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Intellectual Property, Independent Creation, and the Lockean Commons

Mala Chatterjee
Columbia Law School, mchatterjee@law.columbia.edu

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Intellectual Property, Independent Creation, and the Lockean Commons

Mala Chatterjee*

Copyrights and patents are differently structured intellectual property rights in different kinds of entities. Nonetheless, they are widely regarded by U.S. scholars as having the same theoretical underpinnings. Though scholars have sought to connect philosophical theories of property to intellectual property, with a particular interest in the labor theory of John Locke, these explorations have not sufficiently probed copyrights' and patents' doctrinal differences or their philosophical implications for the theories explored. This Article argues that a defining difference between copyrights and patents has normative significance for the framework of Lockean property theory: namely, that copyright law treats independent creation as a complete defense to claims of infringement while patent law does not. This distinction entails that the two legal systems differ in their effects on the "intellectual commons," or what exactly they give to rights-holders and take away from the rest of the world. It also entails that Seana Shiffrin's seminal challenge to Lockean theories of intellectual property—arguably the most significant philosophical exploration of intellectual property so far, but which fails to distinguish between these two areas of law—is a success as to patents but not as to copyrights. Disentangling this and other distinctions in copyrights and patents within the Lockean framework, as well as between tangible and intellectual property generally, this Article outlines a number of possible implications for intellectual property doctrine. Specifically, it identifies revisionary implications for copyright required by the Lockean framework in order to better protect the intellectual commons, as well as for the copyright/patent division of labor if the two legal systems have distinct theoretical grounds. The Article thereby uses the Lockean framework to call attention to intellectual property's underexplored philosophical complexity, as well as its doctrinal stakes, so that we begin considering it more carefully than it has yet been.

* Incoming Associate Professor, Columbia Law School; Furman Fellow, NYU School of Law; Ph.D. Candidate in Philosophy, New York University. Thanks very much to Shyamkrishna Balganesh, Barton Beebe, Chris Buccafusco, David Chalmers, Abraham Drassinower, Scott Hemphill, Barry Friedman, Jeanne Fromer, Robert Hopkins, Mark Lemley, Daniel Markovits, Liam Murphy, Matthew Sag, Erick Sam, Samuel Scheffler, Seana Shiffrin, Chris Sprigman, David Velleman, Jeremy Waldron, Gideon Yaffe, the NYU Department of Philosophy, my fellow Furman Academic Scholars in 2017–18, the attendants of the 2019 Works-in-Progress: Intellectual Property Conference, and the participants of the University of Pennsylvania School of Law's 2019 Copyright Scholarship Roundtable, for their very helpful comments and questions.

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INTRODUCTION

Copyright and patent law—both lumped together under the phrase “intellectual property”—are widely regarded by American legal scholars as having

the same theoretical underpinnings.¹ This is despite the fact that copyright and patent law have domains which not only are different but also purportedly disjoint. Whereas copyright law is in the business of allocating rights in *creative works*, including—but not limited to—songs, novels, paintings, and films,² patent law is the domain of rights in *functional inventions*, paradigmatic examples of which include machinery, electronic devices, and pharmaceuticals.³ The requirements for protection and the nature of the rights granted also are importantly different in each system. A creative work need only be original and made with a “modicum of creativity”⁴ in order to be copyrightable, while an invention seeking patent protection must be useful, novel, and nonobvious, such that the subject matter of patents is held to a much higher bar than that of copyrights.⁵ On the other hand, the protection granted to authors under copyright is far more limited than what inventors granted patents receive. For one thing, copyrights protect the *expression* of the work, but they do not protect any facts, functionality, high-level ideas, or “stock” elements the work might also contain.⁶ Moreover, copyright law recognizes an independent creation defense, which means that copyrights only are enforceable against individuals who have actually copied another’s protected work, rather than ones who independently make a work looking substantially similar.⁷ In contrast, patent law grants inventors a comparatively strong right in the protected invention, for even independent, subsequent inventors—ones demonstrably lacking access to or knowledge of the earlier inventors’ work—nonetheless are barred from utilizing the invention and defenseless against an infringement claim.⁸

1. See, e.g., Justin Hughes, *The Philosophy of Intellectual Property*, 77 GEO. L.J. 287, 291 (1988) (applying different theories of rights to intellectual property law as a general matter); WILLIAM M. LANDES & RICHARD A. POSNER, *THE ECONOMIC STRUCTURE OF INTELLECTUAL PROPERTY LAW* (2003) (defending an economic theory of all intellectual property law).

2. 17 U.S.C. § 102 (2018).

3. 35 U.S.C. § 101 (2018).

4. *Id.*; see also *Feist Publ’ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 346, 363 (1991) (holding that information alone without a modicum of original creativity cannot be protected by copyright, and therefore that a telephone directory was not copyrightable).

5. 35 U.S.C. §§ 101–103 (2018) (requiring that patent-eligible inventions be a “new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof,” that is also not “obvious . . . to a person having ordinary skill in the art”).

6. 17 U.S.C. § 102 (2018); see also *Burrow-Giles Lithographic Co. v. Sarony*, 111 U.S. 53, 58 (1884) (holding that one who discovers a fact is not its “maker” or “originator”); *Baker v. Selden*, 101 U.S. 99, 105 (1879) (“The description of the art in a book, though entitled to the benefit of copyright, lays no foundation for an exclusive claim to the art itself. The object of the one is explanation; the object of the other is use. The former may be secured by copyright. The latter can only be secured . . . by letters-patent.”).

7. *Castle Rock Ent., Inc. v. Carol Publ’g Grp.*, 150 F.3d 132, 137 (2d Cir. 1998) (noting that establishing copyright infringement requires demonstrating actual copying).

8. See 35 U.S.C. § 271 (2018) (identifying actions that constitute an infringement of patent); *Kewanee Oil Co. v. Bicron Corp.*, 416 U.S. 470, 490 (1974) (“While trade secret law does not forbid the discovery of the trade secret by fair and honest means, e.g., independent creation or reverse engineering, patent law operates ‘against the world,’ forbidding any use of the invention for whatever purpose for a significant length of time.”).

In light of these differences between copyright and patent law's scopes, requirements, and domains, a number of intellectual property doctrines—for example, the useful articles doctrine⁹—exist as safeguards for the division of labor between the two. Such doctrines aim to ensure that candidate subjects of intellectual property rights are not eligible for both copyright and patent protection. Instead, even works possessing both “expressive” and “functional” attributes are meant to fall within one domain or the other.¹⁰ Scholars emphasize the importance of this doctrinal division, cautioning against the risk of “overlapping protection” or “backdoor patents” that would run afoul of the conceptual structure of intellectual property law.¹¹ The purported importance of intellectual property law's division thus raises the question—despite the dominant view to the contrary—of whether copyrights and patents are philosophically distinct as well, possessing distinct normative foundations.

Nonetheless, as of yet, this question remains underexplored by both legal scholars and philosophers. While the dominant view among legal scholars is that both copyrights and patents have a wholly *economic* justification¹²—which is a kind of *utilitarian* justification—a number of legal scholars have sought to connect *non-utilitarian* philosophical theories of property to intellectual property, drawing inspiration from the ideas of John Locke,¹³ Immanuel Kant,¹⁴ John Rawls,¹⁵ and

9. 17 U.S.C. § 101 (2018).

10. Note that, although this is the aim of the useful articles doctrine, the Supreme Court's recent decision in *Star Athletica, L.L.C. v. Varsity Brands, Inc.* has been roundly criticized by intellectual property scholars for muddying the water by resulting in overlapping domains for copyright and patent law. 137 S. Ct. 1002 (2017). I return to this issue in the Conclusion of the present Article.

11. E.g., Viva R. Moffat, *Mutant Copyrights and Backdoor Patents: The Problem of Overlapping Intellectual Property Protection*, 19 BERKELEY TECH. L.J. 1473, 1500 (2004) (noting that the useful articles doctrine is a “channeling doctrine” that directs functional works to the patent realm in order to “maintain the distinction between the two regimes”); Mala Chatterjee, Note, *Conceptual Separability as Conceivability: A Philosophical Analysis of the Useful Articles Doctrine*, 93 N.Y.U. L. REV. 558 (2018) (arguing for an analysis of the useful articles doctrine that assures that no functional elements receive copyright protection). Another phrase for this is “patent smuggling.” See Gerard N. Magliocca, *Ornamental Design and Incremental Innovation*, 86 MARQ. L. REV. 845, 855 (2003) (describing patent smuggling as an effort to “dodge the patent process” by receiving a different form of protection).

12. See, e.g., Mark A. Lemley, *Property, Intellectual Property, and Free Riding*, 83 TEX. L. REV. 1031, 1031 (2005) (“Intellectual property protection in the United States has always been about generating incentives to create.”).

13. E.g., Wendy J. Gordon, *A Property Right in Self-Expression: Equality and Individualism in the Natural Law of Intellectual Property*, 102 YALE L.J. 1533, 1540 (1993); Lawrence C. Becker, *Deserving to Own Intellectual Property*, 68 CHI.-KENT L. REV. 609, 610 (1993); David McGowan, *Copyright Nonconsequentialism*, 69 MO. L. REV. 1, 2 (2004); Adam D. Moore, *A Lockean Theory of Intellectual Property Revisited*, 49 SAN DIEGO L. REV. 1069, 1070 (2012); Eric R. Claeys, *Labor, Exclusion, and Flourishing in Property Law*, 95 N.C. L. REV. 413, 417 (2017).

14. See generally ABRAHAM DRASSINOWER, WHAT'S WRONG WITH COPYING? (2015); Shyamkrishna Balganesh, *Privative Copyright*, 73 VAND. L. REV. 1 (2020).

15. See generally ROBERT P. MERGES, JUSTIFYING INTELLECTUAL PROPERTY (2011); Justin Hughes & Robert P. Merges, *Copyright and Distributive Justice*, 92 NOTRE DAME L. REV. 513 (2016).

G. W. F. Hegel.¹⁶ Lockean labor theory—the most well-known and controversial philosophy of property—has been the non-utilitarian account most frequently explored.¹⁷ But these efforts also have either assumed copyrights’ and patents’ theoretical unity or alternatively have focused primarily on the former, seemingly assuming a theoretical distinction. The question of *why* copyrights and patents would be distinct, or how exactly their differences are normatively significant, is left unanswered.¹⁸

On the other hand, in the domain of philosophers, there is little literature on the foundations of intellectual property law at all. And although philosophical work has long contributed to our understanding of property,¹⁹ intellectual property cannot simply be substituted into one’s favored philosophy of property without reflection, due to the important ways in which the two are very different. While property rights primarily are in that which is concrete, the subjects of intellectual property rights are intangible and abstract, non-rivalrous and infinitely shareable, and difficult to individuate or define precisely. Thus, they raise a class of considerations that are not present in the case of tangible property, and which complicate the efforts of legal scholars to adapt theories of property to intellectual property law. Indeed, in likely the most important philosophical exploration of intellectual property theory so far, Seana Shiffrin’s *Lockean Arguments for Private Intellectual Property* critiques these efforts to apply Lockean theory to intellectual property for overlooking differences between tangible and intellectual objects that, she argues, render the theory ill-suited for intellectual property rights.²⁰ But even Shiffrin’s seminal piece begins with the assumption of copyrights’ and patents’ theoretical unity, not considering whether their differences might have implications for Lockean theory itself.

16. See, e.g., Hughes, *supra* note 1, at 332; Christopher S. Yoo, *Rethinking Copyright and Personhood*, 2019 U. ILL. L. REV. 1039.

17. See, e.g., sources cited *supra* note 13.

18. See *infra* Section I.B.

19. For philosophical explorations of the justifications of physical property rights, see generally PLATO, *THE REPUBLIC* (R. E. Allen trans., Yale Univ. Press 2006) (375 B.C.E.); JOHN LOCKE, *TWO TREATISES OF GOVERNMENT* (Peter Laslett ed., Cambridge Univ. Press 1988) (1690); DAVID HUME, *A TREATISE OF HUMAN NATURE* (David Fate Norton & Mary J. Norton eds., Oxford Univ. Press 2007) (1739); JEAN-JACQUES ROUSSEAU, *DISCOURSE ON THE ORIGIN OF INEQUALITY* (Donald A. Cress trans., Hackett Pub. Co. 1992) (1755); JEREMY BENTHAM, *THEORY OF LEGISLATION* (Richard Hildreth trans., Thoemmes Continuum 2004) (1840); JOHN STUART MILL, *PRINCIPLES OF POLITICAL ECONOMY* (Jonathan Riley ed., Oxford Univ. Press 1994) (1848); KARL MARX, *CAPITAL* (Samuel Moore, Edward Aveling & Ernest Untermann eds., Wordsworth Editions 2013) (1867); JOHN RAWLS, *A THEORY OF JUSTICE* (1971); ROBERT NOZICK, *ANARCHY, STATE, AND UTOPIA* (1974); STEPHEN R. MUNZER, *A THEORY OF PROPERTY* (Jules Coleman ed., 1990); JEREMY WALDRON, *THE RIGHT TO PRIVATE PROPERTY* (1988); G. A. COHEN, *SELF-OWNERSHIP, FREEDOM, AND EQUALITY* (G.A. Cohen, Jon Elster & John Roemer eds., 1995).

20. Seana Valentine Shiffrin, *Lockean Arguments for Private Intellectual Property*, in *NEW ESSAYS IN THE LEGAL AND POLITICAL THEORY OF PROPERTY* 138 (Stephen R. Munzer ed., 2001).

The present Article grapples with these theoretical questions surrounding copyrights and patents, showcasing how failure to do so has already led legal scholars—and perhaps the law—astray. Using the framework of Locke’s labor theory, it demonstrates that copyrights and patents introduce philosophical wrinkles that are not present in the case of physical property, ones with different implications for each of the two legal systems. In particular, this Article argues that a defining difference between copyrights and patents has normative significance for the Lockean framework: that copyright law treats *independent creation* as a complete defense to claims of infringement while patent law does not. This distinction entails that the two legal systems differ in their effects on the *intellectual commons*, or what exactly they give to rights-holders and take away from the rest of the world, and it further entails that Shiffrin’s seminal challenge—the most sophisticated critique that Lockean intellectual property yet has faced—is a success as to patents but not as to copyrights. The Article disentangles and analyzes this and other distinctions in copyrights and patents, as well as between tangible and intellectual property generally, outlining several possible revisionary implications from Lockean theory for intellectual property doctrine. It thereby uses the Lockean framework to call attention to intellectual property’s underexplored philosophical complexity, as well as its doctrinal stakes, so that we begin considering it more carefully than it has yet been considered.

Part I provides the background of Locke’s property theory, the efforts of legal scholars to connect it to intellectual property, and Shiffrin’s argument for why Locke’s theory cannot be used to justify intellectual property rights. Part II argues that Shiffrin’s challenge is unsuccessful against a Lockean theory of copyright, in virtue of overlooking copyright’s existing and defining limitations: that copyright specifically protects expression and that independent creation is a complete defense, such that copyright grants do not appropriate from the intellectual commons. Part III explores Shiffrin’s likely response to this argument and further explicates the nature of our normative and interpretative disagreement. In so doing, it also disentangles rights *within* the copyright bundle by analyzing their respective fit with the Lockean framework. Part IV then outlines a number of potentially revisionary implications from Lockean theory for copyright doctrine, specifically with respect to (i) proving independent creation, (ii) “subconscious copying,” (iii) *scènes à faire*, (iv) duration, (v) fair use, and (vi) the derivative right. Next, Part V examines patent law, arguing that Shiffrin’s challenge succeeds against it and raising further objections for a Lockean theory of patents, thereby dissociating copyrights and patents in the Lockean framework. Finally, the Article concludes by outlining further questions raised by this discussion, not merely for Lockean theory but for the philosophical foundations of intellectual property generally, as well as their implications for intellectual property law.

I. LOCKEAN PROPERTY THEORY AND THE INTELLECTUAL COMMONS

This Part provides the requisite background of John Locke's labor theory of property,²¹ as well as efforts of legal scholars to apply the theory to the domain of intellectual property law. It then reconstructs Shiffrin's argument for the thesis that, even if we accept Locke's theory for the domain of tangible property, it cannot be used to justify intellectual property rights. Finally, it explains why moving Lockean theory from tangible to intellectual property presents distinct philosophical complexities, ones which will have different implications for Shiffrin's argument when applied to copyright versus patent law.

A. Common Ownership, Self-Ownership, and Lockean Property Rights

The most well-known discussion of John Locke's property theory is found in Chapter 5 of the *Second Treatise of Government*.²² Locke—starting with an egalitarian picture of the state of nature, according to which all individuals have equal moral status—begins the explication of his theory with the *common ownership thesis*.²³ According to this thesis, the world is initially commonly owned by all of humanity, with no human having any more entitlement to it than any other.²⁴ Locke grounds this initial common ownership in the fact that God *gave* the world to humanity in common, in order for it to be used by humanity “to the best advantage of life, and convenience. . . . for the support and comfort of their being.”²⁵

However, Locke tells us, the earth—the “commons”—cannot actually be used to our advantage unless we have some procedure for appropriating the commons' components, for transforming them from publicly held to privately owned. This is

21. For the purposes of this Article, I follow Seana Shiffrin's interpretation of Lockean property theory. I note this because it is no secret among philosophers who have contemplated Lockean theory that it might be interpreted or constructed in a number of ways. As we will see, and as Shiffrin herself acknowledges, her interpretation is unique in its emphasis on the *common ownership thesis*. Shiffrin, *supra* note 20, at 143. But the reader might be familiar with alternative interpretations of Lockean theory instead focusing on the *self-ownership thesis*, or on distinct normative principles such as *desert* or the *maker's right*. For a discussion of desert-based Lockean theories, see WALDRON, *supra* note 19, at 198; A. JOHN SIMMONS, THE LOCKEAN THEORY OF RIGHTS 258 (Marshall Cohen ed., 1992). For an exploration of the workmanship model of Lockean theory, see JAMES TULLY, A DISCOURSE ON PROPERTY: JOHN LOCKE AND HIS ADVERSARIES 37 (1980); GOPAL SREENIVASAN, THE LIMITS OF LOCKEAN RIGHTS IN PROPERTY 63 (1995).

I take Shiffrin's interpretation as my starting point because (a) it is an important and influential example of theorists unifying copyright and patent law, and (b) examining it will bring to light the more general philosophical significance of differences between and within the two. But note that this leaves open the questions of whether a contrary interpretation or construction is ultimately favorable, preferable, or convincing as a basis for intellectual property rights. I explore alternative interpretations of Lockean property theory—arguing that they plausibly support copyrights but not patents—in other work. See Mala Chatterjee, *The Fruits of Authorship: A Theory of Copyright* (2020) (Ph.D. dissertation, New York University) (on file with author).

