EXPRESSIVE INCENTIVES IN INTELLECTUAL PROPERTY

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INTRODUCTION

ACCORDING to the dominant American theory of intellectual property, copyright and patent laws are premised on providing creators with just enough incentive to create artistic, scientific, and technological works of value to society by preventing certain would-be copiersô free-riding behavior.[1] Another group of scholars reasons instead that creators deserve moral rights in their works either by virtue of the labor they expend to create them or because the works are important components of creatorsô personhoods (the aspects of creatorsô personalities infused into and bound up in their works).[2] Other academics highlight a rhetoric focused on authorship and inventorship within intellectual property law, all the while assuming that it is devoid of substantive effect.[3]

Scholars nearly always see the utilitarian and moral-rights theories as disjoint,[4] likely because utilitarian theories are more concerned with maximizing benefit to society via a properly calibrated incentive to creators whereas moral-rights theories place more emphasis on the creatorôs interests. In this Article, I show that the two theories can be complementary in important ways because there is a utility to moral-rights concerns. As evidence from a multitude of vantage points demonstrates, creators of copyrightable and patentable work typically attach great significance to both their personhood and labor interests in their work.[5] As such, the incentive to create ought to be all that much stronger when intellectual property laws are structured both to protect and to communicate solicitude for authorsô personhood and labor interests. Drawing on a rich legal

[1] See infra Section I.A. Typically grounded in distinct theories are other important forms of intellectual property, such as trademarks. Jeanne C. Fromer, The Role of Creativity in Trademark Law, 86 Notre Dame L. Rev. 1885, 1894ï 96 (2011). I do not consider those other forms herein.

[2] See infra Section I.B.

[3] See Oren Bracha, The Ideology of Authorship Revisited: Authors, Markets, and Liberal Values in Early American Copyright, 118 Yale L.J. 186, 188 (2008); Stewart E. Sterk, Rhetoric and Reality in Copyright Law, 94 Mich. L. Rev. 1197, 1197 (1996).

[4] See infra Section II.A. In that Section, I discuss some important exceptions, which take a different approach than mine. See, e.g., Rochelle Cooper Dreyfuss, The Creative Employee and the Copyright Act of 1976, 54 U. Chi. L. Rev. 590, 590ï 91 (1987); Alfred C. Yen, The Interdisciplinary Future of Copyright Theory, *in* The Construction of Authorship 159, 171 (Martha Woodmansee & Peter Jaszi eds., 1994).

[5] See infra Section II.B.

literature on the interaction of law and norms and expressive theories of law, I call the ways in which copyright and patent law can protect creatorsô labor and personhood interests and employ rhetoric communicating concern for these interests ñexpressive incentives.ò The lawôs careful use of expressive incentives can bolster the utilitarian inducement to create valuable intellectual property. This particular marriage of the utilitarian and moral-rights theories in the use of expressive incentives has been under-theorized, if not overlooked, as a valuable arrow in intellectual propertyôs quiver.[6] When scholars have explored incentives in intellectual property, they have not looked much beyond offering pecuniary incentives[7] to appreciate that utilitarian incentives can be expressive as well. I ground the notion of expressive incentives in intellectual property in the analogous philosophical issue of the possibility of rights in utilitarian systems.

I approach this broadening of incentive possibilities from the utilitarian position, which is concerned with promoting societyôs cultural, technological, and scientific progress at a minimal cost to society, through limited grants to authors and inventors of rights in their works. By complicating the conceptual landscape of intellectual property incentives to include expressive incentives, this Article seeks to open another line of inquiry into the optimal structure of incentives. For societyôs benefit, intellectual property utilitarians seek to award the least incentive possible

[6] Some legal scholarship occasionally hints at related possibilities. E.g., Sara K. Stadler, Forging a Truly Utilitarian Copyright, 91 Iowa L. Rev. 609, 664ï65 (2006) (ñ[W]ithholding copyright from fine artistsð but granting moral rightsð would address the primary concerns of Creators, who care more about the integrity of their work, and receiving credit for its authorship, than they do about licensing its reproduction on consumer goods.ò); cf. Jane C. Ginsburg, Moral Rights in a Common Law System, 1 Ent. L. Rev. 121 (1990) (analyzing how some common-law countriesð Australia, the United Kingdom, and the United Statesð have recently implemented moral-rights protections for authors).

[7] E.g., David S. Abrams, Did TRIPS Spur Innovation? An Analysis of Patent Duration and Incentives To Innovate, 157 U. Pa. L. Rev. 1613, 1615 (2009); Ian Ayres & Paul Klemperer, Limiting Patenteesô Market Power Without Reducing Innovation Incentives: The Perverse Benefits of Uncertainty and Non-Injunctive Remedies, 97 Mich. L. Rev. 985, 986ï87 (1999); Shyamkrishna Balganesh, Foreseeability and Copyright Incentives, 122 Harv. L. Rev. 1569, 1571 (2009); William M. Landes & Richard A. Posner, An Economic Analysis of Copyright Law, 18 J. Legal Stud. 325, 326ï27 (1989). But cf. Lydia Pallas Loren, The Popeôs Copyright? Aligning Incentives with Reality by Using Creative Motivation to Shape Copyright Protection, 69 La. L. Rev. 1, 4 (2008) (suggesting that there are ñtypes of works created and distributed without the primary motivation being the marketable right provided by copyright law,ò such as model legal codes and advertising copy); Diane Leenheer Zimmerman, Copyrights as Incentives: Did We Just Imagine That?, 12 Theoretical Inquiries L. 29, 29 (2011) (discussing the inadequacy of the incentive model).

in exchange for a requisite degree of valuable artistic, scientific, and technological creation.[8] Expressive incentives are likely to assist utilitarians in this quest. Many might be relatively cost free for society to provide but are very valuable to creators themselves, thereby enhancing the intellectual property incentive at little loss to society at large. In fact, it is plausible that, to secure expressive incentives, individual creators would be willing to relinquish some traditional pecuniary incentives that are costly for society to provide. Expressive interests, however, ought to be protected only when the utilitarian analysis indicates that the benefits of doing so exceed the costs. Moral-rights interests ought to yield to the utilitarian calculus whenever there is a conflict between the two, largely because extensive protection of moral rights is likely to harm societyôs cultural, scientific, and technological progress.

I focus in this Article on creatorsô expressive interests vis-à-vis their works. Like creators, users of copyrightable and patentable works generally can have expressive interests in the works they consume.[9] Similarly, follow-on creators can have expressive interests in borrowing from or even destroying previous creatorsô works.[10] Crafting optimal intellectual property laws requires accounting for these expressive interests as well. Broadly speaking, utilitarians ought to be concerned with the societal cost, including expressive deadweight loss, imposed by granting particular incentives. These sorts of important expressive interests are, however, beyond this Articleôs scope.

After setting the theoretical stage in Parts I and II, Part III goes through a number of potential applications of expressive incentives in copyright and patent laws. My discussion there is tentatively normative.

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[8] Joseph P. Liu, Owning Digital Copies: Copyright Law and the Incidents of Copy Ownership, 42 Wm. & Mary L. Rev. 1245, 1310 (2001).

[9] See Julie E. Cohen, The Place of the User in Copyright Law, 74 Fordham L. Rev. 347, 370ï 71 (2005); Jessica Litman, Creative Reading, 70 Law & Contemp. Probs. 175, 175, 178 (2007); Jennifer E. Rothman, Liberating Copyright: Thinking Beyond Free Speech, 95 Cornell L. Rev. 463, 497ï 98, 500ï 01 (2010).

[10] Amy M. Adler, Against Moral Rights, 97 Calif. L. Rev. 263, 265 (2009) (maintaining that ñmoral rights law obstructs rather than enables the creation of art because the law fails to recognize the defining role that destruction has come to play in contemporary artistic practiceò); Pierre N. Leval, Toward a Fair Use Standard, 103 Harv. L. Rev. 1105, 1109 (1990) (ñFirst, all intellectual creative activity is in part derivative. There is no such thing as a wholly original thought or invention. Each advance stands on building blocks fashioned by prior thinkers. Second, important areas of intellectual activity are explicitly referential. Philosophy, criticism, history, and even the natural sciences require continuous reexamination of yesterdayôs theses.ò (footnote omitted)).

Some areas seem to be promising ones for employment of robust expressive incentives, such as: attribution; copyrightôs structure of duration, right of reversion, and originality requirement; and patentôs former first-to-invent rule and written-description requirement. Current copyright and patent laws already employ such incentives in these areas, but their current form is typically anemic. By contrast, providing forceful, expressive incentives in other areas of the law, such as integrity, adaptation, and restraints on creatorsô alienation of their rights, is likely to be problematic in light of the overall utilitarian goals of copyright and patent law. I conclude with some thoughts on legal structures that might account for the diverse set of authors and inventors and the different incentives that might work for them. My recommendations are tentative in light of holes in empirical scholarship about the specific effects of varying incentives on creators and society, which future work will carry out. It is the hope that this Article can launch a conversationð both theoretical and empiricalð on establishing the ideal mix of expressive and pecuniary incentives to maximize their roles in the American utilitarian intellectual property system.

I. THEORIES OF INTELLECTUAL PROPERTY

American copyright law protects ñoriginal works of authorship fixed in any tangible medium of expression,ò including literary works, sound recordings, movies, and computer software code.[11] To obtain copyright protection, authors need only create a qualifying work. There is no requirement that a work be published to be protected.[12] Protection vests in authors without any formalities like registration.[13] A copyright holder receives the exclusive right to reproduce the work, distribute copies of it, and prepare derivative works, among other things,[14] typically until seventy years after the authorôs death.[15] Copyright protection extends to the

[11] 17 U.S.C. §§ 101, 102(a) (2006); see infra Section III.D (discussing the originality requirement as expressive incentive).

[12] 17 U.S.C. § 102(a) (requiring only that a work be ñfixed in any tangible medium of expressionò to be copyrightable).

[13] Registration of a protected work with the Copyright Office is permissive. Id. § 408(a). To bring an infringement action, though, a copyright holder must in the ordinary case first have registered the copyright with the Copyright Office. Id. § 411(a).

[14] Id. § 106.

[15] Id. § 302(a); see also infra Section III.B (analyzing the structure of duration as expressive incentive).

expression of particular ideas rather than to the ideas themselves.[16] Yet protection actually reaches well beyond the literal work to works that have been copied and are substantially similar,[17] ñóelse a plagiarist would escape by immaterial variations.ôò[18]

Patent law looks different. It grants protection to inventors of useful, novel, and nonobvious inventions.[19] Patents are granted after successfully undergoing examination by the Patent and Trademark Office (ñPTOò) to ascertain that an invention meets patentability conditions and the description in the patent application satisfies certain disclosure requirements.[20] The patent right permits the patentee to exclude others from practicing the invention claimed in the patent for a term of typically twenty years from the date the patent application was filed.[21]

With this brief outline of copyright and patent law, I now turn to the theories scholars put forth to justify these laws: utilitarianism and moral rights (in two flavors: labor-desert and personhood).

A. Utilitarianism

The Supreme Court, Congress, and many legal scholars consider utilitarianism the dominant purpose of American copyright[22] and patent

[16] 17 U.S.C. § 102; Nichols v. Universal Picture Corp., 45 F.2d 119, 121 (2d Cir. 1930). According to the Supreme Court, the idea/expression distinction ñóstrike[s] a definitional balance between the First Amendment and the Copyright Act by permitting free communication of facts while still protecting an authorôs expression.ôò Harper & Row, Publishers v. Nation Enters., 471 U.S. 539, 556 (1985) (quoting Harper & Row, Publishers v. Nation Enters., 723 F.2d 195, 203 (1983)).

[17] Corwin v. Walt Disney Co., 475 F.3d 1239, 1253 (11th Cir. 2007) (quoting Ferguson v. NBC, 584 F.2d 111, 113 (5th Cir. 1978)); Whitehead v. Paramount Pictures Corp., 53 F. Supp. 2d 38, 46 (D.D.C. 1999) (citing Williams v. Crichton, 84 F.3d 581, 587 (2d Cir. 1996)).

[18] *Nichols*, 45 F.2d at 121.

[19] 35 U.S.C. §§ 101ï 103 (2006).

[20] Id. § 131. The Patent Act requires disclosure of certain content within the patent by calling for a written description, enablement, and best mode. Id. § 112. See generally Jeanne C. Fromer, Patent Disclosure, 94 Iowa L. Rev. 539, 546ï 94 (2009) (describing these requirements and arguing that they do not suffice for useful and clear disclosures).

[21] 35 U.S.C. § 154(a).

[22] See, e.g., Harper & Row, Publishers v. Nation Enters., 471 U.S. 539, 558 (1985); Act of May 31, 1790, ch. 15, 1 Stat. 124, 124 (declaring the purpose of the first U.S. copyright law to be ñAn Act for the encouragement of learningò); 122 Cong. Rec. 2834 (1976) (statement of Sen. McClellan); Balganesh, supra note 7, at 1576ï 77; Landes & Posner, supra note 7, at 326.

law.[23] According to utilitarian theory, copyright law provides the incentive of exclusive rights for a limited duration to authors to motivate them to create culturally valuable works.[24] Without this incentive, the theory goes, authors might not invest the time, energy, and money necessary to create these works because they might be copied cheaply and easily by free riders, eliminating authorsô ability to profit from their works.[25]

Parallel reasoning supports patent lawôs protection of inventorsô exclusive rights in their technologically or scientifically valuable inventions for limited periods of time. The theory is that public benefits accrue by rewarding inventors for taking two steps they likely would not otherwise have taken: to invent, and possibly commercialize, in the first place, and to reveal information to the public about these inventions that stimulates further innovation.[26]

Utilitarianism aligns fluently with (and is frequently justified by) the U.S. Constitutionôs grant of power to Congress ñ[t]o promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.ò[27] Some utilitarians understand social welfare to be maximized by the creation of more artistic, scientific, and technological

[23] See, e.g., Diamond v. Chakrabarty, 447 U.S. 303, 307 (1980); Sinclair & Carroll Co. v. Interchemical Corp., 325 U.S. 327, 330ï 31 (1945); Dan L. Burk & Mark A. Lemley, Policy Levers in Patent Law, 89 Va. L. Rev. 1575, 1597ï 99 (2003); F. Scott Kieff, Property Rights and Property Rules for Commercializing Inventions, 85 Minn. L. Rev. 697, 697ï 98 (2001).

[24] Sterk, supra note 3.

[25] See Alina Ng, The Authorôs Rights in Literary and Artistic Works, 9 J. Marshall Rev. Intell. Prop. L. 453, 454 (2009); cf. Symposium, The Constitutionality of Copyright Term Extension: How Long Is Too Long?, 18 Cardozo Arts & Ent. L.J. 651, 676 (2000) [hereinafter The Constitutionality of Copyright Term Extension] (statement of Wendy Gordon) (discussing the implications of instrumentalism in copyright).

[26] Fromer, supra note 20, at 547ï 49. Utilitarian thinking comes in different flavors. One is the prospect theory, which suggests that inventors are rewarded with a patent right to centralize investment in the patented inventionôs commercialization and improvement, which in turn benefits society. See Edmund W. Kitch, The Nature and Function of the Patent System, 20 J.L. & Econ. 265, 266 (1977). A related theory advocates for encouraging commercialization because of its valuable role in diffusion of inventions. See, e.g., Michael Abramowicz & John F. Duffy, Intellectual Property for Market Experimentation, 83 N.Y.U. L. Rev. 337, 337 (2008). Another is the signaling theory, which proposes that patents are useful signals to financiers that the patenting firm is a worthy investment. Clarisa Long, Patent Signals, 69 U. Chi. L. Rev. 625, 636ï 37, 648 (2002); Gideon Parchomovsky & R. Polk Wagner, Patent Portfolios, 154 U. Pa. L. Rev. 1, 37 (2005).

[27] U.S. Const. art. I, § 8, cl. 8.

works.[28] Others, like Professor William Fisher, employ a broader understanding: that intellectual property protection ought to ñhelp foster the achievement of a just and attractive culture.ò[29]

Pursuant to utilitarianism, the rights conferred by copyright and patent laws are designed to be limited in time and scope.[30] The reason for providing copyright and patent protection to creators is to encourage them to produce socially valuable works, thereby maximizing social welfare.[31] If the provided rights are overly extensive, society would be hurt (and social welfare diminished).[32] For one thing, exclusive rights in intellectual property can prevent competition in protected works, thereby allowing the rightsholder to charge a premium for access and ultimately limiting these valuable worksô diffusion to society at large.[33] For another, given that knowledge is frequently cumulative, society benefits when subsequent creators are not prevented from building on previous artistic, scientific, and technological creations to generate new works.[34] For these reasons, copyright and patent laws ensure both that the works they protect fall into the public domain in due course and that third parties are free to use protected works for certain socially valuable purposes.[35]

At bottom, utilitarian theories of intellectual property rest on the premise that the benefit to society of creators crafting valuable works offsets the costs to society of the incentives the law offers to creators.[36] Because this utilitarian framework establishes a cost-benefit analysis, the leading scholarly analysis of intellectual property has used an economic lens.[37]

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[28] See William Fisher, Theories of Intellectual Property, *in* New Essays in the Legal and Political Theory of Property 168, 169ï 70 (Stephen R. Munzer ed., 2001) (discussing this view).

[29] Id. at 172ï 73.

[30] Mark A. Lemley, The Economics of Improvement in Intellectual Property Law, 75 Tex. L. Rev. 989, 997 (1997).

[31] See, e.g., Ralph S. Brown, Eligibility for Copyright Protection: A Search for Principled Standards, 70 Minn. L. Rev. 579, 592 (1985).

[32] Lemley, supra note 30, at 996ï 97.

[33] See id. at 996.

[34] See id. at 997ï 98.

[35] See id. at 999.

[36] Id. at 996ï 97.

[37] See, e.g., Suzanne Scotchmer, Innovation and Incentives (1st paperback ed. 2006); John P. Conley & Christopher S. Yoo, Nonrivalry and Price Discrimination in Copyright Economics, 157 U. Pa. L. Rev. 1801 (2009); F. Scott Kieff, The Case for Registering Patents and the Law and Economics of Present Patent-Obtaining Rules, 45 B.C. L. Rev. 55 (2003); Lemley, supra note 30.

B. Moral Rights

Despite the dominance of utilitarian thinking in American intellectual property law, scholars also proffer other theories to justify intellectual property protection. These theories are typically grounded in the notion of natural or moral rights that authors and inventors deserve by virtue of having created their works.[38] I use the term ñmoral rightsò herein to refer to deontological theories of intellectual property, rather than the class of laws, almost all foreign to the United States, that explicitly incorporate these theories.[39]

Moral-rights theories typically come in two flavors: labor-desert and personhood. Labor-desert theory sees intellectual property rights as a Lockean acknowledgment of the labor of creation, in granting copyright or patent protection to creators that have worked sufficiently hard.[40] According to Professor Wendy Gordonôs articulation of this line of thinking, intellectual property rights cease to be justified when they ñharm . . . other personsô equal abilities to create or to draw upon the preexisting cultural matrix and scientific heritage.ò[41] Unlike the utilitarian viewpoint, which seeks to discontinue intellectual property rights when they cease to be efficient, the American labor-desert approach typically refuses to grant protection in labored-on works only when third parties are prevented from drawing on the public domain.[42]

Personhood theories also establish intellectual property protection as a moral right of sorts, but unlike labor-desert approaches, they see a creative work as a Hegelian extension of the authorôs personality.[43] According to Professor Margaret Radin, a leading American legal-personhood

[38] See, e.g., Balganesh, supra note 7, at 1576ï 77; Brown, supra note 31, at 589ï 90.

[39] See Roberta Rosenthal Kwall, The Soul of Creativity: Forging a Moral Rights Law for the United States 37ï 52 (2010) (describing protections in France, Germany, and other countries). Legal implementations principally encapsulate rights of attribution and integrity. Id. at 5.

[40] Robert P. Merges, Justifying Intellectual Property 31ï 67 (2011); Wendy J. Gordon, A Property Right in Self-Expression: Equality and Individualism in the Natural Law of Intellectual Property, 102 Yale L.J. 1533, 1540ï 83 (1993); Justin Hughes, The Philosophy of Intellectual Property, 77 Geo. L.J. 287, 296ï 330 (1988).

[41] Gordon, supra note 40, at 1563ï 64.

[42] Id. at 1564; cf. Seana Valentine Shiffrin, Lockean Arguments for Private Intellectual Property, *in* New Essays in the Legal and Political Theory of Property, supra note 28, at 138, 146ï 58 (arguing that Lockean arguments justify only minimal protection).

[43] Lawrence C. Becker, Deserving To Own Intellectual Property, 68 Chi.-Kent L. Rev. 609 (1993); Hughes, supra note 40, at 330ï 65; Margaret Jane Radin, Property and Personhood, 34 Stan. L. Rev. 957, 957 (1982).

theorist, ñto achieve proper self-developmentð to be a *person*ð an individual needs some control over resources in the external environment. The necessary assurances of control take the form of property rights.ò[44] There are related understandings of personhood: Professor Roberta Kwall sees ñthe [workôs] importance as a reflection of the authorôs meaning and an embodiment of her message.ò[45] Professor Sonia Katyal views creative works as expressions of a personôs individualism and freedom.[46] And Professor Stewart Sterk perceives that a theory grounded in moral rights ñconjures up a genius irrevocably committed to his work.ò[47]

Despite its occasional invocation in copyright, personhood theory is less frequently invoked as an explanation for patent law.[48] Kwall suggests that personhood theories are absent in patent law because functional scientific and technological works ñare perhaps less likely [than artistic works] to need modifications that may ultimately conflict with the creatorôs artistic vision in order to serve their intended functions.ò[49] Alternatively, Professor Justin Hughes hypothesizes ñan implicit social judgment that the degree of personality reflection in most patented works is different and smaller than in most copyrighted works.ò[50] To him, patentable inventions

> usually embody strongly utilitarian solutions to very specific needs. We tend not to think of them as manifesting the personality of an individual, but rather as manifesting a raw, almost generic insight. In inventing the light bulb, Edison searched for the filament material that would burn the longest, not a filament that would reflect his personality. Marconi chose to use a particular wavelength for his radio because that wavelength could travel much farther than waves slightly longer, not because that wavelength was his preferred form of expression.[51]

[44] Radin, supra note 43, at 957; accord Jeremy Waldron, The Right to Private Property 4 (1988) (noting that Hegelians ñestablish a connection between respect for property and respect for personsò). While Radin discusses the general theory for property in depth, she merely notes that personhood theory has relevance to copyright law. Radin, supra note 43, at 1013 n.202.

[45] Kwall, supra note 39, at 25.

[46] Sonia K. Katyal, Semiotic Disobedience, 84 Wash. U. L. Rev. 489, 490ï 93 (2006).

[47] Sterk, supra note 3.

[48] Lemley, supra note 30, at 1031.

[49] Roberta Rosenthal Kwall, Originality in Context, 44 Hous. L. Rev. 871, 874ï 75 (2007).

[50] Hughes, supra note 40, at 351.

[51] Id. at 341ï 42.

That said, other scholars underscore a strong notion of the romantic inventor employing his or her particular brand of genius to create valuable scientific and technological works.[52] In fact, Radinôs characterization of the connection between personhood and control over oneôs resources seems just as apt for inventions as it does for artistic works protected by copyright law.[53]

All in all, an inventor might maintain personhood interests in his or her creations, but perhaps in different ways than those an author retains in his or her artistic works, an issue to which I return in Subsection II.B.2.

