

October 9, 2008

Dear IP Scholarship Seminar Participants,

I hope this incomplete draft of “Author Autonomy and Atomism in Copyright Law” will give you a sense of the idea that I am exploring and provide fodder for a fruitful discussion. As you’ll see, the paper aspires to propose a range of possible solutions to problems caused by “copyright atomism,” by which I mean the proliferation and fragmentation of copyrights held and exercised by far-flung individual people. These problems have recurred throughout the history of copyright (which I explore in the paper), but I argue that they are particularly pressing in the age of user-generated content.

I am especially eager to hear your ideas about (1) lessons to be learned from the historical examples I use; (2) the range of solutions and their advantages and disadvantages; and (3) analogies to similar problems and solutions in other areas of law. At this early stage in the development of the project, I am also curious whether you think it might best be divided into two separate papers: one focused on the history of autonomy and atomism and another drawing on that history to inform analysis of the special challenges posed by the rise of user-generated content.

Thanks in advance for your feedback.

Molly Van Houweling

**AUTHOR AUTONOMY AND ATOMISM IN COPYRIGHT LAW**

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**I. Introduction**

Digital technologies are empowering individuals to become large-scale authors and distributors of creative works. Copyright law—which both incentivizes and regulates creativity—is relevant to these technologically-empowered authors in new ways. For one thing, these authors increasingly have to take account of the possibility

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I serve on the Board of Directors of Creative Commons, an organization discussed below. The views expressed about Creative Commons are my own.

that their creativity infringes the copyrights of others. This aspect of copyright can pose an especially significant burden for unsophisticated and poorly-financed creators who must navigate their way through confusing (and potentially expensive) thickets of upstream rights. Copyright's potential to thus stifle creativity by authors who might otherwise be diversifying the marketplace of ideas has led for calls to reform copyright to make it more consistent with principles of individual autonomy, semiotic democracy, and distributive justice.

But just as solicitude for technologically-empowered individual creators has triggered criticism of copyright law, the same individuals are increasingly harnessing copyright themselves—insisting on ownership of their rights and controlling the ways in which those rights are licensed to others. Scholars are increasingly refusing to assign their copyrights to publishers, for example. Independent musicians are operating without record companies. Organizations like the Free Software Foundation and Creative Commons are encouraging individual authors to manage their copyrights in innovative ways.

A tension arises from the way in which the mechanisms that individual authors use to harness the power of copyright may be exacerbating the very features of copyright that are especially problematic for them. When the myriad individual authors empowered by digital technology claim, retain, and manage their own copyrights, they contribute to what I call “copyright atomism”—the proliferation and fragmentation of rights that impose potentially insurmountable costs on future generations of creators. In other words, they thicken the thicket of copyrights that makes it difficult for iterative creativity to move forward—especially difficult for individual creators who may lack the legal sophistication and resources necessary to hack their way through. Author autonomy can lead to copyright atomism, which can ultimately threaten author autonomy.

In this project I aim to illustrate some of the unintended and potentially troubling consequences of copyright atomism; to place copyright atomism in historical and doctrinal context by examining the various ways in which copyright law has encouraged, discouraged, and managed the consequences of proliferation and fragmentation of copyright interests; and to offer potential solutions that address the difficulties posed by atomism without sacrificing author autonomy.

I lay the groundwork by documenting in Part II how technology-empowered speakers are increasingly regulated by copyright. In Part III I demonstrate that they are also increasingly regulating through copyright: acquiring, retaining, and deploying copyright to control other people's behavior. In Part IV, I develop these observations into the concept of “copyright atomism,” the proliferation of copyrights held and exercised by far-flung individual people. This trend is celebrated by many observers; I raise the specter of information costs and other unintended consequences of copyright atomism. In Part V I preview one potential solution to my concerns: reconsolidation of atomized copyrights into the hands of intermediaries (like the social networking hub

Facebook, for example). Critics disparage this practice as “digital sharecropping”; they give short shrift to its potential to overcome atomism’s costs.

