

**BEYOND EUREKA: WHAT CREATORS WANT
(FREEDOM, CREDIT, AND AUDIENCES) AND HOW
INTELLECTUAL PROPERTY CAN BETTER GIVE IT TO
THEM (BY SUPPORTING, SHARING, LICENSING,
AND ATTRIBUTION)**

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THE EUREKA MYTH: CREATORS, INNOVATORS, AND EVERYDAY INTELLECTUAL PROPERTY. BY *Jessica Silbey*. California: Stanford University Press. 2015. Pp. xi, 285. Cloth, \$85; paper, \$25.95.

INTRODUCTION

I read Jessica Silbey's book, *The Eureka Myth: Creators, Inventors, and Everyday Intellectual Property*,¹ while I was on sabbatical. The word sabbatical, like the word Sabbath,² conjures a sense of rest and a break from the day-to-day rhythms of commerce, transactions, and, for me as a professor, teaching. My husband was on sabbatical as well, and we and our two young sons spent much of the summer in the house in Belgium where my husband grew up, enjoying late sunsets, visiting with friends, and biking through idyllic pasturelands. Summer is supposed to be a carefree time, and for me it was—at times. But not until my sons were asleep or away at school or child care programs did I have the time and space to rest, reflect, and refocus on my writing projects, including this Review—to get the work done.

In the theater of the courtroom or the rough and tumble arena of intellectual property policymaking, the day-to-day lives of creators are rarely presented. We often instead see one-dimensional vignettes, for example, “the new artist or band that has just released their [*sic*] first single and will not be paid for its success,” described on Taylor Swift's Tumblr last summer when

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1. Jessica Silbey is a Professor of Law, Northeastern University School of Law.

2. *Sabbatical*, OXFORD DICTIONARIES, http://www.oxforddictionaries.com/us/definition/american_english/sabbatical [<https://perma.cc/WQ3Y-CLJJ>] (the origin of the word “sabbatical” is from the late sixteenth century, from Greek *sabbatikos* “of the sabbath”).

she initially withdrew from Apple's music streaming service.³ While instructive, this description leaves out that Swift and other artists have long relied on "free play" mediums like radio and, more recently, YouTube to develop, not cannibalize, their audiences and followers.⁴ Such accounts ignore both context and the complex relationship between what creators want and need and what intellectual property provides.

These are a few of the reasons that Jessica Silbey's book, *The Eureka Myth*, is both refreshing and important. In it, she draws from over fifty interviews, completed over half a decade, with an array of creative professionals, including filmmakers, photographers, sculptors, journalists, novelists, musicians, composers, hardware and software engineers, biologists, publishers, computer scientists, and business executives.⁵ Silbey asked them about their work, the challenges they faced, why and how they overcame professional obstacles, joys they experienced, and what was important to them. And at the end of each interview, she asked them what they thought about intellectual property (pp. 291–92). The resulting insights are as true as they are original.

Take the experiences of Joan,⁶ an internationally known public artist whose statements appear throughout the book. Joan is a woman who "wanted to make paintings. I wanted to publish them. But I didn't want to own them. . . . It's like having a litter of puppies and you [find] a good home for each one of them" (p. 1; omission and alteration in original). Having to maintain, store, and find "good homes" for artistic works is a practical burden—one that, unless you are a visual artist, may not be the first thing that comes to mind.⁷ Though placing puppies is a far cry from the fundamental purposes of intellectual property—which according to the Supreme Court include "inducing dissemination[] as opposed to creation"⁸—both creators and legal systems want to ensure the same end. Both want works to be created and disseminated to their audiences rather than kept in the minds or storage spaces of creative people.

But can intellectual property help achieve this end? Does it, on net, do so? And how might intellectual property be changed to advance the shared interest of creators and policymakers in the creation and dissemination of creative works?

The Eureka Myth provides authentic, if not always straightforward, answers to these questions. And in presenting the perspective of creators, it

3. Taylor Swift, *To Apple, Love Taylor*, TUMBLR (June 21, 2015), <http://taylorswift.tumblr.com/post/122071902085/to-apple-love-taylor> [<http://perma.cc/8YP6-S6BL>].

4. See Tom Conrad (@tconrad), TWITTER (June 22, 2015, 10:37 AM), <https://twitter.com/tconrad/status/613038036880744448> [<https://perma.cc/F9VD-DCVD>].

5. See pp. 287, 290.

6. This and the other names used throughout this Review are pseudonyms provided by Silbey to protect the privacy of her subjects. P. 297.

7. See p. 1.

8. P. 222 (quoting *Golan v. Holder*, 132 S. Ct. 873, 888 (2012) (emphasis omitted)).

provides much more—namely, accounts of how factors like serendipity, circumstance, and hard work really matter. It shows glimpses of the importance to creators of space, time, and the freedom to work on projects that one believes are worthwhile. It does so in an age in which declines in the cost of communication, content discovery, and replication⁹ are presenting creators with many more pathways, users, and uses in disseminating their work, even as intellectual property's default is to exclude them.

The result is a distillation of what, in their own words, creators want and the degree to which intellectual property does or does not align with these desires. While many commentators purport to represent the interests of artists and inventors, the creators that Silbey interviews speak for themselves throughout the book. Their experiences endow Silbey's observations and findings with an authenticity that other accounts lack. In the paragraphs that follow I draw from them and describe how in many cases they challenge, and in some others they support, traditional notions of intellectual property. Extending from this base, I bring other voices into the conversation—including related narratives, historical and modern empirical studies, and my own research—to consider what an intellectual property system keenly attuned to the needs of creators might look like, while recognizing that creators are not the only important constituency the intellectual property system needs to care about.

What creators want isn't all that surprising: freedom, credit, and relationships with their audiences and customers. What intellectual property offers is also fairly straightforward: the right to exclude, including the right to pursue legal actions against others for copying, misappropriating, or treading on one's work. These are not the same, as Chapter 3, entitled "Making Do with a Mismatch" recounts in detail, but the degree of match varies widely. In some of the cases Silbey reviews, intellectual property is perceived to be critical to support a protected space in which research and creative agendas can thrive (p. 217). In other contexts, intellectual property is just one of many factors that matter to creators; other times it is entirely beside the point.¹⁰ In yet other cases, intellectual property sends the wrong message ("go away") and actually undermines creators by, for example, deterring the audiences they are trying to reach or Pareto suboptimally discouraging paid or free uses that would benefit both licensee and licensor.¹¹ Across these scenarios, what creators seek is an accurate expression of their desires. They seek the ability to deploy intellectual property flexibly to

9. For an overview of the technologies that have reduced the cost of creating, distributing, and reproducing (i.e. the internet, 3D printing, synthetic biology, and robotics), see Mark A. Lemley, *IP in a World Without Scarcity*, 90 N.Y.U. L. REV. 460, 468–81 (2015).

10. See pp. 81–82.

11. See Alberto Galasso & Mark Schankerman, *Patents and Cumulative Innovation: Causal Evidence from the Courts* 30 (Rotman Sch. of Mgmt., Working Paper No. 2247011), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2247011 [<http://perma.cc/GH2P-37QQ>] (concluding, based on their analysis, that some—potentially feasible—licensing failure is taking place insofar as deals that would benefit both parties are not taking place in the presence of patent protection).

achieve their desired ends of complete exclusion, complete inclusion, and everything in between. They want choice, and they want control.

In order to support creators' desires for freedom, credit, and audiences during a time of declining communication, marketing, production, and reproduction costs, policymakers could consider reorienting intellectual property to better support goals other than exclusion. Making it easier for potential sellers and buyers of works to find each other, building more reliability into existing contract-based sharing regimes, and making paid and unpaid sharing easier—including through orphan-works reform and supporting licensing, defensive patenting, and humanitarian or public-domain dedication, as others have suggested—could go far to enhance creators' reputations and audiences' freedom to play and ability to get paid. Encouraging users and others to give accurate credit to creators—by taking attribution into account when copyright is enforced, enforcing commitments to attribute, and codifying best practices in attribution, as others have considered—would create a better alignment between U.S. intellectual property law and the expressive and personhood desires of creators and their audiences. Below I describe what *The Eureka Myth* and related works say about what creators want, and the implications of those desires for intellectual property.

I. WHAT CREATORS WANT

The primary purpose of intellectual property law is to motivate the production and dissemination of artistic, scientific, and technological works.¹² But to induce authors and inventors to take such steps requires an understanding of what motivates them. The first part of this essay distills the desires expressed by Silbey's subjects. Across a broad swath of fields, settings, and creative endeavors, creators expressed three desires: freedom, credit, and audiences.

A. Freedom

Freedom is essential to the creative process. Below, I describe how three freedoms—freedom to do meaningful work; freedom to play, borrow, and build upon; and freedom through revenue generation—and their pursuit define the substance and process of creation.

1. Freedom to Do Meaningful Work

“Autonomy, mastery, and purpose” motivate creative people to do their best work, according to Daniel Pink's well-known book, *Drive*.¹³ Among

12. E.g., Jeanne C. Fromer, *Expressive Incentives in Intellectual Property*, 98 VA. L. REV. 1750–52 (2012).

13. DANIEL H. PINK, *DRIVE* 80 (2009). See generally Richard M. Ryan & Edward L. Deci, *Self-Determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-Being*, 55 AM. PSYCHOLOGIST 68, 68 (2000) (describing how satisfaction of the basic human needs for “competence, autonomy, and relatedness,” motivates people); Teresa Amabile & Steve Kramer, *What Doesn't Motivate Creativity Can Kill It*, HARV. BUS. REV. (Apr.