Personhood theories typically suggest a broader scope of intellectual property protection than utilitarian and labor-desert theories. Margaret Radin theorizes that ñ[o]nce we admit that a person can be bound up with an external óthingô in some constitutive sense, . . . by virtue of this connection the person should be accorded broad liberty with respect to control over that óthing.ôò[54]

Professor Robert Merges has also recently invoked a Kantian notion of autonomy as justifying intellectual property protection.[55] To Merges, intellectual property rights are valuable because they ñrespect claims over [creative] objects that are bound up with the exercise of an individualôs willò and thereby promote their personal freedom.[56] In turn, such rights allow creative individuals the opportunity to seek to devote themselves professionally and fully to their talents.[57] There are limits to rights

[52] Mark A. Lemley, Romantic Authorship and the Rhetoric of Property, 75 Tex. L. Rev. 873, 880 (1997) (reviewing James Boyle, Shamans, Software, and Spleens: Law and the Construction of the Information Society (1996)) (ñThink of Einstein the patent clerk, working late into the night on the theory of relativity, or Darwin the scientist-explorer, recording in his journal ideas that would shake the world.ò); accord Keith Aoki, Authors, Inventors and Trademark Owners: Private Intellectual Property and the Public Domain Part II, 18 Colum.-VLA J.L. & Arts 191, 213ï 18 (1994) (observing that patent law confers rights on inventors that have employed a particular brand of creative genius).

[53] Supra text accompanying note 44.

[54] Radin, supra note 43, at 960. But see Justin Hughes, The Personality Interest of Artists and Inventors in Intellectual Property, 16 Cardozo Arts & Ent. L.J. 81, 81ï 82 (1998) (noting the argument that ñthe creatorôs personality interest in her work must be balanced against the personality interest of consumersð who will be further creatorsð using her work in their own acts of creation/expressionò); Rothman, supra note 9, at 499ï 500 (same); John Tehranian, Parchment, Pixels, & Personhood: User Rights and the IP (Identity Politics) of IP (Intellectual Property), 82 U. Colo. L. Rev. 1, 5ï 6 (2011) (same).

[55] Merges, supra note 40, at 68ï 101.

[56] Id. at 72.

[57] See id. at 195.

under this theory, according to Merges, because property claims ñmust not be so broad that they interfere with the freedom of fellow citizens.ò[58]

Congress, federal courts, and commentators tend to disclaim any significant presence of moral-rights protection within American copyright and patent law[59] beyond the limited rights of attribution and integrity (preventing a workôs destruction or alteration) set forth in the Visual Artistsô Rights Act of 1990.[60] Other countries, such as France, Germany, and Italy, provide authors with broadð often perpetual and inalienableð protections sounding in moral-rights interests: principally, the rights of attribution, integrity, retraction of a work from the public, and first disclosure of a work to the public.[61]

C. Rhetoric of Moral Rights

Despite the dominance of the utilitarian framework in American intellectual property protection, scholars acknowledge historical and rhetorical uses of moral rights in copyright law.[62] Legal commentators similarly point to inventorship rhetoric in patent law. This Section explores these scholarsô discussions of these rhetorical relics of moral rights in American intellectual property law.

In the context of copyright, Professor Oren Bracha writes:

> Authorship is copyrightôs ghost in the machine. In American culture, . . . the authorð as the heroic creator of original intellectual works and as their rightful ownerð looms large. The author plays an important role in popular understanding of copyright law . . . . Even in this postmodern era during which the ñdeath of the authorò has been

[58] Id. at 80, 89ï 91.

[59] Register of Copyrights, 87th Cong., Report of the Register of Copyrights on the General Revision of the U.S. Copyright Law 4 (Comm. Print 1961) [hereinafter Copyright Office Report]; Kwall, supra note 39, at 23ï 26; Orrin G. Hatch, Toward a Principled Approach to Copyright Legislation at the Turn of the Millennium, 59 U. Pitt. L. Rev. 719, 722 (1998); see also Dastar Corp. v. Twentieth Century Fox Film Corp., 539 U.S. 23, 34ï 35 (2003).

[60] Visual Artistsô Rights Act, Pub. L. No. 101-650, §§ 601ï 610, 104 Stat. 5089, 5128ï 30 (1990) (codified at 17 U.S.C. § 106A (2006)). But see H.R. Rep. No. 100-609, at 32ï 37 (1988) (asserting that pre-1990 copyright law granted moral rights required by the Berne Convention).

[61] Adler, supra note 10, at 268; Henry Hansmann & Marina Santilli, Authorsô and Artistsô Moral Rights: A Comparative Legal and Economic Analysis, 26 J. Legal Stud. 95, 95ï 96 (1997).

[62] Bracha, supra note 3, at 188; Peter Jaszi, Toward a Theory of Copyright: The Metamorphoses of ñAuthorshipò, 1991 Duke L.J. 455, 455.

> proclaimed countless times, we often continue to picture solitary authors creating original ideas ex nihilo through their intellectual labors. This picture lies at the normative heart of our vision of copyright.[63]

By authorship, Bracha appears to be referring to its prototypical act by a prototypical actor: as Professor Jane Ginsburg puts it, ña human being who exercises subjective judgment in composing the work and who controls its execution.ò[64]

Copyrightôs authorial focus first coalesced in England in the early eighteenth century. It was in England that a true and extensive copyright system first arose, following on the heels of laws that had promoted crown favoritism, printer monopolies, and censorship.[65] Soon after the printing press arrived in England in 1476, royal grants of privilege and patents to publishers for exclusive printing of certain books or types of books became common.[66] Once a publisher acquired an authorôs work, the authorôs rights were at an end.[67]

The author, however, was emerging as a central figure,[68] not in small part because of a growing professional class of writers.[69] In 1710 the Statute of Anne, the first copyright legislation, was enacted, and it became a model for all early American copyright legislation.[70] Its stated purposes were to relieve authors from piracy and ñfor the Encourage-

[63] Bracha, supra note 3. Aspects of copyright law cannot be explained so easily in terms of authorship, such as the rightôs expansion over time. See Lemley, supra note 52, at 887 (ñHas authorship gotten more romantic over time? Surely not since the invention of the romantic authorship concept, which . . . traces to the eighteenth century.ò). Mark Lemley suggests that the phenomenon of propertization explains this expansion and other facets of copyright law. Id. at 874.

[64] Jane C. Ginsburg, The Concept of Authorship in Comparative Copyright Law, 52 DePaul L. Rev. 1063, 1066 (2003). An exhaustive definition of authorship would surely be more complex (and would tend to vary by country). Id. at 1064. The most important copyright treaty, the Berne Convention, principally permits member countries to define authorship as they see fit. Id. at 1069.

[65] Bruce W. Bugbee, Genesis of American Patent and Copyright Law 50ï 51 (1996).

[66] Benjamin Kaplan, An Unhurried View of Copyright 2ï 3 (1967).

[67] Bugbee, supra note 65.

[68] Bracha, supra note 3, at 193; Ginsburg, supra note 64, at 1064.

[69] Lionel Bently & Jane C. Ginsburg, ñThe Sole Right . . . Shall Return to the Authorsò: Anglo-American Authorsô Reversion Rights from the Statute of Anne to Contemporary U.S. Copyright, 25 Berkeley Tech. L.J. 1475, 1477ï 78 (2010).

[70] Craig Joyce, ñA Curious Chapter in the History of Judicatureò: *Wheaton v. Peters* and the Rest of the Story (of Copyright in the New Republic), 42 Hous. L. Rev. 325, 330, 361 (2005).

ment of learned Men to Compose and Write useful Books.ò[71] This legislation transformed what had been the printerôs right into the authorôs right.

Oren Bracha meticulously describes the injection of authorship into American copyright in the eighteenth and nineteenth centuries.[72] In the eighteenth century, like England, the United States bestowed copyright on a workôs author rather than its publisher.[73] Nineteenth-century developments continued to emphasize the authorôs centrality in copyright law. For example, the requirement that works be original to the author to be copyrightable became a rhetorically central aspect of copyright law, even as courts rendered the originality threshold minimal.[74] Additionally, copyright scope expanded from protecting only against near verbatim duplication of works to ñgeneral control of an intellectual work.ò[75] Despite these outward manifestations of author centrality, actual authorial ownership of copyrights weakened in the nineteenth century through rules like the work-for-hire doctrine, which vested many copyrights in employers.[76]

Copyrightôs current rhetoric is similarly grounded in an authorial focus. Bracha posits that ñ[a]uthorship as embedded in copyright law is an ideology,ò often in ways that do not realistically characterize actual authorship.[77] He concludes that ñauthorship in modern copyright discourse [is] merely a harmless declaratory layer of rhetoric, a relic of bygone times that has little influence on órealôcopyright law.ò[78]

Stewart Sterk agrees that this rhetoric is present in current copyright law. Sterk, however, is convinced that its presence is harmful, in that it results in an overprotective copyright law unmoored from utilitarian realities.[79] He observes that this rhetoric ñevokes sympathetic images of the author at work,ò with the aim of ñextending the scope of copyright protection [to] relieve[] the authorôs plight.ò[80] Sterk notes that this au-

[71] Statute of Anne, 1710, 8 Ann., c.19 (Eng.).

[72] Bracha, supra note 3, at 189.

[73] Id.

[74] Id. at 190; Jaszi, supra note 62, at 483. But cf. infra Section III.D (elaborating on how the originality requirement can be an expressive incentive).

[75] Bracha, supra note 3, at 190.

[76] Id. at 191, 248ï 55; see infra Sections III.Aï B (discussing the work-for-hire doctrine in the contexts of attribution and duration).

[77] Bracha, supra note 3, at 266ï 67.

[78] Id. at 267.

[79] Sterk, supra note 3.

[80] Id.

thor-centered rhetoric has accompanied most attempts (often successful) at expanding copyright protection.[81] As a result, he thinks that copyright law protects works, like architectural designs, which do not need the copyright incentive to be created.[82] He also argues that copyright lawôs attempts to reward deserving authors are misplaced because ñ[t]he beneficiaries of expanded copyright doctrine often are not struggling authors but faceless corporate assignees well-versed in the ways of the business world.ò[83]

A comparable story of creator-centered rhetoric might be told in patent law. Despite the scarcity of moral-rights invocations in patent law, there is rhetoric in patent law depicting the inventor as a romantic individual who infuses inventive genius into his or her creations.[84] For one thing, patent rights initially vest in inventors, who must technically file a patent application, even in the now-common case of corporate assignment of patent rights.[85] Moreover, an inventorôs name will always remain on a patent for his or her invention, even if someone else owns the patent rights.[86]

In sum, although utilitarian thinking dominates American justifications of intellectual property law, there are also voices proclaiming moral rightsð in its two flavors of labor-desert and personhoodð as the legal rationale. Supplementing these voices are scholars who highlight significant rhetoric about authorship and inventorship in intellectual property laws.

II. EXPRESSIVE INCENTIVES IN INTELLECTUAL PROPERTY

In this Part, I show that theories of utilitarianism and moral rights are not disjoint, as conventional wisdom tends to suggest. I demonstrate that they can frequently work together harmoniously to maximize societal benefit from improved production of artistic, scientific, and technological works. Relatedly, the scholarly emphasis on creator-centered rhetoric

[81] Id. at 1199.
[82] Id. at 1197ï 98.
[83] Id. at 1198.
[84] See Aoki, supra note 52, at 213ï 16.
[85] See Steven Cherensky, Comment, A Penny for Their Thoughts: Employee-Inventors, Preinvention Assignment Agreements, Property, and Personhood, 81 Calif. L. Rev. 595, 599ï 600, 605, 649 (1993) (citing 35 U.S.C. § 111 (1988)).
[86] See Hughes, supra note 40, at 351; infra Section III.A (discussing attribution in patent law).

in intellectual property law overlooks the substantive impact that expressions of solicitude for and protection of creatorsô interests can have on stimulating the development of valuable copyrightable and patentable creations.

Evidence from multiple vantage points demonstrates how significantly authors and inventors care about their personhood and labor interests in the works they create. Pertinently, as discussed further below, they believe that their self-concept is critically bound up in their creations; they are uniquely situated to employ their personal vision and genius to create their works; they create in large part for reputational gains; they psychologically possess their creations; and they often hold strong interests in their works and their worksô integrity by virtue of their expended labor.[87]

As such, utilitarians ought to be deeply occupied with giving weight in intellectual property laws to creatorsô moral-rights interests in appropriate circumstances. Utilitarians, focused on providing for societyôs gain via a minimal incentive for maximal artistic, scientific, and technological production, ought to appreciate that copyright and patent lawsô substantive protections and expressions of solicitude for creatorsô moral rights in a variety of ways can provide expressive incentives for creators to create, perhaps in ways that traditional pecuniary incentives do not.[88] Of course, utilitarians ought to be concerned also with the societal costsð both pecuniary and expressiveð imposed by granting particular expressive incentives, just as they ought to be concerned with such costs when it comes to granting pecuniary incentives. Only when the societal benefits of granting expressive incentives exceed the societal costs should they be offered.

In building this case for expanding the concept of intellectual propertyôs incentives to include expressive incentives as well as traditional pecuniary ones, I draw parallels to literature on law and norms and expressive theories of the law. This literature has been underutilized in

[87] See infra Section II.B; cf. Merges, supra note 40, at 114 (ñThe universal experience of creative people is that fashioning something new and distinctive almost always requires sustained attention, effort, and personal vision.ò).

[88] Cf. Eric R. Claeys, Takings, Regulations, and Natural Property Rights, 88 Cornell L. Rev. 1549, 1559 (2003) (ñUtilitarianism and personhood now provide the two main justifications for [real] property rights. . . . Founding Era natural-right theory started from the insight that people rely on having free control over their labor and their external possessions. If this insight is substantially correct, that reliance must count heavily in a utilitarian justification of property.ò).

intellectual property discussions with regard to incentives within copyright and patent law.[89] I also emphasize the consistency of my inclusive notion of expressive incentives with philosophical work on consequentialism.

Section II.A discusses the possibility of connecting utilitarianism and moral rights. Section II.B provides the lynchpin for this combination by setting out evidence that authors and inventors care deeply about their personhood and labor interests in their creations. Utilitarianism ought therefore to give serious weight to expressive incentives to authors and inventors, where appropriate. Section II.C builds further support for expressive incentives by grounding the notion in scholarship on law and norms, expressive theories of law, and philosophical utilitarianism.

A. Connecting Utilitarianism and Moral Rights

The theories of utilitarianism and moral rights, as presented in the previous Part, are almost always seen as disjoint.[90] Scholars typically choose just one of the theories on which to hang their views of intellectual property. American courts usually favor utilitarianism over the other theories.[91] For example, the Supreme Court has noted that ñ[t]he primary objective of copyright is not to reward the labor of authors, but ó[t]o

[89] Legal scholarship discusses norms with regard to regimes outside the scope of traditional intellectual property laws. See, e.g., Emmanuelle Fauchart & Eric von Hippel, Norms-Based Intellectual Property Systems: The Case of French Chefs, 19 Org. Sci. 187, 187ï 88 (2008) (cooking); Jacob Loshin, Secrets Revealed: Protecting Magiciansô Intellectual Property Without Law, *in* Law and Magic: A Collection of Essays 123, 124 (Christine A. Corcos ed., 2010) (magic); Dotan Oliar & Christopher Sprigman, Thereôs No Free Laugh (Anymore): The Emergence of Intellectual Property Norms and the Transformation of Stand-Up Comedy, 94 Va. L. Rev. 1787, 1790ï 91 (2008) (stand-up comedy). There is also scholarship on norms and their relationship to copyright and patent law. See, e.g., Arti Kaur Rai, Regulating Scientific Research: Intellectual Property Rights and the Norms of Science, 94 Nw. U. L. Rev. 77, 79ï 80 (1999) (discussing norms as an alternative to securing exclusive patent rights); Jennifer E. Rothman, The Questionable Use of Custom in Intellectual Property, 93 Va. L. Rev. 1899, 1905ï 06 (2007) (discussing influence of norms on scope of IP rights); Sean B. Seymore, Rethinking Novelty in Patent Law, 60 Duke L.J. 919, 928ï 29 (2011) (referencing a ñdisconnect between patent law and the norms of scienceò); John Tehranian, Infringement Nation: Copyright Reform and the Law/Norm Gap, 2007 Utah L. Rev. 537, 543ï 50 (discussing disparity between copyright law and norms of infringement).

[90] See, e.g., Brown, supra note 31, at 607; Julie E. Cohen, Creativity and Culture in Copyright Theory, 40 U.C. Davis L. Rev. 1151, 1155 (2007); Jane C. Ginsburg, A Tale of Two Copyrights: Literary Property in Revolutionary France and America, 64 Tul. L. Rev. 991, 993ï 94, 1023 (1990); Jessica Silbey, The Mythical Beginnings of Intellectual Property, 15 Geo. Mason L. Rev. 319, 319 (2008); see also Radin, supra note 43, at 984ï 86.

[91] See supra Section I.A.

promote the Progress of Science and useful Arts.ôò[92] Similarly, the Second Circuit has observed that ñAmerican copyright law . . . does not recognize moral rights or provide a cause of action for their violation, since the law seeks to vindicate the economic, rather than the personal, rights of authors.ò[93] Why utilitarianism and moral rights seem incompatible to so many usually goes unanalyzed. Nonetheless, explicit evaluators note that utilitarian theories are more concerned with maximizing benefit to society via a properly calibrated incentive to creators whereas moral-rights theories usually more heavily emphasize creatorsô interests.[94] In addition, American utilitarians likely neglect moral-rights dimensions because of their association with rejected deontological theories of intellectual property. Occasionally, as demonstrated in the previous Part, thinkers appreciate the historical or rhetorical force of moral-rights thinking, all the while making utilitarianism supreme in setting policy.[95]

Nonetheless, there is helpful scholarship that suggests that utilitarian and moral-rights theories or values can overlap in crafting intellectual property laws.[96] In the context of arguing that copyright lawôs work-for-hire doctrine ought not to be applied to university academicsô works, Professor Rochelle Dreyfuss argues that the utilitarian approach of maximizing the public interest ought to seek to optimize artistic worksô quality by giving authors control of their works in some circumstances.[97] As she explains, ñSevering financial considerations from other creative concerns harms . . . those [interests] of the public in high-quality, accessible, creative material.ò[98] Dreyfussôs insight about the interaction of

[92] Feist Publôns v. Rural Tel. Serv. Co., 499 U.S. 340, 349 (1991) (quoting U.S. Const. art. I, § 8, cl. 8).

[93] Gilliam v. Am. Broad. Cos., 538 F.2d 14, 24 (2d Cir. 1976).

[94] See Brown, supra note 31, at 607; Ginsburg, supra note 90, at 993.

[95] Supra text accompanying notes 62ï86.

[96] Cf. Eyal Zamir & Barak Medina, Law, Morality, and Economics: Integrating Moral Constraints with Economic Analysis of Law, 96 Calif. L. Rev. 323, 325ï28 (2008) (providing a general model for incorporating threshold deontological constraints into economic analysis of the law).

[97] Dreyfuss, supra note 4, at 590ï93, 643.

[98] Id. at 606. For example, Dreyfuss reasons that granting copyright ownership to universities for academic writing might inhibit authorsô creativity by emphasizing the popular taste to which the university would likely want the work to appeal over perhaps more controversial topics. Id. at 609ï10. Dreyfuss makes parallel arguments for control of academic worksô dissemination, see id. at 616ï20 (arguing that university control of the timing of dissemination might dampen both the workôs quality and the authorôs reputation), and the creation of derivative works, id. at 624.

utilitarian and moral-rights theory is that utilitarian intellectual property laws ought to be concerned also with the quality of works produced, something that had been a traditional focus of author-centered moral-rights theories.[99] Relatedly, Professors Henry Hansmann and Marina Santilli maintain that there can be economic reasons to support moral-rights legislation.[100] For example, a right of integrity might be useful to society at large in ensuring that important artistic works are not altered or mutilated.[101]

In another vein, Professor Alfred Yen observes that both utilitarianism and moral rights should guide the structure of intellectual property laws.[102] Discussing only copyright law, Yen sets forth two reasons. First, he sets out evidence that American law, both historically and at present, views copyright as a tool to effectuate both utilitarianism and moral rights.[103] Second, Yen argues that the economic thinking necessary to implement utilitarian intellectual property laws cannot answer all necessary questions, such as getting hold of reliable data on individual preferences necessary for calculating utilities.[104] He suggests that in those cases, it is useful to supplement intellectual property rules with moral-rights interests.[105] Not dissimilarly, Robert Merges maintains that efficiency concerns of the utilitarian flavor normally are a midlevel principle for intellectual property law design, but at the highest level, deontological Lockean labor theory, Kantian autonomy theory, and distributive-justice concerns inform the lawôs design.[106]

This scholarship helpfully shows that utilitarianism and moral rights can play a joint role in structuring the substantive aspects of intellectual property laws. In this Article, I take a different approach to establish that utilitarianism and moral rights can be and ought to be in greater confluence than the conventional wisdom would have us believe. That is, solicitude for, and sometimes protection of, creatorsô moral-rights interests can strengthen utilitarian incentives in copyright and patent law, thereby

[99] Id. at 643.

[100] Hansmann & Santilli, supra note 61, at 102, 142ï 43.

[101] Cf. id. at 110ï 11 (explaining that alteration and mutilation typically transgress the right of integrity, although complete destruction generally does not).

[102] Yen, supra note 4, at 160ï 61, 171ï 72; accord Fisher, supra note 28, at 197ï 99.

[103] Yen, supra note 4, at 164ï 66.

[104] Id. at 169ï 71.

[105] Id. at 170ï 72.

[106] Merges, supra note 40, at 6, 13ï 16.

melding the two theories together in an underexplored way.[107] In the next Section, I demonstrate that evidence from numerous perspectives shows that artists and inventors hold strong and central personhood and labor interests in the works that they create. To maximize the utilitarian incentive to create valuable works for society, then, it is helpful to complicate our understanding of incentives beyond traditional pecuniary incentives to include expressive incentives that convey solicitude for and effectuate these personhood and labor interests, thereby maximizing the creative incentive for the benefit of society.[108]

B. Creators' Strong Beliefs in Moral Rights

This Section inspects considerable evidence from many vantage pointsð including philosophy, psychology, sociology, and the artsð to demonstrate how strongly many creators of artistic, scientific, and technological works believe in their moral rights in their works.[109] Taken together, a constellation of interests that creators typically possess about their works yields a sturdy conclusion about creatorsô deep conviction in their moral rights.

Before delving into creatorsô beliefs vis-à-vis their works, a clarification is in order. Beside the point of my inquiry is whether these creatorsô beliefs reflect the process by which individuals (or groups of individuals) end up creating artistic, scientific, and technological works. My focus instead is on how individuals tend to perceive their creations and

[107] This harmonization focuses on traditional accounts of utilitarianism rather than on commercialization theory, as set out in Abramowicz & Duffy, supra note 26, at 337, 339 & n.4. To the extent intellectual property laws ought to care about both worksô creators and commercializers, there is room for both expressive and pecuniary incentives in these laws.

[108] Cf. David Fagundes, Property Rhetoric and the Public Domain, 94 Minn. L. Rev. 652, 660 (2010) (ñIn legal discourse, [rhetoricôs] appeal has two valences. First, rhetoric frames legal arguments, and those frames determine what substantive legal analysis applies to the issue at hand. Second, the choice to use particular terms can persuadeð or dissuadeð by calling up particular associations that generate visceral reactions in listeners.ò); Jessica Silbey, Comparative Tales of Origins and Access: Intellectual Property and the Rhetoric of Social Change, 61 Case W. Res. L. Rev. 195, 199 (2010) (concluding that some movements to expand public access to intellectual property are undercut by utilizing the underlying rhetoric and values of traditional intellectual property law).