22. LOCKE, *supra* note 19, § 25.

23. *Id.*

24. *Id.*

25. *Id.* § 26.

because the elements of the commons are *rivalrous*: their use by one necessarily precludes simultaneous use by another. Thus, for example, I cannot consume a commonly held apple and thereby use it for my advantage—preventing others from doing the same—unless there is some mechanism whereby it becomes my apple alone; nor can I build my home on a patch of land without some way to justly claim it as mine, removing said land from what is commonly held. Locke goes on to identify the means for such appropriation, deriving it from his *self-ownership thesis*. He explains,

Though the earth, and all inferior creatures be common to all men, yet every man has a property in his own person. This no body has any right to but himself. The labour of his body, and the work of his hands, we may say, are properly his. Whatsoever then he removes out of the state that nature hath provided, and left it in, he hath mixed his labour with, and jo[i]ned to it something that is his own, and thereby makes it his property. . . . [F]or this labour being the unquestionable property of the labourer, no man but he can have a right to what that is once jo[i]ned to, at least where there is enough, and as good left in common for others.²⁶

As Locke says, although the earth is owned in common, an important limitation on this common ownership is each individual's exclusive right—or, in Lockean terms, property—in himself. In other words, one's *self* is not a part of the commons; rather, our selves are already privately each of our own. Locke argues that it follows from this principle of self-ownership that we each also have exclusive rights in the labor of our own bodies, and he concludes that this labor is to serve as our mechanism for appropriation.²⁷ More specifically, Locke says that we may privately appropriate from the commons by “mixing” what is commonly owned with our privately owned labor.²⁸ Laboring on components of the commons imbues those components with something of the laborer's own, thereby creating a unique entitlement for the laborer and a justification for excluding others from what has been imbued. My picking an apple gives me the right to nourish myself with it exclusively, for example, because only I have mixed it with my labor through the act of picking it.²⁹

Locke articulates two limitations on our ability to use our labor to appropriate from the commons. The first limitation, known as the *Lockean proviso*, maintains that one can only appropriate from the commons if doing so will still leave enough and as good for the rest of humanity.³⁰ Given that the commons is a finite resource, Locke says, components of it can only be privatized by individuals to the extent that plenty is left behind for all others.³¹ Locke's second limitation concerns avoiding

26. *Id.* § 27.

27. *Id.*

28. *Id.*

29. *Id.* § 28.

30. *Id.* § 27.

31. *Id.*

the spoilage of resources. In particular, he says that one can only appropriate from the commons to the extent that one is able to fully utilize such appropriation.³² Thus, an acquisition of property is not legitimate if it will ultimately go to waste. These limitations on appropriation also are underpinned by Locke's emphasis on the commons being held equally by all for our use, rather than for the use of some at the expense of others.

B. Lockean Theory and Intellectual Property

As noted above, the dominant view among American legal scholars is that both copyright and patent law have a wholly economic justification.³³ According to this story, copyright and patent law both only exist in order to incentivize the efficient creation of socially valuable creative works and inventions.³⁴ But a number of legal scholars have deviated from this dominant narrative, defending the application of non-utilitarian property theories to intellectual property.³⁵ These efforts likely have been motivated by dissatisfaction with the conventional utilitarian picture, along with the *prima facie* attractiveness of certain compelling intuitions surrounding rights-based alternatives. And while scholars have pulled from Kantian ideas about autonomy and dignity,³⁶ Hegelian ideas about personhood,³⁷ and even Rawlsian ideas about distributive justice,³⁸ Locke's labor theory is no doubt the most frequently explored non-utilitarian framework.³⁹

This interest in Lockean theory likely is because the basic intuition that we are *sometimes, in some sense*, morally entitled to the fruits of our labor—including when that labor is authorial or inventive—still compels so many. Scholars have argued that the Lockean framework justifies the existence of intellectual property rights and that it perhaps even offers a better or more important justification than any alternative theory, including the dominant economic framework.⁴⁰ Often such arguments are put forth in support of the conclusion that, in fact, Lockean theory favors the existence of particularly strong intellectual property rights, ones even more protective of authors and inventors than those favored by the utilitarian narrative or the existing structure of intellectual property law.⁴¹ But some others

32. *Id.* § 37.

33. *See generally* LANDES & POSNER, *supra* note 1.

34. *Id.*

35. *See* sources cited *supra* notes 13–16.

36. *See* sources cited *supra* note 14.

37. *See, e.g.*, Hughes, *supra* note 1, at 291; Yoo, *supra* note 16.

38. *See* sources cited *supra* note 15.

39. *See* sources cited *supra* note 15.

40. *See* sources cited *supra* note 13.

41. *E.g.*, Becker, *supra* note 13, at 609, 610 (arguing that “people might deserve to own the products of their intellectual labor in an especially strong way—stronger than any way in which they might deserve to own the products of non-intellectual labor”); McGowan, *supra* note 13, at 51 (arguing that it is “hard to see why Lockean theory does not justify rights in ideas, assuming for the moment

have used the Lockean framework to justify limited intellectual property rights, ones more aligned with the existing structure of law and which accommodate countervailing rights and interests, particularly by relying on the Lockean proviso. Most notably, Wendy Gordon—in arguably the most significant extended defense of Lockean intellectual property thus far—has argued for this reason that a Lockean account of intellectual property justifies rights sufficiently limited to avoid interference with First Amendment liberties.⁴² As Gordon puts it,

The proviso that “enough and as good [be] left” lies at the center of this Article’s thesis: that creators should have property in their original works, only provided that such grant of property does no harm to other persons’ equal abilities to create or to draw upon the preexisting cultural matrix and scientific heritage.⁴³

Nonetheless, these existing explorations—whether they support stronger or weaker intellectual property rights generally—leave a number of important questions surrounding Lockean theory and intellectual property unanswered. First, legal scholars considering Lockean intellectual property typically have overlooked the centuries of philosophical criticism that Lockean property theory *itself* has faced, and which has led the majority of philosophers—including myself—to conclude that Lockean property theory is itself implausible.⁴⁴ By not engaging with these many critiques, these explorations leave us with the question of whether they would be equally forceful against Lockean intellectual property, rendering it unworthy of further consideration.⁴⁵

Second, and particularly in light of the aforementioned criticisms, scholars have underexplored the differences between intellectual and tangible objects or their implications for the feasibility of the Lockean theory. Indeed, Shiffrin’s challenge reacting to these existing explorations—which we examine and evaluate below—endeavors to show that scholars have missed an important way in which Lockean theory is ill-suited for intellectual property in virtue of the differences between intellectual and tangible objects. The present Article will also unearth important differences between the two, specifically regarding tangible and intellectual property rights’ effects on the Lockean commons, but with normative implications contrary to Shiffrin’s conclusion: that there are ways in which

that they could be made concrete enough to protect” and that “it is very hard to square existing fair use rights, or any other set of fair use rights, with Lockean theory”).

42. Gordon, *supra* note 13, at 1535. I argue against Gordon’s attempt at using the Lockean proviso to justify limitations on copyright grants in the present Article. See *infra* Section II.C.

43. Gordon, *supra* note 13, at 1563–64.

44. For a discussion of the most compelling of such critiques, see my article: Mala Chatterjee, *Lockean Copyright Versus Lockean Property*, 12 J. LEGAL ANALYSIS 136 (2020).

45. In another work, I fill this void by examining the dominant criticisms faced by Lockean property theory and evaluating their implications for Lockean theories of intellectual property by arguing that a Lockean theory of copyright in fact avoids the most compelling objections Lockean property has been faced with, such that the former turns out to be on firmer theoretical foundations than the latter. *Id.*

Lockean intellectual property arguably is *more* defensible than such a theory of tangible property.⁴⁶

Finally, the existing explorations leave us with questions about the implications of different *types* of intellectual objects and rights for the Lockean framework. Some scholars exploring Lockean intellectual property have followed the dominant account in assuming theoretical unity and thus have not differentiated between copyrights and patents or analyzed their differences.⁴⁷ But others have tended to focus their Lockean explorations (and rights-based explorations generally) more upon copyright than patent law, suggesting at least a latent intuition that the former is better suited for the Lockean framework, yet without completely articulating precisely *why* this would be so.⁴⁸ Indeed, these latter explorations often are regarded by those favoring the dominant, unified understanding of intellectual property as unduly “romantic” in their suggested conception of authorship, as though the activity is special or different from other creative activity like invention and thereby worthy of stronger rights.⁴⁹ Moreover, while some have noted that an independent creation defense—the particular focus of this Article—might have unique implications for the Lockean framework, the full range of these implications have

46. At this point, it is worth noting there is reason to think that Locke *himself* did not intend his theory to apply to intellectual property. For instance, in a 1694 memorandum opposing the renewal of Licensing Act, the parliamentary act which had given the Stationer’s Company exclusive control of publishing in Britain since the abolition of the Star Chamber, Locke makes no connection between his property theory and possible authorial rights and also objects to the idea of exclusive rights “in any book which has been in print fifty years.” PETER KING, *THE LIFE OF JOHN LOCKE* 375, 379–80 (London, Henry Colburn & Richard Bentley, 1830). For a discussion of the historical context and scholarly commentary on this memorandum, see Justin Hughes, *Locke’s 1694 Memorandum (and More Incomplete Copyright Historiographies)*, 27 CARDOZO ARTS & ENT. L.J. 555 (2010). However, I take myself in this Article to be exploring the fit between intellectual property and Lockean theory, rather than between intellectual property and Locke’s own beliefs. Indeed, the argument that the spirit and structure of Lockean theory turns out to be better suited for (and more defensible in) the domain of copyright than property—the latter being what Locke had in mind—is a straightforward rejection of Locke’s views: for it suggests that, in an important sense, Lockean copyright might be *more Lockean* than Locke’s own theory.

47. See, e.g., William Fisher, *Theories of Intellectual Property*, in *NEW ESSAYS IN THE LEGAL AND POLITICAL THEORY OF PROPERTY*, *supra* note 20, at 168.

48. See, e.g., Gordon, *supra* note 13; McGowan, *supra* note 13; DRASSINOWER, *supra* note 14.

49. See, e.g., James D.A. Boyle, *The Search for an Author: Shakespeare and the Framers*, 37 AM. U. L. REV. 625 (1988) (arguing that this romantic vision of authors causes us to value and protect some forms of creation over others, and to underestimate the importance of external sources in the creative process); Peter Jaszi, *Toward a Theory of Copyright: The Metamorphoses of “Authorship,”* 1991 DUKE L.J. 455, 456 (arguing that the author was an “ideologically charged concept” that functioned to individualize authorship in the eyes of the law, causing it to overprotect authors who fit the romantic and individualistic mold); MARK ROSE, *AUTHORS AND OWNERS: THE INVENTION OF COPYRIGHT* 135, 141 (1993) (arguing that “discourse of original genius” and “the problems inherent in the reifications of the author and work” complicate the application of copyright doctrine, “obscur[ing] the fact that the cultural production is always a matter of appropriation and transformation”).

not been explicated, particularly as they will relate to Shiffrin's influential criticism.⁵⁰ But the present Article provides this explication while substantiating and vindicating the intuition that copyright is uniquely well suited for rights-based theories. It identifies a way in which copyright *is* special, but which has nothing to do with "romanticism" about authorship and which ultimately disfavors categorically strong authorial rights. Thus, in addition to unearthing the philosophical significance of copyrights' and patents' differences in the Lockean framework, this Article hopes to show that—notwithstanding Shiffrin's seminal critique below—Lockean copyright theory is worthy of serious consideration, and it also yields surprisingly minimalist conclusions for copyrights themselves.⁵¹

C. Shiffrin's Challenge to Lockean Intellectual Property

While Lockean theory is the most frequently explored non-utilitarian theory of intellectual property, Shiffrin's is the most significant challenge it has been faced with, and it thus serves as our entry point in the dialectic. As she notes at the outset, Shiffrin's interpretation of Lockean theory is unique in its emphasis on the common ownership thesis.⁵² She disparages those interpreters of Lockean theory who focus only on the self-ownership thesis, simply reciting the slogan that laborers own their labor's fruits without recognizing the role of these ideas in the broader picture.⁵³ Shiffrin argues that this story is incomplete for failing to note humanity's common ownership of the earth in its natural state, as it is only because the earth cannot be used *without* private (rather than common) ownership that Locke introduces labor as the mechanism for appropriation.⁵⁴ In other words, Shiffrin says, if the commons *could* be used by all while still being commonly held, then there would be no need

50. In particular, some scholars have noted that the lack of an independent creation defense fails to recognize the labor of the subsequent creator or inventor and that such a defense might be required by the Lockean proviso. *See, e.g.*, Gordon, *supra* note 13, at 1581–82 (“Lockean property rights are limited to protecting an initial laborer from someone injuriously taking advantage of ‘another’s Pains’, which an independent rediscoverer does not do. Lockean law would, therefore, indeed permit independent rediscoverers to use their creations and discoveries.”); Becker, *supra* note 13, at 623 (“If the devices are then independently invented and patented by others, *and* if we have resolved the equivocation in desert-for-excellence arguments by saying excellence will be rewarded with property rights, then surely *both* have a desert-claim to title.”); Adam D. Moore, *A Lockean Theory of Intellectual Property*, 21 HAMLINE L. REV. 65, 100 (1997) (“[S]urely those who have independently created a patented process are made worse by being excluded from obtaining intellectual property rights[.]”); 1 PETER S. MENELL, MARK A. LEMLEY, ROBERT P. MERGES & SHYAMKRISHNA BALGANESH, INTELLECTUAL PROPERTY IN THE NEW TECHNOLOGICAL AGE: 2020, at 5 (2020) (“We ‘might distinguish between a Lockean theory of copyright, which prevents copying, and an effort to justify patent law, which precludes even independent invention and therefore restricts the labor of others.’”); *see also* NOZICK, *supra* note 19. I explore and elaborate on these arguments below. *See infra* Section V.C.

51. In other work, I explore and defend a Lockean theory of copyright and authorship, one grounded in the unique properties of copyright's expressive subject matter, and which avoids problems faced by such a theory of property or patents. *See* Chatterjee, *supra* note 21.

52. Shiffrin, *supra* note 20, at 143.

53. *Id.*

54. *Id.* at 146.

for Locke to introduce a mechanism for private appropriation from the commons in the first place.⁵⁵

This idea that *necessity for use* is a precondition for permissible appropriation from the commons is central to Shiffrin's challenge against a Lockean theory of intellectual property rights, as it is where the analogy between tangible and intellectual property breaks down.⁵⁶ As we saw above, private appropriation is necessary for use of the physical commons because it (and all it contains) is rivalrous: one's consumption of an apple or fencing in of a patch of land precludes anyone else from using that same apple or patch of land in the same way. It is on this basis that Locke provided a mechanism for appropriation; in the case of the physical commons, private appropriation is necessary for it being usable at all.

However, Shiffrin argues, this is not true in the case of *intellectual* property's subject matter. Instead, "one's use or consumption of an idea, proposition, concept, expression, method, and so forth, is fully compatible with others' use, even their simultaneous use."⁵⁷ In fact, she explains, intellectual objects are only more fully utilized when they are commonly held and shared, as this allows more of humanity to enjoy their benefits rather than limiting that enjoyment to only those with private ownership.⁵⁸ This is all because intellectual objects are *non-rivalrous*, meaning they can be simultaneously consumed by any number of individuals without inhibiting the ability of any others to also consume. Thus, Shiffrin concludes that the private appropriation of intellectual objects simply cannot be justified under the Lockean picture. Locke only permits private appropriation from the commons when such appropriation is necessary for use, and in the case of intellectual property, this condition will never be met.

D. The Nature of the Intellectual Commons

Do intellectual property rights appropriate from the commons? In light of the common ownership thesis and its centrality in Lockean theory, the question of what the preexisting commons contains—of what is, in fact, originally commonly owned—is fundamental. In the case of tangible property, the answer is straightforward: Locke says that the earth and all it contains is originally held in common, which includes all land and physical materials. And at first blush, Shiffrin's argument seems to succeed only if we conceive of the commons as including an *intellectual commons*, such that grants of copyrights and patents—like grants of property—appropriate from what is otherwise commonly owned.⁵⁹ But in light of the abstract and seemingly infinite intellectual "raw materials" that creative works and inventions are made from, the answer to the question of what the preexisting

55. *Id.*

56. *Id.* at 156.

57. *Id.*

58. *Id.*

59. See *supra* note 26 and accompanying text.

intellectual commons contains is not as obvious. Thus, prior to evaluating Shiffrin's argument, we must determine how the intellectual commons should be understood.

Supposing one possible conception of the preexisting intellectual commons as *empty*, Jonathan Peterson has noted that Shiffrin's challenge is unsuccessful if we understand authors and inventors as always creating and inventing *ex nihilo*, or from nothing.⁶⁰ According to this conception of creation and invention, authors and inventors do not use anything from the preexisting commons and are instead bringing about something wholly new.⁶¹ Put differently, the argument goes, Locke's "necessity for use" condition (hereafter called the *necessity condition*) for private appropriation specifically regards materials in the original commons. But since the *ex nihilo* conception of creation and invention maintains that the original intellectual commons itself contains nothing, these activities do not use any commons materials at all. Thus, under the *ex nihilo* conception, Shiffrin's initial challenge would seem to not get off the ground.⁶²

However, this conception of creation and invention is implausible. Consider Jeremy Waldron's discussion of the post-modern challenge to the idea of *ex nihilo* creation, defending the view of intellectual works as "fragmented *pastiches*"⁶³ rather than as genuinely created from scratch. Waldron explains,

If one just reflects a little on what it really means to write a book, compose a song or conceive an image in a modern world saturated with culture, one will hardly be surprised, let alone outraged, to hear that a given author's work incorporates or makes use of elements that are familiar to us already. In a world dominated by television, in a physical environment over-borne by advertising, in conversation increasingly loaded with, like, catch-phrases, it is the idea of *the totally new* that should surprise us. That an author's work should be completely original rather than derivative, so far from being a moral or legal requirement, would strike most sensible observers as supererogatory.⁶⁴

Shiffrin herself seems to favor a conception of the preexisting intellectual commons as containing all ideas, propositions, concepts, expressions, and so on, such that every act of creation or invention is an act of constructing a composition of some subset of these preexisting raw materials.⁶⁵ Indeed, such creations and inventions might be novel compositions, unlike any of the creations or inventions that have come before, but they nonetheless are constructed out of these preexisting materials from the commons. Under this view, the construction of intellectual objects is analogous to that of tangible objects in one important sense: just as we

60. Jonathan Peterson, *Lockean Property and Literary Works*, 14 LEGAL THEORY 257, 265, 269 (2008).

61. *Id.* at 265–66.

