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CREATORS, INNOVATORS, AND APPROPRIATION MECHANISMS

*Sean M. O'Connor**

INTRODUCTION

Now that Congress's House Judiciary Committee has undertaken a review of current copyright law,¹ and the Register of Copyrights, Maria Pallante, has called for the "Next Great Copyright Act,"² sides are being drawn by various interest groups. Perhaps following the pitting of information technology firms against bio-chem and pharma firms in the patent reform battles leading to the America Invents Act,³ some interest groups want to divide the copyright reform debates into "innovators" and "creators." Much of this seems driven by large tech firms such as Google, along with advocacy groups such as the Electronic Frontier Foundation ("EFF") who are aligned with them, as they push for copyright reform. The narrative being developed is that tech firms are simply trying to create the innovative technologies and digital platforms of the future, while being dragged down by behemoth content owners who are trying to thwart this progress to maintain the status quo of an analog content world that no longer exists.⁴

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¹ Press Release, House Judiciary Committee, Chairman Goodlatte Announces Comprehensive Review of Copyright Law (Apr. 24, 2013), <http://judiciary.house.gov/index.cfm/press-releases?ID=1B5C521A-D006-B517-9949-43E692E1E52E>.

² Maria A. Pallante, *The Next Great Copyright Act*, 36 COLUM. J.L. & ARTS 315, 315 (2013); *The Register's Call for Updates to U.S. Copyright Law, Statement Before the H. Subcomm. on Courts, Intellectual Prop. & the Internet of the Comm. on the Judiciary*, 113th Cong. (2013) (statement of Maria A. Pallante, Register of Copyrights and Director, U.S. Copyright Office), available at <http://copyright.gov/regstat/2013/regstat03202013.html> (last visited Ma. 2, 2015).

³ Leahy-Smith America Invents Act ("AIA"), Pub. L. No. 112-29, 125 Stat. 284 (2011). While patent reform had been considered by Congress for a number of years before passage of AIA, serious disputes over proposed changes to patent injunctions and damages between the information technology industry, on the one hand, and the bio-chem industries, on the other, had slowed down efforts to find an acceptable compromise. See, e.g., Diane Bartz, *U.S. Battle Over Patent Reform Headed for Compromise?*, REUTERS (Mar. 10, 2009), <http://www.reuters.com/article/2009/03/10/us-patents-idUSTRE5295J920090310>.

⁴ See, e.g., NAT'L RESEARCH COUNCIL OF THE NAT'L ACADS., COPYRIGHT IN THE DIGITAL ERA: BUILDING EVIDENCE FOR POLICY 1, 7-8 (Stephen A. Merrill & William J. Raduchel eds., 2013).

But this simple narrative is quite misleading and harmful to the kind of rational, objective debate necessary to accommodate the newest forms of digital and social media in the copyright ecosystem. Great creators are innovators and great innovators are creators. The content companies, including large legacy movie and music studios, have developed impressive new digital technologies. And digital technology and platform distribution firms are increasingly creating new content. In the middle, industries such as video gaming have always existed at the crossroads of developing cutting edge technology and content. What society is really witnessing is an explosion of creative innovation across a range of fields.

But no matter what the field or form, creative innovation relies on some mode of appropriation. Without it, anyone can copy or use the innovation without payment or attribution to the original producer. In such a world, it seems likely that few will invest significant time or resources into fully developing and implementing their ideas for a particular creative innovation. They will still have the ideas, and they may be willing to implement them in some inexpensive, fast manner. While that may work for some kinds of creative innovation, it does not work for many others. Copyright is only one appropriation mechanism. There are many others, including the areas of intellectual property (“IP”) outside of copyright.

A problem that underlies the emerging innovator-creator copyright debates is that creative innovators naturally want their inputs to be “free” (in both the cost and repurposing senses), while they need their outputs to be appropriable if they want to receive a return on investment for their innovations. As argued below, this appears to have led some tech firms and their advocates to engage in a diversionary sleight of hand in which they seek to minimize the appropriation mechanisms of those providing their inputs, while hiding or downplaying robust efforts to appropriate their outputs.⁵ This Essay explores the current state of this phenomenon, especially with regard to digital and social media. It argues that policymakers need to focus on this broader perspective and not allow some interested players to narrow the debate to the appropriation mechanisms of only one stakeholder group in creative innovation ecosystems.

I. “CREATORS VS. INNOVATORS” IS A FALSE DICHOTOMY

What is a “creator” that is not also an “innovator,” and vice versa? It may be tempting when observing current debates to adopt the apparent popular sense that creators are “artists” who produce aesthetic “creative expression,” while innovators are entrepreneurs who produce “technology.”

⁵ See *infra* Part III.

As I have written elsewhere,⁶ this perspective also unfortunately maps onto a gendered distinction between “feminine” aesthetic arts and “masculine” math and science-based technology.⁷ This dubious distinction is so pervasive that it seems to underlie the common division of IP into “soft IP” for the creative arts (e.g., copyright and trademark) and “hard IP” for industrial technology (e.g., patents and trade secrets).⁸ But when one digs deeper into what so-called creators and innovators actually do, the existing dichotomy—and seemingly tight correlation to “artists” and “entrepreneurs,” respectively—largely evaporates.

First, the distinction between innovative and replicative activities is the key to thinking about what constitutes innovation. As Professor William Baumol notes in the entrepreneurship management literature, “innovative entrepreneurs” are those who “locate new ideas and . . . put them into effect.”⁹ By contrast, the replicative entrepreneur is one who can function in the broader, earlier sense of “entrepreneur” as simply anyone who undertakes a new venture.¹⁰ The innovative entrepreneur commercializes new kinds of goods or services, including new ways of producing or distributing them.

In this light, one can see first and foremost that many artists and entrepreneurs are replicative. The artist who produces a nominally new creative expression, but which fits closely within an existing genre and breaks no new ground, is not innovative. However, the work may have other significant value, and thus this understanding is not meant to denigrate such works. Equally so, many entrepreneurs are small business owners who have opened a franchise of an existing chain of goods or service providers, or who open a new restaurant or store within an established industry (e.g., pizzerias, dry cleaners). When there is nothing notably different about the goods or services, or the way they are produced or distributed, then the business is replicative and not innovative. Again, “replicative” need not be pejorative. There can be great value in replicative businesses, especially where they fill an unmet need in a neighborhood. However, this illustrates why “entrepreneur” is not co-extensive with “innovator.”

In contrast to replicative entrepreneurship, innovative entrepreneurship is that which provides new kinds of products or services, or ways of producing or distributing them. While Professor Joseph Schumpeter’s “creative

⁶ See SEAN M. O’CONNOR, *METHOD+OLOGY AND THE MEANS OF INNOVATION* (forthcoming June 2016) (manuscript, ch. 4, at 1) (on file with the author).

⁷ See *id.* (manuscript, ch. 4, at 55).

⁸ *Id.* (manuscript, ch. 4, at 48).

⁹ WILLIAM J. BAUMOL, *THE MICROTHEORY OF INNOVATIVE ENTREPRENEURSHIP* 18 (2010).

¹⁰ *Id.* In fact “entrepreneur” began its modern meaning when Richard Cantillon, the eighteenth century pioneer of entrepreneurship studies, imported it without translation as the French word for “undertaker” (in the sense of anyone embarking on an undertaking) in his English language writings. See RICHARD CANTILLON, *ESSAI SUR LA NATURE DU COMMERCE EN GÉNÉRAL* 388-89 (Henry Higgs ed. & trans., Macmillan & Co. 1931) (1755).

destruction”—the “disruptive innovation” that upends incumbents in an existing business space¹¹—is often held as the archetype of innovative entrepreneurship, it is not the only kind. Incremental innovation that results in evolution within existing industries or businesses can also be quite valuable.

At the same time, there can be creative aesthetic works that establish or modify genres, techniques, or modes of audience interaction. These works should count as “innovation” even though the innovation literature is largely focused on technology innovation. A new catchy tune firmly within an existing genre such as country music is valuable, but it is not innovation. However, a new song or sound that crosses over genres or creates a new genre is innovative. For example, the seminal collaboration between composers Antonio Carlos Jobim and Vinícius de Moraes on “Girl from Ipanema,” as recorded by João Gilberto, his wife Astrud Gilberto, and Stan Getz, arguably launched a new version of the Brazilian genre bossa nova that was accessible to United States audiences in the 1960s.¹² Similarly, bands like Uncle Tupelo, and successors such as Wilco, created a sub- or crossover genre called “alt-country” in the 1990s.¹³

Turning to what constitutes creativity, it has become clear that individuals from many walks of life exercise creativity in their activities. While it is difficult to precisely define creativity, the general notion of it actually seems to overlap with innovation.¹⁴ Creativity can be seen as individuals or groups coming up with new artifacts or methods that draw on inspiration from multiple sources.¹⁵ Sometimes linked to “divergent” thinking in which a person synthesizes multiple seemingly unrelated ideas,¹⁶ creativity often generates entirely new kinds of works. But creativity is not limited to this; rather it can also be used to produce new iterations of works in an existing field of activity. At the same time, a nominally new work that is largely replicative of existing works in the same field, with perhaps trivial variations, would likely not be viewed as creative.