[109] Some of this evidence is systematic, whereas some is more anecdotal. Although as of yet, there have been no comprehensive empirical studies addressing this particular question, future work attempts to start answering this question. E.g., Christopher J. Buccafusco, Jeanne C. Fromer & Christopher J. Sprigman, Empirical Studies of Incentives in Intellectual Property (forthcoming manuscript, to be on file with author).

creative process, because that is critical for optimizing the incentives that can actually motivate creators to innovate.[110] Therefore, while research inquiries doubting the centrality of any particular authors or inventors to their worksô creation are interesting,[111] they are not germane to my analysis. These theories have not typically affected norms about the personhood and labor interests authors and inventors have in their creations and therefore do not affect what would realistically motivate these creators.

I separate my discussion on authorsô beliefs from that of inventorsô. Although derived from different sources, much that is said about one will apply to the other. Nonetheless, the moral-rights interests authors have in their works likely differ in some important ways from those inventors have in their creations.

1. Authors

In a recent book on writing, the author Margaret Atwood offers three pages of reasons why a writer writes. Many relate to an authorôs personhood and labor interests. To list a few: ñTo express myselfò; ñBecause I knew I had to keep writing or else I would dieò; ñBecause to create is human. Because to create is Godlikeò; ñTo amuse and please myselfò; ñBecause I was possessedò; ñBecause I got pregnant by the Muse and needed to give birth to a bookò; ñTo act out antisocial behavior for

[110] Cf. Yochai Benkler, The Wealth of Networks: How Social Production Transforms Markets and Freedom 37 (2006) (positing that if information producers do not need the incentive of exclusive rights to create and exploit their works, the justification for giving them would be diminished).

[111] Some sociological work labels the centrality of any individualôs genius to his or her inventions ñmythology,ò and places the emphasis instead on sociological factors that make almost any individualôs role incidental rather than crucial. S.C. Gilfillan, The Sociology of Invention 10ï 11, 71ï 74 (1935). As an example of such evidence, this work points to the frequency of near-simultaneous inventions. Id. at 75ï 76; see Mark A. Lemley, The Myth of the Sole Inventor, 110 Mich. L. Rev. 709, 709ï 12 (2012) (discussing the implications of the limited importance of the sole inventor, contrary to this myth, for patent law). With regard to literary works, one robust strand of literary analysis has sought to show that the author ought not be the central figure in literary works, above and beyond, say, the audience that interprets these works, those literary works from which the author is inspired and borrows, and the publisher that distributes and markets these works. See David Saunders, Authorship and Copyright 5ï 9 (1992) (showing historically that in addition to the Romantic notion of the author, there has also been a cultural and collaborative conception of authorship); Lior Zemer, The Idea of Authorship in Copyright 6 (2007); cf. Martha Woodmansee, On the Author Effect: Recovering Collectivity, *in* The Construction of Authorship, supra note 4, at 15, 16ï 17 (noting that the concept of authorial centrality was not always predominant).

which I would have been punished in real lifeò; ñTo satisfy my desire for revengeò; ñBecause the story took hold of me and wouldnôt let me goò; ñTo search for understanding of the reader and myselfò; ñTo bear witness to horrifying events that I have survivedò; and ñTo make a name that would survive death.ò[112] Some of these are about an author harnessing personal emotions or history into an artistic product. Others are about satisfying some deeply felt personal urge to create something intrinsically linked to oneôs self-concept. Yet others invoke the authorôs concern with reputation. What they share, as this Subsection shows, is how intrinsically linked these reasons are to authorsô personhood interests and how commonly held similar beliefs are.

One critical belief authors usually have about their creations is that they are intimately linked to their self-concept. Psychological and philosophical work demonstrates that oneôs possessions are tightly bound up in a personôs self-concept.[113] Objects over which people have control or which they themselves have created or manipulated are more likely to be perceived as part of a personôs self-concept than other types of objects.[114] In this context, psychological benefits shown to flow from this connection to oneôs possessions include the experience of efficacy, a feeling of personal autonomy, and a positive association between these possessions and oneôs sense of self.[115] Margaret Radin theorizes a tight bond between self and object when the object is personal (such as someoneôs own wedding ring), rather than fungible with another item of at least equal market value (such as a wedding ring in a jewelerôs hands).[116]

[112] Margaret Atwood, Negotiating with the Dead: A Writer on Writing, at xxï xxii (2002).

[113] See Mihaly Csikszentmihalyi & Eugene Rochberg-Halton, The Meaning of Things: Domestic Symbols and the Self 16 (1981); John Christman, Distributive Justice and the Complex Structure of Ownership, 23 Phil. & Pub. Aff. 225, 235ï 37 (1994); Lita Furby, Possessions: Toward a Theory of Their Meaning and Function Throughout the Life Cycle, *in* 1 Life-Span Development and Behavior 297, 317ï 23 (Paul B. Baltes ed., 1978); Jon L. Pierce et al., The State of Psychological Ownership: Integrating and Extending a Century of Research, 7 Rev. Gen. Psychol. 84, 85ï 86 (2003); Radin, supra note 43, at 959ï 61.

[114] Furby, supra note 113, at 312ï 13, 319; Pierce et al., supra note 113, at 92ï 93; Ernst Prelinger, Extension and Structure of the Self, 47 J. Psychol. 13, 18 (1959); see F.W. Rudmin & J.W. Berry, Semantics of Ownership: A Free-Recall Study of Property, 37 Psychol. Rec. 257, 266 (1987).

[115] See Christman, supra note 113, at 235ï 39; Pierce et al., supra note 113, at 88ï 90.

[116] Radin, supra note 43, at 959ï 60.

Psychologist Lita Furby posits, moreover, that people think something is theirs when it is associated with them.[117]

Likely for all of these reasons, people experience these possessory and self-concept effects with regard to their artistic creations, especially because they are self-made and far from fungible.[118] A striking illustration of this notion comes from the novelist Anne Lamott, who states with regard to writing published in her childhood, ñI understood immediately the thrill of seeing oneself in print. It provides some sort of primal verification: you are in print; therefore you exist.ò[119] Another comes from John Miltonôs characterization of books containing authorsô essences:

> We should be wary . . . what persecution we raise against the living labours of public men, how we spill that seasoned life of man, preserved and stored up in books; since we see a kind of homicide may be thus committed, sometimes a martyrdom, and if it extend to the whole impression, a kind of massacre . . . .[120]

A feeling of psychological ownership in these worksð even absent legal ownershipð according to psychological research, ñhelps people define themselves, express their self-identity to others, and maintain the continuity of the self across time.ò[121] People feel a sense of psychological ownership when they ñcontrol[] [an object], com[e] to know the target intimately, and invest[] the self in the target.ò[122] All three seem to happen in varyingð but pertinentð ways when authors create artistic works, typically by expending great amounts of time and energy to au-

[117] Furby, supra note 113, at 314 (discussing this ideaôs consistency with study showing feelings of ownership based on association in children); accord Meir Dan-Cohen, Harmful Thoughts: Essays on Law, Self, and Morality 276ï 77 (2002).

[118] See Csikszentmihalyi & Rochberg-Halton, supra note 113, at 28; Pierce et al., supra note 113, at 86, 93ï 94; accord Hegel, Philosophy of Right §§ 68ï 69, at 54ï 56 (T.M. Knox trans., Oxford Univ. Press 1952) (1821); Hughes, supra note 54, at 87ï 88. On authorsô belief that their creations are personal and not fungible, see infra notes 130ï 42 and accompanying text.

[119] Anne Lamott, Bird by Bird: Some Instructions on Writing and Life, at xiv (1994).

[120] John Milton, Areopagitica: A Speech to the Parliament of England for the Liberty of Unlicensed Printing 9ï 10 (Ralph, Holland & Co. 6th ed. 1906) (1644); accord Bleistein v. Donaldson Lithographing Co., 188 U.S. 239, 250 (1903); Thomas F. Cotter, Pragmatism, Economics, and the *Droit Moral*, 76 N.C. L. Rev. 1, 7ï 8 (1997); Hughes, supra note 40, at 329ï 30; Samuel D. Warren & Louis D. Brandeis, The Right To Privacy, 4 Harv. L. Rev. 193, 207 (1891).

[121] Pierce et al., supra note 113, at 89.

[122] Id. at 92.

thor highly personal works.[123] Coinciding with this view is the metaphor of author as parent to his or her literary works, commonly invoked since the sixteenth century.[124]

Because of this possessory interest authors have in their creations, they frequently believe strongly in their worksô integrity, in the sense that they ought to be able to prevent their works from alteration.[125] As Michelangelo illustrates in his explanation of his control of his commissioned painting of the Sistine Chapel:

> As soon as I had begun this work . . . I told the Pope how, in my opinion, the placing of the Apostles there alone would have a very poor effect. He asked why, and I replied, ñBecause they also were poor.ò He then gave me fresh instructions, which left me free to do as I thought best . . . .[126]

Similarly, many authors have strong feelings about controlling the contexts in which their works are used. For example, photographer Richard Avedon, in licensing his works, sought to forbid other photographs from appearing on the same page as his.[127] There is a countervailing view, as articulated by Professor Amy Adler, of ñthe profound artistic importance of modifying, even destroying, works of art, and of freeing art from the control of the artist.ò[128] Adler suggests that a view that artists have integrity interests in their work has become increasingly obsolete.[129]

Beyond the strong influence of artistsô creations on their self-concept (and concomitant desire for integrity many have), much else about authorship is considered to be highly personal. Authors typically view the

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[123] See Jeanne C. Fromer, A Psychology of Intellectual Property, 104 Nw. U. L. Rev. 1441, 1462ï65 (2010). The fact that creators value their works more highly than do purchasers and owners of these works, Christopher Buccafusco & Christopher Jon Sprigman, The Creativity Effect, 78 U. Chi. L. Rev. 31, 39ï40 (2011), is likely related, at least partially, to these personhood interests.

[124] See Mark Rose, Authors and Owners: The Invention of Copyright 38 (1993).

[125] See Carter v. Helmsley-Spear, Inc., 71 F.3d 77, 81 (2d Cir. 1995).

[126] Letter from Michelangelo to Ser Giovan Francesco Fattucci (Jan. 1524), *in* Artists on Art 61, 62 (Robert Goldwater & Marco Treves eds., Pantheon Books 1945).

[127] Symposium, Artists Donôt Get No Respect: Panel on Attribution and Integrity, 28 Colum. J.L. & Arts 435, 444ï45 (2005) (statement of Eugene Mopsik).

[128] Adler, supra note 10.

[129] See id.

process of creation as both personal and subjective.[130] Filmmaker Francis Ford Coppola conveys his most important piece of advice for his children, who work in the arts: ñAlways make your work be personal.ò[131] As I explore in prior work on creativityôs role in intellectual property law, artists are preoccupied with ñharnessing experiences and themes for artistic expression.ò[132] Painter Henri-Matisse observes that he is ñunable to distinguish between the feeling [he] ha[s] for life and [his] way of expressing it.ò[133] Creativity scholars Jacob Getzels and Mihalyi Csikszentmihalyi recount that the goal of the ñartist is to be sensitive to salient life experiences, and to translate these into [artistic] products, thereby preserving as much of the impact of the experience as possible, while at the same time revealing meanings that were not perceived before the work of art was completed.ò[134] Csikszentmihalyi elaborates that ñ[a]rtists find inspiration in órealô lifeô emotions like love and anxiety, events like birth and death, the horrors of war, and a peaceful afternoon in the country.ò[135] There is a seemingly endless supply of instances of this principle: Spanish painter Pablo Picassoôs painting *Guernica* was inspired by his views on the destruction of the Spanish Civil War, fought during his lifetime.[136] Philip Rothôs novels about secular American Judaism in the face of Jewish tradition[137] mirror the world in which he grew up.[138] A recent novel by Israeli author David Grossman, about a mother

[130] See Rose, supra note 124, at 113ï 27; Fromer, supra note 123, at 1467; Jane C. Ginsburg, Creation and Commercial Value, 90 Colum. L. Rev. 1865, 1881ï 86 (1990); cf. Rebecca Tushnet, Economies of Desire: Fair Use and Marketplace Assumptions, 51 Wm. & Mary L. Rev. 513, 522ï 27 (2009) (arguing that creativity is often inspired by non-economic, intrinsic motivation).

[131] Ariston Anderson, Francis Ford Coppola: On Risk, Money, Craft and Collaboration, 99U, http://www.99u.com/articles/6973/Francis-Ford-Coppola-On-Risk-Money-Craft-Collaboration (last visited Aug. 26, 2012).

[132] Fromer, supra note 123, at 1467; accord Csikszentmihalyi & Rochberg-Halton, supra note 113, at 28; Dreyfuss, supra note 4, at 607ï 08.

[133] Henri-Matisse, Notes dôun Peintre, La Grande Revue, (Dec. 25, 1908) (Fr.), *reprinted in* Artists on Art, supra note 126, at 409, 410; accord Edward Hopper, Notes on Painting, Preface *to* The Museum of Modern Art, Edward Hopper Retrospective Exhibition 17 (1933), *reprinted in* Artists on Art, supra note 126, at 471, 472 (ñI believe that the great painters . . . have attempted to force this unwilling medium of paint and canvas into a record of their emotions.ò).

[134] Jacob W. Getzels & Mihaly Csikszentmihalyi, The Creative Vision 154 (1976).

[135] Mihaly Csikszentmihalyi, Creativity 85 (1996).

[136] See Gijs van Hensbergen, Guernica: The Biography of a Twentieth-Century Icon 3 (2004).

[137] E.g., Philip Roth, Portnoyôs Complaint (1969); Philip Roth, The Ghost Writer (1979).

[138] See Philip Roth, The Facts: A Novelistôs Autobiography 135ï 36 (1988).

coping with her sonôs battles in the Israeli Army, works through the pains he endured following his childrenôs service in the same army and one childôs death in battle.[139] And slightly more lowbrow, a novel by reality television star Nicole Richie, the adopted daughter of the singer Lionel Richie, is about the Hollywood lifestyle of the adopted daughter of a famous singer.[140]

Closely related to this widespread view that artists infuse their creations with their experiences and emotions is the conventional position that artists are creative geniuses.[141] As such, they are thought to employ their originality in ways that only they could.[142]

Additionally, to authors, the artistic works they create are a vehicle for their reputation or esteem, surely a strong personhood interest.[143] A key reason many authors create literary works is the expectation of reputational benefits, such as recognition and attention.[144] For example, in the context of open-source software, scholars show that a quest for reputation has largely driven the enterprise.[145]

Finally, there is a widely held belief that authors are entitled to some control over their works, for having labored on them.[146] William Blackstone articulates this commonly held principle:

> When a man by the exertion of his rational powers has produced an original work, he has clearly a right to dispose of that identical work

[139] Ethan Bronner, An Israeli Novelist Writes of Pain, Public and Private, N.Y. Times, Nov. 17, 2010, at C1 (discussing David Grossmanôs novel *To the End of the Land*).

[140] Nicole Richie, The Truth About Diamonds, at viiï viii (2005).

[141] See Rose, supra note 124, at 6, 114ï 22; Catherine L. Fisk, Authors at Work: The Origins of the Work-for-Hire Doctrine, 15 Yale J.L. & Human. 1, 5 (2003); Woodmansee, supra note 111, at 16.

[142] See Dreyfuss, supra note 4, at 608.

[143] See generally Geoffrey Brennan & Philip Pettit, The Economy of Esteem: An Essay on Civil and Political Society 13 (2004) (studying the central human desire for esteem, or prestige).

[144] Greg Lastowka, Digital Attribution: Copyright and the Right to Credit, 87 B.U. L. Rev. 41, 58 (2007).

[145] See Eric S. Raymond, The Cathedral and the Bazaar 64 (1999); Lastowka, supra note 144, at 59.

[146] See, e.g., Adam D. Moore, A Lockean Theory of Intellectual Property, 21 Hamline L. Rev. 65, 78 (1997); cf. Patricia Kanngiesser et al., The Effect of Creative Labor on Property-Ownership Transfer by Preschool Children and Adults, 21 Psychol. Sci. 1236, 1238ï 40 (2010) (discussing empirical evidence indicating creative labor has an effect on ownership judgments in children and adults).

> as he pleases, and any attempt to take it from him, or vary the disposition he has made of it, is an invasion of his right of property.[147]

All in all, this Subsection demonstrates a collection of beliefs that authors typically hold (as society at large often does too) about their strong personhood and labor interests in the works they create. With this demonstration, I now turn to the beliefs that inventors tend to hold with regard to their creations.

2. Inventors

As this Subsection shows, the set of beliefs inventors hold with regard to their inventions is similar to those artists hold about their works. However, they are not identical. Even though both artists and inventors believe they have personhood and labor interests in their works, there appear to be some crucial differences.

Just as authors believe their creations are intimately linked to their self-concept,[148] so too inventors think their inventions are closely linked to theirs. Given that they created their inventions, they tend to feel tightly bound to them.[149] In fact, inventors discuss how much their inventions are a part of their identity.[150] Relatedly, empirical work demonstrates the considerable significance inventors attach to the personal satisfaction and intellectual challenge they derive from inventing.[151] Psychological

[147] 2 William Blackstone, Commentaries *405ï 06; accord Rose, supra note 124, at 34ï 38 (describing Daniel Defoeôs similar writings).

[148] See supra text accompanying notes 113ï 24124.

[149] Pierce et al., supra note 113, at 93.

[150] See J.A. Chambers, Relating Personality and Biographical Factors to Scientific Creativity, 78 Psychol. Monographs: Gen. & Applied, no. 7, 1964, at 1, 6, 18ï 19 (ñThe creative research man thus emerges as the dominant, strongly motivated individualist who is self-propelled and whose interests are channeled away from social and civic activities and are directed towards his own individual research problems.ò). There is a countervailing norm in the sciences, that of a form of communism, in that ñ[t]he substantive findings of science are a product of social collaboration and are assigned to the community.ò Robert K. Merton, The Sociology of Science 273 (Norman W. Storer ed., 1973). Professor Robert Mertonôs thinking might hold more strongly for the scientific community generating theories than for technological innovators. The former is less relevant to intellectual property, as scientific theories typically are not protectable, while innovation based on those theories is. Fromer, supra note 123, at 1442, 1449ï 50.

[151] See, e.g., Henry Sauermann & Wesley M. Cohen, What Makes Them Tick? Employee Motives and Firm Innovation, 56 Mgmt. Sci. 2134, 2134 (2010); John P. Walsh & Sadao Nagaoka, Who Invents?: Evidence from the Japan-U.S. Inventor Survey 22 (Research Inst. of Econ., Trade & Indus., Working Paper No. 09-E-034, 2009), available at http://www.rieti.go.jp/jp/publications/dp/09e034.pdf; Alfonso Gambardella et al., PatVal-EU

research also shows that the desire for self-expression is a main reason why inventors invent.[152]

An extreme story illustrates the strong connection inventors can feel to their creations. In the 1980s, Petr Taborsky worked for a Florida power company, having been assigned to assist on a research project using bacteria to extract ammonia from a type of clay used in filtering water.[153] The company terminated the project after it appeared that it would not be successful and reassigned Taborsky to work on other tasks. Taborsky, captivated by the research problem, nonetheless continued to work on the original research question.[154] Taborsky figured out how to use bacteria to accomplish this extraction by raising the temperature.[155] Taborsky was stunned to learn that he had no legal rights in the invention, having signed them away to his employer in his contract.[156] Angry and determined, he refused to turn over his research notebooks.[157] Taborsky fought so far as to be convicted of theft of the notebooks, being jailed for refusing to assign to the company the patents he ultimately secured for the invention, and later refusing an executive pardon.[158] Taborsky stated that he was willing to go to jail because his employers ñweren=t entitled too= his invention.[159] Although he was likely driven in part by pecuniary considerations, the extent to which he was willing to be punished surely underscored his personhood-based determination, in his words, that ñthe notebooks were mine and the work was mine.ò[160]

Another personhood interest in which inventors, and society writ large, believe is that inventors are creative geniuses, uniquely situated to fashion their inventions.[161] Professor Catherine Fisk elaborates that

Project, The Value of European Patents: Evidence from a Survey of European Inventors, 4ï 5, 35ï 36 (2005), available at http://www.alfonsogambardella.it/PATVALFinalReport.pdf.

[152] Joseph Rossman, Industrial Creativity: The Psychology of the Inventor 200 (1964).

[153] Leon Jaroff, Intellectual Chain Gang, Time, Feb. 10, 1997, at 64.

[154] Id.

[155] Id.

[156] See id.

[157] Id.

[158] Id.

[159] Taborsky Case Study: Wastewater Treatment 8, IPAdvocate.org, http://www.ipadvocate.org/studies/taborsky/Taborsky.pdf (last visited Aug. 23, 2012).

[160] Morning Edition: Disputes Rise over Intellectual Property Rights (NPR radio broadcast Sept. 30, 1996), transcript available at http://www.cptech.org/ip/npr.txt.

[161] See Gilfillan, supra note 111, at 72; Catherine L. Fisk, Removing the óFuel of Interestô from the óFire of Geniusô: Law and the Employee-Inventor, 1830-1930, 65 U. Chi. L. Rev. 1127, 1133, 1137ï 38, 1160 (1998); Hughes, supra note 54, at 143ï 45.

ñ[t]he popular and even the academic vision of invention in the nineteenth century was that of the genius alone in his workshop, tinkering away until suddenly a bright idea came to him in a flash.ò[162] A quintessential (and somewhat mythical) example is Thomas Edison, depicted as laboring and tinkering with possibilities for the light bulb and then coming up with a solution in a stroke of genius.[163] Thomas Jefferson, a noted inventor himself, colorfully called inventions ñthe fugitive fermentation of an individual brain.ò[164] Fisk observes that this view has been so longstanding that ñ[b]y the nineteenth century, . . . it was so widely accepted as to seem a matter of natural right.ò[165] Twentieth-century psychological work confirms the continuing endurance of this belief, showing that an inventorôs most important characteristic is perceived to be originality.[166]

Take Johannes Gutenbergôs invention of the printing press as but one example of an inventorôs unique situatedness. A critical step in Gutenbergôs invention required solving how to press paper to affix images or type.[167] Gutenberg did so when he was participating in a wine harvest, which led him to draw a connection between using the principles for pressing grapes to make wine to press paper to affix images or type.[168] This illustration suggests what sociologist Robert Merton has shown more systematically, that ñ[o]nce a scientific problem has been defined, profound individual differences among scientists will affect the likelihood of reaching a solution.ò[169]

This belief that inventors are uniquely placed to solve particular problems in certain ways is distinct from views about authorsô uniquely personal connection to their artistic works. Inventors, unlike authors, are ultimately guided to their creations by functional considerations of solving a particular problem, such as cooling air, creating software to encrypt communications, or providing a vaccine for polio.[170] A poignant childhood memory, vacation experience, or lasting emotion might help guide

[162] Fisk, supra note 161, at 1160.
[163] Id. at 1161.
[164] Letter from Thomas Jefferson to Isaac McPherson (Aug. 13, 1813), *in* 13 The Writings of Thomas Jefferson 333 (Albert Ellery Bergh ed., 1907).
[165] Fisk, supra note 161, at 1142.
[166] See Rossman, supra note 152, at 48.
[167] Dean Keith Simonton, Scientific Genius: A Psychology of Science 34ï 35 (1988).
[168] Id. at 35.
[169] Merton, supra note 150, at 349.
[170] Id.; Fromer, supra note 123, at 1468ï 71; see supra text accompanying notes 49ï 51.

the inventorôs mind to particular scientific and technological problems to study or successful problem solutions.[171] However, if personal emotions, memories, or themes do not help solve a particular problem, inventors will be guided away from them by functional considerations to particular solutions.[172] For Gutenberg, if his experience with grape presses had not helped solve the problem of affixing print to paper, Gutenberg likely would have searched elsewhereð possibly beyond his personal experiences and emotionsð to find a solution.[173]

User innovators are one subset of inventors likely to have strong personhood interests in their inventions.[174] They are users of commercial products that rely on their experiential needs to modify these products to satisfy their own needs.[175] As Professor Katherine Strandburg illustrates with mountain biking equipment, ñuser innovations often depended on information that the inventors had obtained through their own cycling experience, reflecting their own unique circumstances and interests, such as a desire to bike in extreme weather conditions or to perform acrobatic stunts.ò[176] Their principal goal is to improve commercial products to which they have a personal connection based on use or reputation within the relevant user community.[177] These motivations are frequently romantic and personal.[178] ñUser innovators,ò explains Strandburg, ñmay be more likely to be personally invested in their inventions and more likely to believe that there are óacceptableô and óunacceptableô uses for

[171] See Mihaly Csikszentmihalyi, Creativity: Flow and the Psychology of Discovery and Invention 83ï 84 (1996); R. Keith Sawyer, Explaining Creativity: The Science of Human Innovation 147ï 48 (2006); Simonton, supra note 167, at 34ï 35; Anne Roe, The Psychology of the Scientist, 134 Science 456, 457 (1961).

