf. Lapine v. Seinfeld, 375 Fed. Appx. 81 (2d Cir. 2010) (holding that similar elements among two cookbooks aimed at parents were unprotectable ideas, or "scenes a faire," and thus not protectable under copyright law, and that the books were not confusingly similar as a matter of trademark law).

<sup>53.</sup> See Raustiala & Sprigman, Piracy Paradox, supra note 5, at 1765 n.156 (discussing the patentability of recipes).

<sup>54.</sup> *Id.* at 1765; see also Jessica Nicole Cox, Note, *Why Coca-Cola's Fictional Lawsuit Against Coke Zero for Taste Infringement is a Losing Battle*, 17 J. INTELL. PROP. L. 121, 129–30 (2009) (discussing miniscule potential for protection of flavor as a sensory trademark).

<sup>55.</sup> See Raustiala & Sprigman, Piracy Paradox, supra note 5, at 1772–73.

[34:3

common.56

Another noted type of work that resides in doctrinal no man's land is the electronic database. Under U.S. law, electronic databases are only lightly protected.<sup>57</sup> Although the trade dress and expression of a database interface may be protected by trademark and copyright law respectively, the underlying material is subject to copying without recourse to intellectual property law.<sup>58</sup> Such database information lacks the core elements of trademark and patent law, and is generally understood not to meet the "originality" requirement of copyright law, as it consists of facts, rather than expression.<sup>59</sup> Thus, while the configuration of a database may be protectable, the data inside it are not.<sup>60</sup> Like fashion, electronic databases are subject to a protection regime in Europe, but the U.S. database industry is growing faster than Europe's despite, or perhaps because of, weak U.S. protection.<sup>61</sup> Maps are similar—their expression is often minimal and their facts are readily copied—yet to the extent the map publishing business suffers, it appears to be because of improved interfaces like those of Google Maps, MapQuest and automotive GPS devices, rather than because they lack intellectual property protection.<sup>62</sup>

As databases may reside just outside the "originality" border of copyright law, entertainment idea submissions often reside just outside its "idea/expression" border. Thus, entertainment ideas are easily susceptible to copying without recourse. He there is no shortage of new entertainment ideas or creators striving to break into the entertainment industry. Pitch creators may hope that they are protected by an implied oral contract, although contract claims are subject to possible preemption, and creators often sign such rights away. In other words, despite knowing that their ideas can be "stolen" more or less with impunity, there is

- 58. See id.
- 59. See id.

- 61. See Raustiala & Sprigman, Piracy Paradox, supra note 5, at 1770.
- 62. See Lipton, supra note 12, at 191-92 (discussing thin intellectual property protection for maps).

<sup>56.</sup> *Id.*; see also Smith v. Chanel, Inc., 402 F.2d 562, 568–70 (9th Cir. 1968) (holding that the manufacturer of a perfume may market its perfume as a duplicate of nonpatented, name brand perfume so long as the manufacturer did not misrepresent or create a reasonable likelihood that purchasers would be confused as to source, identity or sponsorship of the manufacturer's product).

<sup>57.</sup> See Raustiala & Sprigman, Piracy Paradox, supra note 5, at 1770.

<sup>60.</sup> See, e.g., Feist Publ'n, Inc. v. Rural Tel. Serv. Co., Inc., 499 U.S. 340, 344 (1991) ("That there can be no valid copyright in facts is universally understood.").

<sup>63.</sup> See Lindsey Weisselberg, Comment, Sui Generis Genius: How the Design Protection Statute Could Be Amended to Include Entertainment Pitch Ideas, 9 J. MARSHALL REV. INTELL. PROP. L. 184, 187–90 (2009) (noting that the entertainment industry suffers from inadequate legal protection for ideas).

<sup>64.</sup> See Stefan Bechtold, The Fashion of TV Show Formats, Workshop on the Law & Economics of Media & Telecommunications (forthcoming June 2011) (regarding the "IP without IP" that has developed surrounding reality show formats and arguing that such formats are subject to a fashion cycle).

<sup>65.</sup> Ia

<sup>66.</sup> *See* Desny v. Wilder, 299 P.2d 257, 263–65 (Cal. 1956) (establishing implied contract theory for idea submission claims); *also see, e.g.*, Selby v. New Line Cinema Corp., 96 F. Supp. 2d 1053 (C.D. Cal. 2000) (holding that state idea submission claim was preempted by federal copyright law).

a steady parade of aspiring creators submitting ideas. Like the other industries above, these creators are not acting from altruism or a sense of community. Nor are they acting solely on the promise of benefit to come when their ideas are developed into expressions; they want to be paid for the unprotectable ideas they submit just as fashion designers want to be paid for the garments they design. Indeed, most expect to be paid as a condition of having their idea developed into a protectable expression. Alternatively, sometimes a producer will use a pitched idea without payment, and sometimes disputes arise over the ownership of ideas. This variety of outcomes demonstrates that the system creates new entertainment ideas without the guarantee of IP ownership.

Typefaces, both electronic and physical, have also received scholarly attention for their idiosyncratic place outside IP protection. It is generally accepted that typefaces, as utilitarian articles, are not subject to copyright. Some typefaces receive trademark protection, but such protection does not necessarily inure in the typeface creator—it goes to the entity that creates a consumer association between the typeface and a particular product or service. For example, a particular typeface is associated with the Coca-Cola brand and another is associated with the Star Trek entertainment franchise. For the most part, however, typefaces live outside IP protection. Scholars have suggested that this low-IP state is beneficial for the development of new typefaces, partly because of a sort of fashion cycle and partly because of network effects that drive typeface popularity. The industry thrives, despite an ever-increasing capacity for copying, through a combination of

<sup>67.</sup> See generally David M. McGovern, What Is Your Pitch?: Idea Protection is Nothing but Curveballs, 15 LOY. L.A. ENT. L. REV. 475 (1995) (discussing various theories under which "idea men" seek compensation for ideas not protected by copyright).

<sup>68.</sup> See id. at 506 ("[T]he policy of paying for good ideas is nothing new for the entertainment industry. Ideas have been, and will continue to be, purchased in the form of completely developed scripts; of undeveloped, abstract ideas; and of moderately developed ideas, fleshed out as 'spec' scripts.").

<sup>69.</sup> Lindsey Weisselberg proposes that a sui generis form of protection, like the Vessel Hull Design Protection Act, 17 U.S.C. §§ 1301–32 (2006), be implemented to protect submitted entertainment ideas. *See* Weisselberg, *supra* note 63, at 187–90. I suggest that submitted entertainment ideas exist in a low-IP equilibrium that does not require change.

<sup>70.</sup> See generally Fry, supra note 12 (arguing against the copyrightability of typefaces in spite of their uniqueness and the innovation behind their development); Lipton, supra note 12 (examining questions surrounding copyright law and the digital typeface industry, traditionally conceived of as occupying IP's "negative space").

<sup>71.</sup> See Fry, supra note 12, at 432–37 (explaining the difficulty of affording copyright protection to typefaces whose functional characteristics cannot practically be severed from their aesthetic characteristics). But see Lipton, supra note 12, at 152–55 (arguing that typefaces should be copyrightable under current law).

<sup>72.</sup> See Lipton, supra note 12, at 183.

<sup>73.</sup> See id.; see also STAR TREK, Registration No. 1,799,214 (filed Feb. 19, 1993) (showing typeface associated with Star Trek). Although such typefaces are outside the scope of this Article, their existence—the fact that some typefaces may have a trademark meaning and others do not—highlights the potentially arbitrary nature of IP's negative space.

<sup>74.</sup> See Fry, supra note 12, at 474–78 (discussing the fashion cycle for typefaces).

technological protections and norms against verbatim copying. 75

Other industries surely reside in doctrinal no man's land, but have not received attention from scholars. These include geographic indicators, craft patterns and blank forms.

## 2. IP Forbearance

IP forbearance occurs when traditional intellectual property protection is available to creators, but those creators commonly opt either to forego protection, or not to pursue infringers. Creators may engage in IP forbearance for a number of reasons, which I will discuss in greater detail below.

One of the most studied areas of IP forbearance is the open source software movement. There is little question that in many instances, the creators of open source software could obtain copyright, and often patent, protection on many of their creations. Yet, open source devotees engage in widespread, royalty-free licensing of their work and enter into contractual arrangements that foster interoperability by forswearing patent rights. In a way, the open source software movement, and its siblings in the creative commons, science commons and copyleft communities, rely heavily on the existence of intellectual property laws. They are based on licenses, and thus cannot exist without some underlying intellectual property right (e.g. copyright and patent) to license. But as a cultural and practical matter, such licenses seem to function as a sort of copyright relinquishment, built on a theoretical foundation of creation and sharing without direct monetary remuneration. Instead of cash, creators are rewarded with such intangibles as recognition, personal pride and the superior product that tends to result from collaborative creation. Similar considerations likely motivate the

<sup>75.</sup> See id. (discussing norms in the typeface industry, including why and how they are enforced); Lipton, *supra* note 12, at 188–91. Both Fry and Lipton note that in the digital age, such norms are at ever-increasing risk of breaking down. As a result, Lipton suggests, typefaces may not remain a "negative space" for long. *Id*.

<sup>76.</sup> Many scholars have written on the benefits of IP forbearance in the context of the free software movement. *See generally, e.g.*, Benkler, *supra* note 13 (arguing that the free software movement is an example of a broader commons based peer production, which has advantages over markets and managerial hierarchies).

<sup>77.</sup> See Raustiala & Sprigman, Piracy Paradox, supra note 5, at 1770–71.

<sup>78.</sup> See, e.g., Free Software Foundation, Inc., GNU General Public License (June 29, 2007), GNU OPERATING SYS., http://www.gnu.org/copyleft/gpl.html; News Press Release: Microsoft and Linspire Collaboration Promotes Interoperability and Customer Choice (June 13, 2007), MICROSOFT, http://www.microsoft.com/presspass/press/2007/jun07/06-13LinspirePR.mspx?rssfdn=Press%20 Releases (regarding Microsoft/Linux collaboration, which includes a patent forbearance pact).

<sup>79.</sup> See Rochelle Cooper Dreyfuss, Does IP Need IP? Accommodating Intellectual Production Outside the Intellectual Property Paradigm, 31 CARDOZO L. REV. 1437, 1449 (2010) [hereinafter Dreyfuss, Does IP Need IP?] (noting that creative commons and similar licenses are premised on the existence of underlying intellectual property protection).

<sup>80.</sup> See Yochai Benkler, Sharing Nicely: On Shareable Goods and the Emergence of Sharing as a Modality of Economic Production, 114 YALE L.J. 273, 321–30 (2004) (discussing studies of motivation among creators of shared works).

<sup>81.</sup> See id.

legion of bloggers, essayists, home video makers, photographers, wiki contributors and others who post their works on the Internet without concern for copying, or even to encourage viral copying, of their work.<sup>82</sup>

Many academics in both science and the humanities also thrive without exercising intellectual property rights.<sup>83</sup> That is not to say that scholars do not benefit financially from their works' eligibility for intellectual property protection. Academic scientists, for example, may benefit from their schools' Technology Transfer departments, which obtain patents on researchers' work and, in turn, license those patents to fund further academic research.<sup>84</sup> But such benefits are indirect, and academics have long inhabited a world in which plagiarism (i.e., copying expressions or unprotectable ideas without attribution) has been a greater concern than infringement (i.e., copying expressions or inventions without payment). 85 Indeed, although academic scientists may be pressured by their own institutions to create research suitable for patenting, the acquisition of such exclusive rights may come at a social and professional cost to the scientist in the broader community.<sup>86</sup> Academics in the humanities routinely post their works for no cost download at sites like the Social Science Research Network ("SSRN"). Academic presses—which rely on book and journal sales for their profits and thus, one imagines, might wish to prevent copying—freely countenance not only academic photocopying and liberal quotation as required by copyright fair use, but also often permit reposting on such free download sites. To date, for example, only a small proportion of the articles posted on SSRN have a fee associated with download.<sup>87</sup> Given the importance of recognition in academia, one can easily see why academics would wish to disseminate their works at no cost. Publishers may

Researchers may also have penalties imposed on them by the research community if patenting of a particular discovery is viewed as a violation of the communalism norm that requires making research results freely available to the community . . . [Such] sanctions . . . may include loss of esteem, but probably more importantly might include denial of the scarce resources of research funding and attention.

Id.

<sup>82.</sup> See Garon, supra note 15, at 116–17 (explaining benefits, including and extending beyond monetary benefits, of open source licensing).

<sup>83.</sup> See generally Strandburg, supra note 16; Fiona Murray et al., Of Mice and Academics: Examining the Effect of Openness on Innovation (Nat'l Bureau of Econ. Research, Working Paper No. 14819, 2009), available at http://www.nber.org/papers/w14819.pdf.

<sup>84.</sup> See Strandburg, supra note 16, at 108 (discussing benefits and shortcomings of technology transfer as a possible funding source for academic scientists).

<sup>85.</sup> See Catherine L. Fisk, Credit Where It's Due: The Law and Norms of Attribution, 95 GEO. L.J. 49, 61–62 (2006). Several scholars have observed an erosion of negative space in academic science since the passage of the Bayh-Dole Act, which permitted universities to profit from the inventions of academics and, in turn, permitted universities to steer academics toward patent protection rather than sharing norms. See Arti Kaur Rai, Regulating Scientific Research: Intellectual Property Rights and the Norms of Science, 94 Nw. U. L. Rev. 77, 109 (1999); Strandburg, supra note 16, at 94. This erosion does not undermine the usefulness of studying academic science as a negative space, but it does highlight (1) the fragility of negative spaces and (2) the complications to negative space that arise when intellectual property creators and intellectual property owners have different priorities.