¹¹ See JOSEPH A. SCHUMPETER, *CAPITALISM, SOCIALISM AND DEMOCRACY* 83 (3d ed. 1950) (introducing “Creative Destruction” and explaining its effects on capitalist industries); CLAYTON M. CHRISTENSEN, *THE INNOVATOR’S DILEMMA: WHEN NEW TECHNOLOGIES CAUSE GREAT FIRMS TO FAIL*, at xii-xiv (1997) (introducing “disruptive innovation” to describe the technological threat that develops generally from within particular industries).

¹² Stan Getz had already been releasing Latin-inspired jazz records including bossa nova and samba tracks beginning in 1961, but it was the collaboration with Gilberto on “Getz/Gilberto” (featuring “Girl from Ipanema”) that gave the new (to the U.S.) genre widespread fame and established it permanently here. See Suzel Ana Reily, *Tom Jobim and the Bossa Nova Era*, 15 *POPULAR MUSIC* 1, 1 (1996).

¹³ See *Alternative Country*, WIKIPEDIA, http://en.wikipedia.org/wiki/Alternative_country (last modified Nov. 26, 2014, 6:20 PM).

¹⁴ See, e.g., Gregory N. Mandel, *To Promote the Creative Process: Intellectual Property Law and the Psychology of Creativity*, 86 *NOTRE DAME L. REV.* 1999, 1999 (2011).

¹⁵ *Id.* at 2004-05; O’CONNOR, *supra* note 6 (manuscript, ch. 1, at 7).

¹⁶ See Mandel, *supra* note 14, at 2004-05.

In this way, it should be clear that innovators are often creative, and creators are often innovative. Both take inspiration from multiple sources—this after all is a big part of “outside of the box” thinking—and synthesize it into a new type of artifact or way of doing things. A more nuanced approach places creativity as a necessary part of innovation.¹⁷ Creativity and innovation may sit along the same continuum with the former perhaps extending somewhat further down towards derivative works (in the artistic not legal sense) than the latter, which requires new (sub)categories of artifacts or methods.

In sum, “creator” is not co-extensive with “artist” just as “innovator” is not co-extensive with “entrepreneur.” Artists are usually creators and in many cases innovate within their field, developing entirely new genres or techniques. Entrepreneurs are innovative when they fall within Baumol’s subcategory of “innovative entrepreneurs,” and to innovate they generally rely on their creative skills. Accordingly, the temptation to make synonyms out of artist:creator and entrepreneur:innovator should be resisted. Further, the alleged contrast between “creator” and “innovator” is not so stark, and in fact may be counterproductive.

Instead of contrasting creativity and innovation, U.S. copyright and patent law history reveal that the phrase “genius and skill” traditionally characterized both. In nineteenth century cases, judges used this phrase to describe what both authors and inventors did.¹⁸ But this was not some idle conjunction of terms that sounded well together or overlapped. Instead, “genius” was quite distinct from “skill.” Most important, “genius” did not encompass the modern popular sense of high intelligence. Rather, it was the older sense of pure inspiration with origins in the “divine madness” mentioned by Plato and the Ancient Greeks.¹⁹ Derived from the same linguistic root that led to “genie,” “genius” was secularized in the Renaissance to remove the troubling supernatural—especially demonic—elements.²⁰ Stripped of this baggage, this mysterious inspiration that could come to anyone, whether they had experience and skills in a particular field or not, became a major desideratum in the Renaissance and early modern period in Europe.²¹

But the fine arts was not the only area that prized “genius.” If anything, it was even more prized amongst the emerging class of engineers designing impressive new machines and methods for construction and war-

¹⁷ *Id.* at 1999. This would mean that by definition innovators are always creative, while creators might not always be innovative.

¹⁸ *See, e.g.,* *Le Roy v. Tatham*, 55 U.S. (14 How.) 156, 187 (1853) (Nelson, J., dissenting), *rev’d in part*, 63 U.S. (22 How.) 132 (1860).

¹⁹ *See* Sean M. O’Connor, *The Lost “Art” of the Patent System*, 2015 U. ILL. L. REV. (forthcoming June 2015) (manuscript at 5-6) (on file with the author).

²⁰ *Id.* (manuscript at 14-15).

²¹ *Id.* (manuscript at 15-16).

fare in the early modern period. While Leonardo da Vinci is perhaps the most famous of these, there were a number of such inventive engineers offering their services to princes across Europe from the fourteenth century onward.²² In fact, the term “engineer” derived from “ingenere” and was related to “ingenious,” circling back again to the shared roots of “genie” and “genius.”²³ This underscored the importance of “genius” inspiration for these new “engineers.”

At the same time, equally prized in both artisans and engineers was the “skill” they had developed in producing artifacts or results in the real world. Much of this was in the form of the “show-how” variant of know-how that had to be mastered through practice.²⁴ Show-how cannot be codified into text or images, although these mediums can be used to describe or help convey some of the actions involved. In modern cognitive science, show-how is called “procedural knowledge” and is exemplified by learning to ride a bicycle or play guitar.²⁵ Because artisanal show-how was also frequently kept as trade secrets and demonstrated only to apprentices,²⁶ its dissemination could be quite limited. Regions that did not possess show-how actively sought it out, often through an early version of patents today referred to as “patents of importation.”²⁷

Innovation occurs when genius and skill come together and an unanticipated new kind of artifact or method is developed. The idea of this new kind of thing arises through the inspirational sense of “genius,” but cannot be realized without the artisan’s show-how craft skill. The challenge is that not all inspired geniuses can master the requisite skill to bring their ideas to practical application, while many skilled artisans may have little inspiration. Thus, those who possessed both were highly valued individuals.²⁸ This carried through to the emerging class of engineers in the early modern period in which the number of inspired geniuses amongst those with technical skill was probably smaller than the number of geniuses in the creative artist classes.²⁹

²² See *id.* (manuscript at 14-16).

²³ *Id.* (manuscript at 14-15).

²⁴ *Id.* (manuscript at 12-13).

²⁵ See JOHN R. ANDERSON, *THE ARCHITECTURE OF COGNITION*, at viii, 215 (1983); see also ANNETTE KARMILOFF-SMITH, *BEYOND MODULARITY: A DEVELOPMENTAL PERSPECTIVE ON COGNITIVE SCIENCE* 16-17 (1992) (discussing playing the piano and solving the Rubik’s Cube as examples of procedural knowledge). Procedural knowledge is contrasted with “declarative knowledge” that is typified by declarative statements whose meanings are conveyed immediately upon comprehension by the recipient. For example, “Tom is ten years old” does not have to be practiced or mastered.

²⁶ See O’Connor, *supra* note 19 (manuscript at 13).

²⁷ *Id.* (manuscript at 2); cf. Ted Sichelman & Sean O’Connor, *Patents as Promoters of Competition: The Guild Origins of Patent Law in the Venetian Republic*, 49 *SAN DIEGO L. REV.* 1267, 1268-69 (2012).

²⁸ See O’Connor, *supra* note 19 (manuscript at 15).

²⁹ See *id.* (manuscript at 15-16).

Beyond the core point that neither artist:creator nor entrepreneur:innovator are co-extensive, artists still sometimes become entrepreneurs and vice versa, further blurring the categories. This is not a new phenomenon. Samuel F.B. Morse was a visual artist who became fascinated with uses of the newly harnessed “galvanic” force and then developed an audiovisual system for communicating language at a distance through it, resulting in the telegraph.³⁰ In the current era, this transition of artist to entrepreneur seems to have increased especially with regard to digital and social media start-ups.³¹ In a different vein are the actors, musicians, and other artists who build off their fame to launch entrepreneurial products or services.³² In the reverse, a number of entrepreneurs have become artists or focused on art-based products or services. One set of examples comes from the early decades of the music recording business in which entrepreneurs who sought to profit from selling records, such as the Chess brothers at Chess Records³³ and Jim Stewart and Estelle Axton at Stax Records,³⁴ discovered major talents and helped develop new genres such as rock and roll, soul, and R&B.

Increasingly there are “convergence” firms and fields that generate both creative content and innovative technology. Getty Images, for example, not only developed an innovative technology platform for digitizing and distributing images, but it also now works directly with content creators to produce new works for Getty Image’s catalogues.³⁵ Likewise, Netflix, which started as an Internet-based videos-by-mail service, moved into not only online streaming distribution, but also into the content production business with award-winning original programming including *House of Cards* and *Orange Is the New Black*.³⁶ Both Getty and Netflix converged towards content production. But video game companies such as Valve

³⁰ O’Reilly v. Morse, 56 U.S. (15 How.) 62, 68-69 (1854).

³¹ For example, the founders of Kickstarter are artists. *Pressroom*, KICKSTARTER, <https://www.kickstarter.com/press> (last visited Mar, 2, 2015).

³² Artist-celebrities such as Jennifer Lopez and Sean “P-Diddy” Combs have parlayed success as performers into multiple entrepreneurial product lines. Martin Bashir, *Diddy Brings Same Old Hustle to Host of New Pursuits*, ABC NEWS (June 10, 2010), <http://abcnews.go.com/Nightline/diddy-exclusive-nightline-interview/story?id=10866530>; JENNIFER LOPEZ BEAUTY, <http://www.jenniferlopezbeauty.com> (last visited Mar, 2, 2015).

³³ See *Chess Records*, WIKIPEDIA, http://en.wikipedia.org/wiki/Chess_Records (last modified Feb. 19, 5:02 AM); *Leonard Chess*, WIKIPEDIA, http://en.wikipedia.org/wiki/Leonard_Chess (last modified Jan. 11, 2015, 7:24 PM).