[172] Fromer, supra note 123, at 1469ï 70; see Michael J. Gelb & Sarah Miller Caldicott, Innovate Like Edison: The Success System of Americaôs Greatest Inventor 47 (2007) (highlighting Thomas Edisonôs ñsolution-centered mindsetò as essential to his inventive success).

[173] In parallel, the audience for artistic works is frequently interested in understanding a creatorôs intended meaning. Hughes, supra note 54, at 142ï 43. By contrast, the audience for inventions is typically not. Id.

[174] See Eric von Hippel, Democratizing Innovation 3, 22ï 23 (2005); Eric von Hippel, The Sources of Innovation 25ï 26 (1988); Katherine J. Strandburg, Users as Innovators: Implications for Patent Doctrine, 79 U. Colo. L. Rev. 467, 468ï 69, 478ï 81 (2008).

[175] Strandburg, supra note 174, at 479ï 80.

[176] Id. at 480.

[177] See William W. Fisher III, The Implications for Law of User Innovation, 94 Minn. L. Rev. 1417, 1418ï 30 (2010); Strandburg, supra note 174, at 469ï 70, 481.

[178] See Gambardella et al., supra note 151, at 35.

them.ò[179] Thus, user innovators might strongly hold personhood interests in their advancements.

Inventorsô regard for their inventionsô integrity might be strong, given their heavy personhood interests.[180] That said, their integrity interests are at less risk than authorsô.[181] If a third party makes changes to someoneôs invention, that invention might no longer work, thus discouraging such changes.[182] By contrast, the public might readily consume changed artistic works, at a detriment to authorsô integrity.[183] Therefore, while inventorsô integrity interests might be strong, they are somewhat less at risk than authorsô.

Another personhood aspect vital to inventors is their reputational interest. Empirical studies show that inventors are heavily concerned with the prestige and reputation that can result from their creative activities.[184] Professor Robert Merton, despite describing a communism pervading the scientific community,[185] observes that scientific norms give innovators a claim to ñrecognition and esteem,ò such as via eponymy for their results (as in the Copernican system or Boyleôs law).[186] This reputation interest is so important, in Mertonôs view, that societyôs systems of priority in discovery are designed to protect this interest.[187] If the view that almost all innovations are inevitable products of societyôs accumulated knowledge is correct,[188] it is all the more striking to see the severe priority fights that ensue when there is near-simultaneous invention by more than one individual.[189]

Finally, inventors underscore the connection between their labor and their discoveries or creations.[190] Thomas Edison famously noted: ñGeni-

[179] Strandburg, supra note 174, at 499.
[180] See Dreyfuss, supra note 4, at 641.
[181] See id.
[182] See id.
[183] See id.
[184] Gambardella et al., supra note 151, at 4ï 5, 35ï 36, 36 tbl.5.1; Rossman, supra note 152, at 152 tbl.9.
[185] Merton, supra note 150, at 273ï 74.
[186] Id. at 273ï 74, 293ï 305 (taking cognizance, also, of scienceôs institutional norm of humility, of arguing oneôs debt to oneôs predecessors).
[187] See id. at 273ï 74; accord Rebecca S. Eisenberg, Proprietary Rights and the Norms of Science in Biotechnology Research, 97 Yale L.J. 177, 197ï 98 (1987); cf. infra Section III.E (exploring the first-to-invent standard as an expressive incentive).
[188] Supra note 111.
[189] See Merton, supra note 150, at 370ï 83 (noting, also, scientistsô strong resistance to studying the phenomenon of multiple invention).
[190] See Hughes, supra note 54, at 145; Moore, supra note 146.

us is one percent inspiration[,] ninety-nine percent perspiration.ò[191] Inventors and those aspiring to invent repeat this aphorism, emphasizing the belief in laboring toward inventions.[192] Moreover, in another example, scientists who made a significant breakthrough with the hypothalamus gland emphasized their labor as a key aspect of their work: ñNobody before had to process millions of hypothalami. . . . The key factor is not the money, itôs the will . . . the brutal force of putting in 60 hours a week for a year.ò[193]

All in all, the evidence suggests that inventorsô typical personhood and labor interests in their inventions are qualitatively similar to those characteristic of authors in their artistic works. However, some notable differences appear between the two, particularly based on inventionsô functionality, a quality not necessary for artistic works. Therefore, inventorsô personhood interests might easily deform to accommodate functionality. In addition, despite qualitative similarity, it is also possible that these interests take on different magnitudes for authors and inventors as distinct groups.

Some notions of personhood and labor that authors and inventors associate with their creations might seem outdated in todayôs corporate environments, in which collaboration is mainstay and firm ownership of rights in these creations is rampant.[194] Contemporary invention is frequently ñthe product of many peopleôs work on a corporate research projectò[195] and professional writing is equally collaborative.[196] Nonetheless, authorsô and inventorsô beliefs in their constellation of moral-rights interests seem to remain undiminishedð and perhaps even magnifiedð in todayôs collaborative and corporate environments. For one thing, studies

[191] See John Bartlett, Familiar Quotations 555 (Justin Kaplan ed., 16th ed. 1992) (quoting Thomas Alva Edison).

[192] E.g. Chris Dunmire, Inspiration vs. Perspiration: A Light Bulb Moment on Edisonôs Creative Genius, CoachingYourCreativity.com, http://www.coachingyourcreativity.com/articles/inspiration-perspiration.shtml (last visited Aug. 25, 2012); Parin, ñGenius Is 1% Inspiration and 99% Perspiration.ò ï Thomas Edison, theGREATnessMIND.com, Nov. 25, 2010, http://www.thegreatnessmind.com/2010/11/25/genius-is-1-percent-inspiration-and-99-percent-perspiration-thomas-edison/.

[193] Bruno Latour & Steve Woolgar, Laboratory Life 118 (1986).

[194] See Gambardella et al., supra note 151, at 3ï 4.

[195] Fisk, supra note 161, at 1133.

[196] Woodmansee, supra note 111, at 24ï 25. See generally Stefan Wuchty et al., The Increasing Dominance of Teams in Production of Knowledge, 316 Science 1036 (2007) (showing that teams increasingly produce knowledge across a wide range of domains, including science, engineering, social sciences, arts, and humanities).

emphasize the unique vantage point individual creators still bring to their collaborations.[197] Moreover, creatorsô articulations of their strong moral-rights interests have not diminished in todayôs more collaborative environments.[198] In fact, evidence points to increasing individualism in contemporary society, despite (or perhaps in spite of) ever more collaboration and corporatization.[199] As but one example, federal courts have observed in patent cases involving collaborative inventorship that the individual inventors insist that their contributions were the most critical, often magnifying their own efforts post hoc.[200]

Given the importance to authors and inventors of their personhood and labor interests in their creative works, copyright and patent laws advance their utilitarian goals when they incorporate this significance into the incentives they offer to creators. By providing incentives that express solicitude for and effectuate creatorsô moral rightsð something critical to themð copyright and patent laws can provide a strong incentive to creators to make socially valuable works.[201]

Incentivesð the underpinning of intellectual propertyð work only if they motivate authors and inventors to create (or indirectly stimulate others, like firms, to encourage them to create).[202] Incentives in intellectual property law, as conventionally understood, offer the creator some pecuniary advantage to encourage socially valuable artistic, scientific, or technological production.[203] However, creatorsô beliefs in their moral rights typically seem to dominate their pecuniary interests in creating (at least in their ownð possibly self-servingð statements).[204] If true, provid-

[197] See Merton, supra note 150, at 345ï 46; Sauermann & Cohen, supra note 151, at 2136.

[198] See Gambardella et al., supra note 151, at 35ï 36, 42ï 43; Hughes, supra note 54, at 93.

[199] See Hughes, supra note 54, at 93ï 95.

[200] See Acme Highway Prods. v. D.S. Brown Co., 431 F.2d 1074, 1083 (6th Cir. 1970) (applying for this reason a clear and convincing standard to claim of joint inventorship for a patent issued in the name of a single inventor); U.S. Surgical Corp. v. Hosp. Prods. Intôl Party, 701 F. Supp. 314, 340 (D. Conn. 1988) (noting that one inventorôs feeling of sole ownership did not imply that invention was not joint).

[201] In an ongoing project of interviews with artists and inventors, Professor Jessica Silbey finds that obtaining intellectual property protection is important to creators as a moral and personal matter. E-mail from Jessica Silbey to author (July 8, 2010, 10:08 EST) (on file with author); cf. Mary Madden, Pew/Internet & American Life Project, Artists, Musicians and the Internet 20, Dec. 5, 2004, available at http://www.pewinternet.org/~/media//Files/Reports/2004/PIP_Artists.Musicians_Report.pdf.pdf (showing that half of all artists questioned think that copyright laws are successful in protecting artistsôrights).

[202] See Loren, supra note 7, at 34ï 40.

[203] See supra note 7 and accompanying text.

[204] E.g., Csikszentmihalyi, supra note 135, at 107ï 08; Fromer, supra note 123, at 1483.

ing expressive incentives to creators might be more useful to intellectual propertyôs utilitarian goals than providing traditional pecuniary incentives in two mutually reinforcing ways. First, assuming expressive incentives are more valuable to creators than traditional incentives, they might be more of a lure to creators.[205] Second, they might be cheaper for society to provide than pecuniary incentives, thus maximizing the utilitarian bargain. Given the pervasiveness of creatorsô moral-rights interests, expressive incentives are at the very least important for consideration as incentives in intellectual propertyôs cost-benefit calculus, even if they do not dominate pecuniary interests.

Viewed this way, an optimized intellectual property system would likely contain some mix of pecuniary and expressive incentives. The law might layer expressive incentives atop the current pecuniary incentives it offers. Or, perhaps more tantalizingly, some of the lawôs current pecuniary incentives could be replaced by certain expressive incentives valued sufficiently by creators. Of course, a utilitarian framework would consider the full costs and benefits of various pecuniary and expressive incentives: their desirability to creators, the costs they impose on society, and the benefits society derives from creatorsô works that were motivated by these incentives.[206]

A question remains as to whether intellectual property laws ought to amplify these moral-rights interests that are held strongly by authors and inventors.[207] For one thing, these interests might not be realistically or rationally grounded. For example, a great deal of evidence casts doubt on the unique genius of inventors, given the near simultaneity of inven-

[205] Cf. Ginsburg, supra note 6, at 122 (ñA writer who feels secure that she will receive name credit for her work, or an artist who can rely on the continued existence of his sculpture, may find this background knowledge more conducive to creative activity.ò). Interesting psychological research shows that providing individuals with incentives to act creatively might counterproductively dampen their creativity. See, e.g., Beth A. Hennessey & Teresa M. Amabile, Reward, Intrinsic Motivation, and Creativity, 53 Am. Psychologist 674 (1998). These incentives tend to be pecuniary. Forthcoming work assesses how the particular incentives intellectual property offers or might offer affect creativity. Buccafusco, Fromer & Sprigman, supra note 109.

[206] See generally Richard L. Revesz & Michael A. Livermore, Retaking Rationality: How Cost-Benefit Analysis Can Better Protect the Environment and Our Health 3 (2008) (making the case for cost-benefit analysis in environmental regulation).

[207] According incentives with creatorsô beliefs, however, diminishes ethical questions that might arise about offering incentives that are exploitative. See generally Ruth W. Grant, Strings Attached: Untangling the Ethics of Incentives 6 (2012).

tion for many important inventions.[208] As another case in point, probably owing in large part to creatorsô expressive interests, Professors Christopher Buccafusco and Christopher Sprigman show that creators value their works more highly than do purchasers and owners of these works.[209] Nonetheless, it is more feasible and productive to align with creatorsô (and societyôs) expressive norms, at least with regard to grants of incentives, so that they actually work. There is still the important caveat, however, that within the utilitarian framework, such incentives ought not to be granted if the harm they cause society outweighs their benefits. As an illustration, creator-centered expressive incentives that encourage creator narcissism or hubris in ways that hurt society at large might not be worthwhile.

The discussion thus far concentrates on both creators and society. What to make, then, of the fact that firms today own most patent rights and most valuable copyrights?[210] As just discussed, authors and inventors appear to hold strong personhood and labor beliefs, even in todayôs corporate world.[211] As argued above,[212] their actual views, even if poorly reflective of corporate realities, ought to be dominant in this context. However, if most intellectual property rights either automatically or eventually vest in firms, in exchange for some considerationð salary, payment, or other rewardð to the creator, then it might seem to dampen the need for expressive incentives for creators. It would then seem to follow that the incentives offered by copyright and patent laws ought to speak principally to firms instead of creators.[213]

Nonetheless, individuals still need at least some (pecuniary and expressive) incentives that intellectual property laws provide. For one thing, not all intellectual property rights are divested from a workôs creator.[214] Even when they are, authors and inventors must still have adequate incentive to focus on creative production rather than other expend-

[208] See supra note 111.

[209] Buccafusco & Sprigman, supra note 123.

[210] A study by John Allison and Mark Lemley shows that over eighty-five percent of patents were assigned by individual inventors to a corporate entity by the time of patent issuance. John R. Allison & Mark A. Lemley, Whoôs Patenting What? An Empirical Exploration of Patent Prosecution, 53 Vand. L. Rev. 2099, 2117 (2000). For copyright statistics, see infra note 295 and accompanying text.

[211] Supra text accompanying notes 194ï 99.

[212] Supra text accompanying note 111.

[213] Julie E. Cohen, Copyright as Property in the Post-Industrial Economy: A Research Agenda, 2011 Wis. L. Rev. 141, 142ï 43.

[214] See supra note 210; infra text accompanying note 295.

itures of time and effort. In fact, thoughtful firms are interested in providing such incentives to their employees, even when their employees will not own intellectual property rights in their creations: evidence shows that some firms confer awards and other recognition on their most productive creator-employees.[215] In addition, evidence demonstrates that most of the firms operating in the copyright and patent sectors are small.[216] Robert Merges reasons, based on social-science research, that ñsmall creative teams allow individual participants more leeway than they would have as employees in large companies.ò[217] With their less bureaucratic and hierarchical structure, these companies grant much personal autonomy to their employees to perform their creative work.[218] Therefore, incentives can have quite a direct effect even in circumstances in which a corporation has been assigned ownership of the creative product ex ante.

More strongly, and perhaps most importantly in the context of expressive incentives, just because firms ultimately secure most intellectual property rights does not mean that no sticks in the bundle of rights ought to remain with the creator. For example, as discussed below, patent law requires an indirect form of attribution of invention to the individual inventors, even when a corporation owns the associated patent rights.[219] Although China is not usually invoked favorably in discussing optimal intellectual property laws, China implements just such a split of rights in its copyright law: there, the author of some copyrighted works has the right to be credited as the author, even though all other rights belong to the authorôs employer.[220] In fact, divvying up legal entitlements at the outset between creators and firms can give each group incentives to bar-

[215] Gambardella et al., supra note 151, at 35; Robert P. Merges, The Law and Economics of Employee Inventions, 13 Harv. J.L. & Tech. 1, 38ï40 (1999). The need for expressive incentives in the law might be diminished in cases of corporate creation to the extent that firms comprehensively provide optimal expressive incentives to motivate their employees. That is only the case, however, if these incentives operate effectively. Compare Merges, supra, at 41 (supposing that they do), with Catherine L. Fisk, Credit Where Itôs Due: The Law and Norms of Attribution, 95 Geo. L.J. 49, 60, 103 (2006) (providing various examples, including from Du Pont, the film ñErin Brockovich,ò and the co-writing of a memoir, in which they did not).

[216] Merges, supra note 40, at 204 & fig.7.1, 210ï12.

[217] Id. at 213.

[218] Id.

[219] See infra Section III.A.

[220] Julie E. Cohen et al., Copyright in a Global Information Economy 131 (3d ed. 2010).

gain with the other in ways that enhance economic efficiency.[221] This condition can be seen as particularly welcome for creators laboring for firms when they lack sufficient leverage to bargain at armôs length with their firms.[222]

These possibilities merely underscore the importance of future work studying incentives empirically. Empirical work can help demonstrate the appropriate audiences of intellectual propertyôs incentives. It can also break down whether certain incentives ought to be aimed at creators and others at firms. It is hypothesized here that some expressive incentives might prove valuable to creators even if they know they are unlikely to retain the pecuniary incentives offered by intellectual property laws. The theoretical framework established herein of expressive incentives as a possible supplement to traditional pecuniary incentives ought to help structure the ideal shape of incentives in a utilitarian intellectual property system.

C. Expressive Law

The previous Sections establish the notion of expressive incentives in intellectual property and show how they might help maximize a utilitarian system due to creatorsô beliefs about their moral-rights interests. I now anchor the notion of expressive incentives using work in other legal areas on law and norms and expressive theories of law. I also demonstrate how philosophical thinking on utilitarianism supports the inclusion of expressive incentives in those intellectual property law offers.

A robust literature studies the interaction between legal content and social norms, both descriptively and prescriptively. A dominant view of the interaction is that the law ought to institutionalize the norms people have so as to bolster lawôs enforceability and legitimacy.[223] As Professor

[221] See Ian Ayres & Eric Talley, Solomonic Bargaining: Dividing a Legal Entitlement To Facilitate Coasean Trade, 104 Yale L.J. 1027, 1029ï30 (1995).

[222] See NLRB v. Hearst Publôns, 322 U.S. 111, 127 (1944); Wheeler v. Hurdman, 825 F.2d 257, 273ï74 (10th Cir. 1987); William E. Forbath, The Distributive Constitution and Workersô Rights, 72 Ohio St. L.J. 1115, 1121 (2011).

[223] See, e.g., Yuval Feldman, The Behavioral Foundations of Trade Secrets: Tangibility, Authorship, and Legality, 3 J. Empirical Legal Stud. 197, 231 (2006); Richard D. Schwartz & Sonya Orleans, On Legal Sanctions, 34 U. Chi. L. Rev. 274, 294ï99 (1967); cf. Robin Bradley Kar, The Deep Structure of Law and Morality, 84 Tex. L. Rev. 877, 878 (2006) (positing that law and morality share a deep structure ñto allow us to resolve various classes of social contract problems flexiblyò). A variation of this theory posits that in a democracy, laws could not be passed without majority support, and thus legal content is based on preex-

Robert Cooter observes in the case of legal punishment, ñ[w]hen law aligns with social norms, the law can use state sanctions to supplement social sanctions. For example, fines can supplement the shame associated with being a tax cheater. Supplementing the social sanction with a legal sanction increases the total sanction.ò[224] Conversely, when the law does not accord with peopleôs norms, the lawôs credibility might be undermined.[225]

Scholars showð in the context of criminal lawð that people frequently assume the lawôs rules are the same as their own moral attitudes.[226] People generally will suppose that the law took the ñrightò approach, one that is consistent with their moral attitudes, even when it did not.[227]

Yet more pointedly, even when legal goals differ from peopleôs norms, the law can sometimes achieve those goals in the guise of those different norms.[228] Specifically, Professor Paul Robinson shows that the Model Penal Code, expressly designed to deter crime, frequently is retributive instead, thereby deferring to lay intuitions and norms of justice.[229] For example, the Code contains the following rules and standards, which are strikingly retributive and are hard to explain under deterrence theories: excuses, such as insanity and duress; a failure to take into account coercive crime control factors, like age, family situation, and difficulty of crime detection; and standards requiring jury speculation as to what the defendant believed or hoped.[230] Robinson explains what might seem like a puzzle by hypothesizing that ñeffective

isting agreement in society at large. Robert E. Scott, The Limits of Behavioral Theories of Law and Social Norms, 86 Va. L. Rev. 1603, 1614 (2000). Another suggests that the law helps coordinate peopleôs behavior by providing a normative focal point. Robert D. Cooter, Three Effects of Social Norms on Law: Expression, Deterrence, and Internalization, 79 Or. L. Rev. 1, 20 (2000); Richard H. McAdams, A Focal Point Theory of Expressive Law, 86 Va. L. Rev. 1649, 1651ï 53 (2000).

[224] Cooter, supra note 223, at 15; accord Saul Levmore, Norms as Supplements, 86 Va. L. Rev. 1989, 2009ï 10 (2000).

[225] See John M. Darley, Kevin M. Carlsmith & Paul H. Robinson, The Ex Ante Function of Criminal Law, 35 Law & Socôy Rev. 165, 183 (2001).

[226] Id. at 165ï 68.

[227] Id. at 181.

[228] Paul H. Robinson & John M. Darley, The Utility of Desert, 91 Nw. U. L. Rev. 453, 454 (1997); Paul H. Robinson, Why Does the Criminal Law Care What the Layperson Thinks Is Just?: Coercive Versus Normative Crime Control, 86 Va. L. Rev. 1839, 1863 (2000).

[229] Robinson, supra note 228, at 1839.

[230] Id. at 1842ï 57.

crime control requires a criminal code that is seen as adhering to the communityôs shared perceptions of just desert.ò[231] He elaborates that

> the perception of a criminal code as doing justice is necessary for the codeôs moral credibility, which in turn is necessary for the effective crime control that the drafters seek. It is necessary because the extent of criminal lawôs moral authority determines the extent of its ability to shape community norms and to influence peopleôs conduct through normative forces.[232]

That is, incorporating communal norms of retribution into criminal laws augments the lawôs ability to deter criminal conduct.[233] This amplification of deterrence works by getting potential criminals to see the communal shame they would suffer were they to commit crimes, thereby deterring them more readily than laws conventionally designed to deterð without retributionð would.[234] To secure greater compliance with criminal law, then, Robinson and Professor John Darley argue for ña just desert allocation of liability, . . . [in an] unusual form . . . : one based upon the communityôs shared principles of justice rather than on those developed by moral philosophers.ò[235]

This view of the harmonious interaction of law and norms has important implications for intellectual property laws with regard to incentive design. Just as criminal law can obtain deterrence by imposing retributive punishments that communally shame offenders, so too can intellectual property laws provide utilitarian incentives to create sounding in moral rights.[236] Given that creatorsô norms evoke their strong personhood and labor interests in their works, intellectual property laws can

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[231] Id. at 1840.

[232] Id.

[233] Robinson & Darley, supra note 228.

[234] Id. at 457; Robinson, supra note 228, at 1840ï 41, 1861ï 62.

[235] Robinson & Darley, supra note 228, at 456.