<sup>86.</sup> See Strandburg, supra note 16, at 108–09. Strandburg writes:

<sup>87.</sup> See Gregg Gordon, Fee Based Partner Publications, Soc. Sci. Res. Network, http://ssrn.com/update/general/partners.html (last visited Feb. 5, 2011).

be driven by similar needs for scholarly attention and prestige.<sup>88</sup>

Several other categories of artists and performers have also received scholarly attention as denizens of IP's negative space by dint of IP forbearance. As a doctrinal matter, stand-up comedians' jokes and routines are literary works and are protected under copyright law when they are fixed in a tangible medium of expression. As a practical matter, however, copyright law "does not play a significant role in the market for stand-up comedy." Comedians generally follow industry norms against copying, and when they do not, they may be socially and professionally punished within the comedic community, but they do not get sued. 90 Similarly, magicians—although their tricks and performances are capable of protection under patent law and may be protected as trade secrets—prefer to rely more on anticopying and secrecy norms to protect their innovations than they do on IP doctrines. 91 Tattoos and other pictorial body art are copyrightable works and are frequently copied, but are seldom the subject of copyright disputes. 92 Jambands also routinely permit bootleg recording of their performances, even going so far as to permit bootleggers to run their recording equipment through the sound board, forgoing the potential profit from exclusive sales of live recordings when bootleggers sell or share copies of their live recordings. 93 In addition to demonstrating their own IP forbearance, the willingness of jambands to have their performances bootlegged also facilitates—or even induces—infringement of works owned by record companies, but to date, there appear to be few repercussions. The implication is that record companies consent to, or at least do not categorically object to, bootlegging behavior in the jamband community.<sup>94</sup>

<sup>88.</sup> See Strandburg, supra note 16, at 95 ("scientists are more likely to respond to opportunities for greater scientific productivity and autonomy than to wealth maximization per se"), 101 ("most scientific researchers work collaboratively . . . [to be] part of the ongoing conversation between researchers. . . . Participating in this conversation means getting the attention of other researchers"); David C. Yamada, Therapeutic Jurisprudence and the Practice of Legal Scholarship, 41 U. MEM. L. REV. 121, 130–31 (Fall 2010) (describing the "ranking" instinct that may encourage publishers to permit free distribution of works through services that tally and rank downloads of articles).

<sup>89.</sup> Oliar & Sprigman, *supra* note 11, at 1798 (discussing norms in stand-up comedy).

<sup>90.</sup> *Id.*; see also Interview with John Rogers, Former Stand-up Comedian, in Van Nuys, CA (Oct. 23, 2010) (relating story in which several Canadian comics informed Rogers that another comic had been performing material similar to Rogers' own, and how, without Rogers' prior knowledge, the community had ostracized that comic as a result).

<sup>91.</sup> See Loshin, supra note 10, at 130–34 (discussing the flaws of patent and trade secret law, respectively, in protecting magic tricks).

<sup>92.</sup> See Thomas F. Cotter & Angela M. Mirabole, Written on the Body: Intellectual Property Rights in Tattoos, Makeup, and Other Body Art, 10 UCLA ENT. L. REV. 97, 103 (2003) (describing original works embodied in tattoos as seemingly copyrightable); Jordan S. Hatcher, Drawing in Permanent Ink: A Look at Copyright in Tattoos in the United States, Soc. Sci. Res. Network 7–19 (Apr. 15, 2005), http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=815116 (discussing issues in copyrighting tattoos).

<sup>93.</sup> See Schultz, supra note 17, at 676–77. Of course, outside the jamband culture, musical performers commonly profit from live recordings—some, like the band Pearl Jam, release for-profit box sets of bootleg style recordings. See Darren Davis, Breaks Its Own Chart Record, YAHOO! NEWS (Mar. 7, 2001, 4:00 PM), http://new.music.yahoo.com/pearl-jam/news/artist-name-pearl-jam-id-1020778-breaks-its-own-chart-record--12055527 (detailing commercially released Pearl Jam bootlegs).

<sup>94.</sup> Id. (describing jambands' practice of allowing and facilitating tapers); see also Symposium,

Scholars have also observed that, as a matter of existing law, there is nothing standing in the way of protection for sports "moves" and techniques. 95 although innovative sports maneuvers such as the curve ball, and the "Fosbury flop" high jump technique were all original and game changing when first created, none is protected by intellectual property law. 96 Under the doctrine articulated in Bilski v. Kappos, any original sports maneuver could be eligible for patent protection as a business method patent—assuming the invention is a process of playing a sport that lacks invalidating prior art—yet athletes generally do not seek such protection. 97 Patent law is not the only possible avenue for protection: any sports move that is fixed in a tangible medium of expression (a task as easy as making a home video) can be protected by copyright law, and nonfunctional moves capable of serving as source identifiers can be protected as trademarks. 98 This is a rare, but conceivable scenario; take, for example, the distinctive look of the "Ickey shuffle" touchdown celebration dance. Unsurprisingly, athletes and dancers persist in creating new techniques, but rarely take advantage of potential protections for their moves. When they do, it receives attention. See, for example, the hubbub over the patent "Method of Swinging on a Swing," or over Bikram Choudhury's copyright in the specific sequence of yoga moves he developed.<sup>99</sup> Why? Scholars have proposed that good sportsmanship and artistic integrity require that when a new technique is developed, anyone capable of performing it be permitted to do so. 100 And most of the time, sharing is good for the industry and for those who

Intellectual Property and Social Justice, 40 U.C. DAVIS L. REV. 1275, 1300 (2007). Keith Aoki said:

The [Grateful] Dead were the world's largest grossing touring band, and they were not really into pushing vinyl. . . . For fans seeking the Dead experience, seeing the Grateful Dead live was the only way to scratch that itch. On top of it, the Dead, allowing fans to plug their recorders into the main mixing board so fans could take away high-quality recordings of the live Dead . . . shows a band can make a lot of money by offering something other than a commodity-widget, i.e., a record, for sale.

Id.

- 95. See generally Kieff et al., supra note 14. See also Magliocca, supra note 14, at 875–76; Raustiala & Sprigman, Piracy Paradox, supra note 5, at 1774.
- 96. See Rochelle Cooper Dreyfuss, Are Business Method Patents Bad for Business?, 16 SANTA CLARA COMPUTER & HIGH TECH. L.J. 263, 276 (2000) [hereinafter Dreyfuss, Business Method Patents] ("What, for example, if Candy Cummings had patented the curve ball or Dick Fosbury, his high jump 'flop?"").
  - 97. Bilski v. Kappos, 130 S. Ct. 3218, 3228–29 (2010).
- 98. Kieff et al., *supra* note 14, at 776–81 (discussing copyright protection for sports moves), 781–84 (discussing trademark protection for sports moves).
- 99. Method of Swinging on a Swing, U.S. Patent No. 6,368,227 (filed Nov. 17, 2000); see Jeff Hecht, Boy Takes Swing at US Patents, NEW SCIENTIST (Apr. 17, 2002, 10:23 AM), http://www.newscientist.com/article/dn2178-boy-takes-swing-at-us-patents.html (the patent, obtained by a five year old inventor, "has generated a mixture of chuckles and frustration at an overworked patent system unable to catch absurd applications"); Press Release: Bikram Obtains Copyright Registration for His Asana Sequence, Bikram Yoga (July 30, 2003), http://www.bikramyoga.com/press/press19.htm (outlining protections obtained and legal victory against infringer); William Patry, Yoga and Copyright, PATRY COPYRIGHT BLOG (Aug. 22, 2005), http://williampatry.blogspot.com/2005/08/yoga-and-copyright.html (describing Bikram's claims to protection in his yoga sequences as "baloney").
  - 100. See Magliocca, supra note 14, at 876-77, 891 n.64 (discussing sportsmanship norms and

created the moves. If a move is distinctive enough, copying by others will bring notoriety to the originator, and permitting copying satisfies fans who would likely lose interest if one athlete, performer or team could hold a monopoly on a key aspect of the sport.<sup>101</sup>

Other, less commented on areas in which IP forbearance is common include briefs and other legal documents; hairstyles, which, much like tattoos, are likely subject to copyright protection but have seldom if ever been the subject of ownership disputes; and fireworks displays, which are amenable to copyright protection but see only rare spats over ownership. 102

## 3. Use-Based Carve Outs

In a number of instances, Congress and the courts have explicitly exempted certain otherwise infringing activities from liability or suit. For example, 17 U.S.C. § 107, which defines fair use in copyright, creates a whole class of activities that would infringe copyright, but do not by operation of the statute. These include, for example, reprinting materials for purposes of comment, criticism or news reporting; copying materials for classroom use; or excerpting materials for scholarly use. The same token, 35 U.S.C. § 271(e)(1) and the Court of Appeals for the Federal Circuit's ruling in *Madey v. Duke University* outline two very narrow "experimental use" exceptions to patent infringement, which permit certain kinds of otherwise infringing drug development activities and activities by people who are motivated purely by curiosity. Trademark's fair use doctrine, 15 U.S.C. § 1115, permits someone to use a descriptive mark in a descriptive manner, even if that use would be likely to create otherwise impermissible consumer confusion. Other doctrinal carve outs do not render certain activities

contractual limits imposed on athletes by sports leagues); see also Kieff et al., supra note 14, at 774–76 (same).

<sup>101.</sup> Magliocca, *supra* note 14, at 876–77; *see also* Dreyfuss, *Business Method Patents*, *supra* note 96, at 276.

<sup>102.</sup> See Shubha Ghosh, Copyright as Privatization: The Case of Model Codes, 78 TUL. L. REV. 653, 721 (2004) (discussing copyrightability of legal complaints and legal briefs); Lydia Pallas Loren, The Pope's Copyright? Aligning Incentives with Reality by Using Creative Motivation to Shape Copyright Protection, 69 LA. L. REV. 1, 8–11 (2008) (discussing model legal codes, portrait photography, advertisements, all of which are not motivated by protection that copyright affords); Raustiala & Sprigman, Piracy Paradox, supra note 5, at 1772, 1774 (discussing the copying of celebrity hairstyles, magic tricks and fireworks displays).

<sup>103. 17</sup> U.S.C. § 107 (2006).

<sup>104.</sup> *Id*.

<sup>105.</sup> Madey v. Duke Univ., 307 F.3d 1351, 1361–63 (Fed. Cir. 2002) (describing experimental use exception when solely "for amusement, to satisfy idle curiosity, or for strictly philosophical inquiry").

<sup>106. 15</sup> U.S.C. § 1115; KP Permanent Make-Up, Inc. v. Lasting Impression I, Inc., 543 U.S. 111, 121–22 (2004). The Court writes:

<sup>[</sup>S]ome possibility of consumer confusion must be compatible with fair use . . . . The common law's tolerance of a certain degree of confusion on the part of consumers followed from the very fact that in cases like this one an originally descriptive term was selected to be used as a mark, not to mention the undesirability of allowing anyone to obtain a complete monopoly on use of a descriptive term simply by grabbing it first.

noninfringing, but severely curtail the remedies associated with infringement. For example, 35 U.S.C. § 287(c) eliminates the right of civil action, and the availability of an injunction or damages as remedies against a medical practitioner who performs a patented medical or surgical activity. <sup>107</sup>

The full effects of these carve outs are beyond the scope of this Article. For this Article's purposes, the carve outs are worth noting because they give users the ability to create negative spaces. This does not happen automatically for every fair or experimental use—although, in a sense, every time a user takes advantage of one of these carve outs to copy a work, use a trademark or practice a patent, the user reduces the exclusivity benefit for the intellectual property owner. Rather, users can create low-IP spaces when their collective use of carve outs moves a type of work or invention out of the zone of intellectual property protection.

More research is required to know whether, and to what extent, use-based negative spaces actually arise. There are two areas, however, where one can safely project the emergence of such negative spaces: scholarly writing and medical techniques. In both of these areas, a significant (and possibly predominant) proportion of uses would infringe, but are exempted by law. <sup>108</sup> As a result, creators of such works and inventions know that intellectual property law provides few opportunities for exclusivity based benefit. Yet they continue to create, and the carve outs provide the additional opportunity for their users to create by building on the original works and inventions.

Indeed, it is reasonable to believe that use-based carve outs could create negative spaces. Although both of the above carve outs can be traced to the promotion of a public interest—free speech and public health, respectively—their very existence is premised on the philosophy that they enhance, rather than detract from, creation and innovation. They presume that intellectual property protection not only encourages creation through incentives, but could also stifle creation by limiting access to the raw materials of creation, i.e., the works that came before. Each carve out depends on the assumption that certain restrictions on IP protection will not significantly damage the potential for future innovation. If Congress believed, for example, that surgeons would stop innovating if they could not receive patent damages for their innovations, Congress could not have, in good conscience, enacted the carve out. Put differently, Congress and the courts have concluded that the incremental increase in incentive from protecting these areas would come at too steep a price to the public good and to further creation.

Is Congress's faith in continued creation warranted? It appears so. There is no shortage of scholarly writings or medical techniques. Nor, in the broader sense, is there a shortage of copyrighted works, descriptive trademarks and patented inventions, despite the existence of fair use and experimental use carve outs. Of course, enacting the carve outs was an uncontrolled experiment, so we can never be

Id.

<sup>107. 35</sup> U.S.C. § 287(c).