³⁴ See *Stax Records*, WIKIPEDIA, http://en.wikipedia.org/wiki/Stax_Records (last modified Feb. 05, 2015, 6:50 PM).

³⁵ See *About Us*, GETTY IMAGES, <http://press.gettyimages.com/about-us/> (last visited Mar. 2, 2015).

³⁶ Alex Ben Block, *Netflix’s Ted Sarandos Explains Original Content Strategy*, HOLLYWOOD REP. (Apr. 07, 2012, 11:26 AM), <http://www.hollywoodreporter.com/news/netflix-ted-sarandos-original-content-309275>; Brian Stelter, *Netflix’s Strategy: Shows for Every Age*, CNN MONEY (Oct. 13, 2014, 3:58 PM), <http://money.cnn.com/2014/10/13/media/netflix-kids-interview/>.

Software embodied the convergence of technology and content from the beginning.³⁷ They produce both the creative content of their games as well as the technology behind them. Likewise, the path-breaking computer-generated image movie company Pixar also engaged in this kind of convergence from its founding.³⁸ Pixar, in fact, has won both content and technology awards.

II. APPROPRIATION MECHANISMS

Regardless of the actual distinction or overlap among artists, entrepreneurs, creators, and innovators, they all need some means of supporting both themselves *and* the practical instantiation of their ideas. This could be done through grants, awards, prizes, premiums, or other direct support to the individual. Or it could be done through monetization of the artifacts or services produced. In capitalist, market-based economies, the latter has been widely used. But for it to work, the artifacts or services must be *appropriable* by the producer, otherwise no one will pay money for them. In other words, if others can simply take or reproduce the artifacts or services for free, then they will not pay the original producer. Appropriation mechanisms thus allow for producers of artifacts or services to support themselves—and fund future productions—by being able to monetize those artifacts or services.³⁹

The concept of an appropriation mechanism can be illustrated by thinking about a craftsman who builds furniture. Personal property rights allow the craftsman to monetize the furniture he produces. For example, a particular chair he built is his exclusive property, assuming he had lawful unencumbered rights to the materials used to produce it and did not infringe anyone else's rights in doing so. He can then seek to convey title in the chair to someone else in exchange for money or other value—in other words, sell the chair. The property right in the chair is the appropriation mechanism by which he can legally protect his investment and efforts in building the chair: no one else can simply take the chair without his permission, absent unusual legal circumstances.

³⁷ Valve Software, producer of successful game franchises such as *Half-Life*, social-entertainment technology platform *Steam*, and game-engine developer tool *Source*, embodies this convergence. *Welcome to Valve*, VALVE, <http://www.valvesoftware.com/company/index.html> (last visited Mar. 2, 2015). In some ways, this echoes the early decades of the music recording industry in which pioneering producer-engineers developed both content and technology to produce path-breaking multi-track audio landscapes that were nothing like what anyone had heard before on a regular soundstage. Dan Daley, *The Engineers Who Changed Recording: Fathers of Invention*, SOUND ON SOUND (Oct. 2004), <http://www.soundonsound.com/sos/Oct04/articles/rocketscience.htm>.

³⁸ *Our Story*, PIXAR, <http://www.pixar.com/about/Our-Story> (last visited Mar. 2, 2015).

³⁹ See David J. Teece, *Profiting from Technological Innovation: Implications for Integration, Collaboration, Licensing and Public Policy*, 15 RES. POL'Y 285, 287, 290 (1986).

IP rights are then the appropriation mechanisms for products of the intellect.⁴⁰ They allow one to control not just the artifacts or services one personally produces, but also any copies of those artifacts or services produced by others.⁴¹ The first kinds of IP rights to consider are patents that give exclusive rights to inventors for novel and nonobvious useful products or methods.⁴² But this means that the inventor can effectively monetize not only his own direct production of goods or delivery of services, but also anyone else's doing so. At the same time, the inventor and other producers of the covered goods will have personal property rights over the artifacts they produce themselves, just based on personal property rights as discussed above. Thus there seem to be two levels of appropriation mechanisms covering the same productions. But the patent mechanism is not so much aimed at the actual physical goods as it is to the production of the *innovation* that the invention represents (and is then embodied in the goods). The four predominant economic justifications for patents are that they incentivize development of inventions, public disclosure of inventions (a condition of patenting), commercialization of inventions, and designing around currently patented inventions.⁴³

Trade secrets, while less property-like perhaps than patents, are also appropriation mechanisms that give legal redress to someone with confidential, commercially valuable information or processes whose secrets have been *misappropriated* by someone else.⁴⁴ Secrecy in and of itself can be an appropriation mechanism. But the law of trade secrets enhances the effectiveness of secrecy as such a mechanism. Secrecy is further enhanced by the availability of enforceable contracts to allow limited disclosure to select others without the secret being deemed as now public.⁴⁵ Additionally, legal steps taken to control the disclosure of secrets, such as nondisclosure contracts, bolster one's claim to having enforceable trade secrets.

Copyright is another appropriation mechanism that gives exclusive rights to authors for copies of their original expressive works, including technology-oriented goods such as software.⁴⁶ While the author has to have fixed the original expression in a tangible medium, once copyright arises the author can control the production of not only copies she produces, but also those that anyone else produces. And, again like patents, there are two levels of appropriation mechanisms at play for any copies. First is the personal property right to that physical object. Second is the copyright that is

⁴⁰ *Id.* at 287 & fig. 3.

⁴¹ *See id.* at 290.

⁴² *See id.* at 287.

⁴³ *See* F. SCOTT KIEFF ET AL., *PRINCIPLES OF PATENT LAW: CASES AND MATERIALS* 63-68 (6th ed. 2013).

⁴⁴ *See* Teece, *supra* note 39, at 287.

⁴⁵ *See id.* at 290.

⁴⁶ *See id.* at 287, 290.

really directed at creation of the *form* and *substance* of the work, and not any particular copies. Further analogous to patents, copyrights are usually justified as incentivizing the creation of new, original works, the publication of such works (rather than keeping them private), and the distribution of copies of the work.⁴⁷

Trademarks are the last type of IP rights that can also be a valuable appropriation mechanism. In this case, the appropriated object is the *brand* of products or services as represented in particular words or images.⁴⁸ Development of brands has become a core component to the commercialization of creative or innovative artifacts and methods.⁴⁹ Trademarks are thus complementary to, and in some cases can be used as a partial substitute for, patents or copyrights. If consumers are inclined to buy products or services only from one company due to brand reputation and loyalty, then it may not matter so much if other companies can freely copy the original company's products or services.

Beyond the formal categories of IP rights lie some other legal tools that can be used as appropriation mechanisms. Rights of publicity under state law can allow for appropriation of one's image and other indicia of personality as a kind of brand of the individual person.⁵⁰ This is especially relevant for the monetization of goods or services that are provided directly by that person, or under their express endorsement or authorization. Likewise, Section 43 of the federal Lanham Act provides rights to any claims of endorsement or affiliation by individuals or legal persons, such as corporations.⁵¹

All of these appropriation mechanisms arose to allow producers of creativity, innovation, goods, or services to monetize their productions. But because the revenues will not flow in until after the thing is produced and deployed, producers need to find some initial way to support themselves and the development necessary to engage in the commercialization process. No one would pay to support this engagement unless it was either clearly a charitable program, or unless there would eventually be a return on what is effectively an investment. Holding aside the charitable angle, then, it should be clear that no one would invest without some appropriation mechanism that would provide them with a favorable return on their investment through the monetization of the commercialized goods or services. If they cannot see a way to get such a return, they will not make the investment.

While the linking of investment and appropriation mechanisms should be painfully self-evident, it can get lost in contemporary IP debates. This is

⁴⁷ See ROBERT P. MERGES ET AL., *INTELLECTUAL PROPERTY IN THE NEW TECHNOLOGICAL AGE* 437 (6th ed. 2012).

⁴⁸ *Id.* at 763-68.

⁴⁹ See *id.* at 766-68.

⁵⁰ *Id.* at 1064-65.

⁵¹ *Id.* at 943-52.

because researchers tend to only look at one mechanism at a time. When they then find an activity that does not rely on that mechanism, they are tempted to conclude that no appropriation mechanisms are needed.⁵² But this of course does not follow. For example, researchers looking at the fashion industry and the stand-up comedy business argue that there is plenty of innovation in those fields even though copyright is not available for them.⁵³ But this ignores the powerful use of brands and trademarks in fashion, and glosses over the challenges and violence in the comedian business.⁵⁴

Thus, again, there have to be appropriation mechanisms for investors to get a return on their investment. Just because a field does not rely on the one mechanism someone might expect it to does not mean it uses none of the other mechanisms. The real question, then, is which mechanisms are being used in which fields? The next Part explores this core issue, with emphasis on the paradox that all producers want their inputs to be freely accessible, while their outputs should be appropriable.