62. Shiffrin does respond to this conclusion, as discussed in the following Section. *See infra* Part III.

63. Jeremy Waldron, *From Authors to Copiers: Individual Rights and Social Values in Intellectual Property*, 68 CHI.-KENT L. REV. 841, 881 (1993).

64. *Id.*

65. Shiffrin, *supra* note 20, at 161–62.

are not capable of genuinely creating new matter, we can still separate, combine, and transform existing matter such that it becomes something new and different from what it formerly was. This understanding of the intellectual commons, and the processes of invention and creation, is the one I also take to be the most plausible.⁶⁶ Thus, with it in mind, we can now examine why Shiffrin's challenge to Lockean intellectual property is unsuccessful as to copyright.

II. COPYRIGHT'S LIMITATIONS AND INDEPENDENT CREATION

As a preliminary response, note that—despite intellectual objects being technically non-rivalrous—there might be *some* senses in which private appropriation is necessary for their full use. After all, the conventional economic story is that authors and inventors would not be able to use their creative works and inventions to earn a living but for the existence of legally enforceable exclusive rights.⁶⁷ Moreover, if the dominant legal narrative—that many creative works and inventions would not exist in the absence of the incentive offered by intellectual property rights—is correct as an *empirical* matter, then it seems that private appropriation is necessary for *any* use of those works. This is because an object's existence is a precondition on its use. Thus, for those works that would not exist but for the incentive provided by exclusive rights, private rights are necessary for them to be put to any use at all.⁶⁸

This empirical claim that intellectual property rights incentivize creation and invention—the central premise in utilitarian defenses of intellectual property rights—will have implications for the Lockean framework as well. But for now, suppose that we accept Shiffrin's contention that intellectual objects do not satisfy

66. Note a third possible conception of the intellectual commons offered by a more robust form of *Platonism*. Shiffrin, *supra* note 20, at 160. According to such a view, it is not merely that all ideas, expressions, concepts, exist in the preexisting intellectual commons; all possible combinations of these elements—in other words, all possible configurations for creations and inventions—are a part of it as well. *Id.* at 138, 160. Such a view would presuppose a robust ontology of abstract entities, and it would conceive of the work of creators and inventors as something more like discovering creations and inventions—actualizing these abstracta—than like genuinely making anything new. Shiffrin notes that many would regard Platonist conceptions of creation and invention as implausible. *Id.* at 160. But we will see that the claim of this Article—that Shiffrin's challenge fails in the case of copyrights while succeeding in the case of patents—holds true even if we are Platonists about the subject matter of both.

67. It is not obvious why “use for sale” or “use to earn a living” is not mentioned by Shiffrin as an example of a use for which private appropriation is necessary. After all, Locke does not limit the permissible appropriation for physical property to only instances where the property is used in ways necessary for self-preservation, and Shiffrin notes the “gap in Locke's account, namely the absence of a fuller, explicit account of what other uses are valid and appropriate” leaves open normative questions regarding what sorts of uses justify private appropriation. Shiffrin, *supra* note 20, at 151. My best guess is that Shiffrin would respond by contending that this begs the questions. In other words, “selling” is only a legitimate use of something if one already legitimately private owns it; whereas her claim is that one cannot legitimately privately own something under Lockean theory unless it is rivalrous, such that “use for selling” cannot be put forth as the grounds for such legitimate private ownership.

68. Thanks to Erick Sam for raising this argument in conversation.

the necessity condition for appropriation from the commons. Still, there is an important difference between copyrights and patents as they pertain to Shiffrin's challenge that has broader potential implications for intellectual property theory: that copyrights, unlike patents, do not appropriate from the intellectual commons at all. In other words, Shiffrin's argument underappreciates the implications of copyrights' central limitations: that protection is limited to a work's expression and that independent creation is a complete defense to claims of infringement. In this Part, we will see why these limitations entail that copyrights do not remove anything from the preexisting commons. In fact, we will see, they might ultimately *expand* the commons rather than deplete it. It will also trivially follow that these limitations accord with the Lockean proviso. In the following Part, we will unpack the shortcomings of Shiffrin's likely response to this argument while disentangling important distinctions in the copyright bundle of rights itself, thus concluding that Lockean copyright cannot be ruled out for the reasons that Shiffrin has put forth.

A. Expression vs. Ideas, Scènes à Faire, and Facts

Recall the favored conception of the preexisting intellectual commons: that it includes "raw" intellectual materials—ideas, concepts, expressions, processes, methods—such that creation and invention involves combining them into a distinct, original, and potentially novel composition.⁶⁹ Even though, according to this picture, the creative works *themselves* are not a part of the preexisting commons, Shiffrin argues that the act of granting copyrights amounts to restricting the raw materials from which these creative works have been composed because they prevent subsequent authors from using the very same materials or arrangements as those in protected works.⁷⁰ Such restrictions on the intellectual commons would constitute private appropriations of some kind, and thus would not be justifiable under the Lockean account as Shiffrin has understood it.

However, this argument does not duly consider what exactly a copyright actually protects. For one thing, as noted in the Introduction, the ideas, functions, stock elements, and facts embodied in copyrighted works are not entitled any protection, and these doctrinal limitations thus leave those materials in the intellectual commons. The idea/expression dichotomy—a central and defining tenet of copyright law—limits protection to a work's particular expression of ideas and not the higher-level ideas being expressed, and it is premised on the principle that the author of the expression is not to prevent others from utilizing the ideas expressed therein or from expressing them differently themselves.⁷¹ In the case of

69. See *supra* note 65 and accompanying text.

70. Shiffrin, *supra* note 20, at 162.

71. See *Baker v. Selden*, 101 U.S. 99, 102–03 (1879) (holding that although exclusive rights to the "useful arts" described in a book could be available through patent law, only the description of the useful art was protectable by copyright); *Mazer v. Stein*, 347 U.S. 201, 217 (1954) (holding that

functional ideas,⁷² the idea/expression dichotomy channels them away from the domain of copyright law while—if the ideas meet the patentability requirements of utility, novelty, and non-obviousness—they might instead be eligible for patent protection.⁷³ And with respect to non-functional ideas, the doctrine assures that subsequent authors can distill or re-express the same ideas as others in the course of making their own works, ensuring that the ideas have not been removed from the intellectual commons.

As an example of this phenomenon of re-expression, consider the facts of the case *Nichols v. Universal Pictures Corp.*, perhaps the most classic illustration of the idea/expression dichotomy.⁷⁴ The case concerned the play *Albie's Irish Rose* and the subsequent motion picture *The Cohens and the Kellys*, both of which told the story of a Jewish family and an Irish-Catholic family whose children fall in love and get married, infuriate their parents, have a child, and then eventually reconcile with their families.⁷⁵ Judge Learned Hand explained that even if the subsequent author in fact copied these high-level ideas from the other, the subsequent work constituted a re-expression of those unprotected ideas with substantially different expressive details in the plots and characters, such as the parents' religious zealotry being central to the former while wholly absent in the latter work.⁷⁶ He thus concluded, despite the latter works' similar themes with the former, that there was no copyright infringement.⁷⁷

Further, under copyright's *scènes à faire* doctrine, expression that is common or standard to a particular subject matter or medium is also not protectable.⁷⁸ Such “stock” expressions are most frequently found in literary or dramatic works, in which certain themes or character types flow directly from common plot ideas.⁷⁹

“[u]nlike a patent, a copyright gives no exclusive right to the art disclosed; protection is given only to the expression to the idea—not the idea itself”).

72. The question of what exactly “counts” as a functional idea is itself complex, one that I and others have explored in other works. See, e.g., Chatterjee, *supra* note 11. See generally Christopher Buccafusco & Jeanne C. Fromer, *Fashion's Function in Intellectual Property Law*, 93 NOTRE DAME L. REV. 51 (2017). But it is an undisputed tenet of copyright and patent law—and their division of labor, as exemplified by the useful articles doctrine's treatment of articles with functional and expressive overlap—that copyright is the domain of the non-functional and expressive while patent law is the domain of the functional. For a philosophical examination of this distinction and its implications for intellectual property theory and doctrine, see Mala Chatterjee, *Understanding Intellectual Property: Expression, Function, and Individuation* (2022) (unpublished manuscript) (on file with author).

73. *Mazer*, 347 U.S. at 217. We explore patent law and the Lockean commons *infra* Part V.

74. 45 F.2d 119 (2d Cir. 1930).

75. *Id.* at 120–21.

76. *Id.* at 122.

77. *Id.*

78. *Erickson v. Blake*, 839 F. Supp. 2d 1132, 1137 (D. Or. 2012) (“[E]xpressions that are standard, stock, or common to a particular subject matter or medium are not protectable elements under copyright law.” (quoting *Satava v. Lowry*, 323 F.3d 805, 810 (9th Cir. 2003))).

79. *Atari, Inc. v. N. Am. Philips Consumer Elecs. Corp.*, 672 F.2d 607, 616 (7th Cir. 1982) (explaining the doctrine as barring protection of the “incidents, characters or settings which are as a

For example, a daytime talk show typically contains elements such as “a host, interviews of guest celebrities, and cooking segments, and these standard elements are not protected by copyright.”⁸⁰ And copyright law’s merger doctrine—an extension of the idea/expression dichotomy itself—maintains that any expression that “merges” with the idea being expressed, in virtue of being the only way (or one of few ways) that the idea can be expressed, is also not entitled to copyright protection. Thus, the merger doctrine ensures that even ideas which can only be expressed in few ways do not effectively become privately appropriated through the appropriation of that expression.⁸¹ Finally, copyright’s rule that factual content is not protectable is premised on the idea that authors do not originate facts, no matter how much “labor” might have gone into discovering them, because they are part of the existing world we share equal interest in.⁸² Thus, as a matter of positive copyright doctrine’s defining limitations with respect to ideas, *scènes à faire*, and facts, Shiffrin’s argument does not apply. These aspects of the intellectual commons, while frequently utilized within creative works, are not protected by copyright and thus not appropriated from the commons at all.

B. Independent Creation and the Intellectual Commons

Though the aforementioned elements are safeguarded in virtue of not enjoying copyright protection, this of course leaves the question of what copyright *does* protect: namely, the expressive elements of creative works. Moreover, there are some ways in which existing copyright doctrine in the United States arguably goes beyond protecting mere expression. For instance, though facts do not receive copyright protection, compilations of facts do.⁸³ According to some courts, taxonomies—systems for categorization—are copyrightable as well.⁸⁴ And the

practical matter indispensable, or at least standard, in the treatment of a given topic” (quoting *Alexander v. Haley*, 460 F. Supp. 40, 45 (S.D.N.Y. 1978))).

80. *Erickson*, 839 F. Supp. 2d at 1138.

81. *Morrissey v. Procter & Gamble Co.*, 379 F.2d 675 (1st Cir. 1967) (holding that copyright does not protect expression when said expression “merges” with the idea, in that the idea can only be expressed in a small number of ways). For a discussion of the many functions of the merger doctrine works and how it relates to copyright’s other limitations, see generally Pamela Samuelson, *Reconceptualizing Copyright’s Merger Doctrine*, 63 J. COPYRIGHT SOC’Y U.S.A. 417 (2016).

82. See, e.g., *Harper & Row, Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 556 (1985) (Copyright “strike[s] a definitional balance between the First Amendment and the Copyright Act by permitting free communication of facts while still protecting an author’s expression.”); *Feist Publ’ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 346 (1991) (holding that factual information alone without a modicum of original creativity cannot be protected by copyright); 17 U.S.C. § 102 (2018) (rejecting the copyrightability of discoveries).

83. See, e.g., *Feist Publ’ns, Inc.*, 499 U.S. at 358 (“[T]o merit protection, the facts must be selected, coordinated, or arranged ‘in such a way’ as to render the work as a whole original.”).

84. See, e.g., *Am. Dental Ass’n v. Delta Dental Plans Ass’n*, 126 F.3d 977, 979 (7th Cir. 1997) (With respect to a taxonomy of dental procedures, “[f]acts do not supply their own principles of organization. Classification is a creative endeavor”). *But see* *ATC Distrib. Grp. v. Whatever It Takes Transmissions & Parts, Inc.*, 402 F.3d 700, 706–07 (6th Cir. 2005) (holding that, though classification schemes can be original, they are unprotected ideas).

Supreme Court's recent decision in *Star Athletica, L.L.C. v. Varsity Brands, Inc.*⁸⁵—which we return to below⁸⁶—interprets the useful articles doctrine in a way that leaves some elements with expressive and functional overlap in copyright's domain, thereby effectively extending protection to at least some functionality.⁸⁷ Relevantly, Shiffrin herself explicitly addresses the idea/expression dichotomy, dismissing it as inadequate for fully safeguarding the intellectual commons. Offering a vivid analogy, she explains,

Suppose we thought of expressions metaphorically—as ways to get to ideas. An expression is like a new, convenient path forged into a mountain in order to reach its valuable, commonly owned apex. Other paths, perhaps less direct or elegant, could be forced, maybe with great difficulty. Although it seems permissible to make this path and to charge compensation for the work, we might balk at the pathbreaker's being able to block access indefinitely, at his discretion, or to charge high fees for access that would deter fruitful use. One would need a positive reason for the full private appropriation of the path.⁸⁸

I wholly grant that the idea/expression dichotomy is not *sufficient* for preventing the intellectual commons from being depleted and that the existing treatment of compilations, taxonomies, and expressive/functional overlap leaves the dichotomy itself far from clean. But we can now turn to copyright's most theoretically significant limitation for our purposes, one which assures that the preexisting intellectual commons is fully safeguarded from depletion: the independent creation defense. As noted in the introduction, copyright infringement requires *actual copying* from copyrighted works, such that an author who independently creates a work identical to a copyrighted work is not infringing.⁸⁹ This is to say that an earlier author's copyright does not prevent independent, subsequent authors from utilizing the very same raw intellectual materials—including purely expressive ones—in a work of their own, even while using those materials in the very same way.

The independent creation defense has significant implications for the intellectual commons. For when we reflect on the fact that an independent creator has not infringed on an author's copyright in her own work, we can immediately see that the copyright does not even appropriate the expressive elements themselves, abstractly construed, from the commons. Rather, these abstract expressive elements are *still in there*, as they can be used by subsequent authors in works of their own, even those looking exactly like protected works. Instead, what the author owns is

85. 137 S. Ct. 1002 (2017).

86. See *infra* Conclusion.

87. See Chatterjee, *supra* note 11, at 558 (critiquing the Supreme Court's test for resulting in copyright protection in functional elements, and defending an analysis of the useful articles doctrine that assures that no functional elements receive copyright protection).

88. Shiffrin, *supra* note 20, at 163.

89. See *supra* note 7 and accompanying text.

specifically the expressive elements *as they appear* within her own creative work. In other words, the author's copyright extends specifically to *her* expression, which importantly is distinct from the commons' expressive elements that remain free to be utilized by independent authors; for again, under the favored conception of the preexisting intellectual commons, the creative work made by the author was not *itself* a part of it (even if composed of things that were). Rather, the work was created by the authorial act. Thus, as a consequence of the independent creation defense, though the author's copyright protects her expressive elements as they exist in the work she has made, this cabined protection cannot be regarded as depleting the preexisting intellectual commons.⁹⁰

Moreover, note that copyright's independent creation defense forces any analogy between copyrights and tangible property to break down. For the fact that it is even possible, as a metaphysical matter, for two distinct authors to independently use the same raw intellectual materials in their identical works (let alone that it is permissible for them to do so) is entirely because of the non-rivalrous nature of raw intellectual materials. Because a former author's use of such materials does not extinguish them, a subsequent author can independently use them in the context of her own work. In the contrasting physical case, while two laborers may independently produce, say, (roughly) structurally identical chairs, these chairs will nonetheless be products of distinct raw materials. Indeed, laborers *cannot* independently make use of the very same physical materials since (i) they cannot independently utilize the materials simultaneously, due to their rivalry and (ii) they cannot independently utilize them at different times, as the subsequent laborer would then be laboring directly upon the first laborer's fruits (rather than independently). Tangible property rights thus necessarily appropriate from the commons, and it is not conceptually possible to introduce an independent creation defense for them. In terms of Shiffrin's analogy to paths, copyright permits an author acting independently to make not merely a different (perhaps inferior) path to the same destination but a path *exactly the same* in all relevant ways⁹¹ as an earlier author. These metaphysical differences between intellectual and tangible objects

90. Note that this argument also succeeds under a Platonist conception of the preexisting intellectual commons, according to which all possible creations, inventions, and combinations of elements exist in the intellectual commons prior to their "creation" (read: discovery). Again, because independent creation is a complete defense to infringement, it cannot be claimed that my copyright in *my* Novel X actually privately appropriates the Platonic Novel X from the commons. A second-in-time author remains free to independently write an identical novel—their own "version" of Novel X, exactly like mine in all ways except the identity of the author—without thereby infringing on my copyright and whilst even gaining a copyright of their own. Thus, despite the Platonist conception of the original intellectual commons being far more metaphysically dense, it is still not the case that the work which copyright protects has been removed from the Platonic intellectual commons. Rather, protection extends to the author-specific version of the work, traceable to the particular author's act of creation and which only she could have made, leaving the Platonic work in the commons.

91. Aside from authorial identity.

thus are only obscured by Shiffrin's analogy, and their normative import for the Lockean theory has not yet been observed by scholars.

Although it is true that the independent creation defense is a defining limitation of copyright law, the question of how best to *operationalize* that limitation raises difficulties. We will soon see that existing doctrine perhaps is not adequately protective of independent creation as it stands. Indeed, while I have argued Lockean theory can support copyright law and avoid Shiffrin's objections if—and only if—the law is sufficiently protective of the intellectual commons, a number of aspects of existing U.S. doctrine perhaps fall short. These (and other) revisionary implications from Lockean theory for copyright doctrine will be explored in Parts III and IV below.