Silbey's subjects, the freedom they feel while they work is the "common defining pleasure." Common themes include the freedom to play, the freedom to have fun, and the freedom to make things (p. 41). Freedom also means autonomy and control, including control over one's schedule and control over the content of what one works on.

Many of Silbey's subjects value freedom and flexibility more than money and are willing to take less pay (though, notably, not no pay) for more freedom (p. 44). As Thomas, a software engineer and entrepreneur, said:

The one thing that my job has always given me is a lot of flexibility and a lot of room. And I appreciated that a lot, because I could do pretty much anything I wanted, and I could pursue any projects that I wanted. So that, at that time, meant more to me than additional money. (p. 43)

Programs at well-run companies seek to free up the time of their employees by offering time-saving perks like on-site fitness centers, childcare, and subsidized food.¹⁴ Similarly, the nature of the creative process means that there are particular freedoms important to creators that intellectual property can either support or hinder.

2. Freedom to Play, Borrow, and Build Upon

The freedom to play and to discover is particularly important during the early stages of creating. Leo, a well-known visual artist, started out as a lawyer who entertained ideas of becoming a writer. While playing and experimenting with different sorts of paint materials in his kitchen in the evenings, he devised a new way of making paintings (p. 42). Another subject, Ted, talked about the "juvenile delinquents" at his bioengineering company that try to break stuff and come up with new inventions and discoveries in the process and are among the most prolific inventors in his company (pp. 42–43). Play can be motivated by a desire to solve a problem, but the result is often serendipitous, like Leo's paint technique. It was never the goal; it just happened.

The freedom to play is closely related to the freedom to draw upon and be inspired by others. Silbey's interviewees are the first to acknowledge that their talents are not just in creating completely new ideas from whole cloth, but also in "bringing ideas from different areas together," or the ability to "tweak, move [] around, adapt [content] . . . and then add in" other content (p. 47). One subject laments the decline of creative works made from scratch, as technology makes it easier and easier to create works that reflect "an accumulation, a compilation, [and] a conglomeration of different elements" (p. 48). But her observation flows from a well-established sense of

25, 2012), <https://hbr.org/2012/04/balancing-the-four-factors-tha-1> [<https://perma.cc/P2SF-8YPC>] (describing the importance of intrinsic motivation to creativity).

14. See, e.g., *100 Best Companies to Work For 2015*, FORTUNE, <http://fortune.com/best-companies/sas-institute-4/> [<http://perma.cc/92YV-67RS>] (listing SAS Institute as the fourth best company to work for).

the creative process as highly iterative in nature, and the creative outputs, at times, are as inevitable as they are tremendous. Calculus, evolution, and decimal fractions are a few of the many example of inventions created simultaneously by groups of inventors.¹⁵

By its nature, intellectual property places limits, sometimes significant ones, on the freedom of innovators to innovate freely, without worrying about getting the requisite permissions. Take the example of patents, in particular software patents—which many, including one of the nation’s most prominent venture capitalists—view to be “a major inhibitor of innovation.”¹⁶ Surveys I have done have found that patent assertions, primarily by patent trolls, have caused companies to pivot away from, discontinue, and stop selling products.¹⁷ A handful of other studies have found that they also reduce R&D.¹⁸

In fact, it is the freedom from assertions, rather than the conventional “incentive” to innovate story, that motivate a number of Silbey’s subjects to amass their own intellectual property, consistent with the existing literature. For example, 59 percent of 765 research-and-development managers surveyed by Cohen and his colleagues indicated that preventing suits or defensive objectives motived the acquisition of their last product innovation patent.¹⁹ Companies in technology sectors, initially spurred by the licensing campaigns of Texas Instruments and IBM, now routinely engage in defensive patenting,²⁰ where innovation is cumulative and incremental. This gives their engineers and scientists the freedom to play, experiment, and use any starting materials, developed in-house or elsewhere, that they desire. Silbey’s interviews confirm that defensive or portfolio patenting is used not only in

15. William F. Ogburn & Dorothy Thomas, *Are Inventions Inevitable? A Note on Social Evolution*, 37 POL. SCI. Q. 83, 83 (1922).

16. Fred Wilson, *Permissionless Innovation and Patents*, AVC (Feb. 19, 2010), <http://avc.com/2010/02/permissionless-innovation-and-patents/> [<https://perma.cc/9NW3-B5LA>].

17. See Colleen Chien, *Startups and Patent Trolls* 17 STAN. TECH. L. REV. 461 (2014).

18. See Lauren Cohen et al., *Patent Trolls: Evidence from Targeted Firms* 4 (Harvard Bus. Sch., Working Paper No. 15-002, 2015), http://www.hbs.edu/faculty/Publication%20Files/15-002_6806e22c-a7a6-45d8-bf1a-78cad85f20f5.pdf [<https://perma.cc/UBW8-9YNJ>]; Roger Smeets, *Does Patent Litigation Reduce Corporate R&D? An Analysis of US Public Firms* 2–5 (Tilburg Univ., Working Paper, 2014), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2443048 [<https://perma.cc/6TN9-QEA6>].

19. Wesley M. Cohen et al., *Protecting Their Intellectual Assets: Appropriability Conditions and Why U.S. Manufacturing Firms Patent (or Not)* fig.7 (Nat’l Bureau of Econ. Research, Working Paper No. 7552, 2000), <http://www.nber.org/papers/w7552.pdf> [<https://perma.cc/82RQ-7LKN>]; see also Sadao Nagaoka & John P. Walsh, *Commercialization and Other Uses of Patents in Japan and the U.S.: Major Findings from the RIETI-Georgia Tech Inventor Survey* fig.13 (Research Inst. of Econ., Trade and Indus., Discussion Paper No. 09-E-011, 2009), www.rieti.go.jp/jp/publications/dp/09e011.pdf [<http://perma.cc/5BEE-DMJC>] (finding that, among respondents to a survey in the United States of inventors of “triadic patents”—patents whose applications were filed in both the Japan Patent Office and the European Patent Office and granted in the United States Patent and Trademark Office—45 percent indicated that purely defensive motives were highly important in their acquisition of patents).

20. See Colleen V. Chien, *From Arms Race to Marketplace: The Complex Patent Ecosystem and Its Implications for the Patent System*, 62 HASTINGS L.J. 297, 304–10 (2010).

high tech, but also in the biosciences. As Dennis, who works at a publicly-traded, global pharmaceutical company, explains to his scientists:

I agree that this subject matter likely shouldn't be patentable. But . . . right now, it is being patented by other people, and we're having to analyze their patents, spend tens of thousands of dollars analyzing them, rendering opinions, telling business people they have to make business risks based upon infringement issues. And . . . we're taking licenses. . . . What I want is something that I can trade with somebody . . . I'm not interested in necessarily asserting these against anybody. (pp. 44–45; last omission added)

3. Freedom Through Revenue Generation

Even when intellectual property is not the primary motivator for individuals engaged in creative or inventive endeavors, it can play an instrumental role in securing them the freedom they seek. Meredith, a talent agent that Silbey interviews, describes the freedom licensing a song for a commercial can provide her client, a folk singer: “[b]y doing a thirty-second spot like that, she'll get more money in the next year than she'd get from her record label in six years This was going to be money that she could make without leaving her house” (p. 214; omission in original). In other cases, intellectual property is critical to the existence of a company, especially in the absence of other proxies for innovative output or potential. Patents can provide a check on “inflated view[s] of what [the invention is] worth” (p. 212; alterations in original). In the words of one of the venture capitalists Silbey interviewed, patents give investors greater confidence to commit resources to projects that lack revenue or customers. Thus while Silbey's sense is that “IP simply does not cross the minds of the[] creative or innovative clients [of IP lawyers]” (p. 191), “the entitlements that flow from the work as IP (e.g. revenue, exclusive use) [may] arise . . . after legal intervention” (p. 192).

In this sense, intellectual property can create breathing space, the ability to take risks and make long-term investments, and room to experiment away from the day-to-day pressure to generate revenue. This sentiment is supported by some historical studies of patent and copyright. The introduction of copyright in Italy ushered in a large increase in the quantity and quality of opera production as composers were able to benefit from repeat performances, and were incentivized to produce enduring works, Giorcelli and Moser found.²¹ Empirical historical studies that consider the introduction of patents, as well as the relative performance of countries that do and don't

21. Michela Giorcelli & Petra Moser, Copyright and Creativity: Evidence from Italian Operas (May 24, 2015) (unpublished manuscript), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2505776 [<http://perma.cc/7FPW-TDQP>].

have them, suggest that, if anything, patents influence the direction and diffusion of innovations rather than directly influencing the number of inventions.²² Moser found no increase in the number of new rose varieties introduced after the creation of U.S. plant patents in 1930 even though a large share of patents covered roses.²³ U.S. multinationals respond to stronger intellectual property regimes abroad by “significantly increasing technology transfer to reforming countries.”²⁴ However, increased transfer does not necessarily generate greater social welfare if it is associated with a higher-than-necessary social costs.