III. INPUTS AND OUTPUTS

All creators and innovators have both “inputs” and “outputs” with regard to their products or services. In my experience as a transactional IP lawyer, I classify things like raw materials, processed materials, IP, other kinds of information, and even funding, as inputs. Naturally, each creator or innovator would like their inputs to be “free” in both senses of that term: “free” as in no cost, and “free” as in no permission or authorization required.⁵⁵ At the same time, one would expect that most creators and innovators would *not* like their outputs to be free simultaneously in both senses. For example, even those who might be happy to distribute their works at no cost generally want a right of attribution as well as the right to prevent uses of the work that they feel jeopardize its integrity.⁵⁶ Given that in many cases

⁵² See, e.g., KAL RAUSTIALA & CHRISTOPHER SPRIGMAN, *THE KNOCKOFF ECONOMY: HOW IMITATION SPARKS INNOVATION* 7-8 (2012).

⁵³ *Id.*

⁵⁴ See Dotan Oliar & Christopher Sprigman, *There's No Free Laugh (Anymore): The Emergence of Intellectual Property Norms and the Transformation of Stand-up Comedy*, 94 VA. L. REV. 1787, 1790-91 (2008); David M. Adler, *Fashion Law: Protecting Brands and Designs*, LANDSLIDE, Jan./Feb. 2013, at 21, 21-23 (2013).

⁵⁵ The open source and free software community traditionally illustrated this as the distinction between “free beer” and “free speech.” *What Is Free Software?*, GNU OPERATING SYS., <http://www.gnu.org/philosophy/free-sw.html> (last updated Aug. 5, 2014).

⁵⁶ Integrity has multiple senses as well. One sense is where others modify the work in ways that the author or inventor feels changes the meaning or renders it less effective in its practical use, yet still presents it as the author's or inventor's work, respectively. Another sense is context including the appearance of affiliation or endorsement, such as where others use the author's work as part of a political campaign for a candidate diametrically opposed to the author's own political views. There may be less

one creator's or innovator's output is another's input, tensions arise as to how appropriation mechanisms can be used by creators and innovators to potentially control or affect "downstream" creativity or innovation.

Traditionally, this tension has been viewed in an upstream/downstream construct within *either* the "creative" fields *or* the "innovation" fields.⁵⁷ In other words, artists' use of other artists' works *or* inventors' use of other inventors' inventions. But this Essay posits that the real issue is the use of creators' works as a kind of commodity or throughput product of innovators' new search⁵⁸ and social media platforms. As part of the process, *users* of the search or social media platforms may use or modify the original creators' works, but such use or modification is not being done by the search or social media platforms. Because the platforms largely monetize their technology innovations through advertising models, they would, not surprisingly, like content creators to exercise minimal appropriation rights so that maximal content is freely available (in both senses of the word "free") through the platforms.⁵⁹ Content creators, by contrast, of course would generally like some level of appropriability of their works—if for nothing else other than to ensure proper attribution.⁶⁰

This Part proceeds by first examining the background of the "remix" user-generated-content ("UGC") culture in appropriation art and music sampling. It then briefly discusses how the UGC culture emerged in its present form through social media platforms. Next, this Part considers the re-

of an interest in this sense for inventors with regard to their inventions (although they likely have these interests with regard to their persona).

⁵⁷ See, e.g., Joseph P. Fishman, *Creating Around Copyright*, 128 HARV. L. REV. (forthcoming 2015) (manuscript at 2-3), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2465590##; Alberto Galasso & Mark Schankerman, *Patents and Cumulative Innovation: Causal Evidence from the Courts* 2, 6-10 (Nat'l Bureau of Econ. Research Working Paper No. 20269, 2014), available at <http://www.nber.org/papers/w20269.pdf>.

⁵⁸ "Search" is used here in its information technology meaning as digital Internet search engines such as Google. See JACQUES BUGHIN ET AL., THE IMPACT OF INTERNET TECHNOLOGIES: SEARCH 1 (2011); SEARCH ENGINE HIST., <http://www.searchenginehistory.com> (last visited Mar. 2, 2015).

⁵⁹ See, e.g., BUGHIN ET AL., *supra* note 58, at 22-27; JEANETTE CARLSSON, AN ASSESSMENT OF SOCIAL MEDIA BUSINESS MODELS AND STRATEGIC IMPLICATIONS FOR FUTURE IMPLEMENTATION 28 (2010), available at <http://www.opengardensblog.futuretext.com/wp-content/uploads/2010/10/Jeanette-Carlsson-An-Assessment-of-Social-Media-Models.pdf>; ORG. FOR ECON. CO-OPERATION & DEV., OECD INTERNET ECONOMY OUTLOOK 2012, at 184-87 (2012); Eric Fulwiler, *As Pinterest Meets With Marketers, Evolving Business Model Gets Clearer: Pinterest Isn't About Social, It's About the Visual Web and Search*, ADVERTISING AGE (May 24, 2013), <http://adage.com/article/digitalnext/pinterest-social-search/241683/>. Some social media platforms have attempted to bring at least users into ad revenue sharing programs, although even these still do not address the third party creators whose works may be used by the platforms' users as inputs into the latter's user-generated content. See, e.g., Mike O'Brien, *Are Paid Platforms the Future of Social?*, CLICKZ (Oct. 27, 2014), <http://www.clickz.com/clickz/news/2377732/are-paid-platforms-the-future-of-social>.

⁶⁰ See Roberta Rosenthal Kwall, *The Attribution Right in the United States: Caught in the Crossfire Between Copyright and Section 43(A)*, 77 WASH. L. REV. 985, 985-87 (2002).

lated but different dynamics of search and the access-to-knowledge (“A2K”) movement. Finally, it presents a core theme of this Essay that at least some major search and social media firms are trying to undermine creator attribution mechanisms while downplaying their support for and enforcement of their own attribution mechanisms.

A. *Setting the Stage for the “Remix” Culture: Appropriation Art*

The seminal copyright parody fair use case *Campbell v. Acuff-Rose Music, Inc.*⁶¹ helped establish Judge Pierre Leval’s concept of “transformative use” into the case law.⁶² Section 107 in the Copyright Act sets out four factors courts must consider when deciding whether the copying of a registered work is actionable infringement:

(1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes; (2) the nature of the copyrighted work; (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and (4) the effect of the use upon the potential market for or value of the copyrighted work.⁶³

Campbell concerned a fair use defense raised by the rap group 2 Live Crew for copying the hit song “Oh, Pretty Woman” by Roy Orbison.⁶⁴ While 2 Live Crew’s version was clearly commercial, as was the original, and a substantial portion of the original was used by the rap group, the Court found that 2 Live Crew had “transformed” the original through what the rap group claimed was an attempt at parody, such that the new work did not have much of a detrimental effect on the market for the original.⁶⁵ Accordingly, the group was not liable for infringement.⁶⁶

Subsequent to this case, the judicial factor of “transformative use” has expanded far beyond both the category of music copyright and the fair use parody defense. It is routinely invoked for almost any copyright infringement claim where it is fairly clear that copying has occurred.⁶⁷ If the alleged infringer can create any argument that he has transformed the copied elements from either their original form or by placing them into a new context,

⁶¹ 510 U.S. 569 (1994).

⁶² *Id.* at 579, 589, 584; Pierre N. Leval, *Toward a Fair Use Standard*, 103 HARV. L. REV. 1105, 1110-12 (1990).

⁶³ Copyright Act of 1976, 17 U.S.C. § 107 (2012).

⁶⁴ *Campbell*, 510 U.S. at 571-72.

⁶⁵ *Id.* at 578-85.

⁶⁶ *Id.* at 594.

⁶⁷ See *The Scope of Fair Use: Hearing Before the Subcomm. on Courts, Intellectual Prop., and the Internet of the H. Comm. on the Judiciary*, 113th Cong. 13-14, 17-18 (2014) (statement of June M. Besek, Executive Director of Kernochan Center for Law, Media and the Arts, and Lecturer-in-Law, Columbia Law School).

then he might be judged to have engaged in permissible activity.⁶⁸ Fair use is designed to be one of the Copyright Act's "safety valves" or "built-in First Amendment accommodations" that balances the exclusive rights of authors with important public interest speech and A2K values.⁶⁹ For example, commentators must be able to not only reference works they wish to critique, but they also should be able to reproduce short segments for illustrative purposes.⁷⁰ Likewise, classroom instructors must be able to use segments of works they are discussing in class.⁷¹

Around the same time as Judge Leval was articulating transformative use and the Supreme Court was applying it in *Campbell*, the emerging doctrine was put to the test in copyright litigation over "appropriation art." In this art form, artists take the existing work of others as a kind of "found art" input that they then modify or incorporate into a new work.⁷² In an early test case, the U.S. Court of Appeals for the Second Circuit found appropriation artist Jeff Koons liable for infringement of the plaintiff photographer's photo "Puppies."⁷³ Koons conceded that his sculpture "String of Puppies" was a copy of the photo, but claimed that it was a fair use because it was intended as parody or commentary.⁷⁴ The court was not persuaded, and the case raised the question of whether an artist can simply *claim* that he intended to parody or comment on the original work, or whether there has to be some objective evidence that the audience for the work would perceive it as such.⁷⁵

But the Second Circuit appears to have warmed to the idea of appropriation art as a transformative fair use in recent years. In a 2006 decision also involving Koons's work, the court found his collage artwork "Niagara"—which included an unauthorized copy of plaintiff photographer's image of sandal-clad feet from a Gucci ad—to be a "transformative" fair use that would be unlikely to have an effect on the market for the original work.⁷⁶ In its most recent statement on the matter, the Second Circuit held

⁶⁸ *Id.* at 13-18.

⁶⁹ *Eldred v. Ashcroft*, 537 U.S. 186, 219 (2003).