[236] There is, however, a difference from the criminal context. Criminal law operates to sanction violators, even when they are ignorant of its rules. United States v. Intôl Minerals & Chem. Corp., 402 U.S. 558, 563 (1971). For this reason, coincidence of norm and criminal law sensibly causes even the ignorant to obey the criminal law. By contrast, intellectual property incentives can work only when creators are aware of them. That said, as most authors and inventors are repeat players in the intellectual property system, Liza Vertinsky, Comparing Alternative Institutional Paths to Patent Reform, 61 Ala. L. Rev. 501, 538 (2010), they are likely to have this awareness after a first legal interaction.

amplify the incentives to create by offering those that are protective of, or express solicitude for, these moral-rights interests.[237]

To be sure, there is another conflicting way to see the lawôs role with regard to norms. This alternative view suggests that the law ought to institutionalize those things that lawmakers find desirable but are not norms.[238] According to this perspective, norms frequently come with their own social enforcement systems (like reputational loss), so lawôs force ought to be imposed only when there is no good extra-legal mechanism to achieve a result.[239] Regardless whether this view is sensible, it is not germane to designing intellectual property lawôs incentives. Unlike criminal law or other legal prohibitions (including those against infringement of intellectual property rights), incentives that seek to motivate individuals to create socially valuable worksð something they are under no obligation to doð should align with how people actually view the world. If lawmakers were to decide that certain incentives were optimal in contravention of widespread norms on creation, the incentives would not realistically motivate creators to craft valuable works for society.[240]

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[237] Welfare economics might look at the different individuals and add up utilities to make a rule, but it might make sense within this framework to choose another rule because without it there could be broad harm to the system. That is, to the extent that expressive norms are perceived as fair, creation of intellectual goods might be undermined if those norms are not represented in the law because of a wide perception of unfairness. Cf. Seana Valentine Shiffrin, The Divergence of Contract and Promise, 120 Harv. L. Rev. 708, 710 (2007) (ñAlthough [contract] law should not aim to enforce interpersonal morality as such, the lawôs content should be compatible with the conditions necessary for moral agency to flourish. Some aspects of U.S. contract law not only fail to support the morally decent person, but also contribute to a legal and social culture that is difficult for the morally decent person to accept. Indeed, U.S. contract law may sometimes make it harder for the morally decent person to behave decently.ò).

[238] See, e.g., Feldman, supra note 223, at 232 (describing this view); Charles R. Tittle & Alan R. Rowe, Moral Appeal, Sanction Threat, and Deviance: An Experimental Test, 20 Soc. Probs. 488, 488, 496 (1973); Nigel Walker & Michael Argyle, Does the Law Affect Moral Judgments?, 4 Brit. J. Criminology 570, 570 (1964).

[239] See Feldman, supra note 223, at 232.

[240] Cf. Zamir & Medina, supra note 96, at 327 (ñ[S]ince peopleôs behavior is commonly influenced by social norms and prevailing moral intuitions, any theory seeking to explain and predict peopleôs behavior should take threshold constraints into consideration.ò). In this sense, the context and thrust of my thesis avoids a critique made against Louis Kaplow & Steven Shavell, Fairness Versus Welfare, 114 Harv. L. Rev. 961 (2001). They argue that

> if individuals in fact have tastes for notions of fairnessð that is, if they feel better off when laws that exist or events that they observe are in accord with what they consider to be fairð then analysis under welfare economics will take such tastes into account

Related to work on law and norms are expressive theories of law. According to this branch of thought, ñexpressive theories tell actorsð whether individuals, associations, or the Stateð to act in ways that express appropriate attitudes toward various substantive values.ò[241] Scholars have developed robust expressive legal theories in other legal areas.[242] Professors Elizabeth Anderson and Richard Pildes analyze many constitutional rules aimed at expressing moral values, such as against discrimination under the Equal Protection Clause and in favor of religious freedom under the Establishment Clause.[243] Professor Cass Sunstein writes that environmental laws, such as endangered species protection, are ña symbol of a certain conception of the relationship between human beings and their environment.ò[244] Professor Carol Rose and others suggest that property law expresses ñthe central role of the institution of property in mediating human conflicts and in drawing people into a fruitful moderation and mutual attentiveness.ò[245] Working in the area of criminal law, Professor Dan Kahan, similar to Paul Robinson, argues

when measuring individualsô well-being, just as it will take any other tastes into account.

Id. at 1350. Critics have stated, however, that ñ[t]he soundness of a judgment depends on the validity of the arguments underlying it, not on the number of its supporters or the intensity of their support.ò Zamir & Medina, supra note 96, at 338. This criticism has little salience in the context of offering people incentives to take action; here, what people think matters significantly more than a free-floating rightness or wrongness.

[241] Elizabeth S. Anderson & Richard H. Pildes, Expressive Theories of Law: A General Restatement, 148 U. Pa. L. Rev. 1503, 1504 (2000); accord Scott, supra note 223, at 1622ï 23; Cass R. Sunstein, On the Expressive Function of Law, 144 U. Pa. L. Rev. 2021, 2024ï 28 (1996). In Professor Matthew Adlerôs view, expressive theories conflict with utilitarianism in that maximizing utility has nothing to do with expression. Matthew D. Adler, Expressive Theories of Law: A Skeptical Overview, 148 U. Pa. L. Rev. 1363, 1461ï 63, 1472ï 73 (2000). I, however, think they are compatible, as sending expressive signals through the law can maximize utility. Cf. Adam M. Samaha, Regulation for the Sake of Appearance, 125 Harv. L. Rev. 1563, 1563 (2012) (developing a framework for analyzing appearance-based justifications of laws, including laws addressing campaign finance and broken-windows policing).

[242] Orthogonal is the notion in trademark law that marks can become important for societal and cultural expression. Rochelle Cooper Dreyfuss, Expressive Genericity: Trademarks as Language in the Pepsi Generation, 65 Notre Dame L. Rev. 397, 397ï 98 (1990).

[243] Anderson & Pildes, supra note 241, at 1531ï 51.

[244] Sunstein, supra note 241, at 2024.

[245] Carol M. Rose, Rhetoric and Romance: A Comment on *Spouses and Strangers*, 82 Geo. L.J. 2409, 2410 (1994); accord Nestor M. Davidson, Property and Relative Status, 107 Mich. L. Rev. 757, 760 (2009); Carol M. Rose, Introduction: Property and Language, or, the Ghost of the Fifth Panel, 18 Yale J.L. & Human. 1, 6ï 9 (2006).

that the law can expressively deter people from committing crimes.[246] He suggests, for example, that certain punishments, like imprisonment, express greater community disapproval than do others, like fines.[247] As such, individualsð reasonably seeking to avoid greater community shameð ought to be deterred from committing crime by the former class of punishments more than they would be by the latter.[248] Kahan advises that ña community that cares about deterrence ought to concern itself not just with how much pain different punishments impose and how many dollars they cost, but also with how forcefully they communicate societyôs condemnation.ò[249]

One can likewise see the worth of expressive incentives in intellectual property. In addition to the utility of conferring expressive incentives that protect moral-rights interests so as to spur creators to make valuable works,[250] expressive incentives can also convey solicitude for the personhood and labor values about which authors and inventors care deeply. By mere virtue of this expression, these incentives can also encourage authors and inventors to create and distribute socially valuable works and opt into intellectual property systems that express respect for their moral rights.

Accommodation of expressive incentives in a utilitarian intellectual property system also finds parallel grounding in philosophical thinking on utilitarianism. Utilitarianism, as articulated by classical thinkers like Jeremy Bentham and John Stuart Mill, ñholds that actions are right in proportion as they tend to produce happiness [or pleasure or welfare]; wrong as they tend to produce the reverse.ò[251] The goal is to maximize societyôs overall happiness or welfare.[252] According to Mill and other utilitarians, the things intellectual property laws traditionally seek to

[246] Dan M. Kahan, Social Influence, Social Meaning, and Deterrence, 83 Va. L. Rev. 349, 350ï 52 (1997).

[247] Id. at 352.

[248] Id. at 383ï 85. But see Eric A. Posner, Law and Social Norms 97ï 103 (2000) (arguing that criminal punishments that shame can fail to deter when the relevant subcommunity sees these punishments as a badge of honor).

[249] Kahan, supra note 246, at 383; cf. Samuel W. Buell, The Blaming Function of Entity Criminal Liability, 81 Ind. L.J. 473, 475 (2006) (exposing the link between blame and utility for criminal liability for entities).

[250] Supra text accompanying notes 223ï 40.

[251] John Stuart Mill, Utilitarianism 7 (Hackett Publôg Co. 2d ed. 2001) (1861); accord Jeremy Bentham, An Introduction to the Principles of Morals and Legislation 12 (J.H. Burns & H.L.A. Hart eds., The Athlone Press 1970) (1780).

[252] Mill, supra note 251, at 11ï 12.

promoteð ñthe progress of Science and useful Artsò[253] and societal enjoyment of the goods that tend to be covered by these lawsð are quintessential goals for which utilitarians ought to strive.[254]

Utilitarian thinking in intellectual property is typically one flavor of philosophical utilitarianism: rule utilitarianism.[255] According to this form,

> [i]nstead of individual decision procedures, we evaluate codes of moral rules. The *ideal code* is the set of rules where the consequences of everyone following them would be better than the consequences of everyone following any other set of rules. We then assess acts *indirectly*. The right act is the act called for by the code.[256]

Intellectual property laws establish rules with the aim of maximizing social welfare by encouraging individuals to create valuable works with the reward of incentives, enough to make individuals pursue creation but not so much as to harm society.[257]

Today, we frequently overlook that classical models of utilitarianism account for the expressive effects of various courses of action in selecting the optimal one. Jeremy Bentham made much the same point as Dan Kahan and Paul Robinson about choosing criminal punishments that express community shame to maximize punishmentsô efficacy.[258] Both Bentham and Mill indicate that virtue, freedom, individuality, and other ethical goals that many might see as foreign to utilitarianism are desirable goals in that they bring people and society happiness or pleasure, thereby maximizing general welfare.[259] Measuring individual utility based on ñthe relative personal importance [a person] assigns to various

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[253] U.S. Const. art. I, § 8, cl. 8.

[254] See Mill, supra note 251, at 14 (listing as fundamental goals: mental cultivation; pleasure from music, art, and poetry; and knowledge about nature and history); Henry Sidgwick, The Methods of Ethics 114 (reprt. ed. 1922) (1874) (listing as ideal goods: knowledge, the development of knowledge, and beauty).

[255] See Moore, supra note 146, at 65.

[256] Tim Mulgan, Understanding Utilitarianism 120 (2007); accord David O. Brink, Millôs Ambivalence About Rights, 90 B.U. L. Rev. 1669, 1671 (2010).

[257] See supra Section I.A. But cf. Moore, supra note 146, at 74ï 76 (observing that American copyright and patent laws might not implement rule utilitarianism strictly).

[258] Bentham, supra note 251, at 170ï 71 nn.nï o.

[259] Id.; see also J.S. Mill, On Liberty 55 (The MacMillan Co. 1947) (1859); Mill, supra note 251, at 36ï 37; cf. Alan Ryan, Property and Political Theory 10 (1984) (ñThe line of demarcation between the instrumental view [of property and work] and the self-developmental view is not sharp.ò).

economic (and noneconomic) alternativesò[260] allows us to measure the value individuals attach to the constellation of interests at stake from a moral-rights perspective.[261] Moreover, Mill defends the protection of moral rights, or more generally, ña personal rightð a claim on the part of one or more individuals, like that which the law gives when it confers a proprietary or other legal right.ò[262] He reasons that

> [j]ustice is a name for certain classes of moral rules which concern the essentials of human well-being more nearly, and are therefore of more absolute obligation, than any other rules for the guidance of life; and the notion which we have found to be of the essence of the idea of justiceð that of a right residing in an individualð implies and testifies to this more binding obligation.[263]

Respecting rights, according to Mill, can have social utility in large part because doing so prevents harm to others on metrics that matter to them.[264]

So too in intellectual property we can see the desirability of accounting for notions of moral rights in utilitarianism. Because moral rightsð at least the constellation of personhood and labor interests discussed aboveð matter so much to authors and inventors, accounting for them in the rules that constitute the American utilitarian system of intellectual property ought to maximize overall welfare by incorporating the metrics

[260] John C. Harsanyi, Morality and the Theory of Rational Behaviour, *in* Utilitarianism and Beyond 39, 53 (Amartya Sen & Bernard Williams eds., 1982).

[261] Cf. Zamir & Medina, supra note 96, at 333ï 35 (discussing how utilitarians sometimes argue that accounting comprehensively for both long-term and indirect effects in their analyses ñleads to conclusions that are akin to threshold deontologyò).

[262] Mill, supra note 251, at 50.

[263] Id. at 59.

[264] Id. at 57ï 58, 60ï 61. Contemporary philosophers make variants of this argument. E.g., R.M. Hare, The Language of Morals 57 (Oxford Univ. Press 1991) (1952). These philosophical parallels might not satisfy those normatively committed above and beyond all other considerations to moral rights rather than utilitarianism. Some contemporary philosophers, most notably Professor David Lyons, seek to show how to read Mill as consistent with a ñutilitarian approach to moral rights and justiceò that avoids common problems philosophers usually encounter in trying to fuse the two, such as reconciling utilitarianismôs maximization of welfare with inviolable rights. David Lyons, Rights, Welfare, and Millôs Moral Theory 14ï 17 (1994); accord Brink, supra note 256 at 1691ï 99; Philip Pettit, The Consequentialist Can Recognise Rights, 38 Phil. Q. 42, 51ï 53 (1988); Peter J. Hammond, Utilitarianism, Uncertainty and Information, *in* Utilitarianism and Beyond, supra note 260, at 85, 90ï 102. But see Amartya Sen, Personal Utilities and Public Judgements: Or Whatôs Wrong with Welfare Economics?, 89 Econ. J. 537, 554 (1979).

that matter to creators so as to maximize the return to society on creative works (but not so far as to harm society).

This survey of other branches of scholarship, in both law and philosophy, deepens the support for enlarging the understanding of incentives in intellectual property to include those that are expressive. Literature on law and norms suggests that intellectual property incentives ought to rely on authorship and inventorship norms that will persuade authors and inventors to create. Expressive theories of law further indicate the utility of incentives in intellectual property that express solicitude for creatorsô moral-rights interests. Finally, philosophical thinking on utilitarianism endorses and encourages looking to non-pecuniary interests that contribute to peopleôs happiness or pleasure to maximize utility for society.

I now turn to areas in intellectual property law that can be understood as potential areas to build up expressive incentives.

III. POTENTIAL APPLICATIONS

In this Part, I examine areas in American copyright and patent laws in which expressive incentives already seem to be at work. I do so for two reasons. First, these are promising areas in which to consider implementing useful expressive incentives, even if the current form such incentives take is anemic. Second, these areas reveal that expressive incentives already might be at workð even if not optimallyð in some pockets of copyright and patent laws, providing further explanatory power for these areas. My recommendations in this Part are tentative. The precise form expressive incentives ought to take and the ideal mix of expressive and pecuniary incentives are both important questions for future study.[265]

In turn, I consider attribution, copyrightôs structure of duration, copyrightôs right of reversion, copyrightôs originality requirement, patentôs former first-to-invent rule, and patentôs written description requirement. I also discuss how problematic rights of integrity, adaption rights, and restraints on alienation of exclusive rights can be to the overall expressive goals of copyright and patent law. I conclude with some thoughts on legal structures that might account for the diverse set of authors and

[265] Cf. Yuval Feldman & Orly Lobel, The Incentives Matrix: The Comparative Effectiveness of Rewards, Liabilities, Duties, and Protections for Reporting Illegality, 88 Tex. L. Rev. 1151, 1152 (2010) (studying in the context of encouraging employees to report illegality the efficacy of four different legal mechanisms: anti-retaliation protection, duty to report, liability fines, and monetary incentives).

inventors that create and the different incentives that might work for them.

A. Attribution

Perhaps the most promising expressive incentive is a right attributing a protected work to its creators. In this Section, I explore why attribution can serve as an expressive incentive, as well as how attribution is found in part in patent law but is principally absent in copyright law. I also sketch a more robust form of attribution.

A workôs attribution to its creators can be an expressive incentive for two reasons, both related to personhood interests. First, attribution can bolster an authorôs or inventorôs reputation.[266] Attribution makes it easy to broadcast a creatorôs involvement, enabling the public to give kudos to the creator. A strongly positive reputation can provide the creator with financial rewards, such as increased professional opportunities and a higher salary.[267] In this sense, providing attribution to creators is nothing more than a traditional pecuniary incentive.[268] Yet attribution can also be expressive. By bolstering a creatorôs reputation, attribution expresses the creatorôs central value to his or her work. Just as Robert Merton observed with regard to eponymy in scientific theories, attribution rewards the creator with reputational gain, something important to the creator in having created the work.[269]

Attribution can also serve as an expressive incentive in another way. In a visible way, it establishes a link between the creator and the creatorôs work. By doing so, it concretizes the personhood interest creators have in viewing their creations as strong components of their self-concept.[270] Even if the creator ends up having no rights to control the workôs use, attribution retains for the creator this visible link.[271]

The case of attribution shows that a single right can confer both pecuniary and expressive incentives. Attribution can provide creators with

[266] Fisk, supra note 215, at 50.

[267] Id.

[268] Cf. Hansmann & Santilli, supra note 61, at 104ï 05 (explaining how moral-rights protections might serve pecuniary purposes).

[269] See supra Section II.B; see also Fisk, supra note 215, at 76ï 101 (describing contemporary attribution norms, such as those for Hollywood screen credit and in scientific articles).

[270] See supra Section II.B.

[271] Cf. Fisk, supra note 215, at 53 (ñ[L]egal rights to knowledge must be bifurcated into exclusivity rights . . . and attribution rights . . . .ò).

increased pecuniary rewards during their careers, as well as boost their reputation and highlight their creations as extensions of the self. Attribution is considered to be highly desirable to artists and inventors. In fact, artists frequently thinkð mistakenlyð that seeking copyright protection is worthwhile to provide them with attribution rights.[272] Moreover, by 2004, authors were choosing Creative Commons licenses[273] requiring attribution approximately ninety-eight percent of the time, prompting Creative Commons to make it a standard feature of its licenses.[274] Empirical work also shows that, in order to receive attribution for their work, creators are willing to reduce significantly the amount of money they are willing to accept to license their intellectual property rights.[275] Additionally, in a recent instance, a photographer was content to receive attribution for a photograph she took of a sunglasses-wearing Hillary Clinton that was virally used and viewed by many others imagining that Clinton was exchanging certain invented text messages with others, after initially being upset that the photograph had been used without asking, paying, or crediting her.[276] Katherine Strandburg also hypothesizes that some doctorsô prominent and controversial patent-infringement lawsuits against other doctors for using their patented medical procedures were

[272] E-mail from Jessica Sibley, supra note 201.

[273] Creative Commons ñprovide[s] . . . a set of copyright licenses and tools that create a balance inside the traditional óall rights reservedô setting that copyright law creates,ò ranging from the possibility of opting out of copyright altogether to reserving some or all rights. About, Creative Commons, http://creativecommons.org/about (last visited Mar. 29, 2012).

[274] Glenn Otis Brown, Announcing (and Explaining) Our New 2.0 Licenses, Creative Commons, May 25, 2004, http://creativecommons.org/weblog/entry/4216.

[275] Christopher Jon Sprigman, Christopher J. Buccafusco & Zachary C. Burns, Whatôs a Name Worth?: Valuing Attribution and Publication in Intellectual Property, 93 B.U. L. Rev. (forthcoming 2013) (manuscript at 26ï27), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2011403. Based on this finding, Sprigman, Buccafusco, and Burns tentatively argue against an attribution right in creators because it would likely result in fewer (or less efficient) bargains, because now authors must bargain for this valuable right. Id. (manuscript at 44). That neglects the ex ante value that attribution can serve to get authors to create and distribute in the first place. Relatedly, this finding overlooks the situation in which creators bargain over attribution and other rights before the creation of particular works, as frequently happens in employment and contracting agreements. The finding also assumes that an endowment effect would prevent authors from efficiently bargaining over attribution vis-à-vis other rights.

[276] Emily Heil, ótTexts from Hillaryô Photographer Didnôt LOLð at First, Wash. Post, Apr. 11, 2012, 11:34 AM, http://www.washingtonpost.com/blogs/in-the-loop/post/texts-from-hillary-photographer-didnt-lol-at-first/2012/04/11/gIQApNcZAT_blog.html.

instigated because they had not received credit they felt they were due for their inventions.[277]

An attribution right can take different forms. The protected work itselfð such as a film, novel, computer software, or machineð might contain the requisite attribution. By contrast, attribution might be more indirect, by appearing in a registration or application for legal rights in the work. In this sense, attribution will be visible only to those reviewing the workôs legal rights.

Moreover, varying remedies might be provided for breach of attribution. The law might provide damages for lost financial opportunities[278] or for personhood harms suffered. It might also require correction of attribution errors. Alternatively, the law might nullify exclusive rights in the work or forbid distribution of a creatorôs works lacking the proper attribution.[279]

Current patent and copyright laws ever so faintly provide for attribution. Patent law requires attribution to inventors of patented inventions by requiring that all inventors be named in an inventionôs patent application (and any issued patent).[280] In so doing, patent law acknowledges the individuals who contributed sufficiently to the inventionôs creation. Under the recently enacted America Invents Act, patent law provides that the PTO can authorize a correction, with no further repercussion to patent rights, for any failure to attribute the invention in the patent to the correct set of inventors.[281]

Although this form of attribution has hardy aspects, it is relatively weak overall. Although correcting attribution errors is protective of the attribution interest, its principal infirmity comes from where it happens. It is far more indirect in attributing than a requirement directly crediting all produced or commercialized patented inventions to their inventors.

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[277] Katherine J. Strandburg, Physicians and Patents: A Tale of Two Innovation Systems, *in* Intellectual Property at the Edge: The Contested Contours of IP (Rochelle C. Dreyfuss & Jane C. Ginsburg eds., forthcoming 2013) [hereinafter IP at the Edge].

[278] Fisk, supra note 215, at 53.

[279] See id. (noting the presence of this latter remedy in moral-rights regimes).

[280] 35 U.S.C. §§ 115ï 116 (2006) (amended 2011).

[281] Leahy-Smith America Invents Act, Pub. L. No. 122-29, §§ 4, 20, 125 Stat. 284, 295 (2011) (to be codified at 35 U.S.C.). The previous implementation of patent law had provided two possible remedies for failure to attribute the invention in the patent to the correct set of inventors. If an attribution error was made without deceptive intent, the PTO could have authorized a correction, with no further repercussion to the patent rights. 35 U.S.C. §§ 115ï 116, 256 (amended 2011). Otherwise, an attribution error would have rendered the patent invalid. Pannu v. Iolab Corp., 155 F.3d 1344, 1349ï 50 (Fed. Cir. 1998).

The current requirement conveys attribution information not to all users or viewers of the invention, but only indirectly to those people who see the relevant patent.[282]

Interestingly, as law and practice moved away from granting employees ownership of patent rights in their inventions,[283] one might have imagined that patent lawôs attribution to inventors would have also fallen away. Yet patent law still requires this attribution even in the not infrequent case that inventors working in a corporate setting have contracted away their patent rights to their employer.[284] Catherine Fisk ascribes this requirement to ñreinforce[ment] in the public mind [of] the idea that individual effort, not an organized and employer-sponsored research agenda, produced most inventions.ò[285] She concludes that patent law, in requiring attribution, invites inventors to identify their creations as a product of their personal genius.[286]

Attribution fares worse in American copyright law than in patent law. American copyright law lacks a general right attributing protected works to their authors.[287] Nothing in copyright law generally requires that authors be identified as a condition for copyright protection or provides authors with an attribution right.[288] That said, copyright law will sometimes encourage indirect attribution of protected works. It does so by promoting copyright registration, which requires that a workôs authors be listed.[289] To secure copyright protection, a work need not be registered[290] (and thus there is no comprehensive requirement of indirect attribution). Copyright law, however, provides a significant incentive to

[282] That said, many, if not most, commercialized patented inventions are attributable to their inventors indirectly through the invention itself. Patent law encourages patentees to mark their inventions with the associated patent number, so as to provide notice (constructively) of patent rights for damages recovery in an infringement action. 35 U.S.C. § 287(a) (amended 2011). Doing so leads interested parties from invention to patent, which attributes the invention to its inventors.