Still, the role of intellectual property must be understood in context. The serendipity that Silbey’s subjects experience is reflected in the well-documented skew in the value of copyrighted and patented works. Most works have little commercial value and are not worth affirmatively protecting with copyright²⁵ or a full patent term.²⁶ One of Silbey’s subjects, Dennis, “has great respect for the amount of time it takes to make a useful and novel discovery, and he understands how rarely it happens” (p. 232). Patent values are so unpredictable that patents are called “lottery tickets,”²⁷ because their value depends on many factors beyond the merits of the invention or artistic work. Decades may elapse before an initial discovery is commercialized. In fact, 153 years passed between the first patentable version of the jet engine and its eventual commercialization,²⁸ and it took more than two centuries for the insight that scurvy could be prevented by the vitamin C in citrus to fully diffuse.²⁹ Though scurvy was the leading cause of death among sailors

22. Petra Moser, *Patents and Innovation: Evidence from Economic History*, J. ECON. PERSP., Winter 2013, at 23; see Colleen V. Chien, *Opening the Patent System*, S. CAL. L. REV. (forthcoming 2016) (on file with author).

23. Moser, *supra* note 22, at 28.

24. Lee G. Branstetter et al., *Do Stronger Intellectual Property Rights Increase International Technology Transfer? Empirical Evidence from U.S. Firm-Level Panel Data*, 121 Q. J. ECON. 321, 347 (2006) (concluding that U.S. multinationals increased technology transfer to reforming countries with stronger IPR regimes and documenting an increase in royalty payments and research-and-development expenditures by multinationals after intellectual property reforms were adopted in sixteen countries); see Mercedes Delgado et al., *Intellectual Property Protection and the Geography of Trade*, 61 J. INDUS. ECON. 733 (2013) (finding increased trade flows in intellectual-property-intensive sectors following the implementation of treaty provisions about international intellectual property).

25. Christopher Sprigman, *Reform(aliz)ing Copyright*, 57 STAN. L. REV. 485, 512–14 (2004) (describing surveys showing that only 21 percent of library works in 1908 and less than a third of posters from 1976 were copyrighted).

26. FiveIPoffices, IP5 STATISTICS REPORT, fig.4.8 (2013), <http://www.fiveipoffices.org/statistics/statisticsreports/2013edition/ip5sr2013corr.pdf> [<http://perma.cc/V34T-E94U>] (showing that less than half of U.S. patents, and far fewer international patents, are renewed through their full potential term).

27. Gideon Parchomovsky & R. Polk Wagner, *Patent Portfolios*, 154 U. PA. L. REV. 1, 24 (2005) (explaining the lottery theory of patents).

28. Edmund W. Kitch, *The Nature and Function of the Patent System*, 20 J.L. & ECON. 265, 271–72 (1977).

29. Frederick Mosteller, *Innovation and Evaluation*, 211 SCIENCE 881, 881–82 (Feb. 27, 1981).

at the time of the first successful experiment in 1601, the general that fed his sailors three teaspoons of lemon juice a day was not a doctor.³⁰ Vitamin C's merits were confirmed 150 years later, but it would take another 120 years for the antidote to become widespread.³¹

Despite the emphasis in patent and copyright law on novelty and originality, exactly who reaps the rewards often depends on other factors—first-mover advantages, economies of scale, network effects,³² relationships with others (p. 28), randomness (p. 29), and marketing (p. 160). Serendipity may explain why even those who benefit from intellectual property aren't necessarily motivated by it *ex ante*. Jennifer was a salaried journalist who sold her book to a publisher and was able to live off the royalties (p. 29). Andrew was able to leverage his patent portfolio to get venture capital and eventually sell his business to a public company (p. 30). But based on probing these outcomes in depth, Silbey concludes, “these intellectual property jackpots were by no means preordained,” nor did they provide the initial motivation for the work that led to them (p. 30). Studies of technology transactions and why they often fail have found that uncertainty about the value of the underlying work is compounded by uncertainty about the existence and value of the intellectual property.³³ As Kevin, a high-tech entrepreneur, put it, “[t]he big problem in business with patents is that the implications are totally unquantifiable. What is it going to cost us—well, what are the odds we get sued? Impossible to figure out. What's the likely outcome? . . . Patents? Completely unquantifiable.”³⁴

Numerous studies appear to confirm the intuition that the returns to creative endeavors are by and large too uncertain to make much of a difference *ex ante* when intellectual property is extended.³⁵ In 1980, for example, the Bayh-Dole Act made it easier for universities to patent federally-funded inventions.³⁶ The cancer drug Alimta³⁷ and the Cohen-Boyer DNA techniques are among the numerous technologies that have been licensed since the Bayh-Dole Act.³⁸ The Association of University Technology Managers

30. *Id.* at 881.

31. *Id.* at 881–82, 886 n.5.

32. See PETER THIEL, *ZERO TO ONE* 48–53, 57–58 (2014).

33. E.g., Joshua S. Gans et al., *The Impact of Uncertain Intellectual Property Rights on the Market for Ideas: Evidence from Patent Grant Delays*, 54 *MGMT. SCI.* 982, 983–85 (2008).

34. P. 89. But see Colleen V. Chien, *Predicting Patent Litigation*, 90 *TEX. L. REV.* 283 (2011) (arguing, based on an empirical analysis, that intrinsic and extrinsic factors can be used to predict the likelihood that a patent will be litigated).

35. See, e.g., *Time to Fix Patents*, *ECONOMIST* (Aug. 8, 2015), <http://www.economist.com/news/leaders/21660522-ideas-fuel-economy-todays-patent-systems-are-rotten-way-rewarding-them-time-fix> [<http://perma.cc/9MBX-CPJG>].

36. Bhaven N. Sampat, *Patenting and US Academic Research in the 20th Century: The World Before and After Bayh-Dole*, 35 *RES. POL'Y* 772, 778 (2006).

37. Samantha Chaifetz et al., *Closing the Access Gap for Health Innovations: An Open Licensing Proposal for Universities*, 3 *GLOBALIZATION AND HEALTH*, no. 1, 2007, <http://www.biomedcentral.com/content/pdf/1744-8603-3-1.pdf> [<http://perma.cc/CR7Z-FF2F>].

38. Sampat, *supra* note 36, at 783.

credits the Act with the development of an impressive number of new vaccines and drugs.³⁹ But well before the Bayh-Dole Act, universities were devising and disseminating their inventions through a variety of mechanisms such as publication and institutional agreements.⁴⁰ The pursuit of the next great invention, but typically without its achievement, has resulted in the vast majority of technology transfer offices running at a deficit.⁴¹ An independent review of university innovation before and after Bayh-Dole concluded that there was little evidence that increased licensing and university patenting led to meaningful growth in the economic contributions of universities.⁴² Reviewing a number of metastudies of changes in the patent law, Boldrin and Levine likewise have found, “weak or no evidence that strengthening patent regimes increases innovation; they find evidence that strengthening the patent regime increases . . . patenting.”⁴³

Those who have studied variations in the strength of copyright draw a similar conclusion regarding their impact. A study of fifty changes in U.S. copyright law effected by Congress and the Supreme Court between 1870 and 2006 found that the relationship between laws that change copyright and the registration of new works was “essentially random.”⁴⁴ Of the other factors the authors considered, population was the best and most reliable predictor of the number of works produced.⁴⁵ Like Silbey’s subjects, these studies suggest that the impact on creators of changes in intellectual property is often hard to predict at best and nonexistent at worst. It’s also worth bearing in mind that while the freedom that money provides to creators is important to them, it is far from guaranteed that commercial success will follow intellectual property acquisition. As Scott, one of Silbey’s subjects, said, “How are we gonna derive [economic] value from our activities? . . . Well the only way we’re gonna do it is if we can convince people to buy the product and if we can build a good product, and make it work, and that’s all people driven” (p. 275; alterations and omissions in original). The relevance

39. See Ass’n of Univ. Tech. Managers, *The Bayh-Dole Act: It’s Working*, <http://www.autm.net/AUTMain/media/Advocacy/Documents/BayhDoleTalkingPointsFINAL.pdf> [<http://perma.cc/EP3D-8KDA>] (“Thanks to the research conducted at U.S. universities, and to technology transfer, over the past 30 years, 153 new FDA approved vaccines, drugs and/or new indications for existing drugs were discovered through research carried out in public sector research institutions, consisting of 93 small molecule drugs, 36 biologics, 15 vaccines, 8 in vivo diagnostics and 1 over-the-counter (OTC) drug. This would not have been possible without the Bayh-Dole Act.” (footnote omitted)).

40. Sampat, *supra* note 36, at 773–76.

41. NAT’L RESEARCH COUNCIL, *MANAGING UNIVERSITY INTELLECTUAL PROPERTY IN THE PUBLIC INTEREST*, 24 (Stephen A. Merrill & Anne-Marie Mazza eds., 2011); see also WALTER D. VALDIVIA, *UNIVERSITY START-UPS: CRITICAL FOR IMPROVING TECHNOLOGY TRANSFER*, 9 (Joshua Bleiberg et al. eds., 2013).

42. Sampat, *supra* note 36, at 773, 781–86.

43. MICHELE BOLDRIN & DAVID K. LEVINE, *AGAINST INTELLECTUAL MONOPOLY* 192 (2008) (omission in original).

44. Raymond Shih Ray Ku et al., *Does Copyright Law Promote Creativity? An Empirical Analysis of Copyright’s Bounty*, 62 *VAND. L. REV.* 1669, 1673 (2009).

45. *Id.* at 1673–74.

of intellectual property to reputation for recruitment is described in greater detail below.

B. *Credit / Reputation*

The most important thing to professional creators, Silbey finds, is their reputation (p. 149). Reputational interests are complex. They reflect pecuniary interests in a day and age in which Twitter account holders can monetize their followers⁴⁶ and creators and companies have personhood interests in ensuring that their reputation or brand authentically reflects the image that they want to project.⁴⁷ Reputational interests do not always map cleanly onto intellectual property rights: for example, in Silbey’s interviews, the “desire to be known as someone who contributes good ideas” is not necessarily tied to any particular work (p. 168).