<sup>108. 17</sup> U.S.C. § 107 (categorizing many scholarly uses of copyrighted material as fair use); 35 U.S.C. § 287(c) (exempting infringement of medical technique patents from liability).

sure whether they have blunted creation. There is a slim possibility that scholars write fewer journal articles because they will not be remunerated when those works are reproduced by other academics, or that doctors devise fewer new medical techniques because they cannot extract license fees from other doctors who practice them. But assuredly, despite these carve outs, innovation and creation continue to flourish. Indeed, the weight of scholarship argues that expanding doctrines such as fair use in copyright and patent's experimental use exception would promote creation and invention. <sup>109</sup>

# II. WHAT MAKES A TYPE OF WORK WELL SUITED TO IP'S NEGATIVE SPACE?

Having completed the first step of examining what creates low-IP environments, we now turn to the question of what might make something thrive in one. Although there has been a great deal of scholarly discussion about various negative space environments, relatively little effort has been made to tie these areas to each other in anything but name. Is each area unique? With the exception of the doctrinal carve outs, each area of negative space grew more or less organically from the law, norms and business realities of each industry. But it is not enough to say that each area is idiosyncratic, since each must have traits that make it conducive to the growth of negative space. What are these traits?

The easiest and broadest answer is that in every area of negative space, creators are not primarily motivated by the prospect of IP protection. Although copying may deprive individual creators of licensing income, they persist in creating without the reward of legally enforced exclusivity. Indeed, not only do creators in negative space operate without the assurance of traditional protection, but also they see themselves as benefitting in some way from the lack. This is not to say that in every case, the lack of protection has maximized creation. Even in negative space industries, increased protection might lead to increased creation. Nor does it necessarily mean that the lack of protection has uniformly led to an optimal level of creation. Nonetheless, vibrant creation in each area—particularly those influenced by IP forbearance—implies that legally enforcing exclusivity would impose a cost on creators that would exceed the benefit of exclusivity to those creators.

<sup>109.</sup> See, e.g., Pierre N. Leval, Toward a Fair Use Standard, 103 HARV. L. REV. 1105, 1107–10 (1990) (arguing that the goal of copyright is the utilitarian furtherance of creation and that exceptions to absolute rights, such as fair use, also promote this goal); Janice M. Mueller, The Evanescent Experimental Use Exemption from United States Patent Infringement Liability: Implications for University and Nonprofit Research and Development, 56 BAYLOR L. REV. 917, 921 (2004) ("Most innovation necessarily builds on that which came before. Unrestricted use of the earlier innovation for experimental purposes can only enhance the process of creating new and improved inventions."). See generally, e.g., Katherine J. Strandburg, What Does the Public Get? Experimental Use and the Patent Bargain, 2004 WIS. L. REV. 81 (2004) (arguing that a well designed experimental use exception would promote invention).

<sup>110.</sup> See Dreyfuss, Does IP Need IP?, supra note 79, at 1460–62 (discussing the potential differences between maximal creation and optimal creation).

However universal, this answer is largely tautological: it posits, in essence, that negative space industries benefit in some way from the absence of IP protection (i.e., thrive without IP protection). In addition, the answer begins to break down as we attempt to parse exactly what the benefit is. In some cases, like fashion, the advantage may be perpetuation of the fashion cycle. In others, like academic research or open source software, it may be free access to the raw materials of creation and a product improved by the input of multiple creators. <sup>111</sup> This answer is unsatisfying as we attempt to distinguish what makes an industry well matched to the low-IP environment. We need to dig deeper.

## A. SOME HELPFUL NON-ANSWERS

A number of the case studies on negative space have identified the traits or idiosyncrasies responsible for creating and/or perpetuating low-IP equilibria in the industries discussed. These are helpful in explaining what keeps many negative spaces "negative" rather than devolving (or evolving) into high-IP environments, but they do not provide a unified theory of what makes a type of work well suited to negative space.

# 1. The Fashion Cycle

Kal Raustiala and Christopher Sprigman attribute the low-IP equilibrium in the fashion industry to the fashion cycle. Specifically, they argue that the fashion industry benefits from copying through the joint operation of what they refer to as "anchoring" and "induced obsolescence." According to their theory, fashion copying is instrumental in creating trends (anchoring) and saturating a market with similar goods until they become unstylish (induced obsolescence), thereby driving consumers' need for new, emerging styles which will, in turn, be copied and become unstylish. <sup>113</sup>

For the fashion industry, Raustiala and Sprigman's proposition makes a great deal of sense. Many have attempted to argue in recent years that fashion designs should receive greater protection, but they proceed largely from an assumption that unremunerated copying is harmful.<sup>114</sup> Although this may be true for individual creators, the fashion cycle appears to offset that harm on an industry wide scale.<sup>115</sup> There seems little doubt that the fashion cycle blunts at least some of the ill effect that might arise as a result of fashion's location in doctrinal no man's land.

Why, then, does the fashion cycle alone not provide a unified theory of negative space? The fashion cycle cannot take sole credit for every negative space

<sup>111.</sup> See Benkler, supra note 13, at 414; Strandburg, supra note 16, at 103.

<sup>112.</sup> See supra notes 8–19.

<sup>113.</sup> *Id.* at 1718–34.

<sup>114.</sup> See generally, e.g., Beltrametti, supra note 46; Hemphill & Suk, supra note 39.

<sup>115.</sup> See Raustiala & Sprigman, Revisited, supra note 8, at 1209 ("Fashion piracy may be parasitic on original designs, but it is a parasite that does not kill its host: though it may weaken individual designers it also, paradoxically, strengthens the industry and drives its evolution.").

338

industry—but neither can many of the "commonalities" discussed below. 116 In logic terms, no single factor discussed below is necessary for the creation of negative space. More importantly, the fashion cycle is also not *sufficient* for suitability to negative space. Not every industry with a fashion cycle is, nor necessarily should be, a negative space industry. Raustiala and Sprigman argue that the fashion cycle drives fashion because clothing and accessories are positional goods—but in some ways, the objective of trademark law is to permit anything to be a positional good. 117 In a variety of contexts (cars, cell phones), the fashionability of marks drives consumers' purchases independent of underlying product quality. 118 Yet we do not see low-IP equilibria emerging in these industries. In addition, both anchoring and induced obsolescence are present in other industries that depend heavily on IP protection—or at least profess to—like the popular music industry and studio television industry. In both industries, output tends to conform to trends—see, for example, the rise and fall of "grunge rock" in the wake of Nirvana and the profusion of supernatural dramas that followed in the footsteps of "Lost"—and the fashion cycle drives popularity. 119 At some point, boy bands became passé and grunge rock became hackneyed, but the quality of product didn't change, only the degree of market saturation.

Thus, while some negative space industries are subject to the fashion cycle, it is helpful to consider whether there are other, more universal traits that may also perpetuate the existence of negative space in fashion.

# 2. Norms

It has long been recognized that norms play a significant role in governance, often stepping into the shoes of positive law where none exists. In the early 1990s, Elinor Ostrom and Robert Ellickson each described the use of social norms, common property regimes and cooperative institutions in governing fisheries, grazing pastures, irrigation systems and livestock ranches. By the same token, norms regulate many of IP's negative spaces. These norms may make it possible for creators to function without intellectual property protection, or encourage

<sup>116.</sup> Rochelle Dreyfuss, *Fragile Equilibria*, VA. L. REV. BRIEF (Jan. 22, 2007), http://www.virginialawreview.org/inbrief.php?s=inbrief&p=2007/01/22/dreyfuss [hereinafter Dreyfuss, *Fragile Equilibria*] (pointing out that the fashion cycle is not universally applicable to low-IP industries). It should be noted that, as a matter of causality, Raustiala and Sprigman do not contend that the fashion cycle "caused" intellectual property law to be weak in the fashion industry. Rather, they argue that, by virtue of the fashion cycle, the fashion industry has benefited from the existence of a low-IP environment. Raustiala & Sprigman, *Piracy Paradox*, *supra* note 5, at 1733.

<sup>117.</sup> See generally Barton Beebe, Intellectual Property Law and the Sumptuary Code, 123 HARV. L. REV. 809, 848–59 (2010) (arguing that trademark law has failed in its antidilution objectives); Raustiala & Sprigman, Piracy Paradox, supra note 5, at 1776.

<sup>118.</sup> Beebe, *supra* note 117, at 831, 837–38 (describing the decoupling of trademark elitism and product quality).

<sup>119.</sup> Raustiala & Sprigman, Piracy Paradox, supra note 5, at 1776.

<sup>120.</sup> See generally ELINOR OSTROM, GOVERNING THE COMMONS: THE EVOLUTION OF INSTITUTIONS FOR COLLECTIVE ACTION (1990); Robert Ellickson, Of Coase and Cattle: Dispute Resolution Among Neighbors in Shasta County, 38 STAN. L. REV. 623 (1986).

creators to opt out of intellectual property ownership or enforcement, or both. Some mimic intellectual property, like the trademark-style norms of roller derby; others surpass the restrictions of traditional intellectual property, like the norms of stand-up comedy, which discourage copying of ideas as well as expressions. <sup>121</sup> Some encourage sharing and collaboration, like the conventions of the open source community; others focus on attribution, like those governing the creative commons and academic science communities. <sup>122</sup> Still others discourage creators from pursuing infringers, like the "culture of hospitality" in the realm of creative cuisine or the culture of sportsmanship. <sup>123</sup>

In one sense, therefore, whether an industry is amenable to governance by norms is relevant to whether it is well suited to occupy IP's negative space. If an industry is capable of internal regulation through norms, it has less need for intellectual property protection, and norms can facilitate the creation of negative space through IP forbearance. Certainly, the breakdown of IP forbearance norms is associated with an industry's departure from IP's negative space. <sup>124</sup> But in another sense, norms are neither necessary nor sufficient for the creation of negative space. A negative space can arise without governing norms, if independent creators are sufficiently interested in creating without intellectual property protection. Indeed, a significant portion of the fashion industry—in many ways the quintessential negative space—is not governed by norms. Low-end copyists do not consider themselves to be part of the "high fashion" community, and thus do not consider themselves to be ruled by the fashion industry's norms, and yet their activities have a significant role in perpetuating fashion's negative space through the fashion

<sup>121.</sup> See Fagundes, supra note 19 (explaining norms to protect derby names); Oliar & Sprigman, supra note 11, at 1812 (discussing norms in stand-up comedy).

<sup>122.</sup> See Benkler, supra note 13, at 431–44; Strandburg, supra note 16, at 114–15; Creative Commons Licenses, CREATIVE COMMONS, http://creativecommons.org/about/licenses/ (last visited Feb. 5, 2011).

<sup>123.</sup> Buccafusco, *supra* note 9, at 1151 (describing a "culture of hospitality" that would lead to forbearance even if intellectual property protection were available); Kieff et al., *supra* note 14, at 774–76 (describing cultural forces that discourage patenting sports movies); Magliocca, *supra* note 14, at 876–77 (same).

<sup>124.</sup> Dreyfuss, Fragile Equilibria, supra note 116. Academic scientists' culture of sharing has eroded since the passage of the Bayh-Dole Act made protection profitable for academic inventors; financial analysts have begun seeking patent protection for tax (and other) strategies since the law has become friendlier to business method patents; and roller derby participants have begun registering their pseudonyms as trademarks. Fagundes, supra note 19, at 22 (noting that at least one roller derby league has begun registering pseudonyms as trademarks); Arti Kaur Rai, Regulating Scientific Research: Intellectual Property Rights and the Norms of Science, 94 Nw. U. L. REV. 77, 119 (1999) (documenting partial breakdown of sharing norms following passage of Bayh-Dole Act). In each of these areas, renegades have determined that increased IP protection would be beneficial, and others have followed suit. Rochelle Cooper Dreyfuss has identified a number of changed circumstances likely to contribute to the breakdown of low-IP equilibria in IP forbearance communities: an increase in a product's profitability may lead to "bounded altruism" on the part of putative IP holders; one renegade may break the dam of protection or litigation, leading to "tipping" and "herding" by others who do not want to miss out on potential profit; "failed leadership" may lead to the breakdown of beneficial norms; and "technological change" such as easier copying may make it more beneficial to extract value from protection or litigation than from less formal forms of protection. Dreyfuss, Fragile Equilibria, supra note 116.

cycle.<sup>125</sup> Conversely, not every industry capable of being governed by norms is necessarily well suited to IP's negative space. If that were true, we might expect that boat hull shapes and tax shelter innovations would have remained in IP's negative space—and we might expect to see negative space overtake the entire software, feature film and music industries, rather than merely the open source and creative commons portions of them.

Norms and customs must arise from somewhere. They do not spring from the void; rather, they exist to enforce a state of affairs that is favorable for a critical mass of the community to which they apply. Thus, while norms help to explain how negative space systems operate and how they can continue to exist even in the face of harm to individual creators, we cannot give norms credit, or blame, for making a particular type of work well suited to low-IP treatment. Rather, norms step in to fill the void when intellectual property protection is, for some reason, unavailable or undesirable.

# B. IDENTIFYING COMMONALITIES

Perhaps the chief benefit of having created the taxonomy above is that it helps to identify *who* is responsible for creating negative space. Specifically, it tells us that negative space is created by lawmakers and creators: when an area of negative space falls into doctrinal no man's land, it has been placed there by lawmakers. When an area of negative space falls into a zone of IP forbearance, it has been placed there by creators. And—to break the pattern—when an area of negative space falls into a use-based carve out, it has been placed there both by the lawmakers who made the carve out, and the creators who prefer creation, even when protection is uncertain. To determine what negative space works have in common, we can ask, *why* would these constituencies prefer nonprotection to protection?

As a general matter, every type of work that resides in negative space is one for which, for lawmakers or creators, exclusivity is "not worth it." In doctrinal no man's land, this means that legislators or courts have determined that the potential increase in productivity that might result from protectability is outweighed by the value of free access to a given type of invention or creation. In IP forbearance

340

<sup>125.</sup> See Fauchart & von Hippel, supra note 9, at 198 (noting that mass merchandisers are not governed by the norms systems of the high fashion industry).