⁷⁰ 17 U.S.C. § 107 (2012).

⁷¹ *Id.*

⁷² See ROBERT ATKINS, ARTSPEAK: A GUIDE TO CONTEMPORARY IDEAS, MOVEMENTS, AND BUZZWORDS, 1945 TO THE PRESENT 69-70 (David Fabricant ed., 3d ed. 2013).

⁷³ *Rogers v. Koons*, 960 F.2d 301, 313 (2d Cir. 1992).

⁷⁴ *Id.* at 308.

⁷⁵ *Id.* at 310. These types of cases can also raise the further question whether the artist truly intended the work to be a parody or commentary on the original *at the time of creation* or whether such claims are simply developed later as a defense strategy.

⁷⁶ *Blanch v. Koons*, 467 F.3d 244, 258-59 (2d Cir. 2006) (finding the same appropriation artist's, (Jeff Koons's) use of "Silk Sandals" as fair use and not an infringement).

that a work could be transformative even if it were not a parody or commentary on the work.⁷⁷

Koons is reputedly about to be sued for copyright infringement yet again.⁷⁸ But even as he repeatedly seems to play fast and loose with others' copyrighted works as merely his inputs, he paradoxically is vigorous to enforce his *own* copyrights.⁷⁹ This underscores the hubris of some creative innovators: *their* contributions are valuable; everyone else's not so much.

B. *The Emergence of Social Media Platforms and User-Generated Content*

When inexpensive digital image processing tools became available in recent years, they fueled the use of social media platforms such as Facebook, YouTube, Instagram, and Pinterest for posting of UGC. This comes in three categories, as articulated by Professor Daniel Gervais.⁸⁰ "User-authored content" consists of content created entirely by users.⁸¹ "User-derived content" consists of content that is created by substantially modifying third-party content.⁸² "User-copied content" consists of third-party content simply reposted by users to their own platforms.⁸³ The most concerning categories are user-derived and user-copied, as they involve the works of others. In the analog print world, such uses by amateurs may not have raised as many copyright issues because dissemination was limited.⁸⁴ But the online digital world of social media changed all this, as the works can now be distributed around the world with the click of a mouse.

⁷⁷ See *Cariou v. Prince*, 714 F.3d 694, 707 (2d Cir. 2013). The Second Circuit reversed a district court injunction against appropriation artist Richard Prince for his use of photographer Patrick Cariou's published photos. *Id.* at 712. The district court had found that Prince's work did not parody or comment directly on Cariou's work, and that Cariou lost at least one potential gallery show because of Prince's high profile gallery showing of the appropriated works. *Id.* at 707-08. But the Second Circuit held that this application of the fair use factors was too narrow and that twenty-five of the thirty unauthorized uses were fair, remanding to the district court to review the remaining five under the clarified fair use factors. *Id.* at 712. The case was settled before the remand was decided. See Brian Boucher, *Landmark Copyright Lawsuit Cariou v. Prince Is Settled*, ART IN AM. (Mar. 18, 2014), <http://www.artinamericamagazine.com/news-features/news/landmark-copyright-lawsuit-cariou-v-prince-is-settled/>.

⁷⁸ See Doreen Carvajal, *Koons Again Accused of Copyright Infringement*, N.Y. TIMES ARTSBEAT BLOG (Dec. 19, 2014, 2:26 PM), http://artsbeat.blogs.nytimes.com/2014/12/19/koons-again-accused-of-copyright-infringement/?_r=1.

⁷⁹ *Id.*

⁸⁰ Daniel Gervais, *The Tangled Web of UGC: Making Copyright Sense of User-Generated Content*, 11 VAND. J. ENT. & TECH. L. 841, 858-59 (2009).

⁸¹ *Id.* at 858.

⁸² *Id.* at 869.

⁸³ *Id.* at 859.

⁸⁴ *Id.* at 870.

With regard to user-derived and user-copied content, the question is whether and when postings that include other creators' content should qualify as transformative use. Nothing about the Internet changes the basic relationship between copyright and free speech as established in the physical world.⁸⁵ Thus, case law around things such as appropriation art should still be used as reliable indicators for the resolution of fair use questions in digital and social media. Here the focus is on "mash-ups," "remixes," or even simply audio or visual content that happens to include someone else's work (such as the infamous "dancing baby" video with a baby dancing along to a Prince song).⁸⁶ Are these transformative in the sense of fair use, or are they instead simply derivative works that are intentionally based on, and benefiting from, the copied work and which need to be licensed from the copied work's copyright owner?⁸⁷

This is a difficult question and well beyond the scope of this Essay, but the answer cannot be that *all* uses of other's content are transformative just because the user is copying the content for his own purposes. For example, adding some video to a recording of one's favorite song is likely not transformative, even though it feels like the video helps others understand how the song affects you. Likewise, the fact that one is not making money off one's postings—and not attempting to—is not dispositive for fair use either. The Internet does change one part of the fair use dynamic: even if one is truly posting one's video-enhanced copy of someone else's song for one's circle of friends, unless the video is password protected or otherwise restricted, it is now available to the world and can significantly diminish the market for the song. At the same time, the ease with which digital content can be manipulated allows for unparalleled possibilities for fair use commentary and parody. The difficult zone is the "other" categories of transformative use that are neither commentary nor parody, alluded to by the Second Circuit.⁸⁸

⁸⁵ See Sean M. O'Connor, *The Internet Does Not Reset the Copyright-Free Speech Balance*, GEORGE MASON UNIV. SCH. L.: CTR. FOR PROT. INTELL. PROP, Nov. 2013, at 1, 1, available at <http://cpip.gmu.edu/wp-content/uploads/2013/08/The-Internet-Does-Not-Reset-the-Copyright-Free-Speech-Balance.pdf>.

⁸⁶ See *Lenz v. Universal Music Corp.*, 572 F.Supp.2d 1150, 1151-52 (N.D. Cal. 2008).

⁸⁷ "A 'derivative work' is a work based upon one or more preexisting works, such as a translation, musical arrangement, dramatization, fictionalization, motion picture version, sound recording, art reproduction, abridgment, condensation, or any other form in which a work may be recast, transformed, or adapted. A work consisting of editorial revisions, annotations, elaborations, or other modifications which, as a whole, represent an original work of authorship, is a 'derivative work.'" 17 U.S.C. § 101 (2012). The preparation of derivative works is one of the express exclusive rights of copyright owners. *Id.* § 106. It is a highly valuable right probably best known to the general public through references in popular media to book authors' "motion picture rights." While there is a compulsory license for new "covers" of musical compositions that have already been released on phonorecords under direct authorization from the copyright owner, this only extends to new *audio* recordings, and not to audiovisual recordings (even where the video portion is simply the musicians performing the song). *Id.* § 115(a)(2).

⁸⁸ See *Cariou v. Prince*, 714 F.3d 694, 707 (2d Cir. 2013).

For some, this situation is not concerning: user-derived content and user-copied content should be seen as at least transformative fair use, if not an indictment of the allegedly outdated legal artifact of copyright law.⁸⁹ Further, those who view the demise of copyright as of no particular concern believe that creators who have other jobs or ways of making money will produce adequate creative works.⁹⁰ In other words, we should not worry about whether users post their own content or that of others because copyright is an outmoded means of economic regulation in cyberspace: we should simply allow users to post freely without regard to obtaining permissions from others or compensating other creators for the latter's work.

A related strand of this thinking is that the new digital tools for production and distribution of content have reduced production costs to effectively zero.⁹¹ For example, anyone with a Mac computer and an Internet connection can use the GarageBand application to record a song and make it instantly available to the world. Or, even more basic, anyone can use the built-in camera and microphone on her computer to record herself performing songs that can then be posted to YouTube for worldwide distribution. If the clips are good enough, or quirky enough, they will go viral and voila: recording studios, producers, side musicians, managers, record labels, record pressing plants, record sleeve artists/designers, marketers, distributors, and record stores have been rendered obsolete.

Except that we do not actually seem to want a world with *only* what this Essay will call “amateur song selfies”—no matter how cute they might be on occasion or how often they introduce a new talent. Instead, as shown in one of the most famous cases of this phenomenon, the singer in question did not stop once achieving success with his amateur song selfies. Justin Bieber followed up his YouTube fame by signing with a label and a manager that put him into a professional studio with professional producers, and recorded highly produced pop music.⁹²

Thus the issue is not whether people will create new songs and other content without appropriation mechanisms such as copyright, but whether

⁸⁹ See LAWRENCE LESSIG, REMIX: MAKING ART AND COMMERCE THRIVE IN THE HYBRID ECONOMY 272-73 (2008).

⁹⁰ See *id.* at 157; RAUSTIALA & SPRIGMAN, *supra* note 52, at 7-8.

⁹¹ See, e.g., Raymond Shih Ray Ku, *The Creative Destruction of Copyright: Napster and the New Economics of Digital Technology*, 69 U. CHI. L. REV. 263, 305-06 (2002). For a critique of these assumptions, see Adam Mossoff, *How Copyright Drives Innovation in Scholarly Publishing* 15 (George Mason Univ. Law & Econ. Research Paper Series No. 13-25, 2013), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2243264.