Historically, copyright policy has taken these problems seriously, and in Part VI I trace how copyright law has struggled in its previous encounters with the problems I associate with atomism. This history demonstrates the enduring relevance of my concerns within copyright policy, highlights countervailing interests—particularly authors’ autonomy interests—and provides some lessons about how atomism might be alleviated. In Part VII I begin to explore potential solutions beyond “digital sharecropping,” aiming to develop approaches that alleviate atomism while respecting authorial autonomy.

## II. Technology-Empowered Speakers as Copyright Casualties

The power and ubiquity of personal computing and the Internet have enabled individuals—even impecunious amateurs—to create and communicate in ways that were previously possible only for well-funded corporate publishers.<sup>1</sup> Most observers have celebrated this development, noting its potential to diversify and democratize media and creative culture.<sup>2</sup> In the popular press, buzzwords like “user-generated content,” “Web 2.0,”<sup>3</sup> “crowdsourcing,”<sup>4</sup> “citizen journalism,”<sup>5</sup> and “the Living Web”<sup>6</sup>

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<sup>1</sup> See generally CLAY SHIRKY, *HERE COMES EVERYBODY: THE POWER OF ORGANIZING WITHOUT ORGANIZATIONS* (2008); DON TAPSCOTT & ANTHONY D. WILLIAMS, *WIKINOMICS: HOW MASS COLLABORATION CHANGES EVERYTHING* (2008); YOCHAI BENKLER, *THE WEALTH OF NETWORKS* (2006); GLENN REYNOLDS, *AN ARMY OF DAVIDS: HOW MARKETS AND TECHNOLOGY EMPOWER ORDINARY PEOPLE TO BEAT BIG MEDIA, BIG GOVERNMENT, AND OTHER GOLIATHS* (2006); Dan Hunter & F. Gregory Lastowka, *Amateur-to-Amateur*, 46 WM. & MARY L. REV. 951 (2004).

<sup>2</sup> Similar developments are occurring in the realm of technological innovation, where tools that facilitate collaboration by technologically-empowered individuals have been championed for their potential to democratize innovation. See, e.g., ERIC VON HIPPEL, *DEMOCRATIZING INNOVATION I* (2005) (“When I say that innovation is being democratized, I mean that users of products and services—both firms and individual consumers—are increasingly able to innovate for themselves. User-centered innovation processes offer great advantages over the manufacturer-centric innovation development systems that have been the mainstay of commerce for hundreds of years.”).

Note that this development may not be new, so much as a return to the pattern that prevailed before the Industrial Revolution. John Quiggin and Dan Hunter observe that “in the pre-industrial period, the role of the amateur in the production of innovation was obvious.” John Quiggin & Dan Hunter, *Money Ruins Everything*, 30 HASTINGS COMM. & ENT. L.J. 203, 213 (2008).

<sup>3</sup> See generally Mary Madden & Susannah Fox, *Pew Internet Project Background: Riding the Waves of Web 2.0* (Oct. 5, 2006), available at [http://www.pewinternet.org/pdfs/PIP\\_Web\\_2.0.pdf](http://www.pewinternet.org/pdfs/PIP_Web_2.0.pdf) (providing a short intellectual history of the “Web 2.0” concept); Tim O’Reilly, *What is Web 2.0* (Sept. 30, 2005), available at <http://www.oreillynet.com/pub/a/oreilly/tim/news/2005/09/30/what-is-web-20.html>.