The ever-closer connection between creators and their audiences made possible by the growth of social media makes the cultivation and protection of a company’s brand or an artist’s reputation one of their most important priorities—one that can take precedence over any interest in exclusion. Creators want attention,⁴⁸ and they want credit for their contributions. But more importantly they want accurate credit—a desire reflected outside of the United States primarily through “moral rights” doctrines such as the right “to claim authorship” of a work (the right of attribution) and the right “to object to any distortion, mutilation or other modification” of a work that would harm the author’s reputation (the right of integrity).⁴⁹

Because trademark law protects corporations against uses that are likely to cause consumer confusion, corporate reputational and brand interests are also strong. Silbey’s subjects describe trademarks as “priceless asset[s]” (pp. 160–62), and survey results confirm that trademarks outrank copyright and patent rights.⁵⁰ The perceived importance of a company’s brand can lead to overreach, Silbey documents, as her subjects describe their assertion of trademark rights in cases where they don’t have them in order to avoid unwanted associations.⁵¹ Susan, a university licensing officer, for example,

46. Elijah Daniel, *5 Services to Help You Earn Money from Your Twitter Account*, MASHABLE (Feb. 11, 2012), <http://mashable.com/2012/02/11/twitter-services-money/#Igm4ZalPiq3> [<http://perma.cc/F3XT-ERP8>].

47. See pp. 149–50.

48. Michael H. Goldhaber, *Attention Shoppers! The Currency of the New Economy Won’t Be Money, but Attention—A Radical Theory of Value*, WIRED, Dec. 1, 1997, <http://www.wired.com/1997/12/es-attention/> [<https://perma.cc/J8UZ-CKPZ>].

49. The Berne Convention Implementation Act of 1988 art. 6 *bis*, July 24, 1971, 102 Stat. 2853, 1161 U.N.T.S. 3.

50. John E. Jankowski, *Business Use of Intellectual Property Protection Documented in NSF Survey*, NAT’L SCI. FOUND. fig.2 (Feb. 2012), <http://www.nsf.gov/statistics/infbrief/nsf12307/> [<http://perma.cc/BZM9-GWD9>] (showing trademarks to be ranked ahead of copyrights, design patents, patents, and mask works in importance among companies).

51. See p. 161.

polices nonconfusing behavior that is not likely actionable under trademark law:

We get involved because we've been given the responsibility of the use of the name. That is, when Sony pictures wanted to film [a bad movie here]. . . . [W]e didn't want to let them, even though . . . it was a true story, it did happen [here]. We didn't want to let them, because we didn't want to be associated with [that kind of] picture. (p. 161; alterations and omissions in original)

1. Credit

In this Section, I discuss the intertwined desires of creators and the institutions that support them for credit, accurate attribution, and favorable reputation by association. The desire to be recognized, separate from the desire to be compensated, is pervasive among creators. Corporate inventor-reward programs like one that Silbey describes, which symbolically rewards employees who invent with silver dollars (p. 159), have long been used to give credit to inventors.⁵² Naming credit on scientific papers, which is often shared among groups of authors, is another way to recognize disparate contributions within a scientific cohort and to strengthen relationships and cohesiveness within the group (pp. 166–67). There are complex hierarchies for assigning credits to some creative works. Movies, for example, have both opening and closing credits and name those who contribute to the movie's production under a number of titles including producer, executive producer, co-producer, line producer, unit production manager, production supervisor, production coordinator, and associate producer.⁵³ Where and how an actor or director's name shows up in the credits are negotiated terms,⁵⁴ and experimental studies suggest that creators are willing to give up significant financial benefits in exchange for receiving credit for their work.⁵⁵

Even when creators want to share their copyrighted works for free, they want credit. Creative Commons is an organization that facilitates the sharing of works through the development of licenses that authors can place onto

52. According to U.S. patent law, the inventions of employees that are “hired to invent” belong to the employer, without any requirement to compensate the inventor for their patented contributions. Sean M. O'Connor, *Hired to Invent vs. Work Made for Hire: Resolving the Inconsistency Among Rights of Corporate Personhood, Authorship, and Inventorship*, 35 SEATTLE U. L. REV. 1227, 1240 (2012). Countries like Japan and Germany, in contrast, obligate employers to remunerate their employees for their inventions. JAPAN PATENT OFFICE, THEORY AND PRACTICE OF EMPLOYEES' INVENTION (2006), http://www.training-jpo.go.jp/en/images_x/uploads/text_vtr/pdf/4-05.pdf [<http://perma.cc/88JK-PA2W>].

53. John August, *Producer Credits and What They Mean*, JOHNAUGUST.COM (Oct. 21, 2004), <http://johnaugust.com/2004/producer-credits-and-what-they-mean> [<http://perma.cc/Y6SA-4D8Q>].

54. Ben Schott, Opinion Art, *Assembling the Billing Block*, N.Y. TIMES (Feb. 23, 2013), <http://www.nytimes.com/interactive/2013/02/24/opinion/sunday/ben-schott-movies-billing-blocks.html> [<http://perma.cc/6TGH-PKUQ>].

55. Christopher Jon Sprigman et al., *What's a Name Worth?: Experimental Tests of the Value of Attribution in Intellectual Property*, 93 B.U. L. REV. 1389, 1417 (2013).

their works.⁵⁶ Of the nearly 1 billion pieces of content that have been licensed under Creative Commons, 96 percent have been licensed under terms that require the user of the work to give credit to the author.⁵⁷ Widely used free and open-source software licenses give up copyright protections for attribution obligations.⁵⁸ Studies of Wikipedia contributors, stand-up comics, and chefs have documented the relative importance of attribution to these creators.⁵⁹

Sometimes a creator's interest in getting credit can clash with a distributor's interest in revenue generation. Growing the reputation of an author may be accomplished by the widespread dissemination of her work at zero cost, but doing so may cannibalize the market for paid reads and may alternatively be favored by the distributor⁶⁰ or the author.⁶¹

Putting aside the propriety of making a copy of work, there is a sense that failing to give credit independently harms the creator. In a recent survey of 443 members of the public, 62 percent of respondents believed that providing proper attribution should excuse the free copying of others' copyright content.⁶² This finding is striking because it elevates attributional interests over copyright interests and reflects an incorrect understanding of the law.⁶³

2. Accurate Attribution

Preventing misattribution may be even more important to creators than getting credit. The lawyers Silbey talks to describe their clients' unwillingness to license copyrights or trademarks because they don't want to give up control over the work (p. 156). Sidley recounts that when Steve Jobs initially decided to incur a financial loss by not licensing the characters from *Toy Story* to Disney, he did so to prevent Disney "from making bad sequels and

56. See *About the License*, CREATIVE COMMONS, <https://creativecommons.org/licenses/> [<https://perma.cc/E8DU-V5N4>] (showing a variety of licenses, all indicating that less than all copyright rights are reserved to the author and designating which audiences or rights are being given up).

57. *State of the Commons*, CREATIVE COMMONS, <https://stateof.creativecommons.org/report/> [<https://perma.cc/S9B2-AD7H>] (graphic indicating that CC0, the only Creative Commons license that does not require attribution, has been adopted to cover 4 percent the 882 million pieces of CC-licensed content in 2014).

58. Greg Lastowka, *Digital Attribution: Copyright and the Right to Credit*, 87 B.U. L. REV. 41, 59 (2007).

59. See Sprigman et al., *supra* note 55, at 1398–99, for a review.

60. See, e.g., Swift, *supra* note 3.

61. Lastowka, *supra* note 58, at 41 (quoting Ralph R. Shaw, *Copyright and the Right to Credit*, 113 SCIENCE 571, 572 (1951)).

62. Gregory N. Mandel et al., *Intellectual Property Law's Plagiarism Fallacy* 30 (Temple Univ. Beasley Sch. of Law, Working Paper No. 2015-22, 2015), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2588658 [<http://perma.cc/8SDN-Q2K2>].

63. *Id.* at 3, 13. The authors also find that this reflects a deep-seated misperception of intellectual property's purpose—that it is designed to prevent plagiarism or uncredited copying, when in reality it prohibits only unauthorized copying (with or without attribution). See *id.* at 16.

unseemly merchandise” (pp. 156–57). In his own words, “[t]hat would have been like molesting our children” (p. 157). Brand and control are closely intertwined; in the words of Barbara, a famous author, when ghostwriters are used on her sequels, she maintains “very close control My name is on the books” (p. 165; omission in original).

The desire for accurate attribution and control goes back to the expressive and personal interests that creators have in their works. As one of the painters Silbey interviewed explains:

Ultimately . . . I paint because I want to share . . . my sense of how I see the world, how I see color, with other people. I think I’ve got to . . . not be totally possessive about that . . . [A]s long as someone was [copying me] in a way that I felt was up to the quality [it might be OK] . . . but if you think they are degrading your work, that’s [another] thing. (p. 76; alterations and omissions in original)

3. Favorable Reputation by Association

Expressive and commercial interests are also implicated when it comes to whom a creator is associated with. Steven Tyler of Aerosmith, the members of R.E.M., and Neil Young have all complained about the use of their songs in Donald Trump’s 2016 presidential bid due to a concern, at least in the case of Mr. Tyler, that the use implies endorsement.⁶⁴ Concern about the use of a work in ways that are offensive to the author discourages some to share their works as well.⁶⁵ The desire to be closer, as well as further, from something can also be strong. As a musician interviewed for the book described, the decision to sign with a particular label was motivated by the desire to be associated with its brand: “I have tremendous respect for [the label]. They are small, but they are one of the leading . . . labels. . . . There’s so much crap, you know? . . . The label thing just sets you apart” (p. 158; first and third omissions in original).