⁹² Bieber's manager Scooter Braun did keep the artist producing YouTube videos made to look amateur for a while after signing him to “build him up more” with his Internet fan base. But the intent was never to let Bieber remain on YouTube in this format forever. Rather it was a calculated marketing move to build a kind of Internet street cred that could then be translated into major revenues for professional recordings and live performances. Jan Hoffman, *Justin Bieber Is Living the Dream*, N.Y. TIMES, Jan. 3, 2010, at ST1.

they can *produce* them to the degree we (and they) would like. Quality production takes a lot more than a laptop and the free software that comes loaded on it.⁹³ Even where that equipment could be adequate, it is the training of the person using it in the *production* of recorded content that makes it good, not just ideas for the content generally.⁹⁴ One person can certainly do it all, but it takes significant experience and talent to perform all those functions.

Professor Rob Merges argues that policymakers should fight against the demise of IP in this way because they should support a professional creative class of artists and inventors.⁹⁵ But he does not satisfactorily explain *why* this is important. Primarily he seems to root it in human dignity and valuing artists and inventors as deserving the support of what he seems to concede is a utilitarian market intervention by IP systems.⁹⁶ He also adopts the position that we will get “better” art and inventions if society supports a creative class, but does not exactly articulate why.⁹⁷

There is, however, a direct and pragmatic argument for the value of a full-time creative class: maintaining and being at the top of one’s craft requires daily practice. It is not about tying it to any particular kinds of individuals, expressions, or inventions. Rather, it is about ensuring that those whose works seem to be appreciated by others can make the best possible versions of those works. The importance of daily engagement in one’s craft is well represented by performing artists such as musicians, who refer to the phenomenon as “chops.” To “keep his chops up,” the musician must constantly practice. When in this state, the musician can execute difficult passages to the very best of his ability. When he has not played for a while, he can still play well, but he cannot match his best playing and intensity. This can apply to any craft or skilled activity. Would you rather undergo brain surgery from the doctor who is currently performing these operations on a regular basis or one who has not picked up a scalpel in a few years? Enabling a mechanism so that creators and inventors can get paid for engaging in creation/invention means that they can do it more frequently—without the distractions of having to make money doing something else—which in turn increases the chances they will produce their best work. To be clear, this is not about “high art” versus “low art.” It is about the artist having the

⁹³ The equivalent of this in scholarly publishing has been well documented by Adam Mossoff. Mossoff, *supra* note 91, at 15.

⁹⁴ See, e.g., Tim Chester, *50 of the Greatest Producers Ever*, NME, <http://www.nme.com/list/50-of-the-greatest-producers-ever/262849/article/265277#article> (last visited Mar. 2, 2015); Daley, *supra* note 37.

⁹⁵ See ROBERT P. MERGES, *JUSTIFYING INTELLECTUAL PROPERTY*, at xi-xii (2011). The creative class concept largely originated with Richard Florida. RICHARD FLORIDA, *THE RISE OF THE CREATIVE CLASS: AND HOW IT’S TRANSFORMING WORK, LEISURE, COMMUNITY, AND EVERYDAY LIFE*, at ix (2002).

⁹⁶ MERGES, *supra* note 95, at xi-xii.

⁹⁷ *Id.* at 2.

time and tools to perfect whatever kind of creative expression she envisions.

The further challenge to those who support what this Essay will call the “content wants to be free” approach is that the social media platforms are themselves monetizing the content through advertising and data mining.⁹⁸ Thus, it seems inequitable at best for the platforms and their supporters to be advocating a culture of “free” when the platforms are making money off that content (and the users’ information on top of it through the sale of the data generated about such users). This angle will be explored further in Part III.D below.

C. *Search Engines and Access to Knowledge Movement: Content as Commodity or Commons*

A different debate is over the importance of ensuring that those of limited means or in countries with limited infrastructure can have adequate A2K in the form of online content.⁹⁹ In this debate, two conflicting moral claims must be balanced against each other: the right of creators to exert some control over their creations, and the public interest in not having important knowledge restricted only to the privileged few who can afford it. Further, the A2K movement champions the view that some areas of knowledge should be viewed as the common heritage of humanity and accessible to all. Search engines such as Google, through its Google Books project, ally themselves with the A2K movement—perhaps in part to share in the progressive moral high ground that A2K seems to occupy.¹⁰⁰

But even though both search firms and A2K claim to start from the positions that authors should get paid for their work and that copyright should be respected, they seem to favor free access as a trump card over such principles. Content is merely the commodity or commons that gets moved through the technical infrastructure for mass distribution and repurposing—preferably as freely as possible. While search firms and A2K do not explain how creators are supposed to support themselves, one gets the sense that they believe that creators will simply find salaried positions or government support. However, this really only works on the government support side (through salaries, grants, contracts, prizes, etc.) because salaries or support on the private side only push the problem back to the employer. If the em-

⁹⁸ See O’Brien, *supra* note 59.

⁹⁹ See, e.g., ACCESS TO KNOWLEDGE, <http://a2knetwork.org/a2k> (last visited Feb. 17, 2015).

¹⁰⁰ See, e.g., *Competition that Works: Why Google Books Project Is Good for Consumers and Competitors: Hearing on Competition and Commerce in Digital Books Before the H. Judiciary Comm.* 111th Cong. 1 (2009) (statement of David A. Balto, Senior Fellow, Center for American Progress Action Fund).

ployer cannot monetize the works either, then how can it afford to continue paying creators or inventors?¹⁰¹

Like social media platforms, search firms are now monetizing UGC in a way that seems inequitable to both users and third-party creators whose works are copied or co-opted by users' postings. In some cases, the monetization is tied directly to pirate sites.¹⁰² Thus, a search firm's rhetorical adoption of A2K ethics and moral high ground should be undermined by its relentless—and highly profitable—monetization of its users' "free" searches. Search firms are not a charitable venture. Rather, the model of free searches available to everyone with an Internet connection is instead a business model that became highly profitable for firms like Google only because sophisticated data tracking and mining was also developed by the firms to maximize advertising and marketing revenues. This puts search firms in effectively the same position as "free" social media platforms that effectively lure users in to reveal a treasure trove of personal preferences and habits that can be packaged and sold to big businesses (and others) hungry for such data.¹⁰³ But, as discussed in Part III.D below, the protection of these algorithms by search firms and social media firms through multiple modes of appropriation mechanisms is also central to their business models, as it gives them a crucial advantage over competitors whose algorithms are not as effective. If these competitors could simply copy and infringe the algorithms of dominant players such as Google, the search and social media landscape would likely look much different.

D. *Search and Social Media Shell Game: Undermining Creator Appropriation Mechanisms While Quietly Protecting and Enforcing Innovator Appropriation Mechanisms*

The business models of Google/YouTube, Facebook, Pinterest, Instagram, and other search firms and social media platforms rely on content as a mere "commodity" that is sent through the systems by users as fuel for

¹⁰¹ Of course, the more concerning speculation is that search and A2K proponents simply believe that creators can, or should, get day jobs working in some other industry to support their creative work (which will then be done perpetually after hours and on weekends).

¹⁰² See Chris Castle, *Google May Continue Driving Traffic to Pirate Sites After DMCA Notices by Using Its Google Alerts Product*, MUSIC•TECH•POL'Y (Jan. 7, 2015) <https://musictechpolicy.wordpress.com/2015/01/07/google-may-continue-driving-traffic-to-pirate-sites-after-dmca-notices-by-using-its-google-alerts-product/>.

¹⁰³ Satirical fake news outfit *The Onion* provides a hilarious, yet deeply disturbing, send-up of the data mining and profiling activities of both Facebook and Google. See *CIA's Facebook Program Dramatically Cut Agency's Costs*, ONION, <http://www.theonion.com/video/cias-facebook-program-dramatically-cut-agencys-cos,19753/> (last visited Feb. 17, 2015); *Google Opt Out Feature Lets Users Protect Privacy by Moving to Remote Village*, ONION, <http://www.theonion.com/video/google-opt-out-feature-lets-users-protect-privacy,14358/> (last visited Feb. 17, 2015).

this community of users to engage with the platforms in ever-increasing amounts.¹⁰⁴ Because the business models are largely ad-based and depend on data mining for revenue, the number one imperative for the platforms is to maximize the number of users and click-throughs.¹⁰⁵ Many of the systems have also explored “freemium” business models in which a free version of the system is offered to lure in users, who will hopefully then convert to the paid subscription version with more features.¹⁰⁶ However, the freemium models can be difficult to deploy.¹⁰⁷ The only revenue models that value content in and of itself are those that allow copyright owners to monetize the content by adding links to products related to the content, or even to sites where those accessing the content can download a legal copy.¹⁰⁸ But these models do not produce revenue for the search firm or social media firm; they only appease some content owners who can make effective use of them. Thus, the search firm or social media firm must still produce revenues through advertising, data mining, or subscription models. Thus, when considering all the business and revenue models, none give the search or social media platform firms any incentive to protect user or third-party creator content, other than legal compliance.

Yet even compliance with copyright law does not necessarily provide a strong incentive for search and social media firms to protect user or third-party creator content. In fact, the Digital Millennium Copyright Act (“DMCA”) unintentionally created a *disincentive* for search engine and social media platforms to participate vigorously in protecting the rights of creators.¹⁰⁹ Entrepreneurs starting search engine or social media platforms that will include UGC are generally told two things by attorneys: (1) put strong terms of service agreements and the “DMCA Page” on the website;¹¹⁰ and (2) do not monitor UGC.¹¹¹ Once the site is live, its operators

¹⁰⁴ See CARLSSON, *supra* note 59, at 20-24.