C. Creative Works and the Growth of the Commons

Having seen how copyrights' limitations safeguard the commons and render Shiffrin's challenge unsuccessful, consider that copyrights actually might *add* to the commons, rather than deplete it. To see why, consider again the empirical premise underlying the dominant economic theory of copyright law.⁹² This standard argument tells us that we must grant authors exclusive rights in their creative works in order to incentivize valuable cultural progress.⁹³ Without such rights, the argument goes, authors will not make the investments necessary in order to actually produce creative works, for they will not be able to recuperate or reap any rewards from the investment.⁹⁴ Granting authors copyrights thus assures that the benefits of their creative works flow to and are controlled by them, thereby moving them to produce the creative work in the first place.⁹⁵

It is an empirical question whether copyright protection is actually necessary to incentivize any creation.⁹⁶ But if it *is* the case that any creative works have been directly incentivized by the existence of copyright—such that, but for copyright protection, the authors would not have produced these works—then it turns out that the existence of copyright ultimately expands the intellectual commons. This is not simply because copyrights don't last forever and that the works thereby eventually fall into the public domain. Rather, it is because creative works themselves have the capacity to influence and expand the common culture, often in substantial and lasting ways. In other words, the intellectual commons—dynamic by nature—is enriched by those creative works that influence subsequent culture

92. See *supra* note 12.

93. See *id.*

94. See *id.*

95. See, e.g., LANDES & POSNER, *supra* note 1.

96. Some scholars dispute this claim, arguing that, at least in some industries, copyright is wholly unnecessary for creative productivity (and might even be counterproductive). See e.g., KAL RAUSTIALA & CHRISTOPHER JON SPRIGMAN, *THE KNOCKOFF ECONOMY: HOW IMITATION SPARKS INNOVATION* (2012).

through their expressive choices and combinations. For instance, while the idea of films depicting human beings in outer space might have been a novel proposal at the time of Stanley Kubrick's *2001: A Space Odyssey*, because of that film and its influence, the trope is now eminently familiar to our collective consciousness and its expressive choices have come to define the genre itself. Similarly, the rock n' roll album *Psychocandy* by The Jesus and Mary Chain led to the creation of a distinctly noisy and ethereal sound and the novel subgenre *shoegazing*, thereby also contributing to the proliferation of the countless new works constituting instances of this subgenre. Thus, if the pro-copyright utilitarians are right as an *empirical* matter—such that copyright has the effect of incentivizing creative work that would otherwise not take place—then the existence of copyright protection seems only to result in an even richer common culture.

The observation that copyright law might expand the intellectual commons is not itself new, as scholars have long defended the existence of copyright on this basis. But again, such arguments typically are utilitarian in nature: in the course of justifying the existence of copyright law solely on the basis of the welfare gains that it results in, scholars in part point to how it facilitates the proliferation of culturally influential works and eventually expands the public domain.⁹⁷ Instead, I highlight the implications of this observation for the Lockean theory in light of Shiffrin's interpretation. Shiffrin is right in emphasizing the centrality of the commons within the Lockean framework. But an adequately limited, correctly structured copyright does not deplete the commons and instead only enriches it, thereby only enriching its ability to benefit all individuals.⁹⁸ Further, this is another important way in which the Lockean understanding of copyright departs from Lockean property itself, due to the metaphysical differences between the physical and intellectual commons. For the physical commons can never exactly *grow*—it can change, of course, but never expand—due to the simple scientific fact that physical matter can never be created or destroyed. In contrast, the history of culture demonstrates the myriad of ways in which the intellectual commons is ever transforming and expanding, which gives rise to this normative difference between Lockean theories of physical and intellectual property.⁹⁹ This capacity for creative works to expand the intellectual

97. See, e.g., Mark A. Lemley, *The Economics of Improvement in Intellectual Property Law*, 75 TEX. L. REV. 989, 999 (1997). But see Abraham Drassinower, *A Note on Incentives, Rights, and the Public Domain in Copyright Law*, 86 NOTRE DAME L. REV. 1869 (2011) (offering a rights-based argument for the public domain).

98. Again, for an exploration of ways in which existing copyright doctrine might not be adequately limited such that the Lockean framework would call for a strengthening of limitations, see *infra* Part IV.

99. What does it take for a creative work—or its elements—to become “part” of the intellectual commons? I have claimed that creative works are not part of the intellectual commons at the moment of their creation, but I have also claimed that their existence can lead to the eventual expansion of the intellectual commons. These two theses inevitably raise the question of *when* this commons expansion actually occurs. I return to this question while exploring the doctrinal implications of this understanding of Lockean copyright *infra* Part IV.

commons will also have revisionary doctrinal implications for copyright's limitations in order to ensure that the law tracks the intellectual commons' dynamic nature, and these will be outlined in the Parts below.

D. Copyright's Limitations and the Lockean Proviso

Finally, consider the implications of the above arguments for the Lockean proviso, the requirement to leave enough and as good in the commons for others. First, it seems to follow straightforwardly from the observation that copyright does not appropriate from the preexisting intellectual commons that copyright also accords with the Lockean proviso, at least at the moment of the work's creation.¹⁰⁰ This likely will feel trivial in light of the preceding discussion—if copyright removes nothing, then of course enough and as good still remains. But the implication still warrants emphasis. In particular, this is because our examination of patent law will show not only that patents—by virtue of lacking copyright's limitations—appropriate from the commons and thereby fall prey to Shiffrin's challenge, they also perhaps fail to leave enough and as good, thus violating the proviso and facing a further conflict with Lockean theory. These and other arguments on patent law and Lockean theory are unpacked in Part V.

Moreover, at this point, reflecting upon the Lockean proviso will illuminate not merely the content of this Article's thesis but also its place in the broader dialectic on Lockean intellectual property. For Shiffrin's challenge consciously targets the existing explorations of Lockean intellectual property in part *because* of their misplaced emphasis on the proviso. In other words, Shiffrin rightly identifies that scholars have erred in relying on the proviso to generate limitations for intellectual property grants: for the proviso is a limitation on permissible removal from the commons while intellectual objects cannot *be* permissibly removed under Lockean theory by virtue of not satisfying the necessity condition. But Shiffrin herself also errs in missing that intellectual property grants can still be structured to protect the commons from appropriation entirely, or how the defining aspects of existing copyright already help ensure this. Thus, while I agree with those who have argued that Lockean theory generates important limitations on copyright doctrine, it is not the *proviso* but the requirement to *not appropriate* that ought to generate these limitations.

Note also that this is a fortuitous theoretical shift due to the persistent *interpretive* challenges surrounding the proviso that have long faced philosophers considering Lockean property and which have been inherited by the legal scholars applying the proviso to intellectual property. Indeed, while Lockean intellectual property scholars have frequently selected their favored interpretation of the phrase

100. I make this qualification because the normative facts might change once the work is distributed or “released” into the world. This argument is explored in the following *infra* Part III.

“enough and as good” to generate intellectual property’s limitations, this has yielded a variety of results.¹⁰¹ William Fisher summarizes,

Some of the commentators who have sought to harness Locke’s argument to intellectual property have seen little difficulty in the requirement that a laborer leave “as much and as good” for others. Justin Hughes, for example, emphasizes the myriad ways in which the expansion of the set of available ideas stimulated by intellectual property improves the lot of everyone. Robert Nozick . . . sees the sufficiency proviso as somewhat more constraining, but has identified to his satisfaction a way of structuring patent law that avoids violating it. Wendy Gordon, by contrast, construes the proviso as a much more serious limitation on the scope of intellectual-property rights. Conferring monopoly privileges on the creators of intellectual products, she claims, can hurt more than help the public. . . . Once again, a wide range of interpretations of an important component of Locke’s theory is available, and no one member of the set seems plainly superior to the others.¹⁰²

As Fisher explains, the Lockean proviso is itself susceptible to a number of interpretations, and scholars have used it to construct very different theoretical pictures.¹⁰³ In contrast, the present argument does not utilize or depend upon the proviso at all, let alone any particular implication of it. Rather, it entails that scholars’ focus on the proviso so far has missed that copyright’s defining limitations—most notably, the independent creation defense—can and should be structured to safeguard the commons from *any* depletion under Lockean theory.¹⁰⁴

III. REFINING LOCKE AND DISENTANGLING COPYRIGHT: FURTHER DISTINCTIONS AND IMPLICATIONS

This Part considers Shiffrin’s likely response to the preceding argument, further explicating our normative and interpretative disagreement about Lockean theory. And in so doing, it disentangles the copyright bundle of rights and analyzes its distinct dimensions within the Lockean framework, setting us up for outlining the theory’s possible revisionary implications for existing law in the following Part.

A. Interpreting a Lockean Ambiguity

The preceding line of argument seems to be making the metaphysical point that the subject of copyright protection is not contained in the preexisting intellectual commons. But whether this ultimately succeeds against Shiffrin’s challenge as to copyright will depend on how we interpret an important ambiguity

101. See, e.g., Gordon, *supra* note 13.

102. Fisher, *supra* note 47, at 188.

103. *Id.*

104. Things might change once the creative work has been widely disseminated, however. I consider this question *infra* Parts III–IV.

in Lockean labor theory. In particular, the question is the following: does Lockean labor theory permit private appropriation only of that which *depletes* the preexisting commons in the first place (and moreover, that labor is the mechanism for such appropriation)? Or, alternatively, does it also permit the private ownership of that which does not deplete the commons but which nonetheless is also the product of one's labor?

Note that, because property rights in all land and physical objects necessarily remove them from the Lockean commons, this ambiguity in Lockean theory emerges only once we move from the domain of the physical to the intellectual. But the ambiguity must be resolved for us to proceed. If we interpret Lockean labor theory in the first way, then Shiffrin's challenge against Lockean copyright will survive. She will then say that, although copyright does not deplete the preexisting commons, Lockean labor theory applies to only that which depletes it. In other words, only elements taken away from the commons are even *candidates* for private appropriation via labor (and, moreover, they must satisfy the necessity condition in order to be so appropriated). Shiffrin might thereby argue that copyrightable subject matter is not eligible for Lockean private appropriation in part *because* copyright does not deplete the commons. Accordingly, under the first interpretation, her general conclusion would not be undermined.

However, I think this is not a plausible understanding of the theory. Though the relevant passages of Locke speak specifically about labor-based rights in land and physical objects¹⁰⁵—which, again, always deplete the preexisting commons—Locke says nothing to rule out private ownership of that which does not so deplete. In fact, the self-ownership thesis itself explicitly says the opposite. Locke tells us we each hold original property rights in certain things that, he says, were never part of or appropriated from the commons at all: namely, ourselves and our labor.¹⁰⁶ Thus, there is no basis in the theory for thinking that we are only entitled to ownership in cases where it will cause the commons to be depleted, as the self-ownership thesis—which grounds all other ownership—is itself an example to the contrary.

Further, and more importantly, the idea that labor grounds rights only when doing so depletes the preexisting commons is normatively implausible, as appropriation through labor is only *more* justifiable when the commons has not been depleted. In the case of tangible property rights—which always deplete the physical commons—the necessity condition on appropriation is a normative requirement for the laborer's claims to overcome the claims of the rest of humanity, precisely because the laborer is seeking to privatize something otherwise commonly owned. In contrast, the implication of the argument that copyright does not deplete the commons is that the subject of copyright protection is not “commonly owned” at

105. See *supra* notes 22–32 and accompanying text.

106. LOCKE, *supra* note 19.

all. And intuitively, the private appropriation of what is commonly owned is only harder to justify than of what is not, as the latter is not subject to the competing ownership claims from the rest of humanity. Thus, if anything, we have unearthed a way in which a Lockean theory of copyright—in virtue of copyright's defining limitations—has stronger normative foundations than Locke's theory of property itself.

In summary, my disagreement with Shiffrin has two importantly distinct dimensions. The first is interpretive. Shiffrin fairly emphasizes Locke's common ownership thesis in arguing that depleting the commons is only justifiable when the necessity condition is met.¹⁰⁷ But we still cannot overlook the self-ownership thesis. After all, if labor had no independent normative significance, then (in addition to this being straightforwardly contrary to Locke's explicit words) we would lack an explanation for why it is the appropriate mechanism for taking from the commons. Moreover, the necessity condition for appropriation is only relevant as a limitation in cases where the Lockean commons stands to be depleted, precisely because those are the cases where the competing claims of others must be overcome. Thus, under the most normatively plausible understanding of the Lockean framework, one is entitled to the fruits of one's labor when they do not remove anything from the commons *even if* such appropriation does not meet the necessity condition, as there are no competing prior claims. This understanding of the Lockean framework, combined with the second dimension of my disagreement with Shiffrin—that copyright's limitations safeguard the commons—jointly entail that her argument is unsuccessful against copyright.

B. Shiffrin's Response: Self-Ownership vs. Incorporation into the Commons

Nonetheless, even if Shiffrin grants the metaphysical point that copyright grants do not appropriate from the preexisting commons, she likely will still object to the normative conclusion that authors are entitled to anything like copyrights under Lockean theory. Consider her following remarks:

[M]etaphysical facts do not settle the issue about property rights. We might agree that intellectual products or their bases are not independent of us; still, this would not imply that we have Lockean property rights over them. On the reading of Locke that I have developed, there is a Lockean reason to think that, *morally*, such creations should be regarded as commonly owned, irrespective of their origins . . . although an individual's unique expressions of the ideas are not preexisting components of the intellectual common, these works should be viewed as incorporated into the common upon their creation Common ownership, for Locke, is not, I think, best seen as a mere starting place or an easily overturned default rule. It is also a concrete expression of the equal standing of, and the community relationship between, all people *Creations could become part of the*

107. Shiffrin, *supra* note 20, at 143.

*common—available equally to all—when their nature did not require exclusive use, to symbolize the equal moral status of the individuals.*¹⁰⁸

Though she does not explicitly tackle the metaphysics of copyrights' independent creation defense, what Shiffrin does say suggests resistance to my argument.¹⁰⁹ For even if authors' creative works themselves are not a part of the preexisting intellectual commons, Shiffrin might argue that the Lockean ethos—and its commitment to the equality of all—requires that, upon the creation of such works, they should be regarded as *incorporated* into the commons.

However, I am unconvinced that the Lockean ethos requires this. In fact, the structure and spirit of the theory seems to support the contrary view. Consider the question of what treating individuals as having equal moral status actually requires. Centuries of philosophical exploration have not disposed of this question, and certainly the present discussion will not. But it could not plausibly require treating all individuals as equal *in all ways*, as there might be morally relevant differences among them. Rather, recognition of all individuals' equal moral status requires paying due and equal attention to these morally relevant differences, including whether they ground distinct rights and claims. As a simple example, if I have promised Erick that I will water his plants, then recognizing humanity's equal moral status does not require that I water *everyone's* plants, as Erick is in a morally unique position.

Similarly then, the Lockean ethos of treating individuals as having equal moral status—treating *authors* equally *qua authors*—intuitively would itself ground unique rights for the author in her work, in virtue of her unique and morally significant relationship to it.¹¹⁰ An author who creates her work out of non-rivalrous intellectual materials has thereby produced fruits of her own labor. This is labor which—Lockean theory tells us—is itself her property, and which we have just seen does not extinguish or deplete what is commonly owned. Thus, far from constituting a recognition of the equality of the author and all others, incorporating the work into the preexisting commons upon its creation would simply *contravene* the author's unique, self-ownership-based claim. It would appropriate the work from her and place it into the commons for the rest of humanity. Instead then, particularly if we aim to treat her as our moral equal, the Lockean framework would

108. *Id.* at 158, 164, 167 (emphasis added).

109. Note that I find it surprising that Shiffrin would put the idea that the metaphysical facts do not settle issues about property rights quite so strongly. Her argument against the applicability of Lockean property theory is grounded on a fundamentally metaphysical difference between intellectual and tangible objects: that intellectual objects, in light of their metaphysical nature, need not be privately owned to be fully used. Thus, surely she would grant that the metaphysical facts at least importantly bear on the normative question, even if they do not wholly settle it without normative argument.

110. At least, this is true at the moment of the work's creation. I make this qualification because the relationship between an author and her work—as compared to the relationship between the work and the rest of humanity—might change once the work has been shared with humanity. I return to this question in the following Section and *infra* Part IV.

seem to demand that this author's unique claim upon her work's creation be recognized—and it would thereby demand some bundle of exclusive authorial rights.¹¹¹

C. Disentangling Further: Disseminated vs. Non-Disseminated Creative Works and the Distinct Dimensions of Copyright Protections

Shiffrin does not probe whether recognizing the equal moral status of individuals *qua* authors requires protecting their works versus incorporating them into the commons. But she does speak to the suggestion that the self-ownership thesis could alone ground something like an author's copyright, putting forth the following thought experiment:

Suppose a person grows an extra length of hair, cuts it off from his or her head, and deliberately throws it onto the beach for public view. Is it clear that he or she should be able to prevent passersby from touching it or using it? . . . Does the right of self-ownership really yield a natural right to restrict access to or control what is done to these clumps? . . . when the hair is still attached to the body, there are reasons associated with the values underlying self-ownership to permit the owner to restrict access to it, to protect his or her autonomy and physical security. Such reasons hold even if the attached hair has been fashioned into an artwork or sculpture that others might appreciate. But once a person has deliberately separated from his or her products, it is harder to believe that the right to self-ownership grants rights to continue to control these things.

It strikes me that Shiffrin's analogy brings to light something implicit, yet very important, about her motivations: namely, that she is interested in targeting the exercise of copyrights in creative works that have been voluntarily *disseminated* into the world. Thus, she imagines in this analogy that the clump of hair has been released to rest of the world, such that the individual no longer has a unique and morally significant relationship with it, let alone one grounding self-ownership rights.

However, I agree with Shiffrin that, once a creative work has been widely disseminated—becoming part of the identity of others and maybe even part of the common culture—the Lockean case for certain authorial rights in the copyright bundle weakens. But rather than concluding from this, as she has, that it is implausible that there are Lockean authorial rights *at all*, consider instead that this is in part explained by the existence of *countervailing* Lockean rights. For instance, consider the rights of the subsequent author who encounters the disseminated work and thereby loses a genuine opportunity to independently create it but who nonetheless “labors upon” the work in question, using it as source material to

111. What exact rights should be included in this bundle, however, remains to be seen and is explored in my discussion of doctrinal implications for copyright. *See infra* Part IV.

produce a distinct and transformed work of her own.¹¹² Perhaps even consider the possibility of a Lockean case for rights of access in culturally significant works, as it could be argued that individuals “labor” in selecting and consuming these works and thereby developing their (and their cultures’) identities.¹¹³ If such countervailing Lockean rights and interests can exist, it does not follow that the author herself cannot have rights but rather that hers are to be cabined by the rights of others. Moreover, these countervailing rights and interests would not emerge upon the work’s creation, at which point the author’s unique relationship with it is maximally strong; rather, they might only emerge after dissemination, upon influence, reliance, or other normatively significant effects on others.

In sum, although an author has a unique, labor-based claim in her creative work upon creation, we have now seen ways in which dissemination can cause a work’s relationship with *others* to drastically change. But still, it does not follow that *all* Lockean rights of an author dissipate upon her work’s dissemination. Rather, this discussion illustrates that we must disaggregate and analyze different types of works and rights within the Lockean framework in order to glean what the theory tells us about copyright’s appropriate structure. For instance, consider again my suggestion that treating authors as having equal moral status *qua* authors requires normative recognition of their authorial work. Now imagine the case of a pirate, who produces and disseminates unauthorized reproductions of another’s work to her own benefit, perhaps even misrepresenting the work as her own. Setting aside the wrong of dishonesty that this pirate commits against those whom she misrepresents herself to, what are we to say of the pirate’s actions with respect to the author? Plausibly, the Lockean principles of self-ownership and equality would entail that this pirate’s action is an impermissible affront to the author’s moral status—and this seems to be the case *irrespective* of whether the work has otherwise already been widely disseminated.