<sup>126.</sup> There is vibrant scholarly debate on the origin of norms, but scholars tend to agree that they arise through some alchemical combination of rational and societal factors. See, e.g., ROBERT ELLICKSON, ORDER WITHOUT LAW: HOW NEIGHBORS SETTLE DISPUTES 167 (1991) ("[M]embers of a close-knit group develop and maintain norms whose content serves to maximize the aggregate welfare that members obtain in their workaday affairs with one another."); Dennis Chong, Values Versus Interests in the Explanation of Social Conflict, 144 U. PA. L. REV. 2079, 2101 (1996) ("No individual has the resources to evaluate thoroughly all of the choices he must make, so by conforming to the status quo he takes advantage of the cumulative wisdom of the community. In effect, he operates on the assumption that existing practices have survived the trial-and-error test."); Amitai Etzioni, Social Norms: Internalization, Persuasion, and History, 34 LAW & SOC'Y REV. 157, 171–75 (2000) (reviewing scholarship on norms formation).

systems, this means that creators believe the expense of seeking protection or enforcement would outweigh the benefit that would result, or that the value of free access to others' creations would exceed the value of exclusivity in one's own.

As a result, the boundaries of negative space are seldom entirely contiguous with industry boundaries. Lawmakers have created doctrinal no man's land and facilitated the creation of use-based carve outs not through laws designed to exclude certain industries from protection, but rather through the application of generalized bases for nonprotection that, coincidentally, exempt certain types of works from protection. 127 For example, fashion designs most often fall between the cracks of IP protection because Congress has determined that copyright law should not protect functional items, trademark law should protect only product configurations whose nonfunctional features serve a source identifying function and design patents should require examination and filing formalities. 128 But quite a few fashion designs are protected under trademark and design patent law, and many have been the subject of IP litigation. 129 Likewise, the boundaries of IP forbearance are also not contiguous with industry boundaries. For example, although the open source movement is a powerful force in software development, there are still many large and small scale software developers who seek copyright and patent infringement, and pursue infringers. <sup>130</sup> Thus, in analyzing what makes a type of creation well suited to either doctrinal no man's land or an IP forbearance environment, we need to look not to the traits of any given industry or industries, but to the more generalized circumstances that would lead lawmakers and creators to believe that the benefits of reduced intellectual property protection outweigh the drawbacks.

The boundaries of IP doctrine are drawn by lawmakers, ostensibly in the public interest. These boundaries govern what falls into doctrinal no man's land, and what becomes negative space through use-based carve out. As a result, both doctrinal no man's land and use-based carve outs should arise when lawmakers conclude that the public would benefit more from reduced protection than it would from exclusivity. This will occur in three overlapping situations: (1) when lawmakers observe that creation is significantly driven by something other than exclusivity-based financial gain; (2) when lawmakers believe that granting exclusivity would compromise other creation or innovation; and/or (3) when the public interest in free access to information is higher than the danger of reduced production from reduced incentives.

Interestingly, these same overlapping considerations—with one addition—are instrumental in driving IP forbearance. A culture of IP forbearance arises when

<sup>127.</sup> But see 35 U.S.C. § 287(c) (2006) (excluding patents in the medical procedure industry from damages for infringement).

<sup>128.</sup> See Raustiala & Sprigman, Piracy Paradox, supra note 5, at 1698–1705.

<sup>129.</sup> See, e.g., Wal-Mart Stores, Inc. v. Samara Bros., Inc., 529 U.S. 205, 213 (2000) (holding that fashion designs may be subject to trademark protection if they obtain secondary meaning as source identifiers); L.A. Gear, Inc. v. Thom McAn Shoe Co., 988 F.2d 1117, 1124–26 (Fed. Cir. 1993) (holding that athletic shoes infringed design patent in L.A. Gear's "Hot Shots" design).

<sup>130.</sup> See Magliocca, supra note 14, at 901.

influential creators (or intellectual property owners or controllers) would benefit more from leaving their works vulnerable to copying than they would from seeking license fees. Specifically, this occurs (1) when creation is significantly driven by something other than exclusivity based financial gain; (2) when creators rely on the works or inventions of others to create their own products; (3) when creators' interest in free access to their creations is higher than their interest in exclusivity; and/or (4) when creators prefer to reinvest scarce resources in further creation than in protection or enforcement of intellectual property. This latter condition is most likely to occur when the financial or personal cost of obtaining protection or pursuing infringers exceeds the benefit of exclusivity or damages under current intellectual property law.

Combining these, we can settle on four overlapping sets of conditions that are likely to make a work well suited to low-IP treatment under current law—four sets of conditions likely to create negative space. These are (1) when creation is driven by rewards not reliant on exclusivity; (2) when exclusivity would harm further creation; (3) when there is high public or creator interest in free access without harm to creativity; and (4) when creators prefer to reinvest scarce resources in further creation than in protection or enforcement of intellectual property, i.e., when there is a higher cost of protecting or enforcing exclusivity than benefit to pursuing infringers. I posit that any existing negative space industry or creative community experiences at least one of these conditions, and that any industry or creative community that consistently experiences any of these conditions is better suited to low-IP treatment than an industry or creative community that does not. Thus, a proclivity for negative space treatment is not necessarily inherent in a particular industry or creative community: although some of these factors depend on extra-legal factors such as community culture, most hinge on traits of current intellectual property law. If the law changes, negative spaces may change. If the law provided for rewards other than exclusivity, for example, or reduced the cost of protection, certain industries or creative communities might be less likely to shun protection.

# 1. Creation Driven by Rewards Not Tied to Exclusivity

Some creators and inventors are motivated primarily by financial concerns. Others are motivated by a desire to create, to do *something*; still others are motivated by a practical need for new and improved technologies. The reasons are endless.

The chief financial benefit of exclusivity is that one can charge more for a product. The laws of supply and demand dictate that one with exclusive rights over a product can demand a higher price, and may be able to build and capitalize on a licensing market for rights to copy a work or use an invention. For this reason, exclusivity is of little value to creators whose motivations do not include financial gain. This does not mean, however, that such creators desire no compensation or benefit from their creations—only that financial gain is not the primary

compensation or benefit that they seek.<sup>131</sup> Rather, they may prefer to receive recognition or become a part of a community. But even for those motivated by material gain, exclusivity may not be the most lucrative or desirable option. This is because, to put it in economic terms, scarcity alone does not necessarily create value. Value may be created or enhanced through name recognition, network effects or other first mover advantages that are more likely to be undermined by exclusivity than enhanced by it. These things drive the denizens of doctrinal no man's land to create without the promise of exclusivity, and drive others to forego available intellectual property protection.

# a. The Value of Recognition

For some creators, like those in nonprofit activities such as blogging, contributing to wikis and creating fanworks, recognition alone is a significant incentive to create. For others, recognition is a means to a financially beneficial end: the better known one's works are, the more money one can make from them even when they are copied (as in fashion), the more money one can make from subsequent protected works (as in the early stage of a pop or hip hop musician's career) or (as in academia and computer programming) the more money one can make from other sources, such as employment. Although individual motivations may vary, the recent proliferation of various attribution focused licenses, including creative commons, science commons and GPL/GNU, emphasizes that in many circumstances, creators would prefer attention to money.

Exclusivity raises the cost of access to works. As a result, exclusivity is less

<sup>131.</sup> There are, of course, those who need no incentive whatsoever to create or innovate, for example, those who create for the sheer joy of creation and care not whether their creations reach an audience. Although the availability of intellectual property protection for their works is not a necessary motivator for such creators, it is also unlikely to serve as a *disincentive* for them. For this reason, their own creations may not, themselves, fall into negative space as defined—they will not benefit (or be harmed by) a lack of traditional intellectual property law. They will, however, benefit from the existence of negative space even more than other creators. Since they do not profit from their works, such "sheer joy" creators are particularly susceptible to IP's tendency to increase the (licensing) cost of creative raw materials and thereby to constrict the creator's available creative capital.

<sup>132.</sup> See Garon, supra note 15, at 101 (discussing attribution on wikis); Rebecca Tushnet, Payment in Credit: Copyright Law and Subcultural Creativity, 70 LAW & CONTEMP. PROBS. 135, 156–60 (2007) [hereinafter Tushnet, Payment in Credit] ("[F]ans need to credit—or, depending on the degree to which they distinguish intrafan morality from external morality, to get permission to use—other fans' work, whereas they feel free to mine the outside world for raw material, as long as the resulting works stay noncommercial."). But cf., Rebecca Tushnet, Economies of Desire: Fair Use and Marketplace Assumptions, 51 WM. & MARY L. REV. 513 (2009) (characterizing many fanwork creators as motivated primarily by a desire to create).

<sup>133.</sup> See Anderson, supra note 18, at 140–53 (discussing the importance of the mixtape in promoting musicians); Raustiala & Sprigman, Piracy Paradox, supra note 5, at 1215–16 (discussing the importance of powerful brands in fashion); Tushnet, Payment in Credit, supra note 132, at 158 ("Historians, who generally rely on reputation more than money as compensation for their contributions to the sum of knowledge, care more about proper attribution within the profession than outside it.").

<sup>134.</sup> See, e.g., Fisk, supra note 85, at 53–57; Garon, supra note 15, at 115–16. See generally CLAY SHIRKY, COGNITIVE SURPLUS: CREATIVITY AND GENEROSITY IN A CONNECTED AGE (2010) (discussing the attention economy and its products).

desirable to those who favor recognition, because they would prefer greater dissemination of their works—with attribution. For the most part, however, traditional intellectual property cannot promise attribution. It is a notorious truism that plagiarism (i.e., taking someone's idea without giving credit) is not a form of copyright infringement. The remedies for copyright and patent infringement are royalties or injunctions—not credit. And the most common remedy for trademark infringement is an injunction against using the mark, not attribution of the mark to the mark holder. Indeed, because omitting attribution may make infringements more difficult to find, and because copyright's fair use provisions do not consider attribution in assessing whether a particular use is fair, infringers may be more likely to copy protected works without attribution than with attribution.

In a society in which "cognitive surplus" often creates a much greater supply of works than demand for them, many creators would prefer to be noticed than to be paid. Consider, for example, the citizen journalist: with a blog alone, she could be shouting into the wind; if a major aggregator copies her work with attribution, on the other hand, she gains readers and the possibility of income, for example through employment or through advertisements on the blog. Similar situations exist for hip hop DJs, who distribute mixtapes and unprotectable derivative works with the hope and understanding that they will be copied; popular musicians seeking to break into the industry, who distribute their music and videos on sites such as MySpace and YouTube hoping that they will be copied and distributed virally; and aspiring television creators, who submit unprotectable ideas to developers and producers in the hope of breaking into the industry, despite the

[34:3

<sup>135.</sup> See generally Audrey Wolfson Latourette, Plagiarism: Legal and Ethical Implications for the University, 37 J.C. & U.L. 1 (2010) (discussing legal and ethical differences between plagiarism and infringement). See also Oliar & Sprigman, supra note 11, at 1823 (discussing difference between plagiarism and infringement).

<sup>136.</sup> See 17 U.S.C. §§ 502–05 (2006) (covering copyright remedies); 35 U.S.C. §§ 283–84 (2006) (providing patent remedies).

<sup>137. 15</sup> U.S.C. §§ 1116–17 (2006) (providing trademark remedies); *see* Minn. Pet Breeders, Inc. v. Schell & Kampeter, Inc., 41 F.3d 1242, 1247 (8th Cir. 1994) ("[A]n injunction is the preferred Lanham Act remedy . . . .").

<sup>138.</sup> See Greg Lastowka, Digital Attribution: Copyright and the Right to Credit, 87 B.U. L. REV. 41, 88 (2007) (cataloging instances in which courts have considered attribution as an equitable consideration in assessing fair use, noting lack of explicit inclusion of attribution as a fair use factor, and proposing that fair use analysis include formal consideration of attribution).

<sup>139.</sup> See generally Shirky, supra note 134, at 65–95. See also Clay Shirky, Here Comes Everybody: The Power of Organizing without Organizations 132 (2008) (stating that people contribute to Wikipedia and other noncommercial projects for "a chance to exercise some unused mental capacities" and out of "vanity—the 'Kilroy was here' pleasure of changing something in the world, just to see my imprint on it. Making a mark on the world is a common human desire."). In many circumstances, as discussed below, a side effect of cognitive surplus on creators is a desire for attribution: they wish not only for their works to be widely distributed, but also for their works to be recognized as their own. It should be noted, however, that this is not the universal response. Some creators are happy for their works to be used without any sort of attribution, and are satisfied with the sense of personal pride that comes from knowing other people are exposed to the work. Still others—for example, those who pen religious texts—may have a powerful desire for their works to be disseminated, even anonymously, for reasons entirely unrelated to personal achievement.

possibility that such ideas, if good, may be copied without compensation. <sup>140</sup> In academia, where prestige counts, one hopes to have one's work copied, disseminated and quoted with attribution. If recognition is a creator's objective, the creator may do better outside the intellectual property system, particularly if the alternative is an environment in which copying is common and there are norms requiring attribution. This may lead them to engage in IP forbearance in conjunction with promoting attribution norms, either through a formal system such as creative commons or open source software, or informally, through the creation of attribution norms such as those surrounding wikis, fanworks, cuisine and hip hop mixtapes. <sup>141</sup>

Of course, these examples are but a few of many. The desire for recognition can be a powerful motivator for creators of any type. (If this were not true, there would be many fewer "starving artists.") This means that recognition-driven negative space is not necessarily an industry-wide concept. Within any industry, creators will vary in their desire for recognition, the degree to which they perceive intellectual property protection as a bar to recognition, and the degree to which they are willing and able to rely on attribution-based norms. Thus, works within the same industry may vary in their fitness for negative space treatment.