¹⁰⁵ *Id.*

¹⁰⁶ *Id.* at 26.

¹⁰⁷ See Vineet Kumar, *Making “Freemium” Work*, HARV. BUS. REV., May 2014, available at <https://hbr.org/2014/05/making-freemium-work>.

¹⁰⁸ YouTube’s Content ID is one such program. See *How Content ID Works*, GOOGLE <https://support.google.com/youtube/answer/2797370?hl=en> (last visited Mar. 2, 2015). However, sites using this revenue model must be careful that if they wind up monetizing content posted by users that turns out to be infringing, they may lose their safe harbor for secondary liability for that infringement under the Digital Millennium Copyright Act discussed in the next paragraph. 17 U.S.C. § 512(c)(1)(B) (2012) (for sites hosting content); *id.* § 512(d)(2) (for search engines).

¹⁰⁹ The DMCA was enacted in 1998 to set the ground rules for copyright law in the emerging digital era. Digital Millennium Copyright Act, Pub. L. No. 105-304, 112 Stat. 2860 (1998).

¹¹⁰ The DMCA Page is what lawyers call the mandatory disclosure under the DMCA of the website’s registered agent for purposes of receiving and acting on takedown notices sent by copyright owners regarding infringing content on the site. 17 U.S.C. § 512(c)(2). Such agents must also be registered with the Copyright Office. *Id.* Complying with these items enables the website to come under the DMCA’s safe harbor for “online service providers.”

¹¹¹ The exception is for offensive or obscene material (unless of course that is the point of the site).

must remove or block content flagged as infringing if a “takedown notice” is submitted to the site’s registered agent.¹¹² But this is reactive, not proactive, on the part of the website. Complying with the DMCA notice and takedown provisions provides the website, as an “online service provider” (“OSP”) under the statute, with safe harbor protection from secondary liability for the infringing content.¹¹³

Those who know the details of the statute may find the “do not monitor” piece of advice curious. There is nothing in the law that prevents a UGC-hosting social media platform OSP from monitoring content for copyright infringement. But there is no benefit for the social media platform to do so: it gets the safe harbor regardless. At the same time, there are some serious potential downsides. First, there are the costs in resources. But even worse, given the “red flag” provisions under the statute, a social media platform that does monitor may well find itself with actual knowledge of infringement or an awareness of facts or circumstances from which infringing activity is apparent.¹¹⁴ At that point, the platform must expeditiously remove or disable access to the relevant infringing material, or else lose the safe harbor.¹¹⁵ It must also do so without having received a takedown notice.¹¹⁶ Thus, the advice is “don’t monitor.”

The analysis and advice for search OSPs is similar. However, search platforms that merely provide links or references to other websites via information location tools are not required to have a registered agent.¹¹⁷ But the safe harbor is still dependent on them expeditiously responding to takedown notices (in this case to take down or disable links to the infringing content hosted on the linked site) and removing or disabling access to any links for which it has actual knowledge, or from the facts and circumstances should be aware, of infringing materials at the linked site.¹¹⁸ There is no upside to monitoring, and only downsides. So the DMCA makes it more advantageous to not monitor and simply wait for takedown notices.

At the same time, search firms and social media platforms that want to do the right thing fear the “chump” factor. If everyone else is playing fast and loose with copyright—and making money or getting attention for doing so—why should they walk the straight and narrow path (losing “eyeballs” and money along the way)? Further, in an environment glamorizing “pira-

¹¹² 17 U.S.C. § 512(c).

¹¹³ *Id.* § 512(g).

¹¹⁴ *Id.* § 512(c)(1)(A)(i) (stating that a OSP will not be held liable for infringement if the OSP “does not have actual knowledge that material . . . is infringing”).

¹¹⁵ *Id.* § 512(c)(1)(C).

¹¹⁶ *See id.* § 512(c)(1)(A).

¹¹⁷ *See id.* § 512(d).

¹¹⁸ 17 U.S.C. § 512(d)(3).

cy” and adhering to the “culture of free,”¹¹⁹ the copyright-compliant website might look decidedly uncool.

Perhaps the most troubling aspect of many search firms and social media platforms is that they appear to value their own contributions—the computer code and business model—over the vast amounts of other people’s content that effectively power use of their systems. Taking on the mantle of “innovation,” they seem to view their new distribution platforms as more important than the very thing the platforms are ostensibly supposed to promote: creative expression. If this were merely a superiority attitude it would not matter much. But a pernicious side effect is that many search firms and social media platforms seem quite willing to denigrate, or at least be deeply ambivalent towards, the validity of copyright enforcement for copyright owners whose materials are arguably infringed on the sites. This makes sense as it is in their interest. Too much enforcement of copyright—regardless of whether it is legitimate—might mean less use of the site, which in turn means lower revenues.

This goes to the central theme of this Essay: some innovators are economically benefitting from their own IP-protected services by monetizing these services through a model that undermines creators’ IP. In other words, when Google, for example, uses its advanced algorithms to profit from advertising and data mining tied to links to pirate sites or copyright-infringing content on its subsidiary, YouTube, it is very much relying on its patents, trade secret, copyright, and contract protections on these algorithms so that other search and social media firms cannot simply duplicate this code. A world in which innovators’ code was seriously threatened by misappropriation and piracy would likely see search firms and social media firms publicly calling for stronger enforcement of their chosen appropriation mechanisms. For example, it is telling that Google has not chosen to make its core search and analytics code open source, despite its stated “long-term interests in open source.”¹²⁰ In fact, the company clearly states its proprietary intentions and use of multiple appropriation mechanisms (e.g., IP, confidentiality, and contracts) to advance its business model in its formal filings with the U.S. Securities and Exchange Commission.¹²¹ Underscoring its

¹¹⁹ See, e.g., Clyde Haberman, *Grappling with the “Culture of Free” in Napster’s Aftermath*, N.Y. TIMES (Dec. 7, 2014), <http://www.nytimes.com/2014/12/08/technology/grappling-with-the-culture-of-free-in-napsters-aftermath.html>. This is in many ways an updated version of the “information wants to be free” ethic.

¹²⁰ See Google Inc., Annual Report 13 (Form 10-K), SEC. & EXCHANGE COMMISSION (Feb. 12, 2014), <https://www.sec.gov/Archives/edgar/data/1288776/000128877614000020/goog2013123110-k.htm> [hereinafter Google Inc.].

¹²¹ *Id.*

commitment to a proprietary model, Google is now number eight on the list of firms securing the most U.S. patents.¹²²

Thus, it is relatively easy for tech “innovator” firms to undermine the copyright that protects creators’ content because tech firms by and large use different appropriation mechanisms. Their code and business models are often protected by a combination of patents, trade secrets, and contracts (in the form of the enforceable terms of service that restrict what users can do with the site, its content, and any accessible code behind it, as well as confidentiality and IP assignment agreements with employees and independent contractors).¹²³ And while copyright is also usually part of that mix, it is only one part and the subject matter is computer code—not images, music, text, or video. Thus, in a kind of shell game, the tech firms can freely advocate for copyright reform that would weaken copyright enforcement for content owners without much risk that any changes would hurt their own appropriation mechanisms. In other words, even if their copyright reform efforts resulted in weaker copyright protection for their own code, they would still have patents, trade secrets, and contractual restrictions. But content creators really only have copyright to protect their works.

However, the apparent marginalization of content as mere commodity or commons by tech innovator firms could just as easily be turned around in theory by content producers: applications (“apps”) are the mere “widgets” that allow distribution of premium content. Even during parts of the digital era so far, “content is king.” It could become so again. In fact, given the proliferation of app developers and resultant apps, they could become a “dime a dozen” and be even more abundant than UGC. Further, despite the rise of reality television and other relatively cheap, unscripted shows, that trend seems to have peaked and receded in the face of a “second golden age” of television being produced by premium cable channels, broadcast television, and distribution-platforms-turned-content-producers such as Netflix.¹²⁴

CONCLUSION

Tech innovators currently appear to have the upper hand in protecting their appropriation mechanisms and leveraging business models that undermine the appropriation mechanisms of creators. But this was not always

¹²² See Don Clark, *IBM Wins Most Patents—Again—but Google and Apple Climb in Rankings*, WALL ST. J.: DIGITS (Jan. 12, 2015, 9:00 AM), <http://blogs.wsj.com/digits/2015/01/12/ibm-wins-most-patents-again-but-google-apple-climb-in-rankings/>.

¹²³ See, e.g., Google Inc., *supra* note 120, at 13.

¹²⁴ See, e.g., David Carr, *Barely Keeping Up in TV’s New Golden Age*, N.Y. TIMES, Mar. 10, 2014, at B1, available at <http://www.nytimes.com/2014/03/10/business/media/fenced-in-by-television-excess-of-excellence.html>.

the case, and may not remain the situation for very long. In any event, the “creators vs. innovators” construct is an increasingly skewed and inaccurate picture of the digital realm. Instead, returning to where this Essay started, innovators are creators and creators are innovators. Pixar, Getty Images, Valve Software, and many other “convergence” industry firms create new technology *and* content. Netflix and YouTube now produce both distribution platforms *and* content.