Of course, existing copyright law’s protection goes far beyond protecting authors from straightforward piracy. But again, this is why—beyond disaggregating types of works, such as those protected by copyrights versus patents or those disseminated versus non-disseminated—philosophical analyses of intellectual property law must disaggregate the specific substantive rights these bundles encompass. This is not something which Shiffrin herself does, but it importantly

112. I return to this phenomenon of *non*-independent creation, and possible implications for existing doctrine from the Lockean framework to facilitate and protect it, in Section IV.C. For a deeper exploration of transformative subsequent authorship and Lockean theory, see Chatterjee, *supra* note 44.

113. I am sympathetic with this line of argument, which has also been explored in the work of Jeremy Waldron and Wendy Gordon on the question of Lockean intellectual property rights. *See generally* Gordon, *supra* note 13; Waldron, *supra* note 63. I return to this idea in Part IV. I further defend the view that a justifiable Lockean copyright theory actually *requires* rights far more limited than existing copyright doctrine, in order to protect the Lockean interests of follow-on authors and even consumers, in *The Fruits of Authorship: A Theory of Copyright*. Chatterjee, *supra* note 21.

bears on the efficacy of her argument. Consider, for instance, the exclusive right to reproduce one's work—which might be regarded as the most central right of copyright—in contrast to the more recent and amorphous *derivative* right, which gives an author the exclusive right to all possible works derivative of the one she has made. At various points, Shiffrin disparages the derivative right as particularly unjustifiable.¹¹⁴ Happily though, I agree with her on this point. Indeed, I argue against the derivative right at length elsewhere (albeit for Lockean reasons different from Shiffrin's own) and discuss this argument in Part IV below.¹¹⁵ But does this mean that there is no Lockean right *even* to the exclusive reproduction of one's creative works? Or might it instead mean that (barring overriding, non-Lockean arguments to the contrary) existing copyright systems have strayed from what is normatively justifiable? If the latter, then—particularly in light of the derivative right's continuing expansion—it is enormously important that this point be made; for it suggests that Lockean theory properly understood is not merely a floor for an author's copyright, but perhaps more urgently, a ceiling.

Consider next a very different possible implication of the Lockean framework for copyright, one which Shiffrin—in deeming the exploration itself a misdirection—also does not take sufficiently seriously: that there should be a *non-economic* dimension to copyrights (even if not to patents, as we will discuss below).¹¹⁶ This is a significant implication because it is something that the majority of American intellectual property scholars and courts presently reject, instead arguing that use of copyright to promote non-commercial interests such as privacy, attribution, reputation, personality, individual well-being, or autonomy is an impermissible abuse.¹¹⁷ Consistent with this more general position, such scholars and courts maintain that an author is entitled to things like licensing fees for the unauthorized dissemination of her work or lost profits for the unauthorized production of a derivative work. But she may *not* prevent or control her work's appearance or dissemination, even if the work has otherwise not been distributed by the author at all. In so doing, scholars and courts have departed from the many other copyright systems—such as those in the United Kingdom, France, Germany, Canada, China, and more—that take authors' non-economic or “moral” interests in their work far more seriously. As a practical matter, this has had (and will continue to have) unfavorable implications for authors in the United States seeking to exercise their copyright to prevent the sharing of diaries, letters, unpublished

114. See Chatterjee, *supra* note 44.

115. For the argument that the derivative right falls prey to the “first laborer” objection, such that the most plausible version of Lockean theory would require the right to be abolished, see Chatterjee, *supra* note 44.

116. Other scholars have also defended the idea of copyright law promoting values other than efficiency, such as distributive justice and privacy. See generally Alfred C. Yen, *Restoring the Natural Law: Copyright as Labor and Possession*, 51 OHIO ST. L.J. 517 (1990); Hughes & Merges, *supra* note 15.

117. For a defense of this view, see Jeanne C. Fromer, *Should the Law Care Why Intellectual Property Rights Have Been Asserted?*, 53 HOUS. L. REV. 549, 554 (2015).

manuscripts, and revenge porn.¹¹⁸ But if there is a Lockean right to control one's creative work, then authors would seem to be permitted to use it in preventing their works from unauthorized dissemination just as well as in disseminating it. Indeed, given that many have interpreted Lockean property rights as rights to *use* rather than *exchange* or *market* value, the theory might more strongly support authorial rights of control than rights to market price. It would thus suggest that the many nations whose copyright laws protect non-commercial interests are justified in doing so, and that the United States' copyright system should do the same.¹¹⁹

Of course, a normative defense of Lockean copyright requires much more than what I have provided here. But in pushing back against Shiffrin's influential rejection of the idea, I have shown that the increasing interest in Lockean theory among intellectual property scholars, particularly when it is focused on copyright law, still ought to be taken seriously. I have also disentangled a number of philosophically significant features of copyright requiring closer exploration in the Lockean framework, ones that have been obscured by the existing scholarship's course-grained examination. Finally, I have explored ways in which Lockean theory may yield revisionary implications for existing copyright doctrine. The following Part will identify a number of concrete implications for American law, further illuminating the structure of the Lockean framework and the intellectual commons, as well as this theoretical exploration's doctrinal stakes.

IV. LOCKEAN COPYRIGHT AND DOCTRINAL IMPLICATIONS: PROTECTING THE INTELLECTUAL COMMONS

The argument that Lockean copyright can avoid Shiffrin's objection—indeed, that it might even be on stronger normative grounds than Lockean property—depends on the claim that copyright's central limitations safeguard the intellectual commons from appropriation. But even if these limitations are defining features of copyright law itself, this argument raises the question of whether *all*

118. For a discussion of such “censorial” rather than commercial uses of one's copyright and a defense of their place in copyright law against those scholars and courts that have argued otherwise, see generally Balganes, *supra* note 14.

119. In fact, American copyright law's present focus on exclusively commercial interests has the effect that authors with more of a demonstrable market—such as celebrity authors rather than so-called ordinary ones—are, by virtue of being more readily able to allege economic harms from unauthorized use, also more able to control their creative works. See Andrew Gilden, *Copyright's Market Gibberish*, 94 WASH. L. REV. 1019, 1021–22 (2019). Thus, not only are celebrity authors more directly economically protected by copyright law, but they also are indirectly more protected with respect to *non-economic* interests like autonomy, reputation, and privacy, in virtue of having an appreciable market harm to point to in exercising their right. *Id.* But this is also unfavorable from the perspective of a Lockean commitment to the equal moral status of all; for if both ordinary and celebrity authors have labored to produce creative works, then the resulting rights ought to be recognized and protected equally, regardless of the market power of the particular author. In sum, a proper understanding of Lockean copyright theory perhaps brings to light both that existing law goes beyond the theory's ceiling in granting overly expansive rights (as outlined above) and that its distinct emphasis on solely economic interests falls short of the theory's floor.

aspects of existing copyright doctrine are adequately protective of the intellectual commons for the Lockean framework. The present Part outlines a number of ways in which existing law might fail to do this. Specifically, it identifies aspects of U.S. copyright law that do not adequately safeguard (i) independent creators, (ii) the growth of the intellectual commons that creative works might result in, and even (iii) *non*-independent creators' authorial activity, such that—if the Lockean copyright emerges favorably—it might call for a strengthening and expanding of copyright's defining limitations and for these aspects of doctrine to be revised.

A. Protecting Independent Creators: Proof of Copying and "Subconscious Copying"

As Judge Learned Hand put it, copyright's independent creation defense is such that "if by some magic a man who had never known it were to compose anew Keats's Ode on a Grecian Urn, he would be an 'author,' and . . . others might not copy that poem, though they might of course copy Keats's" in virtue of the latter being in the public domain.¹²⁰ But although the independent creation defense defines copyright itself—which is, bluntly, a right only against copying—the question of how to *prove* independent creation (or the lack thereof) creates a doctrinal wrinkle that presently is mishandled from the perspective of the Lockean framework. Specifically, while plaintiffs alleging copyright infringement are required to establish "actual copying," existing law allows for an inference of actual copying from circumstantial evidence too easily in cases where the allegedly infringed work is popular or where the two works share striking similarities.¹²¹ Thus, existing law *in practice* falls short of safeguarding the intellectual commons for independent creators.¹²²

Consider first the doctrine around popular works. In *Three Boys Music Corp. v. Bolton*, the Ninth Circuit found Michael Bolton's 1991 pop hit "Love Is a Wonderful Thing" to infringe on the popular rhythm and blues group The Isley Brothers' 1964 song of the same name.¹²³ The court explained that, absent direct evidence that the defendant copied the protected work, a plaintiff can use circumstantial facts to prove infringement by showing the defendant had access to the protected work and that the two works are substantially similar.¹²⁴ Moreover, the court said, the plaintiff might establish access through circumstances linking the two artists specifically or instead by simply showing that the protected work was widely available, such that the defendant was likely to have heard it.¹²⁵ In this case,

120. *Sheldon v. Metro-Goldwyn Pictures Corp.*, 81 F.2d 49, 54 (2d Cir. 1936).

121. *See infra* notes 124–138 and accompanying text.

122. *See infra* notes 124–138 and accompanying text.

123. 212 F.3d 477, 480 (9th Cir. 2000) *overruled by* *Skidmore v. Led Zeppelin*, 952 F.3d 1051, 1066–69 (9th Cir. 2020).

124. *Id.* at 481.

125. *Id.* at 482. The court further held that, if access and substantial similarity are established, then even subconscious copying is infringement, and that access to the work therefore need not have been in the recent past. *Id.* at 482–83. We consider the "subconscious copying" doctrine below.

The Isley Brothers based their access argument on the dissemination and popularity of their song upon its release, in combination with the fact that Bolton grew up listening to rhythm-and-blues groups.¹²⁶ Bolton did not admit to hearing the song, noting that it never made the Billboard 100 and was not released in an album or compact disc until 1991, a year after his allegedly infringing song was written.¹²⁷ He further argued that the mere possibility that he heard it on the radio while a teenager was not sufficient to establish that he actually copied it twenty-five years later.¹²⁸ Nonetheless, the court upheld the jury's determination of access, arguing that teenagers are avid music listeners and that it is "entirely plausible" that one obsessed with rhythm and blues music "could remember an Isley Brothers' song that was played on the radio and television for a few weeks, and subconsciously copy it twenty years later."¹²⁹ This finding of access—in combination with the similarities between the two songs—was thus enough to support an inference of actual copying and an ultimate finding of copyright infringement.

Consider next the doctrine around striking similarity. In *Selle v. Gibb*, the Bee Gees were sued on the allegation that their hit song "How Deep Is Your Love" had infringed on the copyright of Ronald Selle's song "Let It End."¹³⁰ Selle presented evidence that the Bee Gees' song was strikingly similar to his, including a professor of music testifying that, in his opinion, the similarities were explained by actual copying.¹³¹ The Seventh Circuit agreed with the plaintiffs' theory that, absent direct evidence, access can be inferred from the similarity between the two works if it is "so striking that the possibilities of independent creation, coincidence and prior common source are, as a practical matter, precluded."¹³² But the court noted that there must still be some evidence establishing a reasonable *possibility* that the plaintiff's work was available to the defendant, as access could not be inferred from striking similarity if the plaintiff admitted to keeping her creation under lock and key.¹³³ With respect to this case, the Seventh Circuit found that Selle failed to present evidence of even the minimal possibility of access, as his song was only distributed to fourteen music publishers (eleven of whom returned it unopened and three of whom never responded) and performed publicly two or three times (with no evidence that the Bee Gees or their associates were in attendance).¹³⁴ But the implication of the court's articulated rule is that, in all cases where there is *some* evidence establishing the possibility of the plaintiff's work being available to the

126. *Id.* at 483.

127. *Id.* at 484.

128. *Id.*

129. *Id.* at 484–85.

130. 741 F.2d 896, 898 (7th Cir. 1984).

131. *Id.* at 899.

132. *Id.* at 901.

133. *Id.*

134. *Id.* at 898, 902.

defendant, striking similarity would indeed be sufficient for an inference of actual copying.

These existing doctrines are not sufficiently protective of independent creators for the Lockean framework, instead effectively softening copyright's most defining safeguard. For if popularity with similarity is sufficient for establishing copying, then all independent creators who *do* happen to make works similar to popular ones are effectively unprotected, and similarly, if striking similarity and the mere possibility of access is also sufficient, then—particularly in the internet age, where all disseminated works are so widely and easily available—any independent creators who make works strikingly similar to existing ones are unprotected unless these latter works are essentially inaccessible or “under lock and key.” Put differently, these doctrines effectively eliminate protections for two possible classes of independent creators and thus cannot be regarded as fully safeguarding the intellectual commons. Instead, the Lockean framework would seem to require that—absent overriding, non-Lockean reasons to the contrary—courts should rethink how to balance copyright's defining limitation against evidentiary challenges, devising doctrines that raise the bar for what evidence can support inferences of copying, and which err more on the side of safeguarding the intellectual commons.

A related wrinkle surrounding the independent creation defense in existing law is offered by the doctrine of *subconscious copying*, according to which one can infringe on another's copyright by producing a substantially similar work while lacking any conscious awareness that they have copied.¹³⁵ Subconscious copying still requires access to the work infringed upon, but it does not require any knowledge or awareness of a casual dependence between the work observed and the work produced.¹³⁶ The doctrine of subconscious copying was embraced by Judge Learned Hand in a 1924 music infringement case, wherein he explained,

Everything registers somewhere in our memories, and no one can tell what may evoke it. . . . Once it appears that another has in fact used the copyright as the source of his production, he has invaded the author's rights. It is no excuse that in so doing his memory has played him a trick.¹³⁷

Arguably the most prominent case in which a court embraced the theory of subconscious copying is *ABKCO Music, Inc. v. Harrisongs Music, Ltd.*¹³⁸ Therein, the Second Circuit affirmed a jury's verdict that former Beatle George Harrison subconsciously copied The Chiffons' “He's So Fine” in writing the song “My Sweet Lord” released six years later.¹³⁹ Harrison admitted to hearing “He's So Fine” in 1963, when it was number one on the Billboard charts in the United States for five

135. Three Boys Music Corp. v. Bolton, 212 F.3d 477, 482 (9th Cir. 2000).

136. *Id.* at 482–83.

137. Fred Fisher, Inc. v. Dillingham, 298 F. 145, 147–48 (S.D.N.Y. 1924).

138. 722 F.2d 988 (2d Cir. 1983).

139. *Id.* at 990, 992, 997.

weeks and one of the top thirty hits in England for seven weeks, and the court found that “the similarity was so striking and where access was found, the [temporal] remoteness of that access provides no basis for reversal.”¹⁴⁰ The court further emphasized “that when a defendant’s work is copied from the plaintiff’s but the defendant in good faith has forgotten that the plaintiff’s work was the source of his own, such ‘innocent copying’ can nevertheless constitute an infringement.”¹⁴¹

Many scholars have debated whether “subconscious copying” ought to be regarded as infringement,¹⁴² and the doctrine brings to light an important question about what exactly even *constitutes* “independent creation.” In particular, should independent creation wholly turn on questions of *causation*, i.e., whether a copyrighted work has caused, in some sufficiently close respect, the subsequent similar work? Or should it instead also implicate questions of something like *intention*, i.e., whether a copyrighted work has been intentionally appropriated in creating the subsequent similar work?¹⁴³ I myself favor the latter understanding, due to a background conception of the nature of authorship according to which intent distinguishes authors’ expression and thus differentiates authorship from infringement, and which I explore and defend in other work.¹⁴⁴ Thus, my favored understanding of authorship entails that the Lockean theory of copyright—and the importance of the independent creation defense—might require the doctrine of subconscious copying to be abolished. More generally, though, this discussion illustrates another way in which Lockean copyright might require revisions in existing doctrine in order for independent creation to be adequately protected, depending on further theorizing about the nature of independent creation itself.

B. Protecting the Growth of the Intellectual Commons: Dynamic Scènes à Faire and Term “Genericide”

Next, recall my argument in Part II that, if it is true as an empirical matter that copyright law incentivizes the proliferation of creative works, then copyright law might actually expand the intellectual commons. Again, this is not only because the work enters the public domain upon the expiration of its copyright but also because copyrighted works have the capacity to meaningfully influence their surrounding

140. *Id.* at 998.

141. *Id.*

142. See, e.g., Mala Chatterjee & Jeanne C. Fromer, *Minds, Machines, and the Law: The Case of Volition in Copyright Law*, 119 COLUM. L. REV. 1887, 1912–13 (2019); Shyamkrishna Balganesh, *Copyright as Market Prospect*, 166 U. PA. L. REV. 443, 492–96 (2018); Robin Feldman, *The Role of the Subconscious in Intellectual Property Law*, 2 HASTINGS SCI. & TECH. L.J. 1, 4–10 (2010); Wendy J. Gordon, *Toward a Jurisprudence of Benefits: The Norms of Copyright and the Problem of Private Censorship*, 57 U. CHI. L. REV. 1009, 1028–32 (1990) (reviewing PAUL GOLDSTEIN, COPYRIGHT PRINCIPLES, LAW AND PRACTICE (1990)).

143. Another way of putting this idea: is independent creation a matter of “independence” (causal independence) or “creation” (creative intent)? I aim to explore this question in future work.

144. See Chatterjee, *supra* note 21.

culture and the subsequent progression of creativity. Moreover, this constitutes another normatively significant difference between the effects of copyright and tangible property for Lockean theory. But the observation raises the question of when and how this phenomenon of commons expansion occurs. If (as I have argued) the creative work is not part of the intellectual commons at the moment of its creation, then when exactly does the work—or aspects of it—enter the commons and thereby expand it? The answer to this question, beyond completing the theoretical picture, will also yield implications for the correct structure of copyright law itself. For if Lockean copyright only supports protection in creative works to the extent that they are not in (and do not deplete) the intellectual commons, it follows that—barring overriding, non-Lockean reasons to the contrary—once works or their elements *do* enter the commons, they should no longer enjoy copyright protection. The present Part thus explores this phenomenon of commons expansion and unpacks possible implications for doctrinal limitations, although I engage in a more extended exploration of the question in other work.¹⁴⁵

First, as noted above, a creative work can expand the intellectual commons by creating and sharing elements that become part of the relevant culture, such as by influencing a critical mass of creators in a way that results in a new genre or class of creations. This phenomenon involves the work's *novel elements* or *element-combinations* entering the intellectual commons. I noted possible examples of this phenomenon: for instance, Stanley Kubrick's *2001: A Space Odyssey* influenced countless subsequent filmmakers depicting human beings in outer space, pioneering the genre of science-fiction film and putting forth expressive elements—retro-futuristic design of space stations, stunning and otherworldly atmospheres paired with ambient or operatic music, and morally ambiguous bits of technology—that ultimately came to define the genre. As the reader might have determined, this sort of commons expansion is perhaps most frequently safeguarded by existing copyright law under its *scènes à faire* doctrine, according to which expression that is common or standard to a particular subject matter or medium is not protectable under copyright law.