## b. Community Building

Just as some people create out of a desire for recognition, some create out of a desire for community. Fanwork and transformative culture, the open source movement, wiki creation and contribution and roller derby, to name a few, are subcultures built around the creation of potentially protectable, but generally unprotected, works. These communities share an ethos of independence and even mild transgression: "We are bucking the establishment." One joins such a

<sup>140.</sup> See Anderson, supra note 18, at 138–44 (describing DJs who intentionally distribute mixtapes); Symposium, supra note 94, at 1298 (noting that DJ Danger Mouse, producer of the "Gray Album," benefited from creating it through industry recognition and opportunities to produce profitable musical projects, notwithstanding that the "Gray Album" was not eligible for copyright protection); Weisselberg, supra note 63, at 186–90 (discussing the lack of protection for TV show ideas). In addition, pop musician Lily Allen rose to fame by distributing her music virally on sites such as MySpace. Once she became an established recording artist, she developed a greater interest in intellectual property protection. See Tama Leaver, Learning with Lily Allen: Copyright Criminals or Complexity and Confusion?, FLOWTV (Oct. 30, 2009), http://flowtv.org/2009/10/learning-with-lily-allen-copyright-criminals-or-complexity-and-confusion-tama-leaver-curtin-university-of-technology/.

<sup>141.</sup> See, e.g., Buccafusco, supra note 9, at 1151–52 (discussing culture of credit in haute cuisine); Garon, supra note 15, at 107–08 (discussing culture of credit in wikis).

<sup>142.</sup> See, e.g., Rebecca Tushnet, Legal Fictions: Copyright, Fan Fiction, and a New Common Law, 17 LOY. L.A. ENT. L. REV. 651, 657 (1997). Tushnet quotes a fan describing the value of fan fiction:

The ethos of [fan fiction] is one of community, of shared journeys to understanding and enjoyment. Regardless of literary value, fan fiction is a pleasurable and valuable part of many fans' experiences. The political importance of fandom stems from sharing secondary creations. Fans feel that they are making significant life choices when they share their work with a broader community of like-minded people.

Id. (internal quotations omitted).

community by creating works—stories, computer programs, information compilations or pseudonyms—and communicating them to other members of the community. Implicit is the assumption that the creator will not break stride with the norms of the community. Pursuit of traditional intellectual property, or pursuit of infringers, is grounds for social expulsion.

It appears that these communities engage in Ellicksonian rule creation either as a manifestation of independence or of a desire for rules that vary from traditional intellectual property, or both. For some, community rules resemble traditional intellectual property law. For example, when roller derby participants assess who is entitled to keep a particular pseudonym, they rely on an internally created rule set that looks remarkably like the *AMF Inc. v. Sleekcraft Boats* factors for adjudicating trademark infringement.<sup>143</sup> This could suggest that the *Sleekcraft* factors are instances of instinctive natural law, but it is more likely that the factors were used as a model for the roller derby system. Thus, it is not that the derby participants desired a different set of rules, but that they desired different arbiters of them—i.e., themselves. The subculture of pseudonyms in roller derby is culturally inconsistent with the idea of arbitration by a third party, and the roller derby participants have situated themselves in IP's negative space to maintain their sense of community.

Others, such as the fan fiction, open source, wiki and athletics communities, enforce internal norms that differ from traditional IP, presumably because such norms are better suited to serving the priorities of the creators. The fanwork, wiki and open source norms permit and even encourage copying, but generally insist on attribution and noncommerciality. Along the same lines, athletes generally decline protection for innovative sports moves, although they could seek it, at least in theory. As a cultural matter, they rely on sportsmanship and the idea of a "level playing field" in which no competitor has an unfair advantage. That these communities both elect and self-enforce norms outside the mold of traditional intellectual property law implies that, at least in part, they situate themselves in IP's negative space as a form of community building, rather than the other way around.

## c. First Mover Advantages and Network Effects

Dan Burk and Mark Lemley have suggested that first mover advantages and

<sup>143.</sup> AMF Inc. v. Sleekcraft Boats, 599 F.2d 341, 348–50 (9th Cir. 1979) (articulating the Ninth Circuit's test for "likelihood of confusion" between similar trademarks); *see also* Fagundes, *supra* note 19 (discussing why roller derby participants prefer internal norms).

<sup>144.</sup> See Casey Fiesler, Everything I Need to Know I Learned from Fandom: How Existing Social Norms Can Help Shape the Next Generation of User-Generated Content, 10 VAND. J. ENT. & TECH. L. 729, 749–54 (describing internal enforcement, noncommerciality and attribution norms in fanfiction community); Garon, supra note 15, at 101 (describing idiosyncratic attribution norms in wiki communities); Glenn O. Brown, Announcing (and Explaining) Our New 2.0 Licenses, CREATIVE COMMONS (May 25, 2004), http://creativecommons.org/weblog/entry/4216 (explaining that attribution would become a standard feature of Creative Commons licenses because ninety-seven to ninety-eight percent of Creative Commons users opted for attribution when selecting licenses).

<sup>145.</sup> See Kieff et al., supra note 14, at 768-81.

<sup>146.</sup> See id.

network effects explain how originators continue to thrive in the absence of strong intellectual property rules or effective enforcement mechanisms. <sup>147</sup> A first mover advantage exists when a creator or innovator can create enough revenue from the introduction of its product that it is not effectively harmed by later copyists. <sup>148</sup> First mover advantages are likely to arise when development of a product or idea is relatively inexpensive but copying is relatively expensive or slow; when the reputational advantage of being first outweighs the potential for lost sales such that consumers will continue to purchase an original even after imitations are available; when an industry is small enough that it can only support one source; or when a product will become obsolete before it can be copied. <sup>149</sup>

First mover advantages have perpetuated innovation in doctrinal no man's land. For example, new entrants into the electronic database industry benefit from a first mover advantage. In addition, although Raustiala and Sprigman have resisted such a categorization, the fashion cycle itself embodies a powerful set of first mover advantages. Anchoring, the idea that a particular style becomes a trend when copied, embodies a first mover advantage for style originators. Meanwhile, induced obsolescence, the idea that once a design is copied enough, the market will demand it be replaced by another design, represents a steady stream of opportunities for designers to become first movers.

Indeed, first mover advantages likely come into play for many positional goods, where there is value to being the "genuine" article. This effect may be responsible, for example, for continued creation of perfumes despite producers' inability to protect scents. Copyists may legally reverse engineer an aroma, but then must either build a new brand to go with it or label themselves as "designer impostors." Designer impostors may capture some of a perfumer's business, but may also draw even more attention to the original perfumer's brand. The result is that copyists are unlikely to have a significant negative impact on the originator, and creation continues despite weak protection.

<sup>147.</sup> Burk & Lemley, supra note 20, at 1584–86.

<sup>148.</sup> See Michael W. Carroll, One Size Does Not Fit All: A Framework for Tailoring Intellectual Property Rights, 70 Ohio St. L.J. 1361, 1414–15 [hereinafter Caroll, One Size] (defining and describing benefits of first mover advantage).

<sup>149.</sup> See id.

<sup>150.</sup> Indeed, Nancy Dorfman has argued that the first mover advantage, not the prospect of patent exclusivity, has been the primary reason for innovation in the computer hardware and semiconductor industries. Nancy S. Dorfman, Innovation and Market Structure: Lessons from the Computer and Semiconductor Industries 235–39 (1987). This hypothesis is consistent with more recent empirical work. See Stuart J.H. Graham, Robert P. Merges, Pam Samuelson, & Ted Sichelman, High Technology Entrepreneurs and the Patent System: Results of the 2008 Berkeley Patent Survey, 24 Berkeley Tech. L.J. 1255, 1289–90 (2010) (finding that software and Internet startups considered first mover advantage to be significantly more important than any other appropriability strategy, including patent or copyright protection).

<sup>151.</sup> See Dreyfuss, Fragile Equilibria, supra note 116.

<sup>152.</sup> Raustiala & Sprigman, Piracy Paradox, supra note 5, at 1759–62.

<sup>153.</sup> *Id.* at 1728–29 (discussing anchoring).

<sup>154.</sup> *Id.* at 1718–19 (discussing induced obsolescence).

<sup>155.</sup> *Id.* at 1772–73 (discussing fragrances).

348

Related to the first mover advantage is the "network effect," which, for some goods, rewards the first market entrant to build a customer base. The network effect functions to increase the value of certain purchased goods or services as a result of other consumers' choice to purchase or use the same good or service. The telephone, which becomes more valuable to each purchaser—and hence to the seller—as more purchasers acquire telephones. First mover advantages and network effects are likely to arise when development of a product or idea is relatively inexpensive but copying is relatively expensive or slow; when the reputational or network effect advantage of being first outweighs the potential for lost sales such that consumers will continue to purchase an original even after imitations are available; when an industry is small enough that it can only support one source; or when a product will become obsolete before it can be copied.

Software is the quintessential example of an industry that benefits from network effects, because the value of a software program frequently depends on how many people use it. Adobe, for example, gives away its PDF reader for free: once everyone uses it, Adobe's more expensive PDF encoder becomes very valuable. This suggests that negative space treatment is appropriate for some software—software that may help to build user standards, for example—but not for all software. And indeed, a partial protection system has arisen organically in the software field: a healthy open source movement develops standards, and companies seek and assert IP protection for many of the products made using those standards. IP forbearance provides a benefit for creators, as their products spread inexpensively (often virally and at no cost) while consumers will, in turn, spend money on related products. For this reason, IP forbearance will be common in industries with significant network effects.

When there are strong network effects or other first mover advantages, intellectual property protection is not only superfluous, but may also hinder innovation. A software creator who wishes his or her product to be distributed virally for quick network effects would be ill-served by traditional intellectual property protection; a trendsetting first mover in the database or fashion field benefits from imitators who draw attention to the authenticity of the "original."

## 2. Exclusivity Would Harm Further Creation

Although intellectual property tends to encourage creation in many settings, it carries social and creative costs. The more protection afforded a work, the more expensive it becomes for others to use it. This added expense could come in the

<sup>156.</sup> See generally Burk & Lemley, supra note 20, at 1585-86 (citing literature on network effects).

<sup>157.</sup> See Carroll, One Size, supra note 148, at 1416 (discussing network effects).

<sup>158.</sup> See id.

<sup>159.</sup> See Daniel F. Spulber, Solving the Circular Conundrum: Communication and Coordination in Internet Markets, 104 Nw. U. L. REV. 537, 549–50 (2010).

<sup>160.</sup> See Dreyfuss, Fragile Equilibria, supra note 116.

form of litigation or licensing costs, or in the form of risk aversion. Both can chill creation, particularly where protected works or inventions could form the building blocks of new creations. <sup>161</sup>

For copyrighted works, the fair use doctrine can help alleviate these costs—and in many situations, it works, through the creation of negative space. For example, much academic writing resides in IP's negative space because its principal uses—classroom use and scholarly analysis and citation—are carved out as fair uses. <sup>162</sup> Such works thrive in negative space both because, as discussed above, their authors seek recognition as much as exclusivity, and because their authors know that it would become prohibitively expensive to create *new* works without freely using earlier works of the same type.

One might expect patent law to contain many similar carve outs, since most inventions rely on what came before. In fact, lawmakers have carved out relatively few such areas. The common law experimental use exception, which permits activity that would otherwise be infringing if it were done purely to satisfy the infringer's curiosity, is so narrow as to be barely an exception at all. <sup>163</sup>

By way of contrast, the doctrinal no man's land surrounding patent law has created a number of negative spaces that thrive because their occupants rely on predecessors' work. Chefs, for example, continue to innovate without intellectual property protection, largely by tweaking and enhancing the recipes of their predecessors and colleagues in the art. If recipes were commonly subject to patent protection, gastronomical innovation would become both expensive and risky. Along the same lines, sports innovation thrives without patent protection because athletes know that they benefit more from being able to imitate and build upon the work of their skilled colleagues than through legal protection. This philosophy is shared by sports leagues, many of which prohibit their members from seeking IP protection for innovative techniques.

We see the same phenomenon in fashion. It is a rare fashion design that cannot be traced to any influences, and many designs could easily qualify as "substantially similar" to their forbears. <sup>167</sup> Of course, most modern designs also differ from their forbears, but if traditional intellectual property law offered stronger protection for

<sup>161.</sup> Anecdotal evidence of the chilling effect of high licensing costs abounds. *See, e.g.*, Loren, *supra* note 102, at 14 (discussing prohibitive cost of copyrighted footage for documentaries); Elizabeth L. Rosenblatt, *Rethinking the Parameters of Trademark Use in Entertainment*, 61 FLA. L. REV. 1011, 1038–40 (2009) (discussing how a perceived need to clear trademarks chills production of entertainment products); Jennifer E. Rothman, *The Questionable Use of Custom in Intellectual Property*, 93 VA. L. REV. 1899, 1903, 1914–15 (describing chilling effects of "clearance culture"); Strandburg, *supra* note 16, at 108 (discussing how patenting university research could threaten curiosity driven research).

<sup>162.</sup> See 17 U.S.C. § 107 (2006) (defining limitations on exclusive rights and fair use).

<sup>163.</sup> See, e.g., Madey v. Duke Univ., 307 F.3d 1351, 1361–63 (Fed. Cir. 2002) (holding that experimental use defense is not available for any activities that are "in furtherance of the alleged infringer's legitimate business" and available only to activities undertaken "solely for amusement, to satisfy idle curiosity, or for strictly philosophical inquiry").

<sup>164.</sup> See Buccafusco, supra note 9, at 1146–50.

<sup>165.</sup> *See* Kieff et al., *supra* note 14, at 774–76.

<sup>166.</sup> See Magliocca, supra note 14, at 891 n.64.