Reputation matters to existing and potential employees as well. Companies can recruit the best only when employees feel affinity for the company’s mission. In Chapter 5, Silbey documents the tension between lawyers, who may be perceived as obstructionist, secretive, and exclusionary, and the scientists and engineers within firms whose impulse is to share and collaborate (pp. 184–220). In-house lawyer Jacqueline describes “a very long and difficult process of changing the mind-set at [the company]—and I think at other companies, too—from hoarding the true essence of your technology to wanting to share it with the world, because you realized the tremendous impact of what you were doing” (p. 202). In public statements, innovative companies like Google, Twitter, and Tesla have distanced themselves from

64. Ben Sisario, *In Choreographed Campaigns, Candidates Stumble Over Choice of Music*, N.Y. TIMES (Oct. 12, 2015), <http://www.nytimes.com/2015/10/13/us/politics/in-choreographed-campaigns-candidates-stumble-over-choice-of-music.html> [<https://perma.cc/Z97J-ZJUY>].

65. See Eric E. Johnson, *The Economics and Sociality of Sharing Intellectual Property Rights*, 94 B.U. L. REV. 1935, 1975 (2014).

the pursuit of patents because of their traditional association with exclusion.⁶⁶ In a blog post entitled “All Our Patent Are Belong To You,” Elon Musk disclaimed offensive uses of Tesla’s patents in order to make clear that they did not reflect a desire to exclude.⁶⁷ He did so apparently to bolster the firm’s reputation among its employees, writing:

Technology leadership is not defined by patents, which history has repeatedly shown to be small protection indeed against a determined competitor, but rather by the ability of a company to attract and motivate the world’s most talented engineers. We believe that applying the open source philosophy to our patents will strengthen rather than diminish Tesla’s position in this regard.⁶⁸

Just as the freedom to draw from the best materials is important for individual creators, a company’s success depends on the creative people it attracts to its projects.

Intellectual property policies can also enhance the reputation of a company. For example, defensive patenting can communicate a firm’s ability to retaliate or signal to the market the firm’s worth. As Andrew, a software entrepreneur interviewed by Silbey, described:

there is [sic] typically one or two ideas that are really valuable. . . . And then the company ends up getting a dozen or two dozen patents. The rest of them are just the blocking stuff—or not even that: they’re just something you build to look very attractive to a potential buyer. But they’re not real (p. 208–09; first omission in original)

Accumulating a large patent portfolio can be very lucrative: “[Company X] had a huge patent portfolio. And that’s where they did this trick. They had an in-house patent lawyer, and he really created value. . . . People looked at that company, the potential buyers, and said, ‘Wow! This company has one hundred issued US [sic] patents’ ” (p. 110; alteration and first omission in original). Intellectual property can help build value, as Donald describes:

The vision I had when I was the general counsel [was] . . . we knew that we wanted to sell that company eventually, so I was trying to build value. So literally, we . . . had one thousand or two thousand registered trademarks, we had at least two thousand copyrights, we have fifteen or twenty patents. (p. 110; alteration and omissions in original)

66. See Adam Messinger, *Introducing the Innovator’s Patent Agreement*, TWITTER BLOG (Apr. 17, 2012, 17:00 UTC), <https://blog.twitter.com/2012/introducing-innovators-patent-agreement> [<https://perma.cc/7S8W-FHJQ>]; Elon Musk, *All Our Patent Are Belong to You*, TESLA MOTORS BLOG (June 12, 2014), <http://www.teslamotors.com/blog/all-our-patent-are-belong-to-you> [<http://perma.cc/N5ZM-ADLR>].

67. See Musk, *supra* note 66.

68. *Id.*

C. Audiences

One reason reputation is so important to creators is that it is related to their ability to get another thing they desire: audiences or customers for their creations. Silbey discusses the importance to creators of various relationships.⁶⁹ Relationships with audiences in particular provide encouragement, meaning, feedback, and freedom. Social scientists Ryan and Deci have identified “relatedness” as a basic human need that motivates when paired with “competence” and “autonomy.”⁷⁰

Audiences inspire and they encourage. In the words of one software entrepreneur, one of his “biggest motivation[s] is people. Because once you get real consumers, you can actually talk to them on the phone, and if they like what you do . . . that’s what really kept me going” (p. 231; omission and alteration in original). Audiences feed and nurture the creative process. Barbara, a prolific author of children’s books, keeps letters and pictures of her adolescent fans around her desk, Silbey reports, to create “a safe and encouraging workspace” (p. 56). Fans may also provide a sense of purpose and meaning, which can best be fulfilled for one artist Silbey interviewed, when she is performing for a live audience. As Mary describes, “when the room is quiet and people are just right there, there is a circuit of energy where you wind up with more energy at the end of the show because you feel like in some tiny way, you have been of service” (p. 244).

Audiences also lead to revenue and freedom. As Richard, a global health-fund director at a pharmaceutical company, put it, “[w]e want to have an impact on health care, but we also have to make a return on investment” (p. 231). Having a product circulate generates the feedback and engagement that are needed for products to improve iteratively.⁷¹ Relationships with audiences can create enduring revenue streams. Though an individual work can be copied or pirated, a direct relationship with an audience makes it easier to promote, for example, a book or movie character who has been redeployed within video games, comic books, or other media.⁷² Silbey discerns at least five distinct modes of distribution, ranging from the “many and more” strategy—in which creators seek to distribute as many copies of their work as possible, preferably through paid methods—to the “nondistribution” or, “hold-out” category, in which the work is distributed sparingly, if at all (pp. 225–26). What creators want can be counterintuitive. Rather than the widest dissemination, some creators are seeking discerning audiences, who can support and fund continuing creative endeavors.⁷³

69. *E.g.*, pp. 137–40.

70. Ryan & Deci, *supra* note 13, at 68.

71. *See* p. 233.

72. *See* p. 240.

73. *See* p. 228.

II. HOW INTELLECTUAL PROPERTY CAN BE SUPPLEMENTED TO GIVE CREATORS WHAT THEY WANT

That three of the things creators really want are freedom, credit, and audiences is unlikely to surprise many. But using these concepts, rather than the legal constructs of intellectual property and exclusion, as starting points, will help ensure that creative interests are represented in discussions about policy in a way that is truthful, rather than oversimplistic. By and large, Silbey's creators are less motivated by the ability to exclude others, or the possibility of a huge payout, and much more focused on the process: dedicating time to their craft and doing day-to-day work. As world-renowned visual artist Chuck Close has said, "[i]nspiration is for amateurs. The rest of us just show up and get to work."⁷⁴ In a similar vein, the influence of intellectual property on the day-to-day lives of creators should not be overstated.

Thus, while it is usually assumed that creators benefit from stronger intellectual property provisions, Silbey's subjects, and the studies cited above, explain why the relationship between creators and intellectual property is more complicated. The availability of intellectual property creates security for a number of business models and can enable long-term investments in creation and innovation. It does not follow, however, that more intellectual property is necessarily better. On the contrary, the evidence cited above suggests that the overall returns to strengthening intellectual property are uncertain at best and negative at worst, though they can influence the direction and diffusion of innovations. Silbey's subjects explain in their own words why this is the case. The uncertainty and serendipity of the creative process limits any *ex ante* impact, even when the *ex post* rewards may turn out to be great.

Intellectual property also interferes, limiting the freedom creators have to play and the dissemination of their creative works by others to the audiences that they want. For example, the fact that intellectual property's default entitlements are set wrong or inefficiently⁷⁵ results in a loss to follow-on innovators or users through unnecessary forbearance or the need to "design around" the invention.⁷⁶ The losses to creators, however, are also significant, and arguably more concentrated, when intellectual property's exclusionary message sends the wrong signal to followers, future customers, and future employees whom the creator seeks to cultivate, engage with, and hire.

While these observations are not necessarily novel, knowing what *does* motivate creators can inform attempts to improve intellectual property law.

74. Anna Dorfman, *Lessons from Chuck Close*, DOOR SIXTEEN (Apr. 11, 2012), <http://www.doorsixteen.com/2012/04/11/lessons-from-chuck-close/> [<http://perma.cc/A63H-UWY4>].

75. See, e.g., JAMES BOYLE, *THE PUBLIC DOMAIN: ENCLOSING THE COMMONS OF THE MIND* 11–12 (2008) (asserting that for most works, the owners expect to recoup value from the work with five or ten years of exclusive rights, and that the remainder of the term is of little use except as a kind of "lottery ticket").

76. See, e.g., Johnson, *supra* note 65, at 1946–50 (lamenting the various types of inefficiencies that flow from the incorrect initial allocation of rights).

These motivations can direct policymakers to the shared interests of the public and creators—for example, greater connection, credit, and freedom to create. But *The Eureka Myth* focuses on creation stories rather than legal reforms. Where Silbey leaves off, this Part picks up.

A. *Greater Support for (Paid and Free) Inclusion, Not Just Exclusion*

Though intellectual property gives creators the right to exclude, creators often want to include others.⁷⁷ Much of the content on several of the internet's top websites—Wikipedia, YouTube, Facebook, and Twitter⁷⁸—has been generated without the expectation of payment and in pursuit of passion, not profits.⁷⁹ Sharing or including furthers creative interests by allowing a creator to connect to her audiences, earn their loyalty and admiration,⁸⁰ and get their feedback.⁸¹ Sharing builds reputation, fame, and market share,⁸² as Silbey documents. Even when a service is initially offered for free, sharing creates paths to eventual revenue streams through “freemium” and related models, for example.⁸³ When sharing means forbearing the exercise of exclusive patent rights, it creates freedom—the freedom to operate for follow-on innovators.