However, the *scènes à faire* doctrine as it currently exists might not adequately track and safeguard the dynamic intellectual commons. For if copyright is to protect this commons expansion, then whether elements in a particular creative work count as *scènes à faire* must be something that can itself change over time, depending on the flow of creativity subsequent to the creative work. This is in contrast to a conception of *scènes à faire* that wholly depends on whether the elements were *scènes à faire* at the moment of the work's creation. So, for instance, although the ultimately genre-defining elements of *2001: A Space Odyssey* were novel at the moment of the film's creation and would not have been *scènes à faire* at that time, the eventual influence they had upon the genre ought to have transformed them into *scènes à faire*

145. *Id.*

subsequently, such that—due to this genre-defining influence—they would no longer be entitled to copyright protection.

This dynamic conception of *scènes à faire* is not presently embraced by all U.S. courts. Most notably, the Federal Circuit affirmed the opposite understanding in its 2014 decision for the landmark software copyright case *Oracle America, Inc. v. Google Inc.*, a dispute which was recently decided by the Supreme Court,¹⁴⁶ and with profound significance with respect to the future of software and development.¹⁴⁷ Therein, the court considered the copyrightability of the Java programming language’s application programming interfaces (APIs), which are owned by Oracle and which Google admitted to using in the development of its Android operating system.¹⁴⁸ Relevantly, in considering Google’s argument that the copied expression constituted *scènes à faire*, the court said that the focus of the *scènes à faire* question is never the circumstances facing the *copier* but, rather, only ever those facing the *creator* at the moment of making the work.¹⁴⁹ Specifically, it said that *scènes à faire* only excludes from protection any expression whose creation “flowed naturally from considerations external to the author’s creativity,” regardless of how the expression might have influenced creativity or the common culture subsequently.¹⁵⁰ The Federal Circuit ultimately found the APIs to be copyrightable.¹⁵¹ But in deciding this way on the issue of *scènes à faire*, it did not speak to whether, in light of the subsequent influence of the APIs and how they altered and constrained the circumstances of creativity and software development, they would count as *scènes à faire* if the question were evaluated at the moment of Google’s copying. Under the alternative dynamic conception of *scènes à faire*, which tracks the correspondingly dynamic intellectual commons, then perhaps the influential APIs ought not have been deemed copyrightable at all, and the *Oracle v. Google* litigation ought to have been resolved well before it faced subsequent litigation on fair use or reached the Supreme Court.¹⁵²

146. *Google LLC v. Oracle Am., Inc.*, 141 S. Ct. 1183 (2021) (finding that Google’s use of parts of the Java Programming language’s application programming interfaces and about 11,500 lines of source code, both owned by Oracle, constituted fair use).

147. 750 F.3d 1339, 1339 (Fed. Cir. 2014). The case is significant for the software industry because computer programs and software libraries (particularly in open source) are often developed by recreating the functionality of APIs from other products to enable interoperability between different systems or platforms. *See, e.g.*, Peter S. Menell, *Rise of the Copyright API Dead?: An Updated Epitaph for Copyright Protection of Network and Functional Features of Computer Software*, 31 HARV. J. LAW & TECH. 305 (2018); Joseph Gratz & Mark A. Lemley, *Platforms and Interoperability in Oracle v. Google*, 31 HARV. J. LAW & TECH. 603 (2018).

148. *Oracle*, 750 F.3d at 1347.

149. *Id.* at 1364.

150. *Id.* (quoting 4 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 13.03[F][3], at 13–131 (1997)).

151. *Id.* at 1381.

152. Note that this case—and software copyright more generally—raises the more general question of whether software should even be in the domain of copyright law at all or whether there are other reasons to permit non-expressive copying of this sort. Those reasons also depend on the correct

Second, and relatedly, a creative work might also expand the intellectual commons by becoming so widespread and significant that it is no longer uniquely tied to the identity of its author, but rather to the identities of all who have consumed it. This phenomenon involves the work *itself* entering the intellectual commons. In such cases, the argument would go, the widespread influence of the specific work has meaningfully altered the conditions of the shared culture we all participate in, such that the author continuing to retain her copyright would inhibit the rest of society's ability to make use of its own culture. Jeremy Waldron has analogized this phenomenon to the doctrine of "genericide" in trademark law, according to which a trademark becomes so pervasive in the common language that it no longer refers exclusively to the originating brand but rather generically to a class of products from any brand (e.g., "Xerox" for all copy machines rather than ones from the Xerox corporation) and, as a result, loses legal protection.¹⁵³ As he put the idea,

Of course these artifacts have their originators, and one can empathize with their initial impulse to control their own work. Nevertheless what they (and their collaborators in marketing) have done—and done intentionally—is make these artifacts now part of our world. My point, then, is that this environment, having been thrust upon us by those in whose interests cultural commodities circulate, is now the only one we have, so that it is now in a sense unfair to deny us the liberty to make of it what we will.¹⁵⁴

Thus, like in trademark law, when a creative work becomes so prevalent as to itself become part of the common culture, perhaps it should no longer enjoy copyright protection under the Lockean framework.¹⁵⁵ Copyright law's duration—typically fixed at the author's lifetime plus seventy years¹⁵⁶—would thus

theoretical basis—and resulting aims and subject matter—for copyright law. I return to this in outlining the theoretical questions that remain after this Article. *See infra* Part V.

153. Waldron, *supra* note 63, at 881–84. Wendy J. Gordon also discusses cases in which a creation becomes so significant to the common culture that it alters the conditions of the culture such that the author retaining rights in that creation would inevitably do harm to the rest of society. She argues that, because of the Lockean proviso, authorial rights should not persist in such cases. Gordon, *supra* note 13, at 1538. Note that, though our arguments are aligned in rejecting authorial rights in such circumstances, my argument does not make use of the proviso but rather only depends on the fact that the creative works have entered the commons at all. *See supra* notes 22–23 and accompanying text.

154. Waldron, *supra* note 63, at 885.

155. The normative foundations for the genericide doctrine in trademark law are different from this Lockean argument for a similar doctrine in copyright law. In trademark law, once the brand name has become "generic" for a product, it is no longer protectable by virtue of now indicating the good or service itself rather than its source. *See* 15 U.S.C. § 1064(c) (1976). Nonetheless, the conceptual analogy between the doctrine as it appears in trademark and what is being proposed for copyright is hopefully useful to the reader. *See also* Barton Beebe & C. Scott Hemphill, *The Scope of Strong Marks: Should Trademark Law Protect the Strong More Than the Weak?*, 92 N.Y.U. L. REV. 1339, 1385 (2017) (discussing how the genericide doctrine in trademark law lowers consumer search costs and "leaves enough and as good for others").

156. 17 U.S.C. § 302 (2018).

need to be revised to accommodate the possibility of loss of copyright as a result of the work entering the intellectual commons. The details of this phenomenon, and the question of how exactly the law should be structured around it, are set aside for exploration in future work. But for now, note the following perhaps counterintuitive general implication of these ideas surrounding copyright genericide and *scènes à faire*: the more widespread and significant a work or its elements become, the less justified the author might be in retaining certain strong rights in it. This implication might strike some as a dramatic departure from how Lockean theory—and rights-based theories of intellectual property generally—are frequently understood (e.g., that an author of a significant work “deserves” stronger rights in it) or even from what the dominant economic narrative might recommend (e.g., that authors should be incentivized to make “significant” works by the promise of strong rights in them). But again, in light of the centrality of the intellectual commons in the Lockean framework—and the resultant countervailing claims of the society surrounding an author and her work—it should ultimately be unsurprising that the theory would yield these egalitarian, minimalist implications.

C. Protecting Non-Independent Creators: Idea/Expression Dichotomy, Transformative Fair Use, and The Derivative Right

The independent creation defense protects independent creators, allowing them to use materials in the intellectual commons regardless of whether another author has used them in the same way. And the proposed dynamic conception of *scènes à faire* and genericide analogue for copyright law would safeguard growth in the intellectual commons that creative works themselves result in. But at this point, an empirical reality bearing on our theoretical discussion comes to mind: that not all authorship is independent, nor does it only utilize the intellectual commons. In other words, as a matter of fact, authorship often occurs *precisely because* follow-on authors have been influenced by the creative works of earlier authors, and these follow-on authors might even use that earlier author’s creative work itself—which, barring the *scènes à faire* and genericide phenomena discussed above, is not itself part of the intellectual commons—as a raw material for their own work. This is all to say that a creative work need not enter the intellectual commons in order to influence subsequent creativity. A work might simply influence a particular author, who then produces a follow-on work using ideas or even expression embodied in the earlier one. Again, this is particularly true in the internet age, when creative content is so widely disseminated and accessed that authors often cannot help but encounter—and be influenced by—the work of others. The prevalence and value of such non-independent authorship thus raises the question of its status in the Lockean framework: for although I have argued that copyright’s defining limitations can and should protect independent creators and the intellectual commons, what are we to say about non-independent creation? If such follow-on authors really engage in authorial labor—indeed, as the prevalence and distinct value

of their work suggests—then should Lockean theory protect their authorial activity just as well?

I am very sympathetic to this line of argument. Indeed, I have argued elsewhere that when such follow-on authors “labor” upon the work of an earlier author—using their ideas or even their expression in the course of creating something distinct—they are no less entitled to the fruits of their labor in light of the Lockean theory’s egalitarian spirit and structure.¹⁵⁷ This phenomenon of earlier and follow-on authorship thus raises a challenge for copyright doctrine in structuring and allocating authorial rights to protect the labor-based claims of *both* authors simultaneously. But it is a special feature of copyright’s non-rivalrous and expressive subject matter that, in fact, it *can* be structured to achieve this. And we will now see that, while there are a number of ways in which existing copyright doctrine already does this—many of which we have already discussed—there are other ways in which it falls short, such that the Lockean framework with a recognition of non-independent creators would call for these aspects of doctrine to be revised.¹⁵⁸

First, consider the existing protections for non-independent creation that we have already discussed: the idea/expression dichotomy, *scènes à faire*, the merger doctrine, and the rule that factual content is not protected.¹⁵⁹ We noted that these limitations on copyright law leave the corresponding materials—ideas, facts, and stock elements—freely in the intellectual commons. This means that non-independent creators who are influenced by creative works but then take these aspects of those works and *distill* or *re-express* them in a work of their own are free to do so in virtue of them remaining in the commons. Call non-independent creation that uses *unprotected* aspects of earlier works—equivalently, the aspects that come from (and remain in) the intellectual commons—*idea-transforming authorship*, which we saw the landmark example of above.¹⁶⁰ Even though such idea-transforming, non-independent creators are making works in part precisely

157. Note that this “first laborer” problem is one of the most devastating objections to Lockean theory understood as a theory of *tangible* property, by virtue of tangible property being rivalrous. Specifically, in the case of tangible property, it is not possible for an earlier and subsequent laborer to both own exclusive rights in their labor’s fruits: If I labor to create a chair and you then labor upon my chair to create a table, your table extinguishes my chair. Thus, we cannot both simultaneously hold exclusive rights in our chair and table. Because the Lockean labor theory is ultimately a theory of “first laboring,” in combination with the view that timing is frequently a morally irrelevant property and a matter of luck, many have rejected Lockean property theory as normatively implausible. *See, e.g.,* WALDRON, *supra* note 19, at 198; SIMMONS, *supra* note 21. But, as I have argued elsewhere, the non-rivalry of the raw materials making creative works and the transformability of its expression itself allows Lockean copyright to avoid this devastating objection, so long as copyright grants are themselves adequately limited to permit follow-on creativity. Chatterjee, *supra* note 44, at 150–56.

158. For an extended discussion on how copyright’s limitations ought to be structured to safeguard follow-on creativity, see Chatterjee, *supra* note 21.

159. *See supra* notes 72–83 and accompanying text.

160. *See supra* Section II.A.

because of influence by the creative works of others, so long as they do the authorial labor of transformation to make a work of their own, copyright law protects and facilitates their activity and even recognizes their own authorial rights. These limitations thus safeguard the intellectual commons not only for independent creators but for non-independent creators as well.

However, the phenomenon of non-independent creation is not limited to follow-on authors using the intellectual commons or the unprotected aspects of earlier creative works. Rather, a non-independent creator influenced by an earlier work might use that work's *expression itself*, the material protected by the earlier author's copyright and which—this Article's argument has shown—is not part of or removed from the intellectual commons at all;¹⁶¹ for she might imbue it with her own expression and thereby transform it into something her own. Call this sort of non-independent creation *expression-transforming authorship*. Notable examples of it include parodies, criticism, or appropriation art. In all such cases, the follow-on author uses an earlier author's expression—again, precisely because that earlier author used it—but to make something expressively, and importantly, distinct.

My own view (again, defended at length elsewhere¹⁶²) is that, though such follow-on authors use earlier authors' protected expression, a Lockean system of copyright should facilitate their work and recognize their rights as well. This is because expression-transforming authors also engage in authorial labor to create distinct creative works and—in virtue of the non-rivalrous and transformative subject matter of copyright—do not extinguish the earlier author's work by doing so.¹⁶³ Moreover, copyright law *can* achieve this goal of recognizing both earlier and expression-transforming authors' rights simultaneously, so long as each authors' rights are limited to her own expression. Indeed, copyright doctrine already permits and facilitates many instances of expression transformation through its existing “fair use” defense. As 17 U.S.C. § 107 states,

Notwithstanding the provisions of sections [17 U.S.C. §] 106 and [17 U.S.C. §] 106A, the fair use of a copyrighted work, including such use by reproduction in copies or phonorecords or by any other means specified by that section, for purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research, is not an infringement of copyright. In determining whether the

161. This is barring the phenomena of *scènes à faire* and genericide as explored earlier. See *supra* Section IV.B.

162. Chatterjee, *supra* note 44.

163. Note that this is a normatively significant disanalogy between copyright and tangible property: in the latter case, if a follow-on laborer labors upon (say) the chair made by an earlier laborer and turns it into a table, then she extinguishes the earlier laborer's chair. The earlier and follow-on laborers' rights in their fruits cannot, as a matter of metaphysics, coexist. But an earlier and follow-on author's expression can, as expression by nature, be imbued with and transformed by the expression of another author without thereby extinguishing the earlier authors' expression. Again, for an extended examination of this “first laborer” problem and why it makes Lockean copyright more plausible than Lockean property, see Chatterjee, *supra* note 44, at 146.

use made of a work in any particular case is a fair use the factors to be considered shall include—

- (1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;
- (2) the nature of the copyrighted work;
- (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and
- (4) the effect of the use upon the potential for or value of the copyrighted work.¹⁶⁴

In sum, fair uses are uses of copyrighted material that are permissible in virtue of the way the material is being used, and the doctrine in part protects many instances of expression-transforming authorship. Indeed, in his seminal article *Toward a Fair Use Standard*, Judge Pierre Leval introduced the concept of “transformativeness” into fair use doctrine, arguing that it should promote free speech and creativity by giving non-independent creators the freedom to build on preexisting works.¹⁶⁵ As a simple example of the doctrine in action, while copying and reproducing protected materials from another’s book to sell them as my own work would be infringement, utilizing these protected materials in the course of writing a criticism of the book would be fair use, since I would be transforming the book’s expression into expression of my own. Similarly, while simply copying the defining guitar riff of another musician’s song into one of my own would constitute infringement, using the riff in order to make a parody of that earlier song—imbuing it with my own, parodic expression—would transform it into something new and would therefore also be fair use.¹⁶⁶

Nonetheless, though these existing protections in part facilitate and protect non-independent authorship, they might not be sufficient as they stand. For one thing, because different courts embrace distinct tests for “transformativeness,” existing fair use doctrine is inconsistent.¹⁶⁷ In particular, courts have adopted tests for transformativeness that range from asking whether the subsequent work has a new meaning or message, has substantively different aesthetic properties, or

164. 17 U.S.C. § 107 (2018).

165. See generally Pierre N. Leval, *Toward a Fair Use Standard*, 103 HARV. L. REV. 1105 (1990).

166. Indeed, the landmark example of expression-transformation in U.S. law—which called the “transformativeness” inquiry the heart of the fair use doctrine—is the Supreme Court’s case *Campbell v. Acuff-Rose Music, Inc.*, which regarded the rap group 2 Live Crew’s parody of Roy Orbison’s “Oh, Pretty Woman.” 510 U.S. 569, 572 (1994). Therein, the Court emphasized the importance of permitting others to build on copyrighted material and create new works, and it held that the parody in question—though copied the heart of the original song (its first line and opening bass riff), “the heart is what most readily conjures up the song for parody,” and is therefore necessary to be copied (and imbued with parodic expression). *Id.* at 588.

167. For an explication of these distinct tests for transformativeness and their problems, see Amy Adler, *Fair Use and the Future of Art*, 91 N.Y.U. L. REV. 559 (2016).

produces a different impression on viewers.¹⁶⁸ Some scholars have also challenged all these existing tests for failing to capture—and safeguard—the full range of transformative authorship.¹⁶⁹ Most notably, Amy Adler has criticized them for being out of step with contemporary creative practices and the importance of expressive copying as a technique in making new works of art, herself favoring a conception of expression-transformation according to which it need not require modifications to the work’s message, aesthetics, or impression at all.¹⁷⁰ In light of these divergent understandings, then, the question of what it *takes* for a subsequent author to transform expression—to engage in an act of *authorship* with the expression of an earlier author, rather than merely an act of infringement—requires further theorizing. Easy cases of expression transformation were seen with the examples of criticisms and parodies discussed above.¹⁷¹ Harder ones include the work of esteemed appropriation artists like Richard Prince, such as his infamous *New Portraits* series constituted by selections of others’ Instagram posts with only the most minimal modifications, especially since Prince himself claims that his appropriation art is not his own expression.¹⁷² Many puzzling examples lie along the authorial spectrum. But if the Lockean copyright requires safeguarding, not just the independently creating and idea-transforming authors but also the expression-transforming authors, then we must determine what expression-transforming authorship itself actually requires; for the answer to this question ought to guide and unify fair use doctrine.¹⁷³

Further, recall that copyright law’s existing *derivative right* grants authors an exclusive right not merely to the work they have created but to all “derivative” works based upon it.¹⁷⁴ The statute defines derivative works as the following:

A “derivative work” is a work based upon one or more preexisting works, such as a translation, musical arrangement, dramatization, fictionalization, motion picture version, sound recording, art reproduction, abridgment, condensation, or any other form in which a work may be recast, transformed, or adapted. A work consisting of editorial revisions, annotations, elaborations, or other modifications which, as a whole, represent an original work of authorship, is a “derivative work.”¹⁷⁵

This simultaneous existence of the derivative right and the transformative fair use defense presupposes a normatively significant difference between follow-on authors who *transform* the expression of an earlier author in making a new work that

168. *Id.* at 574–75.