[283] Fisk, supra note 161, at 1130.

[284] Christopher A. Cotropia, The Individual Inventor Motif in the Age of the Patent Troll, 12 Yale J.L. & Tech. 52, 58 n.22 (2009) (citing 35 U.S.C. § 116); Merges, supra note 215, at 2.

[285] Fisk, supra note 161, at 1140.

[286] Id.

[287] Dreyfuss, supra note 4, at 641 & n. 181.

[288] Id. That said, courts often find that failure to attribute a work to its author weighs against finding a fair use. See Núñez v. Caribbean Intôl News Corp., 235 F.3d 18, 23 (1st Cir. 2000); Narell v. Freeman, 872 F.2d 907, 914 (9th Cir. 1989).

[289] 17 U.S.C. § 409 (2006).

[290] Id. § 408(a).

register copyrights, as registration is almost always a prerequisite to an infringement action.[291] When a copyright is registered, then, attribution happens indirectly, similarly as in patent law. Much like patent law, copyright law provides for supplementary registration to correct attribution errors, but does not invalidate the copyright.[292]

Not only is indirect attribution not required in copyright law, but in some cases the actual individual creators of a copyrighted work are not deemed to be authors of the work and are thus erased from any indirect attribution that ultimately occurs. This situation arises with regard to works made for hire. According to American copyright law, copyright automatically vests in the employer for these works, works created by employees in the scope of their employment (and by some independent contractors commissioned to do works).[293] When a copyright is registered in a work made for hire, the employer is to be listed as the author, with nary a mention of the employee-creator.[294] As of 1955, forty percent of all copyright registrations were works made for hire and the percentage has likely increased since then.[295] For this significant class of works, there is no attribution to the individual creator.

Even beyond registration as a situs of attribution, copyrightôs work-for-hire doctrine erases the employee-creator. The work-for-hire doctrine principally originated out of concerns for efficiency. As a practical matter, notes Kenneth Crews, it is not surprising that ñall rights to [these] works would accordingly repose with the employer who presumably funded the creation.ò[296] If ownership of works by employees would nearly always pass to the employer by agreement (or similarly, commissioned works to the commissioner), it was thought to be more effective to grant the initial copyright to the patron than require a transfer each time.[297] The doctrine originated in the courts in the mid-nineteenth century, with judges deciding that copyright in certain employee-created

[291] Id. § 411.

[292] 37 C.F.R. § 201.5(b)(2)(ii) (2011).

[293] 17 U.S.C. § 201.

[294] Id.; see also U.S. Copyright Office, Form TX, http://www.copyright.gov/forms/formtx.pdf (last visited Mar. 30, 2012).

[295] Lemley, supra note 52, at 883.

[296] Kenneth D. Crews, Copyright Duration and the Progressive Degeneration of a Constitutional Doctrine, 55 Syracuse L. Rev. 189, 237 (2005).

[297] See Ginsburg, supra note 64, at 1088. That said, there is the countervailing interest of ensuring that creators start out with some legal entitlement to facilitate optimal bargaining. Supra text accompanying notes 219ï 222.

works was intended to be held by the employer.[298] Congress implemented this doctrine statutorily in 1909,[299] later revising it in 1976.[300]

When Congress codified the work-for-hire doctrine, rather than rewrite the copyright corpus in an unwieldy way, it labeled the employer or commissioner as the workôs author.[301] In this sense, the label can be viewed as nothing more than a term of art to designate the copyrightôs legal owner.[302] Others, like Justin Hughes, suggest another reason for this label: the patron has ñtremendous control over the artistic program,ò particularly when ñthe patronôs intentions imbue and control the artistic endeavor.ò[303] Judicial analysis of whether a work was made for hire reflects this understanding.[304] This conception accords with at least some artistsô views of commissioned and noncommissioned works: Hughes tells of a visual artist who ñsaid that although her patron had given her great ócreative leeway,ô she could not put her óheart and soulô into the work.ò[305]

That said, this understanding is arguably out of place given the authorial focus of the Constitutionôs grant of congressional power to enact copyright laws.[306] Moreover, many authors view even commissioned works as personal experiences within their control.[307] Even if it is true that the patron has a greater degree of control over a work than when the individual creator works alone, the creator is not an automaton but is engaged in individual expression within the patronôs constraints.

The truth about hired authorship likely lies somewhere between the two poles. As Fisk observes, ñ[e]arly twentieth-century firms used that same mythic genius in their effort to assert corporate control over an increasingly wide range of intellectual property, while at the same time

[298] Bracha, supra note 3, at 252ï 54; Fisk, supra note 141, at 10ï 11.

[299] Copyright Act of 1909, ch. 320, § 62, 35 Stat. 1075, 1088 (superseded 1976).

[300] Copyright Act of 1976, Pub. L. No. 94-553, §§ 101, 201, 90 Stat. 2541, 2544, 2568 (codified in scattered sections of 17 U.S.C.).

[301] Copyright Act of 1909, ch. 320, § 62, 35 Stat. 1075, 1088 (superseded 1976); Bracha, supra note 3, at 261.

[302] Fisk, supra note 141; Jennifer Sutherland Lubinski, Comment, The Work for Hire Doctrine Under *Community for Creative Non-Violence v. Reid*: An Artistôs Fair Weather Friend, 46 Cath. U. L. Rev. 119, 120ï 21 (1996).

[303] Hughes, supra note 54, at 154; accord Hansmann & Santilli, supra note 61, at 134; Peter Jaszi, On the Author Effect, *in* The Construction of Authorship, supra note 4, at 29, 34.

[304] Hughes, supra note 54, at 155ï 56 (citing cases).

[305] Id.

[306] Dreyfuss, supra note 4, at 602ï 04; Ginsburg, supra note 64, at 1089ï 90.

[307] Supra text accompanying note 126 (quoting Michelangelo).

downplaying or ignoring individual creative genius so as to assert corporate ownership over those copyrighted works.ò[308] In most instances, employers are likely dictating some contours of employeesô works, while employees are devising and implementing others. The erasure of the employee-writer, then, from copyright law (including from any attribution similar to that obtained by those outside of the work-for-hire doctrine) likely underrepresents the degree of personhood and labor interests the individual creator has in these works. In fact, French copyright law, which is heavily grounded in moral rights, holds as ña dominant principle . . . that only a natural person may be an author.ò[309] Therefore, French law, albeit with some exceptions, ñprecludes the existence . . . of doctrines of works for hire that vest not only the initial ownership of copyright, but also the status of author, in the employer.ò[310]

In sum, then, absent a small class of optional copyright registrations for works not made for hire compared with the class of copyrighted works at large, copyright law does not generally provide for attribution of works.

Nonetheless, via the Visual Artist Rights Act of 1990 (ñVARAò), copyright law does confer an attribution right in a very limited subset of copyrighted works to creators producing visual art in distributions of less than two hundred.[311] These creators have the right ñto claim authorshipò and prevent the use of their name on works created by others or modified versions of their work.[312] By contrast, European laws typically provide a general right of attribution as recognition of the authorôs moral rights in a work.[313]

Other areas of American law are equally unhelpful in providing authors with attribution rights. Until 2003, many federal courts had held that the Lanham Act would guard authors against false attribution of their works.[314] They had relied on Section 43(a) of the Act, which provides that ñ[a]ny person who, on or in connection with any goods or ser-

[308] Fisk, supra note 141, at 6.

[309] Andre Lucas & Pascal Kamina Robert Plaisant, France, *in* International Copyright Law and Practice § 4(1)(b) (Paul Edward Geller ed., 2011).

[310] Id.

[311] 17 U.S.C. §§ 101, 106A (2006).

[312] Id. § 106A(a).

[313] Lastowka, supra note 144, at 68ï 69.

[314] E.g., Smith v. Montoro, 648 F.2d 602, 604 (9th Cir. 1981); Warner Bros. Pictures v. Majestic Pictures Corp., 70 F.2d 310, 311ï 12 (2d Cir. 1934); Simon & Schuster v. Dove Audio, 970 F. Supp. 279, 291 (S.D.N.Y. 1997).

vices . . . uses in commerce . . . any false designation of origin . . . which . . . is likely to . . . deceive as to . . . the origin . . . of his or her goods, services, or commercial activities by another person . . . shall be liable in a civil action.ò[315] But in 2003, the Supreme Court held that the rights conferred by the Lanham Act belong to ñthe producer of the tangible goods that are offered for saleò rather than ñthe author of any idea, concept, or communication embodied in those goods.ò[316] The Court rejected the latter, broader possible interpretation because it would ñcreat[e] a species of perpetual patent and copyright, which Congress may not do.ò[317] As the discussion above implies and as Professor Barton Beebe points out, however, copyrightð as currently implementedð creates rights distinct from attribution: ñthe exclusive right to claim attribution does not necessarily carry with it the exclusive right to control the uses of the good to which that attribution is affixed.ò[318]

In sum, patent law provides indirect attribution to inventors generally. Copyright law provides attribution indirectly in a limited number of cases and directly in an even smaller number of cases under VARA. Other laws do not seem to protect attribution.

Given that attribution seems likely to be a valuable expressive incentive, it is useful for further exploration as a possible motivator for authors and inventors to create. In fact, authors and inventors might consider it to be more valuable than pecuniary rights provided by intellectual property protection.[319] Moreover, depending on implementation, society might be able to provide this right at a relatively low cost. Linking attribution of individual creatorsð even for works made for hireð to any registration or application for intellectual property rights would be cheap to provide. By contrast, requiring attribution to an individual creator every time his or her creation (or any part of it) is invoked

[315] 15 U.S.C. § 1125(a)(1)(A) (2006).

[316] Dastar Corp. v. Twentieth Century Fox Film Corp., 539 U.S. 23, 37 (2003).

[317] Id.

[318] Barton Beebe, Intellectual Property Law and the Sumptuary Code, 123 Harv. L. Rev. 809, 887 (2010). More helpful have been some courtsô interpretations of the Digital Millennium Copyright Act, which prohibits certain removals of copyright management information attached to copyrighted works. See 17 U.S.C. §§ 1201ï 1205 (2006). Some courts have found a violation under this provision when attribution to the author was removed from a work, even though it does not seem Congress intended such an instance to count as an encroachment. Joseph P. Liu, *Universal v. Corley*ð The Canonical, Yet Atypical, DMCA Case, *in* IP at the Edge, supra note 277 (manuscript at 10).

[319] See Fisk, supra note 215, at 50.

could be expensive to implement, given the amorphousness of invocation and the possibility that the quality of creatorsô works would suffer from constantly needed attributions.[320] However, some bright-line attribution rule that is less extreme, yet still protective of many invocations or uses of creatorsô works, might be a valuable component of intellectual property protection. Due to both the probably high value to authors and inventors and the possible low cost to society, a carefully designed attribution right might be a useful incentive for intellectual property laws to provide, perhaps even replacing some other pecuniary incentive.

B. The Structure of Duration

As another example of an expressive incentive likely to be helpful, this time just in copyright law, consider the structure of duration. Take Stieg Larsson. About a year before he died, he finished writing a trilogy of crime novels[321] that, after his passing, went on to sell more than thirty million copies.[322] Under American copyright law, which confers protection for the authorôs lifetime plus seventy years, these books will remain under copyright for just over seventy years.[323] J.D. Salinger, by contrast, published *The Catcher in the Rye* at the age of around thirty-two and died fifty-nine years later.[324] By the same rule, his copyright endures for 129 years (the fifty-nine years of his life following the writing plus seventy years after his death). Thus, Salinger receives nearly fifty-nine yearsô worth of protection that Larsson does not. Even a single authorôs works can have dissimilar durations. Had Salinger written another novel in the days before his death, copyright in that work would endure for six decades less than that of *The Catcher in the Rye*. Copyright duration, then, varies based on the length of the authorôs lifetime and not on the work that has been created.

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[320] Rebecca Tushnet, Naming Rights: Attribution and Law, 2007 Utah L. Rev. 789, 797–811.

[321] Millennium Trilogy by Stieg Larsson, Literary Mag. Swedish Books & Authors, http://www.stieglarsson.com/Millennium-series (last visited Aug. 23, 2012). The books in the trilogy are *The Girl with the Dragon Tattoo*, *The Girl Who Played with Fire*, and *The Girl Who Kicked the Hornet's Nest*. Id.

[322] Genevieve Hassan, Hollywood Takes on Girl with the Dragon Tattoo, BBC News, Dec. 25, 2011, 8:03 PM, http://www.bbc.co.uk/news/entertainment-arts-16110375.

[323] See infra text accompanying note 340.

[324] See Charles McGrath, J.D. Salinger, Author Who Fled Fame, Dies at 91, N.Y. Times, Jan. 29, 2010, at A1.

At first glance, this durational structure seems hard to explain in a utilitarian framework: why would authors with similar works who just happened to create them at different points in their lifetimes be accorded perhaps wildly different durations for their copyrights? After describing how American copyright law settled on this durational structure, I return to this question and explain that, viewed through an expressive lens, copyrightôs durational structure is plausibly sensible in a utilitarian system.

Until 1976, copyright duration did not vary based on an authorôs lifetime. Instead, it was fixed and keyed to a workôs publication. The 1710 Statute of Anne protected new books for fourteen years, with a term of fourteen more if the author was still living.[325] In 1790, Congress enacted the first federal copyright law, with the same durational terms.[326] Over time, Congress extended copyright duration, and by 1909, the law provided for a first term of twenty-eight years, followed by a renewal term of another twenty-eight years.[327]

In 1976, Congress completed a major overhaul of copyright law. According to the House Report, changes to copyrightôs durational structureð instituting a general term of lifetime of the author plus fifty yearsð stood above other revisions.[328] The House of Representatives Judiciary Committee felt bound to adduce the rationale for this monumental change. Some proffered reasons related to the longer duration provided by this change, such as accounting for increased average life expectancies for authors and for the longer commercial life of works.[329] One important reason, however, related to the change in durational structure, from a fixed term to one keyed to the authorôs lifetime. Congress observed that a ñvery large majority of the worldôs countries have adopted a copyright term of the life of the author and 50 years after the authorôs death.ò[330] This disparity had already ñprovoked consider able [sic] resentment and some proposals for retaliatory legislation.ò[331] Re-

[325] Bugbee, supra note 65, at 53ï 54.
[326] Copyright Act of 1790, ch. 15, § 1, 1 Stat. 124, 124 (repealed 1802).
[327] Copyright Act of 1909, ch. 320, § 23, 35 Stat. 1075, 1080 (superseded 1976).
[328] See H.R. Rep. No. 94-1476, at 133 (1976) [hereinafter 1976 House Report].
[329] Id. at 134.
[330] Id. at 135.
[331] Id.

ciprocal protection through conformity with international practice, Congress thought, would redound to the benefit of American authors.[332]

Despite these asserted advantages, the Copyright Office noted two downsides to switching to a life-plus-years format. First, it would be easier to measure copyright duration with a fixed term commencing with the workôs creation or publication.[333] While an author is still alive, one could not definitively compute a copyrightôs duration with a life-plus-years structure. Even when the author has died, information about the authorôs date of death might not be readily accessible.[334] By contrast, one can measure a fixed copyright duration once one knows when the copyright commenced.[335] Additionally, a fixed duration could be employed across the board regardless of the type of copyrighted work, whereas a life-plus-years format would necessitate treating certain worksð like anonymous worksð differently.[336]

The 1976 Act provided a different rule for the duration of three types of copyrighted works that do not fall under the general rule: works made for hire, anonymous works, and pseudonymous works.[337] The last two involve works whose true author is unknown; thus, copyright duration

[332] Id. Another reason the Judiciary Committee provided is that it would simplify matters. Before, a person inquiring into whether a work was in the public domain for purposes of, for example, licensing, would need to look at the workôs date of registration or publication. But now an authorôs copyrights would all expire simultaneously, a ñdefinite, determinable event, and it would be the only date that a potential user would have to worry about.ò Id. at 134. Surely, that is true. But it also creates additional offsetting complications, which make it unlikely that this change alone justifies the structural change. For one thing, a term fixed to the authorôs lifetime is more difficult to trace than one fixed to some fact about the relevant work. For example, it is harder to know if a bookôs author is still alive (or ascertain the authorôs date of death) than to know when a bookôs copyright was registered (or when the book was published, for that matter). See Landes & Posner, supra note 7, at 361; Avishalom Tor & Dotan Oliar, Incentive To Create Under a ñLifetime-Plus-Yearsò Copyright Duration: Lessons from a Behavioral Economic Analysis for *Eldred v. Ashchroft*, 36 Loy. L.A. L. Rev. 437, 456 (2002). For another thing, it becomes harder to determine copyright duration for works made up of separate contributions (such as a book comprised of original essays), as the copyright in each contribution will expire at the conclusion of seventy years following the death of its author.

[333] See Copyright Office Report, supra note 59, at 48.

[334] Id. Accordingly, the 1976 Act provides a presumption as to an authorôs death. See 17 U.S.C. app. § 302(e) (1976), amended by 17 U.S.C. § 302(e) (2006).

[335] Copyright Office Report, supra note 59, at 48.

[336] Id. at 48ï49.

[337] See 17 U.S.C. app. § 302(c). This Act also treats differently works that were jointly authored but not made for hire, by virtue of the fact that they have multiple authors. See id. § 302(b). Copyright in these works lasts for the life of the last surviving author plus fifty years after the last surviving authorôs death. Id.

cannot be based on the authorôs life.[338] For these three types of works, Congress provided for a term of seventy-five years from the year of first publication or one hundred years from creation, whichever expires sooner.[339]

In 1998, Congress, in the Sonny Bono Copyright Term Extension Act, extended the postmortem term of copyright duration to seventy years.[340] (The increase of twenty years was applied to all copyrights, extending the duration of works for hire and anonymous and pseudonymous works to ninety-five years from the year of first publication or 120 years from creation, whichever expires sooner.[341])

I now show how copyright lawôs durational structure can serve as an expressive incentive. It is important not to conflate durationôs structure with its length. In theory, duration can be long or short.[342] Setting an appropriate length within the framework of a utilitarian system is principally an economic question.[343] In fact, commentators note that patent durationð currently set principally at twenty years from the date of patent application[344]ð is significantly shorter than copyrightôs because of economic differences between the two subject matters. There is greater social need to have patented items fall into the public domain so that they might be built upon cumulatively to advance scientific and technological progress, while copyrighted matter is not as necessary in that way, not least because copyright law permits subsequent creators to borrow ideas and certain amounts of expression from these works.[345]

Once one chooses an appropriate durational length for copyright, one still must decide how to structure that duration. That is, a copyrightôs duration might be statistically equivalent in length whether it lasts, say, seventy-five years from the workôs creation or, instead, for the authorôs

[338] See id. § 101.

[339] Id. § 302(c).

[340] Sonny Bono Copyright Term Extension Act, Pub. L. No. 105-298, sec. 102(b), 112 Stat. 2827 (1998) (codified in scattered sections of 17 U.S.C.).

[341] 17 U.S.C. § 302(c) (2006).

[342] See Saul Cohen, Duration, 24 UCLA L. Rev. 1180, 1181 (1977).

[343] See Joshua S. Gans & Stephen P. King, Patent Length and the Timing of Innovative Activity, 55 J. Indus. Econ. 772, 772 (2007); Ted OôDonoghue, Suzanne Scotchmer & Jacques-François Thisse, Patent Breadth, Patent Life, and the Pace of Technological Progress, 7 J. Econ. & Mgmt. Strategy 1, 4 (1998).

[344] 35 U.S.C. § 154(a)(2) (2006).

[345] See Samuel J. Elder, Duration of Copyright, 14 Yale L.J. 417, 422 (1905); Landes & Posner, supra note 7, at 361.

lifetime plus fifty years.[346] In fact, when it enacted the 1976 Copyright Act, Congress saw the two terms (the former for works made for hire and anonymous and pseudonymous work, the latter for other works) as statistically equivalent.[347] Once the decision that approximately seventy-five years is an appropriate length is reached, one must still decide whether to create a term keyed to the relevant workôs creation, the authorôs lifetime (plus some possible fixed term), or some other variable altogether.

It is often noted that copyright duration is one of copyright lawôs most visible components to authors, if not the most visible.[348] One way to provide incentive for people to create, then, is to use a durational structure that is particularly salient to creators. The structure of copyright duration can be seen as doing just that by invoking the authorôs personhood interests as an incentive. By setting the authorôs lifetime as the essential variable of copyright protection, copyright law shields works in an author-centered way: for the authorôs lifetime (and a fixed terms of years following that). The authorôs lifetime is arguably the duration for which the authorôs personhood interest in his or her works remains most important, in that the author is associating his or her works with self-concept and building a reputation.[349] Duration with a life-plus-years term is keyed to the author himself or herself, also sending a signal of how important the author is in copyright law.[350] For all of these reasons, copyrightôs durational structure can serve as an expressive incentive, which can be particularly helpful to advancing copyrightôs goal of encouraging artistic creations.

Were copyright law to provide a statistically equivalent duration of a fixed term, it might not offer the same incentive to authors because it would not be offering protection for the authorôs personhood or signaling any solicitude for it. Keying duration to the workôs creation or registration, as was once done, signals the workôs importance at the authorôs

[346] See Copyright Office Report, supra note 59, at 50ï 51.

[347] 1976 House Report, supra note 328, at 138; accord Kaplan, supra note 66, at 112ï 13.

[348] See, e.g., 1976 House Report, supra note 328; Kaplan, supra note 66, at 114ï 15.

[349] See supra Subsection II.B.1.

[350] That said, extending copyright duration beyond the authorôs lifetime arguably goes beyond a moral-rights justification, given that the author is no longer alive. The Constitutionality of Copyright Term Extension, supra note 25, at 682ï 83. The addition of some term of years past the authorôs lifetime, however, acts like an insurance policy, giving some certain degree of protection, when a person creates a copyrightable work toward the end of his or her life.

expense. The current durational structure, by contrast, assures the author that protection will attach for the authorôs lifetime (and then some).[351] In fact, Professors Avishalom Tor and Dotan Oliar show, in an experiment, that individuals prefer a life-plus-years term like Congress implemented to a comparable fixed term.[352]

My understanding also makes sense of how authors seem to get treated differently for copyright duration. When two people create nearly identical works at different points in their lifetimesð one, say, the day before death and the other, say, fifty years before deathð they will receive different terms of protection (seventy years in the first example and 120 in the second). When the same author creates two worksð one early in life and another later onð copyright protection for both will expire at the same time, meaning different protective terms for each work. These results seem unfair from the narrower vantage point of rewarding equal term lengths to all similarly situated people or works. However, by viewing duration as an expressive incentive, these differential lengths make sense. If protection of the authorôs personhood interests is an important goal, awarding a term that takes account of the authorôs particular circumstances fulfills that goal in a way the equivalent fixed term across the board does not.

Whether Congress intended this expressive effect for the 1976 change in durational structure, this explanation makes sense of the change. Recall that Congress maintained that its change was intended to conform to the life-plus-years duration of other countries.[353] Accordance with other countriesô durational structure must have been a thumb on the scale in favor of the switch in durational structure. Harmonization would ensure simplicity in that copyrights on the same work in many countries would expire simultaneously and without foreign resentment at more restrictive terms in the United States.[354] But this interest could not have been the

[351] This understanding also makes sense of copyrightôs durational structure for works of joint authorship. See supra note 337 and accompanying discussion. For such works, copyright endures until seventy years after the death of the last surviving joint author. 17 U.S.C. § 302(b) (2006). This way, all joint authorsô personhood interests are protected.