<sup>167.</sup> See Raustiala & Sprigman, Revisited, supra note 8, at 1207-08.

fashion designs (for example, trademark or copyright style protection to works that had not yet acquired secondary meaning), designers would run a constant risk of infringing. Thus, while designers often bemoan the rise of counterfeiting, fashion still thrives in a negative space environment.<sup>168</sup> The same is true for the typeface industry, where easy digital copying has cut profitability, but designers understand that some copying is necessary for the creation of new typefaces.<sup>169</sup>

# 3. High Public or Creator Interest in Free Access without Risk to Incentives

Laws are designed to serve the public interest. As a result, when there is a high public interest in free (i.e., no cost) access to creations and innovations, lawmakers are more likely to leave such creations unprotected by intellectual property law by creating doctrinal no man's land and facilitating use-based carve outs. For example, Congress has determined that there should be no damages for infringement of patents covering medical procedures; that descriptive terms should not be protectable as copyrights unless they have already acquired secondary meaning; and that people should be able to copy for the purpose of criticism, commentary or classroom use. <sup>170</sup> In each of these situations, public values—public health, in the first instance, and free speech in the latter two—trump the potential incentive value of protection. These examples are only the tip of the iceberg. Every boundary of intellectual property law, at least in theory, represents a compromise between the value of public access to information against the incentive of protection. It is a delicate balance.

For that reason, a high public value to access is not itself enough to create negative space. Rather, access is a factor likely to weigh in favor of a gap in protection. Lawmakers must then predict whether reduced opportunities for exclusivity will lead to reduced creation. To the extent that such risks seem acceptable, gaps in protection are appropriate. When lawmakers are correct, and there remains sufficient motivation to create without exclusivity incentives, negative space emerges.

In addition, in some circumstances, an intellectual property owner may be sufficiently interested in free access to his or her works as to forego IP protection. This is true of most advertisements, but it is not unique to commercial speech. For example, people who create religious works may be sufficiently interested in spreading the word that they want to minimize costs to the consumer. The same is true of those who intend their works to persuade politically. The point is to get the word out, and it may not matter whether that word is copied, imitated, attributed or paid for.

<sup>168.</sup> See id.

<sup>169.</sup> See Lipton, supra note 12, at 169.

<sup>170.</sup> See 15 U.S.C. § 1052(f) (2006) (limiting copyrightability of descriptive terms); 17 U.S.C. § 107 (2006) (describing fair use of copyrighted works); 35 U.S.C. § 287(c) (2006) (excluding patents covering medical procedures from damages for infringement).

<sup>171.</sup> *Cf.* Loren, *supra* note 102, at 8 (discussing the Catholic Church's exercise of copyright protection in order to offset production costs and generate income).

## 4. Reinvestment in Creation Preferable to IP Protection or Enforcement

Finally, negative space may arise when creators prefer to invest in creation rather than in protection or enforcement. This is most likely to occur when creators believe that the expense of seeking protection or pursuing infringers exceeds the benefit of doing so.<sup>172</sup> The costs of intellectual property protection, and the benefits to be gained from such protection, vary widely according to the type of creation and the type of protection available. For copyrightable works and trademarks, obtaining protection is as easy as fixing a work in a tangible medium of expression or using a mark in commerce in connection with the sale of goods or services.<sup>173</sup> Registration of copyrights and trademarks is more expensive, but has various benefits for pursuing infringers.<sup>174</sup> Obtaining a patent is even more expensive in application costs, time and attorney's fees.<sup>175</sup> There is little to be gained from registering one's copyright or trademark or obtaining a patent unless the registration or patent will have value.

Typically, the value of obtaining a patent or a registration is the right to pursue infringers. <sup>176</sup> When the cost of pursuing infringers is high, and the relative benefit to be recovered is comparatively low, creators are more likely to forbear. As a result, IP owners deciding whether to pursue infringers need to know their chances of success, the potential upside gain to winning, and the potential downside loss of permitting infringement to continue.

<sup>172.</sup> In this Article, I assume that creators are correct in their assumptions about the costs and benefits of protection and enforcement. It is, of course possible that creators' beliefs differ from reality. Creators may presume, for example, that protection and enforcement are more expensive or complex than they really are, or that enforcement is less likely to be beneficial than it actually is. If so, then the creation of negative space is more dependent on creators' *perceptions* of costs and rewards than on *actual* costs and rewards. In all other respects, however, the analysis remains the same, as does the conclusion that visibly reducing the cost of protection or enforcement could benefit such creators.

<sup>173.</sup> See 15 U.S.C. § 1127 (defining trademark as "any word, name, symbol, or device, or any combination thereof... used [in commerce] by a person... to identify and distinguish his or her goods... from those manufactured or sold by others"); 17 U.S.C. § 102 (defining copyrightable material as "original works of authorship fixed in any tangible medium of expression").

<sup>174.</sup> E.g., 15 U.S.C. § 1057(c) (providing a presumption of nationwide rights with trademark registration); 17 U.S.C. § 412 (permitting a recovery of statutory damages against infringers with copyright registration).

<sup>175.</sup> See Ted Sichelman & Stuart J.H. Graham, Patenting by Entrepreneurs: An Empirical Study, 17 MICH. TELECOMM. & TECH. L. REV. 111, 133–34 (2010) (describing "the high costs of patenting" as a significant reason that startup companies decide not to obtain patent on new inventions).

<sup>176.</sup> This is not to say that pursuing infringers is the only reason one might seek IP protection. For example, one may seek protection for prestige or personal pride; for the ability to use the patent or registration as a form of alternative currency for cross-licensing or other bargaining; or for the ability to use the patent as a symbol of value for purposes of raising investment funds. The existence of these reasons highlights the interconnectedness of the four categories of negative space promoting conditions discussed herein. Specifically, one who obtains a patent or registration for one of these reasons, as opposed to enforcement, is engaging in a form of IP forbearance, and in the process, may be creating negative space. Such inventors and creators create for a reason other than a desire for exclusivity (category one) and engage in IP forbearance because they cannot afford to pursue infringers or because they perceive less potential benefit in pursuing infringers than they do in cross-licensing or raising money (both examples of category four).

In theory, the presence of this factor will only create negative space when the cost savings of declining protection and enforcement can be reinvested in a way that benefits creation. In practice, it is difficult to imagine many situations in which such reinvestment is not possible or likely. Thus, one can consider a high price of protection or enforcement or a low benefit of enforcement to be more or less universally conducive to the creation of negative space. This is not to say, however, that creators in these areas would not prefer a system that provided more affordable protection or enforcement or more beneficial enforcement. No doubt, many would. But when the system does not provide for affordable protection, these creators opt to create negative space by declining protection or enforcement and instead reinvesting in creation. Thus, their innovation and creation benefits—under the current system—more from a lack of protection than it would from protection. If conditions changed, and protection or enforcement became more affordable or feasible, such creators might be able to reinvest without having to sacrifice protection or enforcement, and thus might benefit even more.

Roller derby is a case in point. Most derby participants have few resources and make no money from their derby activities.<sup>177</sup> If a derby participant's pseudonym is infringed, she will have a difficult time claiming actual damages, and an injunction action will be very expensive.<sup>178</sup> Under this calculus, it is not worth it to for a derby participant to register her name as a trademark, much less to sue a copycat. Yet, each participant wants a unique and distinctive moniker. As a result, the participants have collectively built a sui generis trademark-like system to arbitrate name related conflicts among themselves.<sup>179</sup> This system permits them to spend their time and money on participating in roller derby rather than in protecting their monikers, making roller derby more affordable. This relative affordability permits more individuals to participate and create names of their own than would be able to if each name required investment in protection. Voila: negative space.

The same cost-benefit analysis plays into the creation of negative space for fashion designs. Many fashion designs could be protected by design patents, but few are. <sup>180</sup> Why? Design patents are expensive and time consuming to obtain; by the time a design patent issues, copies of the design will have come and gone, and the design will have gone out of style. <sup>181</sup> Moreover, design patents protect only against infringers whose designs are either identical or equivalent to the original. <sup>182</sup> Thus, even designers of the most timeless fashions have relatively little to gain from obtaining design patents, especially considering how many designs a fashion house may generate in a single season. Even if design patents were issued

<sup>177.</sup> See Fagundes, supra note 19, at 2.

<sup>178.</sup> *Id.* at 37.

<sup>179.</sup> *Id.* at 19–35 (describing roller derby's internal registration and arbitration system).

<sup>180.</sup> Raustiala & Sprigman, Piracy Paradox, supra note 5, at 1704-05.

<sup>181.</sup> *Id*.

<sup>182.</sup> See, e.g., Int'l Seaway Trading Corp. v. Walgreens Corp., 589 F.3d 1233, 1239 (holding that "[t]hat which infringes, if later, would anticipate, if earlier" and distinguishing two designs for similar rubber clogs based solely on differences in insole dimpling pattern) (internal quotations and citations omitted).

instantaneously, the fashion industry might not benefit much from them, because it is often difficult to find and obtain damages from copyists, many of whom operate offshore, and even the preliminary injunction phase of a case could last longer than a couture design stays current. Given these considerations, fashion designers instead rely on first mover advantages and, as Raustiala and Sprigman have pointed out, the benefits of a faster fashion cycle brought on by copying. <sup>184</sup>

There are, of course, two variables in this calculus: the cost of pursuing infringers and the likelihood and benefit of winning. Occasionally, the potential benefit of winning may tip the scales in favor of suing. This may be true in, for example, high tech or pharmaceutical patent litigation, where bet the company litigation may carry the chance of a high reward. By the same token, an IP owner with a large purse may be willing to pursue a very small recovery if the cost of pursuit is small enough.

# a. The Cost of Obtaining Protection and Pursuing Infringers

The more it costs to obtain protection, the less likely creators are to seek it. Attorney fees and filing costs may seem daunting, especially to the creator whose filings are likely to require detailed prior art searching or patent drafting, or the creator with a relatively large portfolio of works. Similarly, although litigation is always expensive, some cases are more costly than others. The cost goes up, for example, when infringers are difficult to find or identify; there is a high likelihood of counterclaims; or there is a significant public relations hazard in threatening the infringer. In such circumstances, creators may prefer to invest their scarce resources in further creation, rather than investing in the protection of works already created or pursuit of infringers.

Perhaps the most common of these is the hard-to-find infringer. Tattoo parlors, for example, are decentralized, and unless a tattoo artist posts infringing designs on her wall or website, the only realistic way to find infringements is to see them on the uncovered skin of a consumer. <sup>186</sup> For this reason, although tattoo piracy is common, there is very little litigation in the field aside from cases regarding tattoo "flash" (i.e., pre-made tattoo designs that an artist may post on her wall to be selected by walk in clients). <sup>187</sup>

<sup>183.</sup> See Beebe, supra note 117, at 864 (citations omitted); Hemphill & Suk, supra note 39, at 1171.

<sup>184.</sup> Raustiala & Sprigman, *Piracy Paradox*, supra note 5, at 1733.

<sup>185.</sup> See Graham et al., supra note 150, at 1310–14 (noting that across industries, but particularly for software and Internet startups, "[c]ost considerations loom large for startups in deciding to forgo patenting... We find that, among technology startups, the cost of getting a patent is the most common reason cited for not patenting a major technology" and cost of enforcing patents is the second most cited reason); see also Ted Sichelman & Stuart J.H. Graham, Patenting by Entrepreneurs: An Empirical Study, 17 MICH. TELECOMM. & TECH. L. REV. 111, 133–34 (2010) (describing "the high costs of patenting and patent litigation" as a significant reason that startup companies decide not to obtain patent on new inventions).

<sup>186.</sup> Hatcher, supra note 92, at 4.

<sup>187.</sup> See Raustiala & Sprigman, Piracy Paradox, supra note 5, at 1769.

The high probability of counterclaims likely contributes to what Raustiala and Sprigman have suggested is a negative space environment surrounding the microprocessor industry. Although there is a great deal of litigation in these areas, there is also a great deal of cross-licensing. This may be because, in a sea of claims and counter claims, it is cheaper and easier to skip ahead to the settlement.

The high expense of protection and the low potential return from licensing or infringement disputes may also influence creators who produce a large number of relatively small works. Bloggers, home photographers, wiki contributors and many others can produce hundreds of works per year. Comedians may write dozens of jokes for a single performance. The time and money cost of registering those copyrights, identifying potential licensees or infringers and negotiating with prospective licensees loom as prohibitive for such individuals. It is usually more efficient to forbear. Those who still wish to resist copying may limit access to their works through password protection or subscription requirements; those who still crave revenue can rely on business models that are less dependent on exclusivity, such as advertising or subscription fees. Those who wish to restrict what potential copyists can do with their work can use low-IP licenses, such as Creative Commons. As art director and game designer Daniel Solis tweeted, "For creators who dislike paperwork, Creative Commons is less altruism, more just avoiding a headache."

There may also be nonmonetary costs to pursuing infringers, such as publicity and ostracism. Magicians could not sue without revealing their secrets, so intellectual property protection, even if it were available, would be of limited usefulness. Likewise, even if film and television pitch ideas were protectable expressions, their creators might not pursue claims. Movie and television studios feel free to copy both unprotectable ideas and protectable expressions when they are submitted, and creators stay mum out of fear of reprisal. The writer who sues will "never eat lunch in this town again." Therefore, it is better to produce more and hope that the compensation will—sometimes—follow.

## b. The Potential Benefits of Pursuing Infringers

At the same time, IP owners must consider what they might gain from licensing their creations, how likely they are to win a case against an infringer and what the likely benefit of winning would be. This depends on a number of factors: the value and longevity of the work, the number and resources of potential infringers,

<sup>188.</sup> *Id.* at 1771–72.

<sup>189.</sup> *Id*.

<sup>190.</sup> *See* Johnson, *supra* note 31, at 418–30 (suggesting alternative methods for easy licensing of such materials, such as Konomark and Copysquare, two low-formality IP licensing concepts pioneered by Prof. Eric Johnson).