Despite the apparent interest of some deep-pocketed concerns to force the false innovator-creator dichotomy to advance their own interests (i.e., limiting their costs of doing business by running roughshod over content copyrights), the dichotomy is just that—false—and deeply corrosive to the kind of constructive dialogue over IP rights and other appropriation mechanisms that are necessary in our digital age society. Further, the insinuated geography of it—Northern California tech titans versus Southern California entertainment behemoths—is also inaccurate and unnecessarily divisive. The rhetoric on the tech side seems to also paint this as a battle of the future versus the past, with tech on the right side of history, and the entertainment companies playing the role of hidebound naysayers holding back progress. But this again is simply false, as illustrated by the technology-pioneering status of not only entertainment firms such as Pixar, but also content producers such as James Cameron and George Lucas. Meanwhile, the Valley is not always on the pioneering side, as entrepreneurs and venture capital firms can sometimes get caught up in chasing “me too” start-ups, mining some trend that has already peaked.

It all comes back to inputs, outputs, and appropriation mechanisms. All creative innovators are relying on inputs to develop their value-added outputs. While this relationship might be more visible in the expressive arts—because both the artistic inputs and outputs are generally presented to the public—it is no less true in behind-the-scenes technology advances. Innovative code and business models rarely rise *ex nihilo*. Instead they are built off existing code and business models. Code is built on code. Even if a developer writes a program completely from the ground up, he will certainly be relying on other code he has read or written. If nothing else, the developer had to learn to code somewhere, and the programs one learned on are almost certain to influence one’s coding going forward—even when one is essentially trying to reject that old code to write something completely different and better to achieve a particular functionality.

Thus, the apparent stance of large search and social media platform companies to undermine and marginalize copyright for content is not defensible. Under the guise of a kind of open source ethic for content—usually under the banner of free speech and expression—these firms are simply trying to keep their input costs as low as possible while glossing over the fact that they vigorously control, protect, and monetize their outputs. Ultimately, this is a dangerous game: the same arguments they use to devalue content (“information wants to be free”) can be used against their own pro-

proprietary positions. The key sleight of hand is that firms like Google seek to deflect attention from their own powerful proprietary technology appropriations by minimizing their reliance on visible appropriation mechanisms, such as patents and copyright. This allows them to attack those forms of appropriation mechanisms (on which many of their competitors and input source providers rely) as regressive controls on A2K efforts, while safely keeping tight control of their own proprietary creative innovation through the alternate appropriation mechanisms of trade secrets and contract. At the same time, Google and other search and social media firms are increasingly turning to patents and copyright for market appropriation of their innovations. Further, as even Google's subsidiary of YouTube moves to create its own original content programming, the message will hopefully hit home that the appropriation mechanisms of both "innovators" and "creators" need to be respected as the artificial boundary between them more clearly breaks down in the digital ecosystem.

Things may get worse before they get better, however. In a disturbing twist on the anti-copyright/creator rhetoric, some academics and an attorney at Google recently suggested that society would be better off if we took the IP rights, or even the life savings, from successful older artists so that they would have to go back on tour to earn money from live performances and produce new content. In part, this was based on Professor Glynn Lunney's intriguing and provocative empirical research that seeks to show how reductions in record sales as a result of file sharing content piracy have led to more new hits from existing artists.¹²⁵ But, even if this is in fact true now, it is difficult to see how artists will continue to chase increasingly marginal returns by writing and recording new songs. At some point, the futility of this will set in and they will be forced to focus on other music or non-music revenue sources.

Informally, a Google attorney adopted this perspective when he suggested on a widely subscribed listserv that it was "a huge net social welfare gain" when musician Leonard Cohen had to start touring again to replace the money embezzled from him by his manager.¹²⁶ But Cohen is eighty years old and he was already seventy when he first discovered the prob-

¹²⁵ Glynn S. Lunney, Jr., *Empirical Copyright: A Case Study of File Sharing and Music Output* 1-3 (Tulane Univ. Sch. of Law, Public Law & Legal Theory Working Paper Series No. 14-2, 2014), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2372630. Lunney's paper has been heavily critiqued for its methods and conclusions. See George S. Ford, *What Is the Effect of File Sharing on the Creation of New Music? A Critical Review of "A Case Study of File Sharing and Music Output,"* PHOENIX CTR. PERSP., Mar. 6, 2014, at 1, 1.

¹²⁶ "[M]illions of fans were thrilled" and "Mr. Cohen's revenues have been revitalized" through new touring revenues and the resultant live albums. This and the subsequent e-mail exchange occurred on the IP Profs listserv. Because of the semi-closed nature of that listserv, I am not disclosing the names of the parties here. The full exchange is on file with the editors of the *George Mason Law Review*, however. Further, to be clear, the attorney was not speaking on behalf of Google and was a member of the listserv in his capacity as a law school instructor.

lem.¹²⁷ He had amassed a reasonable fortune for producing decades of critically acclaimed music and writings, which have influenced and inspired countless artists and individuals.¹²⁸ Despite winning a lawsuit against the manager, he has not been able to collect any of the damages.¹²⁹ Interestingly, the attorney is a fan of Cohen and exhorted listserv members to go see this “global treasure.”¹³⁰ This seems like a very odd way to show appreciation for respected elderly artists who have worked hard for decades and look forward to a reasonably secure retirement like any other successful individual. Along these lines, the attorney was queried as to whether society should expect the same of successful tech entrepreneurs—many of whom attempt to retire in their thirties or forties after only one or two “hits.” Among the start-up community, in my experience, there is indeed a sentiment that not enough great entrepreneurs continue building companies after finding success. There was no response to this proposal.¹³¹

We can discuss the merits and ethics of capitalist systems in which some can amass substantial fortunes that allow them to retire early, while others must work for low pay until they are old, exhausted, and unable to work anymore. That is a legitimate political and philosophical debate. But, without some compelling differentiator, we cannot call for the taking away of some persons’ fortunes and not others. The pattern between tech founders and artists is similar in this regard. The best in both fields passionately believe that they are changing the world for the better and are incentivized to give up everything else to pursue this vision both because it is the right thing to do *and* because they have reasonable expectations that they could become financially comfortable. Some individuals in both fields have decided to retreat from their activities once they are financially secure. This ability to retire early—provided one has a big enough “hit”—may in fact incentivize some to work harder, gamble everything, and perhaps pursue even more audacious goals than one would if there was little chance of that

¹²⁷ See Dan Glaister, *Cohen Stays Calm as \$5M Pension Disappears*, GUARDIAN (Oct. 7, 2005, 07:04 PM), <http://www.theguardian.com/world/2005/oct/08/usa.topstories3>.

¹²⁸ For example, Cohen’s song “Hallelujah” has been covered by over one-hundred artists in many languages, including versions by Bob Dylan, John Cale, and Jeff Buckley. *Leonard Cohen*, WIKIPEDIA, http://en.wikipedia.org/wiki/Leonard_Cohen (last updated Feb. 14, 2015); *Book Excerpt: Leonard Cohen’s “Hallelujah” in “The Holy or the Broken,”* ROLLING STONE (Dec. 3, 2012), <http://www.rollingstone.com/music/news/exclusive-book-excerpt-leonard-cohen-writes-hallelujah-in-the-holy-or-the-broken-20121203>.

¹²⁹ See Glaister, *supra* note 127.

¹³⁰ “But, most importantly, if you have not seen him perform these past few years, you must, no matter the ticket price. The man is a global treasure.” See source cited *supra* note 126.

¹³¹ The Google attorney’s comment was actually prompted by another post suggesting that indie artist Jeff Magnum had recently gotten more active in music again because the money from an earlier successful album had largely run out. The commenter was, again, a fan of the artist, and considered it perhaps bad that the fortunes that successful artists have been able to make allow them to retreat from the public and become recluses: “which situation is closer to copyright’s goals: the wealthy recluse, or the dragooned (though apparently happy) performer?” See source cited *supra* note 126.

“big hit.” But we cannot know this at the moment. At the same time, we can know that it is generally unfair to change the rules on someone after she has done her part. Further, it is reasonable to expect that individuals who live in societies where it is clear that there are no safeguards to property and contracts—where a government can indeed simply swoop in at any time and take property or ignore/disrupt relied-upon legal relationships—will not be tremendously inclined to work hard at building up businesses or undertaking activities that rely on property or contract rights.

This is the fundamental point about the need for appropriation mechanisms across both “innovative” and “creative” fields: without them, few would be able to realize or implement their visions with any degree of certainty that they would then get economic or attribution rights. Some might be willing to invest their own, and others’, time and resources to implement a vision just to give it away to all anonymously. But few could afford this, and it is clearly unsustainable except in non-capitalist societies. The only bedrock requirements to allow entrepreneurship, innovation, and creativity to take root are basic rule-of-law tenets like property, contracts, and reasonably steady and predictable systems of adjudication and enforcement. IP rights may well help these fields truly flourish, and we may generate IP-type rights just from the basic notions of property, contracts, and privacy.¹³² But without *some* kind of appropriation mechanisms we will not have sustained innovation or creativity across various fields or genres that are professionally implemented and fully realized.

¹³² For example, because individuals could keep their ideas, inventions, and creations secret, or limited to a small number of contractually bound individuals, we can easily take the next step and create, by statute or case law, legal systems for allowing innovators and creators to fully implement their visions, and make them widely available to the public, on terms set in advance for all, or negotiated in each case. Arguably this is exactly what formal patent and copyright systems do.