169. *Id.* at 584.

170. *Id.* at 561 (discussing and defending the copying-based artwork of Richard Prince).

171. *Id.*

172. *Id.* at 578.

173. I defend a theory of authorship—including of “transformative authorship” specifically—as well as its implications for copyright law in future work.

174. 17 U.S.C. § 106(2) (2018).

175. 17 U.S.C. § 101 (2018).

constitutes fair use versus those who *merely copy* and *add to* that expression in making a new work that is an unauthorized and infringing derivative. However, this distinction between transformative and derivative works is also undertheorized and obscure, which is concerning in light of the fact that both involve follow-on authors using an earlier author's expression in their authorial activity. Moreover, one apparent aspect of the derivative right is that, if a follow-on author creates an unauthorized derivative, then she is not entitled to *any* protection even with respect to the elements that she originally created. As section 103 of the Copyright Act provides, derivative works are only copyrightable by the owner of the original work (or their licensees).¹⁷⁶ This means that, for instance, if a follow-on author makes a film that is ultimately an unauthorized derivative work, then she is not entitled to copyright protection even in the aspects of the film that she herself contributed. The derivative right thus fails to recognize even the follow-on authors' *own* authorial labor, instead allowing its fruits to be wholly absorbed by the earlier author. But if the Lockean framework entails that earlier and follow-on authors have equal claim in their labor's fruits as I have suggested, then it would require at least this aspect of the derivative right to be abolished.¹⁷⁷

In sum, the primary arguments of this Article have focused on how copyright law grants authorial rights while safeguarding the intellectual commons and even expanding it, thereby respecting both the Lockean ideals of common ownership and self-ownership, particularly through the independent creation defense. But although the creativity of non-independent creators is provoked by that of earlier authors, such authors also engage in authorial labor to create distinct and original works. I have thus suggested that non-independent creators should be protected just as well by the Lockean framework's egalitarian structure, whether they use the intellectual commons or the earlier creative works themselves, so long as they engage in the authorial labor of transformation. Moreover, the fact that copyright even *can* be structured to permit both idea-transforming and expression-transforming authorship is only due to its non-rivalrous and transformable subject matter. Whereas tangible property rights cannot be structured to permit follow-on laborers working upon on the work of others without extinguishing what the earlier laborer made, the idea/expression dichotomy and transformative fair use—if they are sufficiently protective and consistent—can achieve this. The independent creation defense, idea/expression dichotomy, and transformative fair use thus work together as a constellation of limitations, ones both protecting the intellectual commons and facilitating follow-on creativity, creating conditions of equality and abundance for

176. 17 U.S.C. § 103(a) (2018) (“The subject matter of copyright as specified by section 102 includes compilations and derivative works, but protection for a work employing preexisting material in which copyright subsists does not extend to any part of the work in which such material has been used unlawfully.”).

177. For a more extensive exploration of the revisions necessary in U.S. copyright law in order to adequately address the “first laborer” problem, see Chatterjee, *supra* note 44.

independent and transformative authorship alike. And copyright doctrine can thereby realize Lockean theory's normative structure and ideals, perhaps even in ways that Lockean property itself could not.

This Part has identified a number of ways in which the Lockean copyright might require substantive revisions to existing doctrine, and it has thereby unearthed the doctrinal significance of this theoretical inquiry. As noted above, a normative defense of the theory requires much more than this Article provides. But the prior Parts' arguments showcased that Lockean copyright ought to be taken theoretically seriously, while this Part illustrated the theory's significant implications. The final Part will turn our attention to patent law,¹⁷⁸ disentangling its normative structure and bringing to light the philosophically significant ways in which it and copyright differ. The Article then concludes with possible doctrinal implications of this dissociation itself as well as the further questions raised for future work.

V. PATENTS AND THE INTELLECTUAL COMMONS

As noted at the outset, the dominant view among American intellectual property scholars is that copyright and patent law have the same theoretical foundations.¹⁷⁹ But Shiffrin's argument against a Lockean theory is far more convincing as to patents, such that copyright and patent law will be normatively dissociated in an important respect. This will likely feel unsurprising following the prior Parts' arguments, as patent systems lack precisely those limitations that copyright possesses. Most obviously, since there is no independent creation defense in patent law, patents really do prevent even independent subsequent inventors from utilizing the fruits of their labor. A patent right thus restricts the intellectual commons in ways copyrights do not, falling prey to Shiffrin's objection. And in fact, this lack of an independent creation defense raises further Lockean objections for patent law beyond Shiffrin's own. Thus, patent systems—at least, as they are presently structured—can only be justified on non-Lockean grounds. These arguments are unpacked in the following Part.

A. Patentable Subject Matter

As a preliminary matter, note that certain existing limitations on patent law do contain flavors of Shiffrin's concerns regarding impermissible appropriations from the intellectual commons. For instance, laws of nature, abstract ideas, and natural phenomena are ineligible for patent protection under American law.¹⁸⁰ The principle behind this exclusion is discussed in the landmark case *Mayo Collaborative*

178. Note that my exploration in this Article specifically concerns *utility* patents, setting aside the theoretical questions surrounding design patents for the time being.

179. See *supra* note 1.

180. See *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 573 U.S. 208, 216 (2014); *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 589 (2013); *Mayo Collaborative Servs. v. Prometheus Lab'ys, Inc.*, 566 U.S. 66, 82–84 (2012); *Bilski v. Kappos*, 561 U.S. 593, 601 (2010).

Services v. Prometheus Laboratories, Inc., where the Supreme Court explained its following concerns:

The Court has repeatedly emphasized [the] . . . concern that patent law not inhibit further discovery by improperly tying up the future use of laws of nature. . . . even though rewarding with patents those who discover new laws of nature and the like might well encourage their discovery, those laws and principles, considered generally, are “the basic tools of scientific and technological work.” And so there is a danger that the grant of patents that tie up their use will inhibit future innovation premised upon them, a danger that becomes acute when a patented process amounts to no more than an instruction to “apply the natural law,” or otherwise forecloses more future invention than the underlying discovery could reasonably justify.¹⁸¹

In an earlier case, the Supreme Court discussed similar concerns regarding patents in abstract ideas:

For aught that we now know some future inventor, in the onward march of science, may discover a mode of writing or printing at a distance by means of the electric or galvanic current, without using any part of the process or combination set forth in the plaintiff's specification. His invention may be less complicated—less liable to get out of order—less expensive in construction, and in its operation. But yet if it is covered by this patent the inventor could not use it, nor the public have the benefit of it without the permission of this patentee.¹⁸²

Under the existing patent system, then, the labor that an individual might put into discovering some natural phenomenon or developing an abstract or mathematical model still is not sufficient to justify its removal from the commons, for the reason that this would prevent free—and potentially beneficial—uses by others. And although the majority of scholars would put forth a utilitarian defense of these limitations, note that they would align with Locke's common ownership thesis as well: that discoveries, mathematical and abstract ideas, and natural laws and phenomena belong to everyone. As Shiffrin would put it, labor is not a justification for their private appropriation, as it is not necessary for their use and only restricts it.

B. Independent Inventors and the Intellectual Commons

The problem, however, is that Shiffrin's concern also extends to all *patentable* subject matter: for patent protection in inventions and processes does remove from the intellectual commons, thereby preventing others from using or benefiting from them. But why does a patent grant deplete the commons if a copyright grant does not? At this point, the theoretical significance of the differences between patent and

181. *Mayo Collaborative Servs.*, 566 U.S. at 85–86 (internal citations omitted) (holding that the patents in question effectively claimed the underlying laws of nature themselves and were thus invalid).

182. *O'Reilly v. Morse*, 56 U.S. (15 Howard) 62, 113 (1854).

copyright are clear. For one thing, I noted that Shiffrin's objection to the private appropriation of ideas is a nonstarter in copyright because copyright is not in the business of granting exclusive rights in ideas at all. Patent law, on the other hand, is precisely in this business. It is in the business of useful ideas, in fact, such that a patent grant by definition precludes others from freely benefitting from the invention's utility.

Moreover, unlike copyright, patent law does not offer an independent creation defense.¹⁸³ A patent is not merely protection against "copying," as the patent owner may prevent others from using it even if they came up with it entirely on their own. Thus, under the favored conception of the intellectual commons according to which inventions are compositions of ideas—and which might themselves be genuinely novel but which nonetheless are made from more simple ideas from the commons—patents restrict the commons by disallowing these ideas to be freely utilized within the patented compositions.¹⁸⁴ It is therefore not the case that they can be justified under Lockean theory, at least not as we have understood it in this Article.¹⁸⁵

Further, note that—unlike in the case of copyright, where we disentangled an important distinction between works that have been widely disseminated with some effect on society and ones that have not—Shiffrin's argument undermines a Lockean right to patents whether or not the patented invention is being disseminated. Since the lack of an independent creation defense entails that patents appropriate the preexisting commons, we need not ask whether and when the invention should be regarded as "incorporated" into it, as explored in the copyright case. Rather, it is the preexisting intellectual commons *itself* that has been restricted. The question of dissemination thus is irrelevant to that of appropriation in this context, despite being highly relevant—as we have seen—to the copyright case.

C. The Lockean Rights of Independent Inventors: Self-Ownership and Nozick's proviso

Shiffrin's challenge puts pressure on patent law from the perspective of the common ownership thesis. But there are in fact two additional ways in which the existing structure of patent law—and its departure from copyright grants in the treatment of independent creation—conflicts with Lockean theory that Shiffrin does not identify in virtue of overlooking the significance of independent creation

183. See *supra* note 8 and accompanying text.

184. Again, this argument also follows if we are Platonists about inventions, holding the view that all possible inventions are abstract entities in the intellectual commons prior to being actually invented (i.e., that invention is really a sort of discovery). The patent straightforwardly removes the Platonic invention from the intellectual commons, in virtue of even independent inventors being unable to use it.

185. As noted above, though we have taken Shiffrin's understanding of Lockean theory as our starting point, alternative possible Lockean or pseudo-Lockean theories might be defended. See *supra* note 21. I argue elsewhere that these alternative interpretations also could only plausibly support a Lockean theory of copyrights, and not patents. See Chatterjee, *supra* note 21.

itself.¹⁸⁶ First, the fundamental structure of patent grants is objectionable in light of the self-ownership thesis. This is because the lack of an independent creation defense entails that patent law recognizes the labor-grounded rights for some individuals but not others: namely, earlier rather than later inventors.¹⁸⁷ To see this, consider the second inventor of some patented invention, who is unaware of the fact that the first inventor has already patented it. We have no reason to think that this second inventor put any less labor into the invention than he would have had the first inventor not already patented it himself; indeed, we can stipulate that the second inventor's efforts were identical to what they would have been had the first inventor never existed. Nonetheless, under patent law's existing structure, the second inventor's labor does not entitle him to the right to even *use* the invention, let alone to a patent of his own. Thus, the second inventor's labor—unlike the first inventor's—is unable to ground a patent right for reasons extrinsic to himself, his labor, or his ownership of either: namely, the fact that someone else claimed the idea first. This failure to respect the labor-based rights of all inventors seemingly runs afoul of the Lockean commitment to self-ownership as well as the equality of all.¹⁸⁸

Second, whereas I argued above that copyright law—in virtue of not appropriating from the intellectual commons at all—trivially satisfies the Lockean proviso, it is worth noting that patent law's lack of an independent creation defense might violate it. In other words, not only does a patent grant remove something from the commons but it might also fail to leave enough and as good, particularly for those aforementioned second inventors. This latter argument was briefly articulated by Robert Nozick in *Anarchy, State, and Utopia*. Nozick's discussion begins with his favored interpretation of the Lockean proviso¹⁸⁹ according to which one's private appropriation is only permissible as long as it does not make anyone "worse off" than they would have otherwise been by depriving them of something they could otherwise possess.¹⁹⁰ He then turns his attention specifically to the example of patents, applying the Lockean proviso to this context:

186. As noted above, these two arguments have been suggested by some scholars exploring Lockean theory. See *supra* note 51.

187. For an extensive discussion of this "first laborer" problem and how it devastated Lockean property theory but might be avoided by Lockean intellectual property, see Chatterjee, *supra* note 44.

188. LOCKE, *supra* note 19.

189. NOZICK, *supra* note 19. Note that Nozick's interpretation of the Lockean proviso is not uncontroversial. See, e.g., Barbara Fried, *Wilt Chamberlain Revisited: Nozick's "Justice in Transfer" and the Problem of Market-Based Distribution*, 24 PHIL. & PUB. AFFS. 226, 232 (1995) ("Nozick's 'weak version' of the Lockean proviso, which allows first-comers to appropriate land and other natural resources provided they leave others (later-comers) as well off as they would have been in a world without private appropriation, in effect permits first-comers to appropriate the surplus value inherent in soon-to-be scarce resources."); Jeremy Waldron, *Enough and as Good Left for Others*, 29 PHIL. Q. 319, 319–20 (1979) (arguing that interpreters are mistaken in understanding the "enough and as good" clause as a restriction on acquisition). Nonetheless, Nozick's interpretation is both important and influential and therefore worth discussing.

190. NOZICK, *supra* note 19, at 178.

An inventor's patent does not deprive others of an object which would not exist if not for the inventor. Yet patents would have this effect on others who independently invent the object. Therefore, these independent inventors, upon whom the burden of proving independent discovery may rest, should not be excluded from utilizing their own invention as they wish (including selling it to others).¹⁹¹

As Nozick argues, if his welfarist understanding of the Lockean proviso is correct, then it provides yet another reason that a Lockean system of patents would require an independent creation defense. Without such a defense, patents leave later inventors worse off than they would have been but for the existence of the patent, as they are unable to utilize their independently created inventions. Thus, given that the existing patent systems lack such a defense for independent inventors, we have yet another reason—beyond Shiffrin's own—that they cannot be plausibly characterized as soundly Lockean systems.

D. Patents vs. Property: Non-Rivalry and Growth of the Commons

The arguments above, in addition to vindicating Shiffrin's objection as applied to patents, raised further concerns with patent law's structure from the Lockean framework. But it is worth noting that there are actually important ways in which patent grants do result in *less* depletion of the commons—and, in fact, greater expansion—than do grants of tangible property. In other words, there are certain respects in which patent law's effect on the commons really is like that of copyright law rather than tangible property, in virtue of the non-rivalrous nature of intellectual materials.

First, although the patented invention is itself removed from the commons, it is not the case that *all* raw intellectual materials utilized to construct the invention are then removed from the intellectual commons as well. Again, this is in contrast to what happens in the physical case: for when a carpenter constructs a chair and then owns that chair, this automatically removes the pieces of wood he used from the physical commons. Instead, when an invention is produced and patented that combines a number of simpler, unprotectable ideas into a novel and non-obvious whole, those simpler ideas remain in the intellectual commons. And they can be utilized in the course of inventing other, perhaps patentable, inventions.

Second, just like in the case of copyright law discussed above, if we accept the utilitarian's plausible empirical premise that the existence of intellectual property law incentivizes creation and invention, then it follows that patent law also facilitates the growth of the intellectual commons. Again, this growth is not simply because the patent will eventually expire, leaving the invention in the public domain. It is also due to the innovative influence that the invention will exert upon the subsequent creativity of other inventors.

191. *Id.* at 182.

In fact, this phenomenon of growth in the intellectual commons is exemplified by at least two existing patent doctrines, ones *without* perfect analogues in the domain of copyright law and which seek to facilitate the utilization of the expanded commons by others. The first is patent law's *disclosure* requirement.¹⁹² The U.S. patent statute sets out four disclosure requirements in order for an invention to obtain a patent. The first is that a patent application—which is later published as the patent—must contain a *specification* describing the invention in writing, concluding with one or more claims “pointing out and distinctly claiming the subject matter which the inventor . . . regards as the invention,”¹⁹³ and (if necessary) with one or more drawings to elucidate the invention.¹⁹⁴ The remaining three statutory requirements ask for certain content within the specification: the *written description* requirement ensures that the inventor is actually in possession of the claimed invention,¹⁹⁵ the *enablement* requirement asks the patent applicant to demonstrate to “any person skilled in the [relevant] art [how] . . . to make and use the [invention]” without “undue experimentation,”¹⁹⁶ and the *best mode* requirement asks the patent applicant to set out “the best mode contemplated by the inventor . . . of carrying out the invention.”¹⁹⁷ By requiring all such forms of disclosure, then, a patent grant facilitates the release of useful, novel, and non-obvious *information* into the intellectual commons, albeit while granting ownership of the invention itself to the patentholder. Thus, although the patent prevents others from utilizing the invention itself, the information released through disclosure is itself free to be used in the course of distinct (inventive or otherwise) pursuits, such that the intellectual commons has been enriched.

The second relevant and related doctrine is that U.S. patent law permits *improvement patents*. Improvement patents are granted to inventors who improve some other, perhaps patented, invention where the improvement itself meets the patentability requirements of novelty, utility, and non-obviousness.¹⁹⁸ By way of example, imagine that you have made, patented, and disclosed some invention with modules 1, 2, and 3, which permits you to perform X task. Under existing American law, I may subsequently improve your disclosed invention by making something with modules 1, 2, 3, and an additional, novel, non-obvious module 4, and which is

192. For an exploration of the theoretical significance of disclosure in patent law in facilitating cumulative inventiveness, as well as the shortcomings of existing doctrine in achieving its stated goal, see generally Jeanne C. Fromer, *Patent Disclosure*, 94 IOWA L. REV. 539 (2009).

193. 35 U.S.C. § 112 (2018).

194. *Id.* § 113.

195. *Id.* § 112.

196. *Monsanto Co. v. Syngenta Seeds, Inc.*, 503 F.3d 1352, 1360 (Fed. Cir. 2007) (first quoting 35 U.S.C. § 112; and then quoting *In re Wright*, 999 F.2d 1557, 1561 (Fed. Cir. 1993)).

197. 35 U.S.C. § 112 (2018).

198. 35 U.S.C. § 101 (2018) (“Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, *or any new and useful improvement thereof*, may obtain a patent therefor, subject to the conditions and requirements of this title.”) (emphasis added); see also Lemley, *supra* note 97, at 1000.

thereby able to perform X task faster. I may even obtain a patent of my own on said improvement, so long as the improvement is itself novel and non-obvious. Note that an inventor obtaining an improvement patent gains a patent in the *improvement itself*, not the conjunction of the improvement and the underlying invention.¹⁹⁹ This is perhaps best illustrated by the case *Marconi Wireless Telegraph Co. v. De Forest Radio Telephone & Telegraph Co.*, which held that a triode (a container having three electrodes) improved on but nonetheless infringed a prior patent on a diode (indeed, a container having two electrodes) since the triode necessarily contained two electrodes in a container.²⁰⁰ Thus, when an underlying invention is patented by its inventor while an improvement upon it is patented by a subsequent inventor, neither of the two are permitted to utilize the entirety of the improved invention without authorization from the other (until either patent expires), since the improved invention contains that which both of them individually own.²⁰¹ Nonetheless, the fact that earlier patented inventions' existence—and disclosure—can result in the proliferation of such improvements at all itself demonstrates enrichment of the intellectual commons, as it has facilitated follow-on, cumulative inventiveness.