<sup>191.</sup> Daniel Solis, *Tweet by @danielsolis*, TWITTER (Sept. 8, 2010, 8:59 AM), http://twitter.com/danielsolis.

<sup>192.</sup> See Loshin, supra note 10, at 132.

the crowdedness of the market and whether the creator, as opposed to someone else, will benefit from the pursuit.

Inexpensive or short-lived creations may not be able to generate enough reward to merit pursuit. As discussed above, neither the Patent Office nor the federal court system can match the pace of fashion. The same is true for software, considering that most programs may become obsolete before the twenty year window of patent protection will expire. Indeed, considering that it can take more than three years to obtain a utility patent, a whole generation of software could be supplanted before receiving a patent. This is not to say that closed source software cannot be profitable, but it helps to explain the rise of the open source movement and its norms. But for many software creators, the most efficient approach is to share their works, in the hope that doing so will foster collaboration and create a better product that profits through first mover advantages and network effects rather than exclusivity.

The same holds true for relatively inexpensive works, such as snapshots and blog posts, or works with little or no independent monetary value, such as roller derby pseudonyms. For these creators, formal licensing will seldom be worth the trouble. The creators of such works—especially those who wish their works to be distributed and who wish to receive recognition for their works—would prefer low formality schemes such as Creative Commons.

There is also the "whack-a-mole" problem, where stopping a single infringer is virtually meaningless because scores of others are waiting in the wings. This is typical of domain name registration. It costs roughly \$10 to register a domain name, but a significant hourly rate for an attorney to write a cease and desist letter and even more—a minimum of \$1,500 per proceeding—to pursue infringers using official means. A trademark holder might be interested in stopping domain name speculators who register their marks as domain names or "typo-squatters" who register confusingly similar domains, but pursuing one infringer is futile, given the legion of others. It is better to purchase all of the possibly infringing domains at \$10 apiece, or to purchase online advertising that guides users to the mark holder's official site or just to allow infringement.

Litigation is similarly pointless when faced with a legion of noninfringing substitutes. Of course, the adequacy of the substitute comes into play. If I want to buy a novel by Neil Gaiman, a substitute by Neal Stephenson (while also likely to entertain) will not do the trick. In contrast, if I want Manolo Blahnik shoes, I

<sup>193.</sup> See supra Part III.B.4.

<sup>194.</sup> See Mark E. Stallion, A Practical Overview of U.S. Patent Law Challenges and Strategy, in Developing a Patent Strategy: Leading Lawyers on Counseling Clients on Patent Protection, Evaluating Patent Portfolios, and Working with the USPTO 219, 228 (Aspatore ed., 2010). Stallion writes:

The typical time to first office action on the merits for a software-related application is three to four years, with many cases stretching to four and a half years. Given the rapid changes in the software industry, the technology can become obsolete in four and a half years, which is obviously problematic. One can file for a petition to expedite, but this process is quite expensive.

356

might—in a pinch—be able to make do with a similar style of shoe from Jimmy Choo. Although shoes and novels are both plentiful, the benefit to Manolo Blahnik of being able to sue one of the many makers of pumps is not as great as the benefit to Random House of being able to sue an unlicensed republisher of Neil Gaiman's books, because shoes are more similar to each other, and thus more fungible, than novels. As a result, shoes reside in negative space, and popular fiction does not.

If a work's value is high enough, or if litigation would serve as a deterrent, it may be worthwhile to pursue infringers even in a whack-a-mole setting or where there are many noninfringing substitutes. Ordinarily, however, if there is no unitary conduit with whom one could bargain for licenses, or a unitary defendant one might sue for inducing or contributing to individual infringements, it is usually not worth it. The money is better spent on increased technological protections, education, production, innovation or product improvement. In this circumstance, like other negative space circumstances, IP forbearance may lead to increased innovation/creation, because producers are forced to innovate more quickly to take advantage of first mover advantages.

The more difficult it is to prove infringement and enforce a judgment, the less worthwhile pursuit becomes. Thus, negative space is more likely to arise when the infringement analysis is subjective or speculative. This is particularly true for perfumes and cuisine: even if they received copyright-style protection, the subjectivity of sensory perception would make it difficult to predict whether a jury would find two flavors or aromas to be "substantially similar." The presence of substantial similarity between two competing stand-up comedy jokes is similarly difficult to adjudicate, especially since the same joke "idea" can be expressed in different, equally funny, ways. <sup>196</sup> Enforcement difficulties also arise, as many comedians are judgment proof. As a result, stand-up comedians favor a system of norms that bans copying of both expression and ideas, and relies on social enforcement mechanisms. Enforcement difficulties also influence the creation of negative space in fashion, where copyists are typically offshore, and in the hairstyle and tattoo industries, where injunctions would range from impractical to unacceptable. <sup>197</sup>

<sup>195.</sup> The statutory damages provisions of the Copyright Act help to alleviate this gap in protection; however, the cost of litigation can easily overtake the benefit of receiving statutory damages. See 17 U.S.C. §504 (2006) (providing limits of statutory damages). Trademark and patent law have no equivalent damages scheme for pursuing infringers of inexpensive creations. The existence of statutory damages, the large resource pool available to large record companies, and the educational effect of making public targets of infringers, may help explain why the field of popular music has not (yet) fallen entirely into the zone of negative space. Arguably, the industry's continued production of music despite rampant infringement might qualify it as (at least an emerging) example of negative space, but as a matter of law and practice, those who copy the music of established popular music artists are still viewed as infringers and still risk paying potential damages. As discussed below, however, even the availability of statutory damages does not erase the distinction between the music of established popular artists, which exists in a high-IP environment, and the music of emerging and struggling artists, which often exists in a low-IP, forbearance based environment.

<sup>196.</sup> See Oliar & Sprigman, supra note 11, at 1795–98 (recounting two jokes that share ideas, but have no identical expression).

<sup>197.</sup> See Hemphill & Suk, supra note 39, at 1171 (describing practices of offshore fashion

# 2011] A THEORY OF IP'S NEGATIVE SPACE

In some circumstances, creators may create a bubble of negative space if they have assigned or licensed away their rights and thus would not be the ones benefiting from enforcement. Take, for example, bands like OK Go that post their videos on YouTube. Internet posting of videos may be an excellent marketing tool for the band—as IP forbearance, it serves the band's preference for recognition over exclusivity—but it also permits some people to go to YouTube instead of buying their album, which harms record companies. As a result, record companies have opposed such postings. Yet, such bands persist because any infringement suits would benefit only the record companies. Academics also share their scholarly research out of a preference for recognition over exclusivity—and do so over the general objections of academic publishers, who want to sell books and journals. This tension leads to a sort of negative space among creators, with an overlay of sometimes unpredictable enforcement by IP assignees or exclusive licensees.

## III. NORMATIVE IMPLICATIONS

This Article is far from the first to observe that intellectual property law is only one of many mechanisms for encouraging innovation and creation, and often not the best such mechanism. What this Article aims to contribute is a sense of when intellectual property law may not be the best mechanism for promoting innovation and creation, and what takes the place of legal protection as a motivator in those cases. By looking at what makes traditional intellectual property protection unhelpful or counterproductive in negative space situations, and by looking at what creators and innovators value in those situations, we can begin to extrapolate how to improve our systems for promoting innovation and creation. This may involve augmenting some current protections and diminishing others.

This Article does not propose that the law remove intellectual property protection for all works that are amenable to negative space treatment. Although a low-IP environment promotes creation in areas amenable to negative space treatment, the existence of possible IP protection also benefits the creators of these types of works in some way. With the potential intellectual property protection as a backstop, creators can create without fear of what will happen when fragile norms break down; in the shadow of patent and copyright law, open innovators can enter

198. See Damian Kulash, Open Letter from OK Go, Regarding Non-Embeddable YouTube Videos, OK Go (Jan. 18, 2010, 6:16 PM), http://okgo.forumsunlimited.com/index.php?showtopic=4169.

357

copyists).

<sup>199.</sup> See id.

<sup>200.</sup> See Beebe, supra note 117, at 885–88; Dreyfuss, Does IP Need IP?, supra note 79, at 1460–62 (arguing that more creation is not always better, since increased creation may come at the cost of quality and may result in the exploitation of creators). Thus, these scholars suggest that, rather than merely seeking to promote creation and innovation, intellectual property law should seek to optimize creation and innovation. While well taken, this point is not at the heart of the present Article. The extent to which the proposals herein would be effective at optimizing creation and innovation—as opposed to merely promoting them—is a matter for further research and analysis.

358

into automatic licensing schemes.<sup>201</sup> And creators may have individual reasons for preferring protection to forbearance; after all, only some of the creators and innovators who have the option of engaging in IP forbearance, actually do.

In addition, the circumstances that create negative space are not—as other scholars have implied—uniformly applicable to all works in any given industry. Indeed, they can vary from work to work, change over the life of a work, or change over the productive life of a creator. Industries change, and with these changes may come the creation or erosion of negative space. As a given type of work becomes more popular or profitable, for example, the IP owner may become more interested in seeking protection or pursuing infringers. And the benefits of a low-IP environment may grow or fade for a single creator over time. Popular musician Lily Allen, who became famous through file sharing of her recordings, is one of many such musicians who are now considerably more interested in formal intellectual property than they were when trying to gain fans. This implies that while negative space may in many circumstances be preferable to traditional intellectual property protection, it is not always a permanently optimal state. When a particular work or industry is well suited for negative space treatment, it may not remain so. This, too, counsels against wholesale erasure of rights.

Nor do I propose that the law eliminate doctrinal carve outs and fill the protection gaps of doctrinal no man's land. Despite the benefits of possible protection discussed above, these gaps and carve outs not only permit negative space to thrive (a benefit in itself), but also generally serve some other public interest, such as providing free access to medical techniques, permitting free speech or facilitating communication. If creators had the opportunity to obtain protection in these areas—because their interests are changeable, as discussed above—it is likely that some would do so. This would not only lead to a constriction of public access, but would also harm other creators by taking away their raw materials and undermining the norms that keep productivity alive in the absence of protection. Providing the opportunity for protection in these areas could therefore result in the collapse of negative spaces that benefit the public.

Rather than suggesting wholesale changes in the configuration of negative space, I propose more nuanced revisions. The common factors described above suggest what drives creation when creators or the public interest do not favor exclusivity. Regardless of whether intellectual property protection is available, harnessing these motivators would do an even better job of promoting creation and innovation than intellectual property law alone. In addition, knowing what may make a lack of protection preferable to protection can suggest ways in which current intellectual property rules may be optimized to promote creation and innovation. When viewed as a whole, therefore, observations drawn from the

<sup>201.</sup> See generally Dreyfuss, Does IP Need IP?, supra note 79, at 1448 (positing that the existence of negative spaces does not render intellectual property law unnecessary).

<sup>202.</sup> See Dreyfuss, Fragile Equilibria, supra note 116, at 2–3.

<sup>203.</sup> See Fauchart & von Hippel, supra note 9, at 198.

<sup>204.</sup> See Leaver, supra note 140, at 1.

theory can be used to develop normative approaches.

#### A. ENCOURAGE ATTRIBUTION

The first is the rather uncontroversial observation that a desire for recognition is a powerful driver of innovation and creation, and that attribution is both reward and incentive for creation. Although this is not a revolutionary assertion, it is one that pops into relief when observing IP's negative space, because the desire for recognition seems so frequently intertwined with creating or perpetuating negative space. The desire for recognition encourages creators to engage in IP forbearance, such as attribution-dependent licensing, wiki creation and academic sharing. Attribution also contributes to community building, first mover advantages and other nonexclusivity-based bases for creation. This leads to the conclusion that the law could better promote creation and innovation if it were structured to encourage attribution.

There are risks to emphasizing attribution. Some commentators, including Rebecca Tushnet, have wisely pointed out that in the copyright context, attribution may be difficult to achieve in certain circumstances such as live broadcasting; that an attribution right might be difficult to adjudicate for works derived from multiple sources; and that it is difficult to attribute works made for hire and works owned by multiple rights holders. Outside the copyright context, attribution becomes even more difficult. Should an automobile maker be required to identify the inventors of every patented part in the car? Should the maker of a smartphone be required to identify the inventors of every piece of software incorporated into the phone? If so, how? It is harder yet to envision how a trademark attribution right would work, since trademarks are themselves source identifiers. In any setting, an automatic attribution right, if piled atop traditional intellectual property protection, could be as great a disincentive to create as it is an incentive: creators would have to fear not only traditional infringement suits, but also attribution-based suits in situations where attribution is difficult.

These criticisms are sound. But that does not mean we should give up on the idea of encouraging attribution—only that attribution is not a panacea for all that ails the traditional intellectual property system. <sup>206</sup> It may still be both possible and advisable to create a low-formality formal attribution right to which, for example, individual creators could opt in; or to provide creators with the opportunity to elect between a copyright and an attribution right. <sup>207</sup> Less dramatic approaches include considering attribution among the factors in adjudicating copyright fair use,

<sup>205.</sup> See generally Rebecca Tushnet, Naming Rights: Attribution and Law, 2007 UTAH L. REV. 789, 789 (2007) (positing that "identifying authors is beyond" the grasp of American copyright law).

<sup>206.</sup> See Fisk, supra note 85, at 108–17. There may also be a number of other potential benefits to formalizing attribution regimes, beyond mere encouragement of attribution. While outside the scope of this Article, Fisk offers a more detailed discussion of various pros and cons of formalizing attribution, as well as ideas for operationalizing such a formal system so as to promote the benefits of recognition. *Id.* 

<sup>207.</sup> This may be what many creators (incorrectly) believe they are doing when they select to license their work under a Creative Commons attribution-only license.

imposing an attribution requirement as a form of injunctive relief or considering attribution as an ameliorating factor in assessing damages. Identifying the best approach is a subject for future scholarship. Whatever the conclusion, however, it is apparent that encouraging attribution would promote creation and innovation by giving a greater number of creators and innovators the means to extract benefit from their creations.