[352] Tor & Oliar, supra note 332, at 480ï 81. Tor and Oliar offer a different and complementary explanation of why individuals prefer a lifetime-plus-years term to a comparable fixed term. They suggest that individuals are not fully rational, overestimating duration under a life-plus-years term. Id. at 441ï 42. They hypothesize that authors are overly optimistic about how long they will live, an effect compounded when individuals add together unlike quantities (here, lifetime and a fixed term of years). Id. at 458ï 59.

[353] See supra notes 330ï 332 and accompanying text.

[354] See id.

whole weight, given how the United States ignores its treaty obligations or countervailing foreign laws in other areas of intellectual property.[355] In fact, Bruce Lehman, the Assistant Secretary of Commerce in 1995, testified before Congress that the life-plus-years structure was easy for the United States to adopt because American legislators were in agreement with it anyhow.[356] Rather than harmonizing just for its own sake, it is likely that Congress also wanted to accord with other countriesô durational structure because Congress was convinced, on the merits, that this structure was appropriate.[357]

In fact, moral-rights justifications were made in other countries and treaties to which the United States acceded. Pertinently, Franceôs adoption in the 1790s of a copyright duration of at least the authorôs lifetime sounded in large part in the authorsô moral rights in the personal artistic property they create.[358] Similarly, the 1948 Berne Convention for the Protection of Literary and Artistic Works and its precursors advocated duration for the authorôs lifetime plus at least thirty years, emphasizing the centrality of authorsô moral rights in their works.[359]

Compare the expressive incentive offered by copyrightôs general durational structure with its absence in the durational structure for works made for hire. Recall that the current duration for works for hire is ninety-five years from the year of first publication or 120 years from creation, whichever expires sooner.[360] Commentators justifying the differential durations for works for hire and other copyrightable works do so on both practical and theoretical grounds. When ownership automatically vests in the employer, often a corporation or other enduring entity, duration cannot typically be measured against the employerôs lifetime.[361] Practically, it must be keyed to something else, such as the creation or

[355] Two examples are the longstanding, but recently overcome, resistance to converting patent lawôs first-to-invent standard to a first-to-file standard as used around the world, see infra Section III.E, and broad moral-rights protections, see Kwall, supra note 39, at 25ï 52.

[356] See The Copyright Term Extension Act of 1995: Hearing on S. 483 Before the S. Comm. on the Judiciary, 104th Cong. 31 (1995) (statement of Bruce Lehman, Assistant Secretary of Commerce of the United States).

[357] See Elder, supra note 345, at 418, 421 (indicating prior support by American legal scholars for a copyright term keyed to the life of the author).

[358] See 1 Sam Ricketson & Jane C. Ginsburg, International Copyright and Neighbouring Rights: The Berne Convention and Beyond § 1.04 (2d ed. 2006).

[359] See id. §§ 2.05ï .06, 2.36; Sam Ricketson, The Berne Convention for the Protection of Literary and Artistic Works: 1886ï 1986, at §§ 7.9, 7.14 (1987).

[360] See supra note 341 and accompanying text.

[361] See Crews, supra note 296, at 194, 214ï 16.

publication date.[362] Nonetheless, duration might still have been keyed to the lifetime of the individual creator, a natural person.[363] Future work ought to explore whether works made for hire should be treated differently. It might be worthwhile to consider keying duration for works made for hire to the individual creatorôs lifetime, thereby also reasserting this creatorôs presence in copyright law.

C. Right of Reversion

As with copyrightôs durational structure, copyright lawôs right of reversion helpfully expresses solicitude for and protects authorsô moral-rights interests. Going back to Englandôs 1710 Statute of Anne, copyright law gave authors a contingent right of reversion.[364] The Statute of Anne provided that if a workôs author was still living after the copyright term of fourteen years, the copyright would return to the author for another equal term.[365] As Professors Lionel Bently and Jane Ginsburg explain, ñ[i]n theory, the second fourteen years should have enabled the author to grant rights anew from a stronger bargaining position should her work have earned a substantial audience.ò[366] Ostensibly, then, this rightôs purpose was to help authors who might have contracted away their rights to the first copyright term for too little money.[367] However, this right frequently went unexercised for two reasons. First, authors would commonly contract away their full copyright (including the reversionary right) to a publisher.[368] Second, at that historical juncture, by the time the reversionary right kicked in, it was typically not worth exercisingð either because an authorôs work became valueless within the first term or the work became so valuable that the author was already updating the work, thus securing another copyright anew (along with an opportunity to renegotiate unfair terms).[369]

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[362] See id. at 215.

[363] Cf. id. at 237 (ñ[T]he copyright law of many other countries is centered more on the interests of the author, or the person who actually did the creative work, whether or not in the context of employment.ò).

[364] Bently & Ginsburg, supra note 69, at 1479.

[365] Statute of Anne, 1710, 8 Ann., c.19, §§ I, XI (Eng.).

[366] Bently & Ginsburg, supra note 69, at 1479.

[367] See id. at 1485ï 86.

[368] Id. at 1492ï 93. The exact mechanism by which the reversionary right was rendered ineffective may have been slightly more complex than mere assignment. See id.

[369] See id. at 1539ï 40.

When the United States enacted its first copyright law, it built on the Statute of Anne in many ways, but did not expressly include a right of reversion to authors, even though it granted two sequential copyright terms of fourteen years each, the second contingent on the authorôs survival.[370] As in England, authors could contract away the full two terms.[371] In the nineteenth century, some courts became more protective of the author, allowing the author to contract away the second term in advance only expressly.[372] In response, publishersô contracts typically had authors give up both terms expressly, without separate consideration for the second term.[373]

The year 1976 brought a more robust right of reversion to copyright law. The new law gave the author (or statutory heir) a right to terminate any grant of the copyright from thirty-five to forty years from the grant date (with between two and ten years of advance notification of termination).[374] Nonetheless, this right has been less author protective than it might seem, as the advance notice requirement is not author friendly and courts have sometimes allowed authors to relinquish the right.[375] The right is in fact infrequently exercised.[376] Moreover, there is no termination right provided to the individual creators of a work made for hire.[377]

In two ways, this right of reversion can helpfully serve as an expressive incentive. First, even if it is not exercised very much, it sends a powerful signal to authors that copyright law cares about the personhood, labor, and possessory interests they have in their work by allowing them to regain control of the rights in their work at a certain point in time. Second, to the extent it can plausibly be exercised, the right is protective of those same moral-rights interests authors have in their works. The right of reversion can be seen as restoring to the author control over the work on which he or she labored and infused with personhood. Rights in works that, to the author, are intimately linked with the authorôs being can be reunited, so to speak, with the author. With this

[370] Copyright Act of 1790, ch. 15 § 1, 1 Stat. 124, 124 (repealed 1802).

[371] See Bently & Ginsburg, supra note 69, at 1550 (indicating that the ability to assign the second term was contingent on the author surviving the first term).

[372] Id. at 1553.

[373] Id. at 1554.

[374] 17 U.S.C. § 203 (2006).

[375] Bently & Ginsburg, supra note 69, at 1573, 1580.

[376] L. Ray Patterson & Stanley F. Birch, Jr., A Unified Theory of Copyright (Craig Joyce ed., 2009), *printed in* 46 Hous. L. Rev. 215, 272 (2009).

[377] 17 U.S.C. § 203(a).

right, then, copyright law might be understood as offering the expressive incentive of control, of knowing that a decision to contract away rights will notð even legallyð extinguish the moral rights the author believes attach to the copyrighted work.

That is not to say that the termination right is definitively a helpful component of copyright law. From a pecuniary perspective, it serves both to protect those authors that exercise the right at the expense of transferees and to redistribute wealth from less successful artists to more successful ones.[378] As to the latter, the right does so by ensuring that copyright transferees pay less up front to all artists because of the possibility of authors later terminating these transfers.[379] Only successful authors will likely terminate transfers and thus benefit in a way likely exceeding any offset in price accepted at the outset, but unsuccessful authors likely will not terminate (or benefit), thus losing twice.[380] All in all, in evaluating the desirability of a termination right as an expressive incentive, both the expressive and pecuniary costs and benefits of providing such a right must be understood and considered.

D. Originality

Copyright lawôs originality requirement, while not protective of authorsô moral-rights interests in any substantive way, helpfully expresses solicitude for them. As noted earlier, copyright protection extends to fixed original works of authorship.[381] Understanding originality as an expressive incentive places it in a different light than the traditional view of originality as a mere restriction on copyrightability.[382]

The Supreme Courtôs most recent formulation of the originality requirement occurred in *Feist Publications v. Rural Telephone Service Co.*, a case involving the copyrightability of a local telephone directory

[378] Keith Aoki, Distributive and Syncretic Motives in Intellectual Property Law (with Special Reference to Coercion, Agency, and Development), 40 U.C. Davis L. Rev. 717, 756 n.153 (2007); Kal Raustiala & Chris Sprigman, The Music Industry Copyright Battle: When Is Owning More Like Renting?, Freakonomics, Aug. 31, 2011, 10:38 AM, http://www.freakonomics.com/2011/08/31/the-music-industry-copyright-battle-when-is-owning-more-like-renting.

[379] See Raustiala & Sprigman, supra note 378.

[380] See id.

[381] See supra note 11 and accompanying text.

[382] See, e.g., Ginsburg, supra note 130, at 1870; Diane Leenheer Zimmerman, Itôs an Original! (?): In Pursuit of Copyrightôs Elusive Essence, 28 Colum. J.L. & Arts 187, 189ï90 (2005).

listing names in alphabetical order, along with their towns and telephone numbers.[383] The *Feist* Court held that work is original so long as it ñwas independently created by the author (as opposed to copied from other works), and . . . it possesses at least some minimal degree of creativity.ò[384] The requisite level of creativity, according to the Supreme Court, ñis extremely low; even a slight amount will suffice.ò[385] A work must merely evidence ñóintellectual production, . . . thought, and conception.ôò[386] Originality does not match up to a requirement of true novelty; a minimally creative work is protectable even if there is a nearly identical work, so long as the other work was not copied.[387] As Judge Learned Hand observed, ñ[I]f by some magic a man who had never known it were to compose anew Keatsôs Ode on a Grecian Urn, he would be an óauthor,ô and, if he copyrighted it, others might not copy that poem, though they might of course copy Keatsôs.ò[388] It is thus the rare work that will not meet the low threshold of originality. For example, the Court held that the telephone directory in *Feist* was insufficiently original because its factual raw data did not owe its existence to the directory creator and the selection and alphabetical arrangement of the directory entries was not creative enough.[389] The threshold for copyright protection is thus minimal but not absent.

Even though there are some works of authorship that are insufficiently original to receive copyright protection, they are few compared with the vast set of authored works that qualify under the minimal originality standard.[390] In this sense, copyright law would protect almost precisely the same set of works absent its originality standard. As a practical matter, why then include a nominal originality standard?

Of course, one answer might be that it is worthwhile to exclude certain unoriginal works from copyright, even if they are few and far be-

[383] 499 U.S. 340, 342 (1991).
[384] Id. at 345.
[385] Id.
[386] Id. at 362 (quoting Burrow-Giles Lithographic Co. v. Sarony, 111 U.S. 53, 60 (1884)).
[387] Id. at 345ï 46.
[388] Sheldon v. Metro-Goldwyn Pictures Corp., 81 F.2d 49, 54 (2d Cir. 1936). Others might copy Keatsôs poem because any copyright on it has long expired, leaving the work in the public domain. See John C. OôQuinn, Protecting Private Intellectual Property from Government Intrusion: Revisiting *SmithKline* and the Case for Just Compensation, 29 Pepp. L. Rev. 435, 504 n.455 (2002).
[389] *Feist*, 499 U.S. at 361ï 64.
[390] Alan E. Garfield, Calibrating Copyright Statutory Damages to Promote Speech, 38 Fla. St. U. L. Rev. 1, 34 (2010).

tween.[391] This traditional view sees originality as a restriction in copyright law.

An additional way to see originality, though, is as an expressive incentive. It communicates to authors that it will protect works infused with the authorôs personality. In both of its componentsð independent creation and a modicum of originalityð copyrightôs standard of originality highlights, as I explore in previous work, ñan author identifying subjective emotional themes or ideas to transform into artistic expression.ò[392] With regard to the requirement of independent creation, the emphasis is on the personal discovery of a subjective problem that artists express in their work. Justice Holmes recognized as much in one of the Supreme Courtôs most notable copyright decisions, *Bleistein v. Donaldson Lithographing Co.*[393] In holding a color poster advertising a circus to be copyrightable,[394] Justice Holmes wrote that creation of an artistic work ñis the personal reaction of an individual upon nature. Personality always contains something unique. It expresses its singularity even in handwriting, and a very modest grade of art has in it something irreducible, which is one manôs alone. That something he may copyright . . . .ò[395]

The emphasis helps explain why it is that Judge Learned Handôs hypothetically (though improbably) identical and subsequent version of Keatsôs *Ode on a Grecian Urn* receives copyright protection, even though Keatsôs version is already a part of the cultural fabric. Because locating the themes and emotions typically necessary to artistic creativity is so personal, copyright law places greater value on rewarding authors for using their pen to convert their valuable emotional and subjective concepts into an artistic product than on making sure that identical works do not receive a copyright.[396] Relatedly, independently created ar-

[391] There is debate over whether the Supreme Courtôs understanding of originality is sensible. Compare Zimmerman, supra note 382, at 205ï06 (suggesting that it accords with the Constitutionôs minimal requirements for copyright), with Ginsburg, supra note 130, at 1907ï13 (arguing in favor of protection for certain works that are often considered to have ñlow authorship,ò principally facts and information collected in databases).

[392] Fromer, supra note 123, at 1492.

[393] 188 U.S. 239 (1903).

[394] Id. at 251.

[395] Id. at 250. That said, *Feist*ôs rejection of copyright protection for sweat-of-the-brow works also renounces any solicitude for an authorôs labor interests in those works.

[396] Fromer, supra note 123, at 1493.

tistic works appropriating the works of others, such as those of Jeff Koons,[397] can nonetheless contain sufficient personhood to be original.[398]

The originality standard thus expresses solicitude for authorsô personhood interests in their works. As such, it ought to signal to authors that copyright laws will be protective of these interests in significant ways. In this way, it can serve as a helpful expressive incentive for authors, even though it does not directly protect authorsô moral-rights interests.

E. First To Invent

Until recently, one was able to observe a similar expressive incentive at work in patent law with regard to its (recently rejected) first-to-invent standard. After describing this standard and its replacement with a first-to-file standard to comport with international consensus, I explain how it could have served as an expressive incentive, in addition to being a threshold requirement for patentability.

As discussed above, a patent can be obtained on an invention that is novel, useful, and nonobvious.[399] Suppose two inventors come up with the same invention. Patent law dictates that only one of them is entitled to a patent in that invention: until this September, it was the person who was the first to invent.[400] This longstanding law had a mechanism for determining priority between competing claims to inventorship: ñ[T]here shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other.ò[401]

By contrast, patent law in almost every other country employs a first-to-file system, awarding a patent to the first applicant to have filed.[402] This September, the United States aligned itself more closely with these other countries by moving American patent law closer to a first-to-file

[397] See Blanch v. Koons, 467 F.3d 244, 246 (2d Cir. 2006).

[398] Cf. Hughes, supra note 54, at 127 (arguing that an appropriation artist might be ñtrying to *recapture* and *reconvey* his own personal expressionò).

[399] See supra notes 19ï 21 and accompanying text.

[400] Dennis D. Crouch, Is Novelty Obsolete? Chronicling the Irrelevance of the Invention Date in U.S. Patent Law, 16 Mich. Telecomm. & Tech. L. Rev. 53, 56 (2009); Mark A. Lemley & Colleen V. Chien, Are the U.S. Patent Priority Rules Really Necessary?, 54 Hastings L.J. 1299, 1299 (2003).

[401] 35 U.S.C. § 102(g)(1) (2006).

[402] Crouch, supra note 400, at 54ï 55.

system.[403] When the new law goes into effect in 2013, the first applicant to file for a patent will win the patent, except in a few circumstances, such as when a second filer was first to publicly disclose the invention.[404] There is also a new defense to infringement liability for commercial uses of a patented invention principally predating the patent application by more than one year.[405] As such, the new law is principally a first-to-file system with remnants of something akin to a first-to-invent system, with a perhaps broad exception for someone else who is first to publicly disclose and infringement immunity for some prior users.

Proponents of a move to a first-to-file system emphasized that harmonization with the rest of the worldôs laws would help establish consistency in entitlement to patent rights.[406] They also suggested that the administrative costs of resolving disputes over priority in a first-to-invent system far exceed those for determining the first filerôs identity.[407] Opponents of this legal change maintained that it would discriminate against small firms or individual inventors, who might take longer to file a patent application than a big firm would.[408] They argued that a switch might be unconstitutional, stating that Congress is authorized to award patent rights only to inventors.[409]

Whichever side one took in this debate, there seems to have been a strong sense that the fairest rule in the abstract is to award patent rights to the first to invent, but for the administrative costs and harmonization interest.[410] Moreover, the incorporation of prior-users rights and a public-disclosure exception into the new American law, as other countries have done in part, arguably ñindicates at least general discomfort with

[403] Leahy-Smith America Invents Act, Pub. L. No. 112-29, sec. 3, § 100, 125 Stat. 284, 285 (2011).

[404] Id. §§ 100, 102, 146, 125 Stat. at 285ï 86, 293.

[405] Id. sec. 5, § 273, 125 Stat. at 297.

[406] Lemley & Chien, supra note 400, at 1303ï 04.

[407] Id. at 1304ï 05.

[408] Id. at 1299. There is empirical evidence that this effect would occur. David S. Abrams & R. Polk Wagner, Poisoning the Next Apple? How the America Invents Act Harms Inventors, 65 Stan. L. Rev. (forthcoming 2012) (manuscript at 4ï 6).

[409] See Karen E. Simon, Comment, The Patent Reform Actôs Proposed First-To-File Standard: Needed Reform or Constitutional Blunder?, 6 J. Marshall Rev. Intell. Prop. L. 129, 150 (2006).

[410] See Max Stul Oppenheimer, Harmonization Through Condemnation: Is New London the Key to World Patent Harmony?, 40 Vand. J. Transnatôl L. 445, 463ï 64, 468 (2007) (citing other proponents of this view).

the fairness of an absolute first-to-file system.ò[411] And even though a first-to-file system would likely produce differences in priority in only a tiny fraction of patents issued annually,[412] there were numerous proponents of retaining the first-to-invent system.

What seems to drive the notion that it is fair to vest patent rights in the first to invent is likely linked closely to inventorsô personhood and labor interests. Inventors hold strong reputational interests in their creations, and as such are strongly invested in attribution of their inventions to themselves.[413] More broadly, inventors tend to feel strong personhood and psychological possessory interests in their creations.[414] Robert Merton has observed that ñfights over priority, with all their typical vehemence and passionate feelings, are not merely expressions of hot tempers, although these may of course raise the temperature of controversy; basically, they constitute responses to what are taken to be violations of the institutional norms of intellectual property.ò[415] Merton notes furthermore that these institutional norms in intellectual property are borrowed from the norms of the scientific community itself.[416]

It would seem, then, an overlooked downside of moving away from a first-to-invent system toward a first-to-file system, even with reasonably broad exceptions attuned to prior uses or disclosures of an invention, is the diminishment of a helpful expressive incentive. A first-to-invent standard prominently signaled to inventors that their personhood normsð including reputation and self-conceptð were accorded respect in patent lawôs award of rights.[417] In addition, then, to having served as a restriction on who might receive a patent, it could have spurred inventors to invent in the constraints of the patent system by expressing solicitude for their interests. This insight ought to have given Congress pause

[411] Adam J. Sedia, Storming the Last Bastion: The Patent Reform Act of 2007 and Its Assault on the Superior First-To-Invent Rule, 18 DePaul J. Art, Tech. & Intell. Prop. L. 79, 124ï 25 (2007).

[412] Cf. Lemley & Chien, supra note 400, at 1331 (ñ[W]hile the percentage of patent applications that involve a priority dispute is quite small, it is no smallerð and indeed is somewhat largerð than the percentage of patents that are ever enforced.ò).

[413] Supra notes 184ï 189 and accompanying text.

[414] See supra Subsection II.B.2.

[415] Merton, supra note 150, at 293.

[416] See id.

[417] Cf. Ryan K. Dickey, Note, The First-To-Invent Patent Priority System: An Embarrassment to the International Community, 24 B.U. Intôl L.J. 283, 292 (2006) (ñArguments to retain the first-to-invent system are especially powerful in light of non-utilitarian theories, such as fairness and personhood.ò).

before it replaced the first-to-invent standard (although recognition of prior-user rights does emphasize other inventorsô connections with their own works).

F. Written Description

Patent law has other spots where expressive incentives might be helpful and where they may indeed currently exist, albeit not in full-bodied form. Consider the disclosure requirement in patent law that a patentôs ñspecification shall contain a written description of the invention.ò[418] The written-description requirement ensures that the inventor is in possession of the claimed invention.[419] Although the written description was originally required to prevent patent applicants from amending patent claims to include things or processes not within their initial application, the Federal Circuit in recent years has invoked it as a substantive test for adequate disclosure.[420] According to the Federal Circuit:

> [A] separate requirement to describe oneôs invention is basic to patent law. Every patent must describe an invention. It is part of the *quid pro quo* of a patent; one describes an invention, and, if the lawôs other requirements are met, one obtains a patent. . . . A description of the claimed invention allows the [PTO] to examine applications effectively; courts to understand the invention, determine compliance with the statute, and to construe the claims; and the public to understand and improve upon the invention and to avoid the claimed boundaries of the patenteeôs exclusive rights.[421]

Just like copyright lawôs originality requirement,[422] patent lawôs written-description requirement tends to be viewed as a restriction: comply with it or get no patent. For example, many understand the Supreme Courtôs 1853 decision in *O'Reilly v. Morse*[423] to strike down Samuel Morseôs patent on the telegraph as being in violation of the written-description requirement.[424] In addition to narrower claims linked more

[418] 35 U.S.C. § 112 (2006).
[419] Ariad Pharms. v. Eli Lilly & Co., 598 F.3d 1336, 1351 (Fed. Cir. 2010).
[420] Guang Ming Whitley, Comment, A Patent Doctrine Without Bounds: The ñExtendedò Written Description Requirement, 71 U. Chi. L. Rev. 617, 618, 629 (2004).
[421] *Ariad*, 598 F.3d at 1345.
[422] See supra Section III.D.
[423] 56 U.S. (15 How.) 62, 112 (1853).
[424] E.g., *Ariad*, 598 F.3d at 1346 n.4.

tightly to Morseôs actual discovery, Morseôs patent broadly claimed ñthe use of the motive power of the electric or galvanic current, which I call electro-magnetism, however developed for marking or printing intelligible characters, signs, or letters, at any distances.ò[425] The Court struck down that broad claim, refusing to grant Morse ñan exclusive right to use a manner and process which he has not described and indeed had not invented, and therefore could not describe when he obtained his patent.ò[426] In so doing, the Court denied Morse patent protection for aspects he did not demonstrate were in his inventive possessionð based on his written description of the inventionð when he sought a patent. In this light, as Professor Michael Risch explains, ñ[w]ritten description helps fulfill dual goals of the patent system: securing claims as broad as the inventorôs contribution, but preventing claims that are broader than the inventorôs contribution.ò[427]

Notwithstanding *O'Reilly* and a handful of other cases, some suggest that the written-description requirement is at best meaningless, in that very few cases fail to meet the requirement.[428] They also emphasize that the bulk of any useful disclosure that patent law demands already happens through the lawôs enablement requirement,[429] which requires to demonstrate in the specification to ñóany person skilled in the [relevant] art [how] . . . to make and use the [invention]ò[430] without ñundue experimentation.ôò[431] Some go further and suggest harm that the written-description requirement might impose on the patent system, in providing

[425] *O'Reilly*, 56 U.S. (15 How.) at 112.