<sup>4</sup> See, e.g., JEFF HOWE, *CROWDSOURCING: WHY THE POWER OF THE CROWD IS DRIVING THE FUTURE OF BUSINESS* (2008); Jessi Hempel, *Crowdsourcing: Milk the Masses for Inspiration*, BUSINESSWEEK (Sept. 25, 2006); Jeff Howe, *The Rise of Crowdsourcing*, WIRED (June 2006), available at <http://www.wired.com/wired/archive/14.06/crowds.html>.

describe and hype this phenomenon.<sup>7</sup> Time Magazine captured it by naming “You” its person of the year in 2006, “for seizing the reins of the global media, for founding and framing the new digital democracy, for working for nothing and beating the pros at their own game.”<sup>8</sup>

Legal scholars have been among the cheerleaders: praising the Internet’s potential to facilitate “cheap speech,”<sup>9</sup> to promote “semiotic democracy,”<sup>10</sup> and to enhance individual autonomy by “giv[ing] individuals a significantly greater role in authoring their own lives.”<sup>11</sup> But among legal commentators this praise has often been accompanied by a critique of regulatory regimes that threaten to limit technology’s democratizing potential by imposing insurmountable burdens on individuals—often unsophisticated and un-lawyered—who are ill-equipped to bear them.<sup>12</sup> This critique has been focused most squarely, although not exclusively,<sup>13</sup> on intellectual property law and copyright in particular.

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<sup>5</sup> See generally DAN GILLMOUR, *WE THE MEDIA: GRASSROOTS JOURNALISM BY THE PEOPLE, FOR THE PEOPLE* (2004).

<sup>6</sup> See, e.g., Steven Levy & Brad Stone, *The New Wisdom of the Web*, NEWSWEEK (Apr. 3, 2006).

<sup>7</sup> There have been skeptics as well. In a particularly biting critique, Andrew Keen argues that democratization of media “despite its lofty idealization, is undermining truth, souring civic discourse, and belittling expertise, experience, and talent...[I]t is threatening the very future of our cultural institutions.” ANDREW KEEN, *THE CULT OF THE AMATEUR: HOW TODAY’S INTERNET IS KILLING OUR CULTURE* 15 (2007); see also NICHOLAS CARR, *THE BIG SWITCH: REWIRING THE WORLD, FROM EDISON TO GOOGLE* 157 (2008) (“We may find that the culture of abundance being produced by the World Wide Computer is really just a culture of mediocrity—many miles wide but only a fraction of an inch deep.”); Andrew Keen, *Web 2.0: The Second Generation of the Internet Has Arrived. It’s Worse Than You Think*, THE WEEKLY STANDARD (Feb. 2, 2006), available at <http://www.weeklystandard.com/Content/Public/Articles/000/000/006/714fjczq.asp>.

<sup>8</sup> Lev Grossman, *Time’s Person of the Year: You*, TIME (Dec. 13, 2006), available at <http://www.time.com/time/magazine/article/0,9171,1569514,00.html>.

<sup>9</sup> Eugene Volokh’s work, written a decade before the Web 2.0 hype, was especially prescient. See Eugene Volokh, *Cheap Speech and What it Will Do*, 104 YALE L.J. 1805 (1995).

<sup>10</sup> See, e.g., William W. Fisher III, *Property and Contract on the Internet*, 73 CHI.-KENT L. REV. 1203, 1217-18 (1998); Madhavi Sunder, *IP3*, 59 STAN. L. REV. 257, 276-80 (2006); Anupam Chander, *Whose Republic?*, 69 U. CHI. L. REV. 1479, 1491 (2002); Anupam Chander & Madhavi Sunder, *Everyone’s a Superhero: A Cultural Theory of “Mary Sue” Fan Fiction as Fair Use*, 95 CAL. L. REV. 597 (2007); Jedediah Purdy, *A Freedom-Promoting Approach to Property*, 72 U. CHI. L. REV. 1237, 1278-79 (2005). See generally Sonia K. Katyal, *Semiotic Disobedience*, 84 WASH. U. L. REV. 489 (2006).