Technology is making sharing easier. Among copyright industries, intermediaries like Harper Collins and Paramount Pictures, who have traditionally added value by curating, gatekeeping, and tightly distributing selected works, are yielding ground to distributors like Amazon, Netflix, iTunes, and YouTube (p. 224). On these new platforms, content is available in abundance, anytime, anywhere. The openness of the internet makes it easier for scientists and engineers to learn from each other and share across firm boundaries. But that openness can also raise proprietary legal concerns as the culture clashes between lawyers, scientists, and creators.

The suggestion here is simple: to reorient the intellectual property system to better support the desire of creators to include and not only exclude

77. The importance of supporting the right to include has been discussed by others including THOMAS W. MERRILL & HENRY E. SMITH, *PROPERTY* 449 (2d ed. 2012) (“[I]t is important not only to be able to exclude other persons from the thing, but also to be able to include other persons in the use and enjoyment of the thing”) and Daniel B. Kelly, *The Right to Include*, 63 *EMORY L.J.* 857 (2014). See also Tim Wu, *Tolerated Use* (Columbia Law & Econ., Working Paper No. 333, 2008), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1132247 [<https://perma.cc/PY8A-A2BJ>] (describing strategies of “tolerated use” in which a copyright is violated, but not enforced).

78. *List of Most Popular Websites*, WIKIPEDIA, https://en.wikipedia.org/wiki/List_of_most_popular_websites [<https://perma.cc/AN2M-WQPM>].

79. Johnson, *supra* note 65, at 1959.

80. See p. 252–55.

81. Johnson, *supra* note 65, at 1994–95.

82. See pp. 121–27.

83. E.g., Fred Wilson, *The Freemium Business Model*, *AVC* (Mar. 23, 2006), http://avc.com/2006/03/the_freemium_bu/ [<http://perma.cc/94UJ-GKCU>].

others.⁸⁴ Potential solutions include supporting existing platforms for sharing, facilitating paid licensing, and sorting goods according to exclusive versus nonexclusive creator intent. The natural reaction to this idea might be that creators already have the ability to share through licensing contracts or through choosing not to enforce their intellectual property rights.⁸⁵ But the ability to *affirmatively* share that Creative Commons offers has been embraced widely.⁸⁶ As described below, existing experiences further demonstrate that mechanisms for licensing or giving away exclusive rights and, more generally, for disavowing exclusive uses of intellectual property are less developed than they could be.

1. Making Existing Sharing Mechanisms More Transparent and Reliable

One problem, for example, with underenforcement, is that it does not reliably provide freedom to use or operate. Owners have no way to signal their intention to forbear from enforcement to potential users. Even if an unlicensed use has been tolerated for a time, an owner's lack of enforcement could be due to a lack of knowledge, resources, or desire. Neither the owner's reason for not enforcing nor whether he or she will continue to do so is transparent to the public. In order to avoid stepping on landmines, risk-averse organizations—including libraries, archives, and other memory institutions—won't tread in the first place.⁸⁷

Even when an owner has taken affirmative steps to signal her intent to license or not assert intellectual property rights, the commitment in some cases stops short of providing follow-on innovators with the assurances they need to make long-term investments. Examples include the nearly one billion pieces of copyrighted works on Creative Commons,⁸⁸ the millions of patents licensed through organizations like the Open Invention Network and the License on Transfer Network, and other standards-setting organizations⁸⁹ that require royalty-limited or royalty-free licensing of patents. The problem with promises made to the public is that one-way promises are not

84. This suggestion is not original; in fact, it motivated the creation of Creative Commons. Lawrence Lessig, *CC in Review: Lawrence Lessig On Supporting the Commons*, CREATIVE COMMONS (Oct. 6, 2005), <http://creativecommons.org/lessig-letters/page/3> [<http://perma.cc/89R6-7SVF>] (“The idea (again, stolen from the FSF) was to produce copyright licenses that artists, authors, educators, and researchers could use to announce to the world the freedoms that they want their creative work to carry. If the default rule of copyright is ‘all rights reserved,’ the express meaning of a Creative Commons license is that only ‘some rights [are] reserved.’” (alteration in original)).

85. Paul J. Heald, *How Notice-and-Takedown Regimes Create Markets for Music on YouTube: An Empirical Study*, 83 U. MO. KAN. CITY L. REV. 313, 321 (2014) (describing examples of tolerated infringement on YouTube).

86. See *supra* note 57 and accompanying text.

87. See David R. Hansen et al., *Solving the Orphan Works Problem for the United States*, 37 COLUM. J.L. & ARTS 1, 3 (2013) (“[O]rganizations that cannot obtain permission often do not make their collections available at all.”).

88. See *supra* notes 56–57 and accompanying text.

89. Chien, *supra* note 22.

enforceable unless they induce reasonable reliance.⁹⁰ Under a federal law designed to protect authors, Creative Commons licenses can be terminated after a period of time,⁹¹ as a number of commentators have lamented.⁹²

A number of ways to build a more reliable “semi-commons” of creative works have been proposed. For example, grants of copyrights to the public could be made irrevocable through the extension of the legal doctrine of abandonment to partial abandonments of rights.⁹³ In the same spirit of “no takebacks,” I have suggested the creation of a “defensive-only” patent option that, once elected, would limit any future enforcement of the patent and stay with the patent through transfer.⁹⁴ Dedication of works to the public domain could also be made easier, including through legitimizing defensive publication in the patent context and creating easier pathways to effect public domain dedication.⁹⁵ Short of creating new legal doctrines and options for sharing, our intellectual property system could legitimize pledges to share by creating a registry where they could be recorded, thereby increasing the likelihood that a court will find it reasonable to rely on and enforce them.⁹⁶

2. Facilitating Licensing

It is also worth considering how to make it easier for willing buyers and sellers of protected works to form licenses. The practical obstacles to paid or unpaid licensing are illustrated well in the case of orphan works, “copyrighted works whose owners cannot be located by a reasonably diligent

90. RESTATEMENT (SECOND) OF CONTRACTS § 90 (1981) (“A promise which the promisor should reasonably expect to induce action or forbearance on the part of the promisee or a third person and which does induce such action or forbearance is binding if injustice can be avoided only by enforcement of the promise. The remedy granted for breach may be limited as justice requires.”).

91. See 17 U.S.C. § 203 (2012).

92. See, e.g., Timothy K. Armstrong, *Shrinking the Commons: Termination of Copyright Licenses and Transfers for the Benefit of the Public*, 47 HARV. J. ON LEGIS. 359, 363–64 (2010); Lydia Pallas Loren, *Building a Reliable Semicommons of Creative Works: Enforcement of Creative Commons Licenses and Limited Abandonment of Copyright*, 14 GEO. MASON L. REV. 271, 318 (2007).

93. Loren, *supra* note 92, at 327–28.

94. Chien, *supra* note 22 (manuscript at 60–63); Colleen Chien, *Why It’s Time to Open Up Our Patent System*, WASH. POST (June 30, 2015), <http://www.washingtonpost.com/news/innovations/wp/2015/06/30/why-its-time-to-open-up-our-patent-system/> [<http://perma.cc/7LNX-RTEG>].

95. See, e.g., Armstrong, *supra* note 92, at 360–64, 416–23 (arguing for adaptation of copyright termination provisions with respect to open-content licenses to promote public benefit); Adrienne K. Goss, Note, *Codifying a Commons: Copyright, Copyleft, and the Creative Commons Project*, 82 CHI.-KENT L. REV. 963, 990–96 (2007).

96. See Jorge L. Contreras, *Patent Pledges*, 47 ARIZ. ST. L.J. 543 (discussing patent pledges and the benefits of a national registry for patent pledges); Rebecca S. Eisenberg, *Noncompliance, Nonenforcement, Nonproblem? Rethinking the Anticommons in Biomedical Research*, 45 HOUS. L. REV. 1059, 1084–98 (2008) (discussing the costs, benefits, and sharing norms surrounding the anticommons patent model in academia).

search.”⁹⁷ The United Kingdom is estimated to have thirteen to fifty million orphan works, and a group of scholars has characterized the U.S. problem to be “at least as bad.”⁹⁸ In the patent context, there is both unmet supply and unmet demand for licensing. Invalidation of a patent leads to it being cited more frequently by subsequent patents,⁹⁹ and patent holders are willing to license 70 percent more patents than are currently licensed.¹⁰⁰ These failures impose significant costs on society. The European Union estimates that \$20 billion is spent annually to develop already existing innovations.¹⁰¹ And research has found that large numbers of copyrighted works are not circulating, at least in part, because the entities that want to bring the work to market cannot secure rights, because they cannot find the rights holder or because the holder is unwilling to license.¹⁰²

Reducing information and transaction costs would likely lead to more licensing of patented and copyrighted works, although the challenges differ by subject matter and by type of work.¹⁰³ In order for a license to be formed, a rights holder needs to be willing to license, contracting parties need to be able to find each other, and the parties need to agree on a price. While licensing markets are robust in certain copyrighted goods, the fact that copyright arises automatically, without any formalities, means that a complete public record of copyright ownership and authorship is missing.¹⁰⁴ A group of prominent copyright lawyers has soundly recommended encouraging standardized registration in public and private registries.¹⁰⁵

Markets for patented technology are underdeveloped for many reasons. The transfer of technology requires both patents and know-how to be transferred, and the availability of both for licensing is impossible to discern based on the public record. It can be difficult to unwind the assumption that

97. *A Case Study for Consensus Building: The Copyright Principles Project: Hearing Before the Subcomm. on Courts, Intellectual Prop., and the Internet of the H. Comm. on the Judiciary*, 113th Cong. 34–35 (2013) (statement of Daniel Gervais, Professor, Vanderbilt University Law School); Hansen et al., *supra* note 87, at 3.