[426] Id. at 113.

[427] Michael Risch, A Brief Defense of the Written Description Requirement, 119 Yale L.J. Online 127, 144 (2010).

[428] *Ariad*, 598 F.3d at 1360 (Gajarsa, J., concurring) (citing Dennis Crouch, An Empirical Study of the Role of the Written Description Requirement in Patent Prosecution, 104 Nw. U. L. Rev. 1665, 1676 (2010)); Christopher M. Holman, Is *Lilly* Written Description a Paper Tiger?: A Comprehensive Assessment of the Impact of *Eli Lilly* and its Progeny in the Courts and PTO, 17 Alb. L.J. Sci. & Tech. 1, 5, 58 (2007).

[429] *Ariad*, 598 F.3d at 1364 (Rader, J., dissenting in part and concurring in part); id. at 1367ï68 (Linn, J., dissenting in part and concurring in part).

[430] 35 U.S.C. § 112 (2006). This, however, does not mean that a person skilled in the art must be enabled to make and use ña perfected, commercially viable embodiment absent a claim limitation to that effect.ò CFMT, Inc. v. Yieldup Intôl Corp., 349 F.3d 1333, 1338 (Fed. Cir. 2003).

[431] Monsanto Co. v. Syngenta Seeds, 503 F.3d 1352, 1360 (Fed. Cir. 2007) (quoting In re Wright, 999 F.2d 1557, 1561 (Fed. Cir. 1993)).

courts with an ad hoc tool to strike down patent claims they do not like.[432]

This debate over the written-description requirement overlooks the requirementôs possible expressive utility. Consider the Federal Circuitôs 1998 decision in *Gentry Gallery v. Berkline Corp.*[433] Before Gentry Gallery came up with its invention, the reclining seats of a sectional sofa would face different directions because the recliner needed to have an arm on which to put the controls, which placement was not good for television viewing or intimate conversation.[434] Gentry Gallery found a way to make a sectional sofa in which two reclining units, both independently controllable, faced in the same direction, and secured a patent on its invention.[435] Gentry Gallery solved this problem by putting the recliner controls on a console between the two recliners.[436] As described by the Federal Circuit, the patent specification ñonly describes sofas having controls on the console and an object of the invention is to provide a sectional sofa ówith a console . . . that accommodates the controls for both the reclining seats.ôò[437] In addition, James Sproule, the patentôs named inventor, testified that ñlocating the controls on the console is definitely the way we solved [the problem of building a sectional sofa with parallel recliners] on the original group [of sofas].ò[438] Some of the patent claims were, however, broader, in that they described an invention in which the reclinersô control means were not limited to a fixed console between the two recliners.[439] Sproule admitted that he did not did consider placing the controls elsewhere until after the patent application was filed and he saw that some competitors had done so, thereby prompting Gentry Galleryôs lawyers to broaden the patent claims.[440] The patent specification, however, could not be amended to include new matter,[441] which is why it remained narrower. The Federal Circuit invalidated these broader

[432] See, e.g., Allen K. Yu, The En Banc Federal Circuitôs Written Description Requirement: Time for the Supreme Court To Reverse Again?, 33 Cardozo L. Rev. 895, 910ï11 (2012).

[433] 134 F.3d 1473 (Fed. Cir. 1998).

[434] Id. at 1474ï75.

[435] Id. at 1475 (quoting Reclining Sofa, U.S. Patent No. 5,064,244 col.4 l. 68ï col.5 l. 27 (filed Jan. 3, 1991) (issued Nov. 12, 1991)).

[436] Id. at 1477.

[437] Id. at 1478 (quoting ô244 Patent col.1 ll. 35ï37).

[438] Id. (second alteration in original).

[439] Id. at 1475.

[440] See id. at 1479.

[441] 35 U.S.C. § 132(a) (2006).

claims on the ground that the patent specification did not show that Sproule was in possession of the broader invention because ñthe original disclosure clearly identifies the console as the only possible location for the controls.ò[442]

Rulings like *Gentry Gallery* and *Morse*, even as rare as they are, suggest that the extent of the patent right is based on what the inventor actually appreciated to be the scope of his or her invention, as set out in the patent specification. Patent claims cannot be broadened beyond what the inventor actually devised. Even though this rule serves to limit the breadth of an inventorôs patent claimsð in a way that can be contrary to the inventorôs pecuniary interestsð the rule expresses the centrality of the inventorôs vision of his or her creation to patent rights. Even when an inventor files a patent application on behalf of an assignee,[443] the inventor must swear that he or she invented the creation described in the patent.[444] The written-description requirement, in conjunction with this oath, expresses solicitude for and protects inventorsô personhood and labor interests. For one thing, it reinforces the psychological possessory interest they feel in the invention. Moreover, it enables inventors to define the invention so closely linked with their self-concept. Additionally, the particular description can help inventors control the shape of their reputation. Finally, beyond protecting their moral-rights interests, the mere fact that a patentôs claim scope hinges on what the inventor discovered expresses solicitude for the inventorôs moral-rights interests by indicating that the inventor is the key inventive figure.

G. Integrity and Adaptation

I now turn to a major right typically invoked when discussing moral rights, the right of integrity, to demonstrate the possible harm to intellectual propertyôs utilitarian goals in implementing the wrong sort of expressive incentives, at least in a strong form. As discussed above, authors and artists often have strong feelings of integrity with regard to their works.[445] They will often be worried about the changes that might

[442] *Gentry Gallery*, 134 F.3d at 1479 (reasoning that the patent specification ñprovides for only the most minor variation in the location of the controls, noting that the control ómay be mounted on top or side surfaces of the console rather than on the front wall . . . without departing from this inventionôò (quoting ô244 Patent col.2 l. 68ï col.3, line 3)).

[443] Supra Subsection II.B.2.

[444] 35 U.S.C. § 115.

[445] Supra text accompanying notes 125ï 129.

be made to physical copies of the work they have distributed as well. Moreover, they also might be concerned with others making adaptations or other uses of their work, even when these adaptations or uses do not affect the physical copies of their work.[446] By comparison, even though inventors might have similar feelings, their integrity is less likely to be at risk because changing an inventionð either physically or conceptuallyð in some way might make it stop functioning.[447] That said, inventors frequently seek to make improvements to othersô inventions by building upon them conceptually.[448]

In this Section, I focus principally on copyrightable material, although some of what is said about art might be said about inventions as well.[449] Despite authorsô frequently strong interests in integrity, there is a critical countervailing societal interest, as Amy Adler discerns, in allowing subsequent authorsô modifications, destructions, and adaptations of existing creations to create further art.[450] Any diminishment in such modifications or adaptations has an impact on those in society who would possess and enjoy such works. Thus, even though a robust right of integrity to authors might serve as a strong expressive incentive, it is likely to be inadvisable due to the intense expressive and other costs it might impose on society and its cultural progress.

VARA has provided authors with integrity rights in a very limited subset of copyrighted works, to creators producing visual art in distributions of fewer than two hundred.[451] A creator of such work has the right, subject to certain limitations for visual art installed in or made part of a building,[452] ñto prevent any intentional distortion, mutilation, or other

[446] Not all authors care very deeply about maintaining control over derivative works, particularly noncommercial ones. Over two-thirds of Creative Commons licensors permit others to use their creations to make derivative works. Christopher Sprigman, Reform(aliz)ing Copyright, 57 Stan. L. Rev. 485, 565 (2004).

[447] Supra text accompanying notes 180ï 83.

[448] See Fromer, supra note 20, at 548ï 49.

[449] Patent law is different from copyright law in allowing improvers to obtain patents on their significant improvements to an already patented invention, which then blocks both the original and subsequent inventors from using the improvement unless they bargain with one another to do so. See Lemley, supra note 30, at 1008ï 10. By so doing, it protects the competing tugs of integrity in a different way than does copyright law.

[450] Supra text accompanying notes 128ï 29.

[451] 17 U.S.C. § 106A(a) (2006) (providing any ñauthor of a work of visual artò with certain integrity rights); id. § 101 (defining a ñwork of visual artò as a painting, drawing, print, sculpture, or photograph produced in distributions of less than two hundred).

[452] Id. § 113(d).

modification of [qualifying] work which would be prejudicial to his or her honor or reputation, and any intentional distortion, mutilation, or modification of that work is a violation of that right.ò[453] Moreover, subject to the same limitations, creators have the right ñto prevent any destruction of a work of recognized stature, and any intentional or grossly negligent destruction of that work is a violation of that right.ò[454] VARA thus gives authors a limited right of integrity in the physical manifestations themselves of certain visual art.[455]

In terms of an integrity right with regard to conceptual borrowings or uses of copyrighted works, copyright law is more broadly protective of original authors. Copyright law confers on authors an exclusive right ñto prepare derivative works based upon the copyrighted work.ò[456] ñDerivative worksò is defined broadly as any ñwork 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.ò[457] As one notable example, the Second Circuit preliminarily enjoined ABC from broadcasting edited versions of ñMonty Pythonôs Flying Circus,ò in which twenty-four minutes of programming were cut from three thirty-minute programs to make time for commercial advertising and to remove offensive or obscene matter.[458] Monty Python had claimed that this editing was a

[453] Id. § 106A(a)(3)(A).

[454] Id. § 106A(a)(3)(B).

[455] By contrast, European laws typically provide a robust form of integrity rights as recognition of the authorôs moral rights in a work. See, e.g., Lucas & Plaisant, supra note 309, § 7(1)(c) (noting the broad scope of integrity rights under French copyright law).

[456] 17 U.S.C. § 106(2). Similar protection of integrity is present in the compulsory license the law provides for covers (adaptations) of musical compositions that have already been publicly distributed in a sound recording. Id. § 115(a)(1). The privilege of compulsory licensing, however, allows only minimal changes to the

> musical arrangement of the work to the extent necessary to conform it to the style or manner of interpretation of the performance involved, but the arrangement shall not change the basic melody or fundamental character of the work, and shall not be subject to protection as a derivative work under this title, except with the express consent of the copyright owner.

Id. § 115(a)(2). As David Nimmer describes this provision, ñ[s]uch respect for the integrity of a musical composition evinces Congressional regard for the moral rights of composers.ò 2 Melville B. Nimmer & David Nimmer, Nimmer on Copyright § 8.04[F] (2009).

[457] 17 U.S.C. § 101.

[458] Gilliam v. Am. Broad., 538 F.2d 14, 17ï 18 (2d Cir. 1976).

ñmutilationò that ruined the integrity of its work.[459] The Second Circuit thought that copyright law could provide Monty Python with a successful cause of action, reasoning that the edits likely contravened Monty Pythonôs right to prepare derivative works from its underlying script.[460] This case illustrates that the copyright ownerôs right to prepare derivative works can be used as a way to ensure against edits and modifications to a copyrighted work that violate the authorôs integrity.

Even in the face of copyright lawôs broad grant of rights to original creators to their integrity against modifications to their work, copyright law is also protective of the competing societal interest in enabling subsequent creators to make such modifications. Copyrightôs fair use doctrine excuses certain uses of a copyrighted work that would otherwise be infringing based on a judicial determination.[461] To determine whether a use is fair, courts look to at least four factors: ñthe purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes,ò ñthe nature of the copyrighted work,ò ñthe amount and substantiality of the portion used in relation to the copyrighted work as a whole,ò and ñthe effect of the use upon the potential market for or value of the copyrighted work.ò[462] In reliance on this doctrine, courts sometimes excuse material that usesð and perhaps modifiesð other authorsô existing copyrighted material, such as parodies of other works,[463] use of relevant art in historical reference books,[464] and use of photographs to help tell a news story.[465]

In spite of the great countervailing need to protect subsequent creatorsô (and societyôs) interest in valuable modifications to existing works, the fair use doctrineð honorable as its goals might beð is likely to be underprotective of these modifications. The four central factors of the ñfair useò standard are thought to have ñinfinite elasticity,ò possibly

[459] Id. at 18.
[460] Id. at 20ï21.
[461] 17 U.S.C. § 107. See generally Lemley, supra note 30, at 1024.
[462] 17 U.S.C. § 107.
[463] Campbell v. Acuff-Rose Music, 510 U.S. 569, 571ï72 (1994) (holding that 2 Live Crewôs rap version of Roy Orbisonôs ñOh, Pretty Womanò may be a fair use within the meaning of 17 U.S.C. § 107).
[464] Bill Graham Archives v. Dorling Kindersley, 448 F.3d 605, 606ï07 (2d Cir. 2006) (judging the use of small versions of posters for Grateful Dead concerts in a book on the history of the band to be fair use).
[465] Núñez v. Caribbean Intôl News Corp., 235 F.3d 18, 20ï21 (1st Cir. 2000) (judging the use of semi-nude modeling photographs of Miss Puerto Rico Universe in a news story about a scandal about those photographsô propriety to be fair use).

suggesting ñtheir concomitant inability to resolve difficult questions.ò[466] Documentarians do not know whether they can air an interview clip containing a copyrighted song in the background,[467] the artist Jeff Koons does not know whether he can incorporate a copyrighted photograph into a collage painting,[468] and avid fans do not know whether they can publish a reference guide to the series of Harry Potter books.[469] Much of the uncertainty in applying the four-factor test derives from the fact that it is a standard.

As is, then, risk-averse authors might frequently avoid modifying works in ways that ought to be construed as fair uses or secure an unnecessary license authorizing this modification.[470] In practice, then, fair use is probably not sufficiently protective of societyôs interest in modifying works. Proposed fixes that might improve the expressive net value of authorsô integrity rights and subsequent authorsô interests in modifying existing works include establishing safe harbors for certain uses[471] and setting out clearer sub-standards of fair use based on the major fair use patterns courts are finding.[472]

All in all, the competing expressive tugs of original authorsô integrity interests and subsequent authorsô interests in using or modifying existing

[466] 4 Nimmer & Nimmer, supra note 456, § 13.05[A][5][c]; see also Michael W. Carroll, Fixing Fair Use, 85 N.C. L. Rev. 1087, 1094ï 95 (2007) (referencing judicial and scholarly frustration with the four-factor test); Pierre N. Leval, Commentary, Toward a Fair Use Standard, 103 Harv. L. Rev. 1105, 1107 (1990) (ñDecisions are not governed by consistent principles, but seem rather to result from intuitive reactions to individual fact patterns.ò). But see Barton Beebe, An Empirical Study of U.S. Copyright Fair Use Opinions, 1978ï 2005, 156 U. Pa. L. Rev. 549, 574ï 75 (2008) (suggesting, after an empirical review of fair-use doctrine in the courts, that it is somewhat more predictable than is typically thought); Michael J. Madison, A Pattern-Oriented Approach to Fair Use, 45 Wm. & Mary L. Rev. 1525, 1533 (2004) (maintaining that ñsocial and cultural patterns underlying case-by-case adjudication of fair use problems may have achieved . . . a framework . . . that is both stable and relatively predictable in the context of legal doctrineò).

[467] James Gibson, Risk Aversion and Rights Accretion in Intellectual Property Law, 116 Yale L.J. 882, 887ï 88 (2007).

[468] See Blanch v. Koons, 467 F.3d 244, 246, 259 (2d Cir. 2006) (finding the use to be fair).

[469] See Warner Bros. Entmôt v. RDR Books, 575 F. Supp. 2d 513, 520ï 22, 551 (S.D.N.Y. 2008) (finding the use not to be fair).

[470] Jeanne C. Fromer, Claiming Intellectual Property, 76 U. Chi. L. Rev. 719, 723 (2009).

[471] Gibson, supra note 467, at 937 (suggesting that fair use be supplemented with a rule that no license is required for excerpts fewer than a certain number of words or seconds of recorded music); Gideon Parchomovsky & Kevin A. Goldman, Fair Use Harbors, 93 Va. L. Rev. 1483, 1488ï 89 (2007) (proposing safe harbors that would treat minimal uses, such as the reproduction of films that are ten seconds or less, as per se valid).

[472] See Pamela Samuelson, Unbundling Fair Uses, 77 Fordham L. Rev. 2537, 2541 (2009).

works to societyôs benefit illustrate the dangers of granting expressive incentives that are too broad in certain contexts. Copyright law attempts to navigate the competing interests through a combination of VARA, exclusive rights to authors to prepare derivative works, and fair use. Although well meaning, this arrangement is likely to be overprotective of original authorsô expressive interests at the expense of subsequent ones.

H. Exclusive Rights and Alienability

Just as with the fear of heavy expressive costs associated with a broad right of integrity, there ought to be a worry about imposing heavy restraints on creatorsô ability to alienate their rights in their intellectual property. The rights provided by copyright and patent law primarily and visibly serve to exclude others from certain uses of the creatorôs work.[473] As such, these rights themselves signal copyright and patent lawsô solicitude for creatorsô expressive interests by granting them broad rights excluding others from using their work in ways that do not accord with the creatorsô expressive goals.

Given that there are, or can be, substantial expressive protections for creators in intellectual property laws, should the law allow more expressive forms of protections to be alienated by creators? If so, the law might be signaling approval of creatorsô commission of an abstract form of suicide, of relinquishing some part of their personhood. If not, the law might be seen as limiting creatorsô personhood for the sake of their personhood. Forbidding alienation can harm society by rendering inefficient the variety and quality of works available to it, but allowing alienation too readily might injure creators in ways that make them less willwilling to create in the first instance.

Copyright and patent laws chart a course between these two concerns. Although copyright and patent laws generally allow creators to alienate their exclusive rights, there are some limitations that are protective of creators. For one thing, as discussed above, copyright law provides authors with the ability to terminate transfers at certain points in the copyright cycle.[474] For another, copyright law has a statute of frauds, requir-

[473] See eBay Inc. v. MercExchange, L.L.C., 547 U.S. 388, 392 (2006); Christopher Buccafusco & Christopher Sprigman, Valuing Intellectual Property: An Experiment, 96 Cornell L. Rev. 1, 5 (2010); Adam Mossoff, Exclusion and Exclusive Use in Patent Law, 22 Harv. J.L. & Tech. 321, 322 (2009).

[474] See supra Section III.C.

ing all transfers[475]ð other than those that happen by operation of lawð to be ñin writing and signed by the owner of the rights conveyedò or the ownerôs agent.[476] Patent law similarly requires assignments of ñpatents, or any interest thereinò to be ñby an instrument in writing.ò[477] A writing (signed, in the case of copyright law) is required to provide evidence of what tend to be valuable agreements, thereby deterring fraud; to prevent misunderstandings; and to emphasize the seriousness of the transaction.[478] The Ninth Circuit has elaborated on these reasons: the writing rule ñensures that the creator of a work will not give away his copyright inadvertently and forces a party who wants to use the copyrighted work to negotiate with the creator to determine precisely what rights are being transferred and at what price.ò[479] In this sense, the writing rule forces creators to reflect on any expressive (and pecuniary) protections they may be relinquishing, without forbidding them from doing so. These laws are thus somewhat protective of creatorsô expressive interests, without going too far against alienability in ways that might hurt society at large.

* * *

All in all, the potential applications discussed in this Part show some promising areas in which to consider implementing useful expressive incentives, even if the current form such incentives take is anemic, and some dangerous areas in which broad expressive incentives would harm the utilitarian system. In addition, these areas reveal the ways in which expressive incentives already might be at work in some pockets of copyright and patent laws, providing more explanatory power for these areas. Further work is important to shed light on the precise ways in which incentives either enhance or weaken creatorsô creative output and on the

[475] A transfer is defined broadly as ñan assignment, mortgage, exclusive license, or any other conveyance, alienation, or hypothecation of a copyright or of any of the exclusive rights comprised in a copyright, whether or not it is limited in time or place of effect, but not including a nonexclusive license.ò 17 U.S.C. § 101 (2006).

[476] Id. § 204(a).

[477] 35 U.S.C. § 261 (2006); see Abraxis Bioscience v. Navinta LLC, 625 F.3d 1359, 1366 (Fed. Cir. 2010); Gaia Techs. v. Reconversion Techs. 93 F.3d 774, 777 (Fed. Cir. 1996).

[478] Lorin Brennan, Financing Intellectual Property Under Federal Law: A National Imperative, 23 Hastings Comm. & Ent. L.J. 195, 270 (2001).

[479] Effects Assocs. v. Cohen, 908 F.2d 555, 557 (9th Cir. 1990).

costs and benefits that various incentives might impose on society at large.[480]

In carrying out future work, it is important to keep in mind that the set of authors and inventors is heterogeneous. Some creation happens with individuals working alone; other creation happens in firms. Some creators need pecuniary incentives to create; others might care more about expressive incentives. Some creators are attentive to the extent of exclusive rights that patent and copyright law provide; others are happy to do no more than list the patents they have received on their curriculum vitæ.

As such, in reconceptualizing the role of incentives in intellectual property, it might be sensible to provide creators with a menu of incentive packages from which to choose as to the extent of their protection. For example, one incentive package might be heavily pecuniary with little expressive reward, another might be principally expressive with little pecuniary incentive (such as attribution), and another might be a tempered mix of the two. In an ideal world, each incentive package would be carefully calibrated to offer maximal societal benefits at minimal cost. Creatorsð presumably knowing what they needð can then choose the incentive package that best fits their needs, thereby maximizing the utility of the incentive.

CONCLUSION

This Article shows that what most scholars have seen as a conflict between theories of utilitarianism and moral rights in intellectual property can in fact frequently come together in a useful harmony. Moral-rights interests, if employed intelligently in the form of expressive incentives, can enhance the utilitarian incentive to create copyrightable or patentable works at minimal cost to society, thereby helping intellectual property laws fulfill their constitutional purpose. In that sense, this Articleôs aim is to complicate the understanding of incentives, beyond traditional pecuniary ones, to include expressive incentives. This Article illustrates a number of areas for potential implementation of expressive incentives in intellectual property law: attribution; copyrightôs durational structure, originality requirement, and right of reversion; and patentôs recently rejected first-to-invent standard and written-description requirement. By contrast, some other areas, such as integrity, adaptation, and restraints on

[480] See, e.g., Buccafusco, Fromer & Sprigman, supra note 109.

alienation of exclusive rights, are precarious places to implement broader expressive incentives because of the intense costs they would likely impose on society.

Although this Articleôs goal has been to deepen the discussion of incentives in intellectual property laws, the ultimate goal of this line of inquiry is to illuminate the ideal mix of pecuniary and expressive incentives. As future work, a number of empirical projects would be particularly beneficial. First, it would be helpful to understand when pecuniary incentives might be traded away for expressive ones. For instance, would creators prefer copyright duration lasting for the authorôs lifetime to a statistically longer, but fixed, duration? Would creators be willing to relinquish some of intellectual property lawsô exclusive (pecuniary) rights for a practicable form of attribution? Second, understanding the effects of different expressive incentives on creation would be valuable. One might compare regimes based on whether they confer moral rights of sorts: for example, the production of visual art before and after VARAôs enactment; countries with moral-rights protections and comparable ones without; and regimes with a first-to-invent standard and those with a first-to-file standard. Relatedly, we need to understand the costs and benefits of particular expressive incentives, such as attribution to a creator in a protected work itself as compared with in legal registration or application. Finally, it is important to probe how much incentives should speak to creators and how much to the firms that typically take pecuniary control of creatorsô works. A richer understanding of pecuniary and expressive incentives will go a long way to optimizing intellectual property laws.