Again, these effects of patents on subsequent inventiveness—especially through disclosure and the development of improvements—have been explored by scholars before, but it has typically been from the utilitarian perspective. Instead, I have identified a way in which, in light of the centrality of the intellectual commons in the Lockean picture, these effects are theoretically significant for the Lockean framework as well. Indeed, these observations might even constitute certain surprising respects in which—notwithstanding patent grants still appropriating *something* from the commons, and thereby falling prey to Shiffrin's argument—a Lockean theory of patents is more normatively justifiable than a Lockean theory of property, in virtue of the latter *always and only* removing the property (and its raw materials) from the commons.

In sum, this Article has utilized the Lockean framework and the differences between copyright and patent law to suggest a possible basis for their theoretical dissociation, and it has used Shiffrin's challenge as a starting point for a broader exploration of the philosophical complexities of intellectual property and their doctrinal stakes. If copyrights and patents do turn out to be distinct in their normative foundations, then this itself could have revisionary doctrinal implications as well. The concluding Part gestures at possible such implications, further underscoring the practical significance of this exploration, while outlining the further questions that this Article raises.

199. Lemley, *supra* note 97, at 1009–10 (explaining this phenomenon of “blocking patents”).

200. 236 F. 942, 954–55 (S.D.N.Y. 1916), *aff'd*, 243 F. 560 (2d Cir. 1917).

201. *Blake v. Robertson*, 94 U.S. 728, 733 (1877).

CONCLUSION

The methodology of this Article has been to analyze the *compatibility* of the Lockean framework with copyrights and patents, taking these existing systems and their defining structures as its starting point. And it has identified an important difference between how the basic structures of these two systems fit (or fail to fit) with the Lockean framework—one that has not been fully reckoned with by Lockean intellectual property theory’s most common defenders or its most influential critic—while outlining aspects of copyright doctrine that might need to be revised for it to fully align with the theory. But this means that the question answered by this Article is very different from one answered by a *tabula rasa* normative exploration of intellectual property, one starting from first principles and asking what—if any—kind of intellectual property law is in fact justifiable. And the analytical conclusion of this Article is compatible with a number of normative conclusions about these legal systems or Lockean theory itself and which could only be adjudicated through further, normative theorizing. For instance, it could be that there is a Lockean right to intellectual property generally, which would mean that copyright (with the aforementioned modifications) is fundamentally structured correctly while patent law is not, the latter minimally requiring the introduction of an independent creation defense.²⁰² Alternatively, it might be that Lockean rights are in general indefensible, which would mean that the alignment between copyrights and Lockean theory is not per se desirable, as copyright law’s structure must be justified on different grounds. And a third possibility is that there really is a Lockean right to copyrights but not to patents, such that patent law has either some non-Lockean (such as utilitarian) justification or is not justifiable, as well as that the bifurcation of these legal systems is getting things right. Again, normative theory is required in order to adjudicate among these and other possibilities, and I engage in such theorizing—defending the third conclusion—in other work.²⁰³

202. Beyond Nozick’s musing, a number of scholars have defended this idea, albeit typically for utilitarian reasons. See generally Mark A. Lemley, *Should Patent Infringement Require Proof of Copying?*, 105 MICH. L. REV. 1525 (2007); Stephen M. Maurer & Suzanne Scotchmer, *The Independent Invention Defence in Intellectual Property*, 69 ECONOMICA 535 (2002); Samson Vermont, *Independent Invention as a Defense to Patent Infringement*, 105 MICH. L. REV. 475 (2006); Oskar Liivak, *Rethinking the Concept of Exclusion in Patent Law*, 98 GEO. L.J. 1643 (2010); Roger Milgrim, *An Independent Invention Defense to Patent Infringement: The Academy Talking to Itself: Should Anyone Listen?*, 90 PAT. & TRADEMARK OFF. SOC’Y 295 (2008); Carl Shapiro, *Prior User Rights*, AM. ECON. REV., May 2006, at 92, 95; Michelle Armond, Comment, *Introducing the Defense of Independent Invention to Motions for Preliminary Injunctions in Patent Infringement Lawsuits*, 91 CAL. L. REV. 117 (2003); John S. Leibovitz, Note, *Inventing a Nonexclusive Patent System*, 111 YALE L.J. 2251 (2002).

203. In particular, in addition to defending the idea of a Lockean right to one’s expression, I argue in other work that—in contrast to the case of copyright—there is no way to construct systems of patent law that adequately protect the rights and interests of both earlier and follow-on inventors. Chatterjee, *supra* note 21; see also Chatterjee, *supra* note 72. This is due to the very nature of functional inventions, in contrast to the nature of expression—the latter being intrinsically and infinitely transformable. Chatterjee, *supra* note 21. It is thus not possible to construct a system of patents that

Further, the outset of this Article identified a number of ways in which the fundamental features of copyright and patent law are very different. Indeed, these existing differences, particularly in their treatment of independent creation, are fundamental to the Article's central argument. But if copyrights and patents do have distinct normative foundations, then this could potentially call for ways in which they ought to be differentiated even further. For instance, both copyright and patent law presently are (for the most part) "one-size-fits-all" regimes, which is to say that they largely do not differentiate between *types* of creative works or inventions in the nature of rights they grant.²⁰⁴ Eligible creative works and inventions essentially receive the very same scope, strength, and term of protection respectively, regardless of, e.g., how valuable, influential, or creative and inventive they might be. But a normative dissociation of copyright and patent law might yield different prescriptions for this doctrinal structure. For instance, if the right theoretical framework is offered by a Lockean theory of copyrights and an economic theory of patents, then widely influential creative works might call for weaker copyright protection than privately held ones with no effect on the commons (for the reasons explored in Part IV), while highly useful and valuable inventions could warrant stronger protection (to efficiently incentivize inventive activity) than more niche or frivolous ones.²⁰⁵

In fact, perhaps in part due to the dominant assumption of their theoretical unity, courts recently have unified a number of copyright and patent doctrines and thus have raised the question of when exactly such unifications are theoretically desirable. We find examples of this in recent Supreme Court and Federal Circuit decisions on rules surrounding injunctions, secondary liability, and laches in both copyright and patent law.²⁰⁶ Therein, courts—perhaps unreflectively—pull legal

avoids the "first laborer" objection, and a Lockean theory of patents—like a Lockean theory of property—is normatively indefensible.

204. *But see* Dan L. Burk & Mark A. Lemley, *Is Patent Law Technology-Specific?*, 17 BERKELEY TECH. L.J. 1155, 1155–56 (2002) (arguing that, though the patent system is unified and provides technology-neutral protection to all kinds of technologies in theory, there is increasing divergence between the rules of patent law and the application of the rules to different industries, most notably in biotechnology and computer software, and such that patent law is now technology-specific in application).

205. For a defense of taking industry-specific variation explicitly into account in applying patent rules, see generally Dan L. Burk & Mark A. Lemley, *Policy Levers in Patent Law*, 89 VA. L. REV. 1575 (2003).

206. *See, e.g.,* eBay Inc. v. MercExchange, L.L.C., 547 U.S. 388, 391 (2006) (articulating a four-factor test for injunctions in patent law that was subsequently adopted into copyright law); Flexible Lifeline Sys., Inc. v. Precision Lift, Inc., 654 F.3d 989, 998 (9th Cir. 2011) (adopting the *eBay* test into copyright law); Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 442 (1984) (pulling from patent law into copyright law the rule that a provider of a product cannot be deemed a contributory infringer if the product in question is capable of commercially significant non-infringing uses); Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd., 545 U.S. 913, 936 (2005) (carving out an exception to the *Sony* rule for inducement liability in copyright law that was subsequently pulled into patent law); Takeda Pharm. U.S.A., Inc. v. West-Ward Pharm. Corp., 785 F.3d 625, 630–31 (Fed. Cir. 2015) (applying the *Grokster* definition of inducement for copyright law to the patent context); Petrella v. Metro-Goldwyn-Mayer, Inc., 572 U.S. 663, 667–68 (2014) (holding, for reasons

rules out of copyright and import them into patent and vice versa. And in so doing, they hardly mention any differences between the two, let alone whether possible theoretical distinctions should give their cross-pollination efforts some pause. However, if copyrights and patents *are* theoretically distinct, then efforts at doctrinal unification should likely be more thoughtful. We must inquire in each case whether the rule fits copyrights' and patents' respective normative foundations and ensure that each instance of cross-pollination is justifiable. Indeed, in one such case on the rules surrounding inducement liability, which pulled the rule from copyright into the domain of patent without raising or exploring any possible theoretical differences, Judge Newman dissented to the cross-pollination whilst offering the following poignant remarks:

Grokster is a copyright case, and although there is common law commonality in the word "inducement," questions of intent and scienter are as fact-specific in the copyright field as in connection with patents. An oversimplified analogy between copyright and patent causes does not aid understanding of these complex issues.²⁰⁷

Additionally, a normative dissociation of copyright and patent law could have implications for the copyright/patent division of labor itself. For instance, it might give cause for concern about the Supreme Court's recent interpretation of the most important doctrine defining this division of labor—copyright law's "useful articles" doctrine—in virtue of it permitting overlapping copyright and patent protection. "Useful articles" are objects with both *expressive* and *functional* properties, including clothing, belt buckles, containers, and industrial designs broadly.²⁰⁸ And as noted above, the useful articles doctrine is an important mechanism whereby copyright screens out functional elements of expressive works and channels them to the domain of patent law.²⁰⁹ The doctrine states that the expressive features of such articles are protected under copyright only if they "can be identified separately from, and are capable of existing independently of, the utilitarian aspects of the article."²¹⁰ This "separability" requirement has been interpreted to include both physical and conceptual separability,²¹¹ but the latter concept has proven difficult to define,

of statutory interpretation, that the defense of laches may not bar relief in copyright law, a rule that was subsequently imported into patent law despite the absence of analogous statutory language); *SCA Hygiene Prods. Aktiebolag v. First Quality Baby Prods., LLC*, 137 S. Ct. 954, 959 (2017) (adopting the *Petrella* rule for laches in copyright law into the domain of patent law).

207. *Takeda Pharm.*, 785 F.3d at 637 (Newman, J., dissenting).

208. *See* 17 U.S.C. § 101 (2018).

209. H.R. REP. NO. 94-1476, at 54, *as reprinted in* 1976 U.S.C.C.A.N. at 5662-63, 5667 (noting that the useful articles doctrine was intended to exclude from copyright law works of industrial design and the creativity associated with successfully marrying form and function).

210. *Id.*

211. *See id.* at 55 ("Unless the shape of an automobile, airplane, ladies' dress, food processor, television set, or any other industrial product contains some element that, physically or conceptually, can be identified as separable from the utilitarian aspects of that article, the design would not be copyrighted . . .").

proliferating a number of distinct and problematic understandings and tests over the years.²¹² The Supreme Court thus took on the question of conceptual separability in the 2017 case *Star Athletica, L.L.C. v. Varsity Brands, Inc.*, while considering the copyrightability of design elements—colors, stripes, and chevrons—printed onto the fabric of cheerleading uniforms.²¹³ The Court found these design details to be conceptually separable and copyrightable and, in so doing, articulated the following test:

[A] feature incorporated into the design of a useful article is eligible for copyright protection only if the feature (1) can be perceived as a two- or three-dimensional work of art separate from the useful article and (2) would qualify as a protectable pictorial, graphic, or sculptural work—either on its own or fixed in some other tangible medium of expression—if it were imagined separately from the useful article into which it is incorporated.²¹⁴

The implication of this understanding of separability is that design elements of a useful article can receive copyright protection even if they impart significant utility, so long as the judge could imagine it as existing purely aesthetically in a non-functional context. This is true even if the useful article in question could not function at all without the design elements, or if the elements would satisfy the patentability requirements of novelty and non-obviousness in addition to utility, and such that the patent/copyright division of labor is now overlapping rather than disjoint.²¹⁵ A number of scholars—including myself—have criticized the Supreme Court’s *Star Athletica* decision for resulting in this overlap, which muddies the water

212. To name only the most well-known of the pre-*Star Athletica* tests, Professor Paul Goldstein has argued that a design is conceptually separable “if it can stand on its own as a work of art traditionally conceived, and if the useful article in which it is embodied would be equally useful without it.” 1 PAUL GOLDSTEIN, COPYRIGHT: PRINCIPLES, LAW & PRACTICE § 2.5.3.1 (1989). NIMMER ON COPYRIGHT claimed that conceptual separability exists when there is “substantial likelihood that, even if the article had no utilitarian use, it would still be marketable . . . simply because of its aesthetic qualities.” MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 2A.08[B][4] (Matthew Bender rev. ed. 2017). *Kieselstein-Cord v. Accessories by Pearl, Inc.* held that the expressive aspect of the article is conceptually separable whenever it can be said to be “primary” and the utilitarian function can be said to be “subsidiary.” 632 F.2d 989, 993 (2d Cir. 1980). *Brandir International, Inc. v. Cascade Pacific Lumber Co.* applied the test articulated by Robert Denicola in his paper *Applied Art and Industrial Design: A Suggested Approach to Copyright in Useful Articles*, holding that copyrightability is dependent on “the extent to which the work reflects artistic expression uninhibited by functional considerations.” 834 F.2d 1142, 1145–47 (2d Cir. 1987) (quoting Robert Denicola, *Applied Art and Industrial Design: A Suggested Approach to Copyright in Useful Articles*, 67 MINN. L. REV. 707, 741 (1983)). And Judge Newman’s dissent in *Carol Barnhart Inc. v. Econ. Cover Corp.* proposed a finding of copyrightability where a work “stimulate[s] in the mind of the beholder a concept that is separate from the concept evoked by its utilitarian function.” 773 F.2d 411, 422 (2d Cir. 1985) (Newman, J., dissenting). For a discussion of the problems posted by each of these tests, see Chatterjee, *supra* note 11, at 558, 564–65.

213. *Star Athletica, L.L.C. v. Varsity Brands, Inc.*, 137 S. Ct. 1002, 1007–08 (2017).

214. *Id.* at 1007.

215. Christopher Buccafusco, Mark A. Lemley & Jonathan S. Masur, *Intelligent Design*, 68 DUKE L.J. 75, 101 (2018).

and undermines the stated aims of the useful articles doctrine.²¹⁶ But if copyright and patent law have distinct normative foundations, ones with different implications for each right's appropriate scope, structure, and subject matter, then this could yield further reasons for concern about the overlapping domains that *Star Athletica* leaves us with. These broader questions of how to correctly structure copyrights and patents—as well as their division of labor—thus exemplify the importance of engaging in this theoretical inquiry, while attending to copyrights' and patents' normatively significant differences.

Finally, in this Article's exploration of the philosophical complexity of intellectual property, the Lockean framework itself served as a suitable starting point for a number of reasons. These included (i) that Lockean theory offers the most well-known philosophy of *property*, and it is the non-utilitarian framework most explored by intellectual property scholars; (ii) that the concept of the Lockean commons brings to light the unique theoretical challenges that arise when one moves from the domain of physical to intellectual property, as well as the significance of copyrights' and patents' differences; and (iii) that Shiffrin's piece is the seminal philosophical examination of intellectual property so far, and the last word on the feasibility of Lockean theories. Moreover, this Article especially focused on independent creation in virtue of it being the theoretical difference between copyrights and patents most relevant to the dialectic at hand. But Locke's is only one of many possible theories of rights, and the treatment of independent creation is only one of copyright and patent's defining differences. The limited exploration of this Article thus leaves us with questions about intellectual property beyond both Locke and independent creation.

Thus, consider again the fundamental structure of intellectual property law, the bifurcation between copyrights and patents: that copyright law is the domain of *creative works*, while patent law is the domain of *inventions*. A complete philosophical exploration of this bifurcated structure would probe its other defining features and underlying assumptions, such as that the categories “creative works” and “inventions” are themselves coherent and importantly different, and that they warrant distinct legal systems. Although it is natural to think that creative works and inventions are fundamentally distinct—works that are principally “expressive” versus those which are principally “functional”—it is hard to specify exactly what this difference is, let alone its normative significance for legal doctrine. No doubt,

216. See generally Rebecca Tushnet, *Shoveling a Path After Star Athletica*, 66 UCLA L. REV. 1216 (2019); Barton Beebe, *Star Athletica and the Problem of Panaestheticism*, 9 U.C. IRVINE L. REV. 275 (2019); Buccafusco & Fromer, *supra* note 72; Christopher Buccafusco & Jeanne C. Fromer, *Forgetting Functionality*, 166 U. PA. L. REV. 119 (2017); Peter S. Menell & Daniel Yablon, *Star Athletica's Fissure in the Intellectual Property Functionality Landscape*, 166 U. PA. L. REV. 137 (2017). In criticizing *Star Athletica*, I have proposed an alternative test that assures that no candidate subject matter for patent protection ends up eligible for copyright protection as well. Chatterjee, *supra* note 11, at 560–61 (arguing for an analysis of the useful articles doctrine that assures that no functional elements receive copyright protection).

we might be tempted to answer by saying that inventions—unlike creative works—are *useful* and leave it at that, but this seems only to pass the explanatory buck, raising the question of what kind of “usefulness” is possessed by inventions but not creative works (since there are of course ways in which creative works can be useful as well: they can be useful in producing enjoyment for those who consume them, for instance). These more general questions on the nature of creative works and inventions—and their implications for the domains and scopes of copyright and patent law, as well as for what, if anything, justifies either—are difficult to completely answer, notwithstanding the fact that they underly the fundamental structure of intellectual property law. No doubt, they also are in the foreground following this Article’s discussion, and I pursue them as well in future work.²¹⁷

In sum, this Article has explored the differences between copyrights and patents and their theoretical significance in the Lockean framework, outlining a number of implications for doctrine that the framework could yield. Although it has used Shiffrin’s challenge as a starting point and has substantively pushed back on it as applied to Lockean copyrights, hers is only one example among many in which the distinct strands of intellectual property regimes have not been examined sufficiently closely. More generally, this Article raised a number of questions for future theorizing about intellectual property. These inquiries should also be pursued with an eye upon the philosophical differences among copyrights, patents, and their component parts, rather than the allure of theoretical unity.

217. See generally Chatterjee, *supra* note 72.