98. Hansen et al., *supra* note 87, at 7.

99. Galasso & Schankerman, *supra* note 11, at 30.

100. Alfonso Gambardella et al., *The Market for Patents in Europe 2* (LEM, Working Paper No. 2006/04), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=899539 [<http://perma.cc/J7GH-97WX>] (reporting that while 18 percent of European patents are offered for licensing, only 11 percent are actually licensed).

101. Ashish Arora et al., *Markets for Technology and Their Implications for Corporate Strategy*, 10 *INDUS. & CORP. CHANGE* 419, 424 n.5 (2001).

102. Paul J. Heald, *How Copyright Keeps Works Disappeared*, 11 *J. EMPIRICAL LEGAL STUD.* 829 (2014).

103. *See id.*, at 860–61 (discussing various licensing challenges facing the book and music industries).

104. *See* Pamela Samuelson et al., *The Copyright Principles Project: Directions for Reform* 25 *BERKELEY TECH. L.J.* 1175, 1185–86.

105. *Id.* at 1198–203.

patent rights are sought by owners in order to pave their own market exclusivity, even though for nonpracticing entities such as universities, governments, and specialized inventors, licenses can hasten inventions to the market in the first place.¹⁰⁶ The doctrine of willfulness, which trebles damages for knowing infringements of patents, also discourages parties from talking to each other, lest a failed licensing negotiation become the basis for a claim for enhanced damages.¹⁰⁷ The question of how to encourage technology transactions deserves further deliberation. For example, limiting the chill that the willfulness doctrine places on negotiations, enabling patent holders to signal a desire and willingness to license, making licensing data more available, or requiring patent holders to record changes to ownership are all policy options worth further deliberation.¹⁰⁸

3. Making It Easier to Differentiate Between Works Held for Exclusion and Inclusion

Given the tremendous variation in the ways that intellectual property is used, it would also be worth exploring making it easier for creators to signal to the public their intents with respect to their works. As Silbey's subjects attest, patents are often filed in pursuit of nonexclusionary ends such as signaling value to investors or for defensive purposes.¹⁰⁹ Twitter and Tesla found clarifying that their company's patents are filed to be used "as a shield rather than as a weapon"¹¹⁰ and in support of, rather than against, an "open source philosophy"¹¹¹ important enough that both companies publicly did it. When Google decided to bid for Nortel's patent portfolio, it explained on its corporate blog that the move was intended to help, not undermine, the open-source community and that its acquisition was defensive, a move to "create a disincentive for others to sue Google."¹¹² To ensure that such corporate representations are backed up with reliable forbearance, companies could elect into a "defensive only" patent option as described above.

Creative Commons provides one way for copyright holders to reserve some, rather than all, copyright rights in works. But its reach is far from

106. Ashish Arora et al., *The Acquisition and Commercialization of Invention in American Manufacturing: Incidence and Impact* (Nat'l Bureau of Econ. Research, Working Paper No. 20264, 2014).

107. See Chien, *supra* note 22 (manuscript at 12).

108. See Remarks by Director Michelle K. Lee at *The Center for Strategic and International Studies (CSIS) Patent Reform Forum*, U.S. PATENT & TRADEMARK OFFICE (July 6, 2015, 12:48 PM), <http://www.uspto.gov/about-us/news-updates/remarks-director-michelle-k-lee-center-strategic-and-international-studies> [<http://perma.cc/VK86-NEKD>] (describing how patent reform can provide "increased transparency of patent ownership information to reduce the barriers to patent licensing and sales").

109. See pp. 113–14, 209–10.

110. Messinger, *supra* note 66.

111. Musk, *supra* note 66.

112. Kent Walker, *Patents and Innovation*, GOOGLE BLOG (Apr. 4, 2011), <https://google.blog.blogspot.com/2011/04/patents-and-innovation.html> [<https://perma.cc/QT7K-ZFG8>].

comprehensive, and the desire for easier ways to clarify the status of works persists.¹¹³ As described earlier, many, if not most, copyrighted works are created without the expectation of remuneration, and in many cases the creators would benefit from greater circulation of the work. One example of how this intuition is enshrined in copyright law is the prohibition on copyright over U.S. government works made by federal employees,¹¹⁴ a policy originally motivated by the desire to ensure democratic engagement with political speeches and laws.¹¹⁵ But because the U.S. government routinely releases works that are created by government contractors, which *are* protectable by copyright, there can be ambiguity about the status of the work that results and whether or not it can be reused.¹¹⁶

The orphan-works problem most clearly demonstrates how legal uncertainties suppress the circulation of works. Implementing orphan-works reforms by limiting the remedies available to reappearing rights holders, extending fair use, and supporting collective licensing regimes,¹¹⁷ should be among the highest priorities for Congress as it takes up copyright reform. Others have suggested statutory mechanisms for allowing users to choose to allow all noncommercial or humanitarian uses of their works.¹¹⁸ Already, the fair-use defense to copyright infringement is quicker to excuse infringement when the use is noncommercial,¹¹⁹ and this legal status reflects the documented instinct of members of the public that educational or humanitarian reuses are permissible.¹²⁰ The problem in these cases may be more technical than legal in nature. While authors may be willing to share with certain audiences—for example K–12 children in neighborhoods in need¹²¹—ensuring that free uses are not diverted to displace paid uses is a major concern. Another aspect of copyright reform, therefore, should be investments in technologies that reduce the risks associated with sharing.

113. See, e.g., Johnson, *supra* note 65, at 1182–91 (critiquing Creative Commons as ill-fitted to certain types of works, incompatible with certain kinds of uses, and failing both to leverage intrinsic motivations and to capture the range of possible sharing behaviors).

114. 17 U.S.C. § 105 (2012).

115. See, e.g., H.R. REP. NO. 101-927, at n.28 (1990) (stating that § 105 was enacted “to keep government data as free as possible of potential restrictions on dissemination”).

116. See Joshua Tauberer et al., *Open Government Data: Best-Practices Language for Making Data “License Free”*, @UNITEDSTATES (Dec. 12, 2013), <https://theunitedstates.io/licensing/#for-government-works-produced-by-a-contractor> [<https://perma.cc/2WSM-QVSX>] (arguing that data becomes “more valuable when it is clear that there is a green light enabling reuse”).

117. For a discussion of orphan-works reforms, see Hansen et al., *supra* note 87, at 23–48.

118. See Goss, *supra* note 95, at 990–96.

119. See 17 U.S.C. § 107(1) (2012).

120. See Mandel et al., *supra* note 62, at 30–31.

121. See *First Book Partners with White House, Libraries and Publishers on Groundbreaking Effort to Bring Thousands of e-Books to Children in Need*, FIRST BOOK (Apr. 30, 2015), <http://www.firstbook.org/first-book-story/media-center/press-room/428-first-book-partners-with-white-house-libraries-and-publishers-on-groundbreaking-effort-to-bring-thousands-of-e-books-to-children-in-need> [<http://perma.cc/65TW-MTRA>].

Another approach to sorting between those using intellectual property for exclusion versus inclusion is to require that rights holders opt into exclusion rather than out of it. The easiest way to do this is to make sure that the author or inventor actually wants the intellectual property. In fact, they usually don't. Only one out of five U.S. companies doing research-and-development files for any patents,¹²² and historical surveys show, for example, that only 21 percent of library works in 1908, and a third of posters from 1976, were copyrighted.¹²³

4. Reforming Patent Marking and Copyright Registration

Patent law continues to require inventors to affirmatively apply for the grant of a patent and to make payments to keep patents in force.¹²⁴ Copyrights under U.S. law, on the other hand, now vest automatically in the author, conferring the right to exclude regardless of whether the holder actually wants to do so.¹²⁵ Both intellectual property regimes, however, incorporate the idea that those who seek to enforce their rights must take affirmative steps. To get statutory damages or to recover attorney's fees in copyright, an owner must register the work.¹²⁶ And to get damages for infringement, patent holders must provide notice to the infringer, which can be accomplished by marking products that embody the intellectual property.¹²⁷ In theory then, members of the public should have notice of which rights intellectual property holders seek to enforce. More could be done, however, to make these public notice mechanisms meaningful. In the case of patent damages, the marking requirement is riddled with loopholes.¹²⁸ It does not extend to process patents or nonpracticed patents. If those loopholes were closed, marking could provide a more useful filter.¹²⁹ In addition,

122. BRANDON SHACKELFORD, NAT'L CTR. FOR SCI. AND ENG'G STATISTICS, NSF 13-307, ONE IN FIVE U.S. BUSINESSES WITH R&D APPLIED FOR A U.S. PATENT IN 2008 1 (2013), www.nsf.gov/statistics/infbrief/nsf13307/nsf13307.pdf [<https://perma.cc/4HNY-R7Q7>].

123. Sprigman, *supra* note 25, at 512–14.

124. 37 C.F.R. § 1.20(e)–(g) (2015) (proscribing the maintenance fees that patentees must pay to keep their patents in force).