#### **B. PERMIT "PRODUCTIVE INFRINGEMENT"**

The second observation is that there is a symbiotic relationship between negative space and "productive infringement"—infringing activity that adds value to the infringed work or produces new creations without diminishing the value of the original work. Negative space may arise in order to provide opportunities for productive infringement as it does in the context of open source software development and academic science, or productive infringement may facilitate the growth of negative space as it does for fan fiction communities.<sup>208</sup>

This implies that leaving room for productive infringement will not unduly compromise—and may even promote—the incentives that underlie initial creation and innovation. Thus, in contexts where productive infringement is likely to occur, there may be both public benefits and productivity benefits in loosening the standards for infringement. In the copyright and trademark contexts, Christopher Sprigman has proposed a system that asks whether an infringement competes with the original.<sup>209</sup> He argues that there is a distinction between counterfeiting and other sorts of infringement: counterfeiting should be prohibited because it will always have some effect on the market for the original; other sorts of infringement should be adjudicated based on whether the infringing product competes with the original.<sup>210</sup> For example, derivative works may not harm authors not positioned to exploit licensing markets, and unforeseeable copying, as a matter of logic, cannot affect incentives.<sup>211</sup> Although Sprigman does not discuss patent law, his theory can be extended by analogy to promote productive patent infringements.

According to this approach, the law can, and should, be structured to create broader exemptions for infringements that do not harm creators' incentives. For example, the existence of negative space in the context of academic science implies that broadening the experimental use exception for patent infringement would benefit, rather than stifle, innovation.<sup>212</sup> Along the same lines, the proliferation of

<sup>208.</sup> See generally Fiesler, supra note 144.

<sup>209.</sup> Christopher Jon Sprigman, *Copyright and the Rule of Reason*, 7 J. TELECOMM. & HIGH TECH. L. 317, 334–41 (2009).

<sup>210.</sup> Id.

<sup>211.</sup> *Id*.

<sup>212.</sup> Dreyfuss, *Does IP Need IP?*, *supra* note 79, at 1469–70. A more dramatic application of the same principle might categorically eliminate patent suits by nonpracticing entities. To my mind, such an extreme step would be counter-productive as nonpracticing entities often provide key sources of income for inventors and, as such, have become part of the invention economy. Thus, while eliminating the opportunity for nonpracticing entities to sue would likely permit more opportunities for follow-on invention, it would also have a significant, indirect undermining effect on the incentives for initial

attribution-based noncommercial copyright licenses suggests that broadening fair use style exemptions for the creation of noncommercial derivative works is likely to promote both initial creation of works and further creation. An explicit exemption for expressive and/or nominative uses of trademarks would generate similar public benefits without impairing the value of marks.<sup>213</sup>

Another, less dramatic approach would be to eliminate injunctive relief and/or limit the opportunities for damages in the context of productive infringement. This would not only reduce the risk of engaging in productive infringement, but would also permit the growth of beneficial negative spaces. A reduction in remedies will decrease the potential benefit of pursuing infringers, so that only those who have experienced genuine harm, or those with large pocketbooks, will be interested in pursuing productive infringers.

## C. RESIST THE URGE TO PROTECT FIRST AND ASK QUESTIONS LATER

The third observation is that overprotection can be as damaging to creation as underprotection. As a result, we should resist the urge to "protect first and ask questions later." A steady stream of scholars and business interests have urged broad interpretations of current infringement laws or proposed new protections that would fill in the gaps of doctrinal no man's land. Lobbyists and scholars alike have argued for statutory protection of fashion designs; the "hot news" doctrine has experienced a recent resurgence; various constituencies have encouraged us to adopt European database protection standards; and the debate over the patentability of business methods rages on.<sup>214</sup>

The negative space analysis teaches that intellectual property protection is, for the most part, unnecessary in these and similar areas. Each fits well into the negative space rubric because each experiences powerful first mover advantages and network effects. Fashion's place in negative space has been well documented.<sup>215</sup> Hot news is, by definition, significantly more valuable to first movers than to others, and those able to broadcast information first will, in this age of electronic customer mobility, be able to capture a larger market share. Promoting creation of hot news therefore means promoting speed, by forcing creators to rely on first mover advantages, rather than preventing copying. As discussed above, electronic databases experience significant first mover advantages, and thus do not require greater intellectual property protection as a

invention.

<sup>213.</sup> Cf. Elizabeth L. Rosenblatt, Rethinking the Parameters of Trademark Use in Entertainment, 61 FLA. L. REV. 1011, 1073-74 (2009) (proposing exemption for "artistically relevant" uses of trademarks in expressive works).

<sup>214.</sup> See, e.g., Shyamkrishna Balganesh, "Hot News": The Enduring Myth of Property in News, 111 COLUM. L. REV. (forthcoming 2011) (discussing the relatively recent resurgence of the "hot news" misappropriation doctrine); Hemphill & Suk, supra note 39, at 1184-90 (proposing tailored protection for fashion designs); Jad Mills, Patentable Subject Matter in Bilski v. Kappos, 130 S. Ct. 3218 (2010), 34 HARV. J.L. & PUB. POL'Y 377 (2010) (discussing effect of recent ruling on patentability of business method patents).

<sup>215.</sup> See generally Sprigman & Raustiala, Piracy Paradox, supra note 5.

creation incentive. 216 Tellingly, a 2005 European Commission study indicated that there was no conclusive data regarding whether the E.U. Database Directive had any significant influence on database production, but that the U.S. database industry, which operates in a relative low-IP environment, was growing faster than the E.U.'s, which operates under a sui generis protection system. 217 Many commentators have observed that a sort of first mover advantage applies to business methods as well: If a business method is genuinely superior, it does not require patent protection to benefit those who create it—and if it is not superior, no one will use it. 218 Those who invent superior business methods do not require patents to encourage invention, and those who invent inferior business methods will not benefit from patents. Thus, they argue, business method patents serve chiefly to increase transaction costs. 219

Also, because overprotection can be as damaging as underprotection, the intellectual property system would benefit from providing a genuine opportunity for creators to abandon their copyrights. Patent law provides for abandonment of one's inventions and dedication to the public; trademark law permits abandonment of marks in a variety of ways. 220 Each of these measures creates opportunities for follow-on inventions and creations. Yet it is strikingly difficult, if not impossible, to abandon one's copyright. 221 Many creators may believe this is what they are doing when they license their works under Creative Commons and similar licenses, yet such licenses actually create additional layers of protection under contract law

Id.

<sup>216.</sup> See supra Part III.B.1.c.

<sup>217.</sup> DG Internal Market and Services Working Paper, First Evaluation of Directive 96/9/EC on the Legal Protection of Databases, at 20, 22–24 (Dec. 12, 2005), available at http://ec.europa.eu/dgs/internal\_market/evaluation/evaluationdatabasesdirective.pdf.

<sup>218.</sup> See, e.g., Burk & Lemley, supra note 20, at 1618. Burk & Lemley write:

As many commentators have noted, however, companies have ample incentives to develop business methods even without patent protection, because the competitive marketplace rewards companies that use more efficient business methods. Even if competitors copy these methods, first mover advantages and branding can provide rewards to the innovator. Because new business methods do not generally require substantial investment in R&D, the prospect of even a modest supracompetitive reward will provide sufficient incentive to innovate.

<sup>219.</sup> See, e.g., In re Bilski, 545 F.3d 943, 1005 (Fed. Cir. 2008) (Mayer, J., dissenting) ("Business innovations, by their very nature, provide a competitive advantage and thus generate their own incentives."); Michael Abramowicz & John F. Duffy, Intellectual Property for Market Experimentation, 83 N.Y.U. L. REV. 337, 340 (2008) (arguing that firms need incentives for "market experimentation" when first mover or branding advantages prove insufficient); Dreyfuss, Business Method Patents, supra note 96, at 275.

<sup>220.</sup> See, e.g., 35 U.S.C § 102(c) (2006) (providing for loss of right to patent if inventor has abandoned the invention); Graver Tank & Mfg. Co. v. Linde Air Prod. Co., 339 U.S. 605, 614 (1950) ("What is not specifically claimed is dedicated to the public."); see also 15 U.S.C. § 1127 (2006) (providing for abandonment of a mark when "its use has been discontinued with intent not to resume such use" and "[w]hen any course of conduct of the owner, including acts of omission as well as commission, causes the mark to become the generic name for the goods or services on or in connection with which it is used or otherwise to lose its significance as a mark").

<sup>221.</sup> See Timothy K. Armstrong, Shrinking the Commons: Termination of Copyright Licenses and Transfers for the Benefit of the Public, 47 HARV. J. ON LEGIS. 359, 391–99 (2010) (describing copyright abandonment as a "paper tiger").

rather than freeing the work in any permanent sense.<sup>222</sup> Considering the changeability of the negative space calculus, most creators may not want to abandon their rights permanently—making withdrawable automatic licenses appealing. For the same reason, some creators, particularly those who have already benefited from first mover advantages, may wish to abandon their rights. In order to generate the productivity benefits of negative space, the system should permit them to do so.

#### D. REDUCE THE COST OF OBTAINING AND ENFORCING IP RIGHTS

Finally, it is tempting to conclude from this analysis that the high cost of obtaining and enforcing intellectual property rights does not harm the incentive function of intellectual property law. One could conclude that, since innovators and creators may elect to create even when they cannot afford protection, the price of protection is no impediment to creation. But it is equally valid to concludeconsidering the lack of controls on this experiment—that if protection and enforcement were less expensive, even more creators and innovators would come out of the woodwork. This hypothesis finds support in the fact that when sui generis norms based protection systems have arisen, they have often mirrored existing intellectual property rules. Roller derby participants who cannot afford the formalities of trademark law have devised a system that resembles the multifactor test applied in trademark cases; stand-up comics who cannot afford the formalities of copyright law abide by rules that tweak copyright's idea-expression dichotomy, but echo its substantial similarity requirement. 223 This implies that in some cases, creators are opting out of intellectual property law not because they don't like it, or not only because they don't like it, but because it is just too expensive. True, some are willing to take the risk of infringement, either because norms exist to protect them or because they continue to value recognition or community, but some may not be. An expensive intellectual property system excludes the latter group. To the extent that any potential creator would find greater incentive in the intellectual property system, they should not be excluded from it *solely* on the basis of price.

## IV. CONCLUSION

By identifying who creates IP's negative space and what makes a particular type of work well suited to reside in negative space, we can learn about the traditional intellectual property system itself. To date, most scholarship concerning IP's negative space has focused on case studies of particular industries and social movements that occupy IP's negative space. This Article builds upon that work to draw conclusions about the benefits of low-IP systems, and how those benefits can be translated to the current intellectual property regime.

Specifically, IP's negative space occupies three territories: (1) doctrinal no

<sup>222.</sup> See Dreyfuss, Does IP Need IP?, supra note 79, at 1449.

<sup>223.</sup> See Fagundes, supra note 19, at 17–18; Oliar & Sprigman, supra note 11, at 1822.

364

man's land, in which creations fall through the cracks of IP protection; (2) areas of IP forbearance, in which creators could receive protection, but choose either not to seek protection or not to pursue infringers; and (3) use-based carve outs, in which lawmakers have exempted certain types of intellectual property use from infringement liability.

Lawmakers, creators and users create these negative spaces under several potentially overlapping conditions. Works are well suited to negative space when (1) creation is significantly driven by something other than exclusivity based financial gain; (2) granting exclusivity would significantly harm or deter other creation or innovation; (3) the public interest in free access to information is higher than the risk of reduced production from diminished exclusivity incentives; and/or (4) creators prefer to reinvest scarce resources in further creation than in protection or enforcement of intellectual property, which is most likely to occur when the cost of obtaining or enforcing protection is greater than the benefit to be gained from enforcement.

These common theories of negative space lead to four core observations about intellectual property law. The first is that a desire for recognition can be a powerful driver of creation, and intellectual property protection may undermine a creator's ability to receive recognition. The second is that that there is a symbiotic relationship between negative space and "productive infringement," which builds on existing works and technology to create new creations and innovations. The third is that intellectual property protection is capable of inhibiting public access to creations and inventions and thereby hampering public knowledge, creation and innovation. The fourth is that intellectual property rights are often so costly to obtain and enforce that creators would prefer to invest resources in production than in IP protection or enforcement.

While these observations are far from new, they have often been used to argue that intellectual property law is unnecessary or detrimental to creation. I posit that, on the contrary, their connection with IP's negative space counsels in favor of a far more measured approach. Specifically, these tenets apply on the margins of intellectual property law, where creation and innovation thrive without the promise of exclusivity. They demonstrate that, to a large degree, a proclivity for negative space treatment is not necessarily inherent in a particular industry or creative community. Although the desirability of protection may depend in part on extralegal factors such as community culture, most hinge on traits of current intellectual property law. Thus, changes in law could lead to changes in negative spaces, making different creative communities better or worse suited to low-IP environments, or making certain industries or creative communities less likely to shun protection.

I do not mean to suggest that creators, consumers or anyone else would benefit from a system designed to motivate creators to seek protection. Far from it: since protection is useful only inasmuch as it acts as a motivator of creation, the key insight here is the knowledge of what may make a lack of protection preferable to protection. That knowledge gives us a new tool for optimizing intellectual property law to promote creation and innovation. Applying that knowledge, I propose that

# 2011] A THEORY OF IP'S NEGATIVE SPACE

intellectual property law would be well served by systems that encourage attribution, permit "productive infringement," resist the urge to protect works when protection is not necessary to encourage creation and reduce the cost of obtaining and enforcing intellectual property rights.

365