125. Jane C. Ginsburg, *The U.S. Experience with Mandatory Copyright Formalities: A Love/Hate Relationship*, 33 COLUM. J.L. & ARTS 311 (2010).

126. 17 U.S.C. § 412 (2012).

127. 35 U.S.C. § 287(a) (2012); *cf.* Dennis Crouch, *False Marking: Lobbying Against the Senate Bill*, PATENTLY-O (Mar. 21, 2010), <http://patentlyo.com/patent/2010/03/false-marking-lobbying-against-the-senate-bill.html> [<http://perma.cc/PAN7-JUBX>] (describing penalties for the false marking of products).

128. *See, e.g.*, Roger D. Blair & Thomas F. Cotter, *Strict Liability and Its Alternatives in Patent Law*, 17 BERKELEY TECH. L.J. 799, 808, 834 (2002) (calling the marking statute “incoherent” and “problematic” including because it “allows knowledgeable (even willful) infringers to remain immune from damages liability”); Chien, *supra* note 22 (manuscript at 54–55); Christina Sharkey, *Strategic Assertions: Evading the Patent Marking Requirement*, 12 Nw. J. TECH. & INTEL. PROP. 103 (2014) (calling for closing the patent-marking loophole for process patents).

129. Blair & Cotter, *supra* note 128, at 843–45 (suggesting reforms to the current patent-marking requirement that would provide better notice to potential infringers).

if inducements to register and keep patent ownership information up-to-date were enhanced, more people would register ownership and transfers, which would facilitate licensing and signal an author's exclusionary motive.¹³⁰ The availability of certain remedies could be contingent upon registration to induce those with an exclusionary motive to register. The concept of pre-enforcement notice has long been embedded in U.S. law and enables the public to assess the risks associated with the use of intellectual property.

B. Supporting Attribution

Finally, one way that U.S. law could be shaped to better support creative interests is by recognizing the importance of attributional and reputational interests. Encouragingly, in congressional hearings, “the issues of individual authors, including attribution and the ability to say no to specific uses” have been discussed recently.¹³¹ Moral rights—including the rights of attribution and the right of integrity—are absent under U.S. law except in the case of works of visual art that fall within the ambit of the Visual Artists Rights Act (VARA).¹³²

Patent law at least requires that the accurate inventors of a product be memorialized on the face of the patent.¹³³ Inventors can also get credit when their patents and publications are subsequently cited by others, generating a “forward citation.”¹³⁴ These forms of credit-giving are limited, however. The relationship between patents and products in the market is tenuous at best, and there is no requirement that inventors be notified when an invention is commercialized. Forward citations are not trackable in a systematic way, and there is doubt about what they measure.¹³⁵ Copyright law's support for attribution is even more meager. There is no comparable requirement to associate an author with a work,¹³⁶ although, removing copyright information including authorship information from a work is a punishable offense.¹³⁷

130. Samuelson, *supra* note 104, at 1199–201.

131. *The Register's Perspective on Copyright Review: Hearing Before the H. Comm. on the Judiciary*, 114th Cong. 28 (Apr. 29, 2015) (statement of Maria A. Pallante, U.S. Register of Copyrights and Director of the U.S. Copyright Office).

132. *E.g.*, Lastowka, *supra* note 58, at 69.

133. *E.g.*, Fromer, *supra* note 12, at 1790–98 (2012) (contrasting these and other ways in which patent law is more supportive of attribution rights than copyright law).

134. *See, e.g.*, Jean O. Lanjouw & Mark Schankerman, *Characteristics of Patent Litigation: A Window on Competition*, 32 RAND J. ECON. 129, 134 (2001) (“An inventor must cite all related prior U.S. patents in the patent application.”).

135. *See, e.g.*, DAVID S. ABRAMS ET AL., PATENT VALUE AND CITATIONS 22 (2013), http://www.oecd.org/site/stipatents/psdm2013_2_1_abrams.pdf [<http://perma.cc/HE9Z-TAPD>] (illustrating the unclear correlation between forward citations and patent value above a certain patent value threshold).

136. Fromer, *supra* note 12, at 1793.

137. *See* 17 U.S.C. 1202 (b) (penalizing the removal of author information from a copyrighted work).

While copyright registrations also list a work's authors, registration is no longer required under U.S. copyright law.¹³⁸

As described earlier, trademark interests are arguably most closely aligned with the attributional interests of creators. A series of court decisions, culminating in the Supreme Court's 2003 *Dastar Corp. v. Twentieth Century Fox Film Corp.* decision, however, significantly limited the possibility of using intellectual property law to protect attribution, as distinct from economic interests.¹³⁹

In this void, there exist a few ways of enhancing attributional interests within copyright law. First, the Copyright Office could catalog and encourage best practices for giving attribution. Whether in a work itself through credits or in author pages or liner notes, best practices of attribution could be cataloged.¹⁴⁰ Although Creative Commons provides guidance on how to attribute to its adopters, it appears that its attribution provisions are consistently violated. According to an analysis of over 227 million Creative Commons photos, more than 90 percent were not attributed and 99 percent were not attributed correctly.¹⁴¹ Although this is just one data point, greater attention to attribution practices is needed given how important receiving credit is to creators. The Copyright Office could explore permitting the registration of attribution interests and attribution specifications separate and apart from copyright interests, pursuant to its authority under 17 U.S.C. § 205, for example.¹⁴² Permitting such registrations would legitimize attribution interests and increase the chance that a court would find the creator's reliance on the attribution actionable. Like a registry of patent pledges, a registry of Creative Commons-type licenses can boost the licenses' reliability at a low cost to the government.

Another approach, proposed by the Copyright Office in 2006, would be to reward third-party attribution in cases of orphan works.¹⁴³ The proposal limits damages in situations where the infringer has, in good faith, carried out a reasonably diligent but unsuccessful search to locate the owner of the infringed copyright, and "throughout the course of the infringement, provided attribution to the author and copyright owner of the work, if possible and as appropriate under the circumstances . . ."¹⁴⁴ Silbey's work validates the merits of such an approach. Finally, another proposal would be to reward attribution by making it a "fifth" fair-use factor in determining

138. Fromer, *supra* note 12, at 1793–94.

139. See p. 166 (citing *Dastar Corp. v. Twentieth Century Fox Film Corp.*, 539 U.S. 23 (2003)).

140. See Fromer, *supra* note 12, at 1792.

141. *How To Attribute Creative Commons Photos*, FOTER BLOG (Mar. 4, 2015), <http://foter.com/blog/how-to-attribute-creative-commons-photos/> [<http://perma.cc/9RYN-Q3F9>].

142. "Any transfer of copyright ownership or other document pertaining to a copyright may be recorded in the Copyright Office." 17 U.S.C. § 205 (2012).

143. U.S. COPYRIGHT OFFICE, REPORT ON ORPHAN WORKS (2006), <http://www.copyright.gov/orphan/orphan-report-full.pdf> [<http://perma.cc/SQN6-AG8N>].

144. *Id.* at 127.

whether or not the use of a copyrighted work is defensible.¹⁴⁵ According to the proposal, if an infringer gives credit to the author, the infringer's use is more likely to be considered fair.¹⁴⁶ Courts have at times taken into account attribution in applying the existing four fair-use factors, but codifying this practice would create a much stronger incentive for users to attribute to original authors.¹⁴⁷

CONCLUSION

At the time of this writing, lawmakers are grappling with how to reform copyright and patent law. High on the agenda are urgent objectives like dealing with abusive patent litigation,¹⁴⁸ limiting the harm to small firms from poorly worded demand letters,¹⁴⁹ and recalibrating statutory damages for copyright infringement.¹⁵⁰ But while lawmakers consider these important policy problems, they should also consider the day-to-day lives of creators and how policymaking could benefit creators. Silbey's *Eureka Myth* provides a glimpse into what is important to creators and into the role of intellectual property in creative pursuits. In reading it, the desire for freedom above all is clear. As a result, unlike some of the most controversial copyright and patent reforms being considered, the options described above largely do not enshrine rigid rules that favor one constituency over another. Instead, they create options for those who may not be best served all the time by intellectual property's default rules. For those for whom copyright and patent law are working fine, the world need not look different. But rewarding and making it easier for rights holders to signal their exclusive and inclusive intents, to share through paid and unpaid licenses, and for others to credit them through attribution would support others as their needs and desires change, well beyond the moment of Eureka.

145. Lastowka, *supra* note 58, at 84–89.

146. *Id.*

147. *See id.* at 85–89.

148. Press Release, U.S. House of Representatives Judiciary Committee, House Judiciary Comm. Approves Goodlatte Patent Reform Bill by Overwhelming, Bipartisan Vote (June 11, 2015), <http://judiciary.house.gov/index.cfm/2015/6/house-judiciary-committee-approves-goodlatte-patent-reform-bill-by-overwhelming-bipartisan-vote> [<http://perma.cc/KV2G-M3FE>].

149. Andrew Baluch & Jason Mock, *Survey of State Laws Against Bad-Faith Patent Assertion*, BLOOMBERG LAW (Aug. 27, 2014), <http://www.bna.com/survey-state-laws-n17179894188/> [<http://perma.cc/4GSD-DWHR>].

150. Press Release, U.S. House of Representatives Judiciary Committee, Chairman Goodlatte Announces Comprehensive Review of Copyright Law (Apr. 24, 2013), <http://judiciary.house.gov/index.cfm/2013/4/chairmangoodlatteannouncescomprehensivereviewofcopyrightlaw> [<http://perma.cc/T8FE-3CBX>].