<sup>11</sup> BENKLER, *supra* n. \_\_, at 9; see also LAWRENCE LESSIG, *FREE CULTURE* 37 (2004); Jack M. Balkin, *Digital Speech and Democratic Culture: A Theory of Freedom of Expression for the Information Society*, 79 N.Y.U. L. REV. 1, 37 (2004); Yochai Benkler, Lecture, *Freedom in the Commons: Towards a Political Economy of Information*, 52 DUKE L.J. 1245, 1246-47 (2003).

<sup>12</sup> E.g., BENKLER, *supra* n. \_\_; LESSIG, *supra* n. \_\_; Molly Shaffer Van Houweling, *Distributive Values in Copyright*, 83 TEX. L. REV. 1535 (2005).

<sup>13</sup> For other examples of concern about regulatory burdens interfering with technology-empowered communication, see, e.g. *Reno v. American Civil Liberties Union*, 521 U.S. 844, 856-57 (1997) (burdens of pornography regulation on non-commercial websites); Mary-Rose Papandrea, *Citizen Journalism and the Reporter’s Privilege*, 91 MINN. L. REV. 515 (2007) (applicability of reporter’s privilege to bloggers); Yochai Benkler, *Overcoming Agoraphobia: Building the Commons of the Digitally Networked Environment*, 11 HARV. J.L. & TECH. 287 (1998) (radio spectrum policy).

The rise of creativity- and communication-empowering technology has coincided with expansion of the scope and duration of copyright protection, and with new regulatory schemes designed to foster copyright-holder self-help. For example, a limited performance right for sound recordings was introduced for the first time in 1995 (increasing the expense and complexity of Internet radio)<sup>14</sup>; criminal copyright enforcement was expanded in 1996<sup>15</sup>; and in 1998 the Digital Millennium Copyright Act limited circumvention of technology designed to prevent unauthorized access to and copying of copyrighted works, while the Sonny Bono Copyright Term Extension Act of 1998 added 20 years to the term of copyright protection.

Critics have decried this increased propertization of creative works as a “second enclosure movement”<sup>16</sup> that limits the ability of creative individuals to harness new technology to build upon existing cultural artifacts.<sup>17</sup> Yochai Benkler worries, for example, that “information production could be regulated so that, for most users, it will be forced back into the industrial model, squelching the emerging model of individual, radically decentralized, and nonmarket production and its attendant improvements in freedom and justice.”<sup>18</sup>

The danger of increasingly restrictive copyright stifling technologically-empowered creativity is especially acute in the realm of “remix culture”—popular forms of creativity that combine existing cultural material into new works. As the New York Times observed in 2001, “digital technology, abetted by the Internet, is

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<sup>14</sup> Digital Performance Right in Sound Recordings Act of 1995.

<sup>15</sup> No Electronic Theft Act of 1996.

<sup>16</sup> James Boyle, *The Second Enclosure Movement and the Construction of the Public Domain*, 66-SPG LAW & CONTEMP. PROBS. 33 (2003).

<sup>17</sup> See, e.g., Boyle, *supra* note \_\_\_, at 49 (“The point is, then, that there is a chance that a new (or old, but under-recognized) method of production could flourish in ways that seem truly valuable--valuable to free speech, innovation, scientific discovery, the wallets of consumers, what William Fisher calls ‘semiotic democracy,’ and perhaps, valuable to the balance between joyful creation and drudgery for hire. True, it is only a chance. True, this theory's ambit of operation and its sustainability are uncertain. But why would we want to foreclose it? That is what the recent expansions of intellectual property threaten to do.”); Quiggin & Hunter, *supra* note \_\_\_, at 246-47 (“There exist some obvious ways in which solicitude for commercial copyright industries can have a detrimental effect on the amateur sphere. ...[T]he blogosphere could not exist in its current, vibrant form if copyright owners actually enforced copyright in relation to all of the millions of infringements that take place on it every day. It is not an answer to say that copyright owners do not usually bother to sue....It would be better to establish a principle that, for example, non-commercial use of copyright material (as on a blog or in other amateur content forms) is not copyright infringement....”).

<sup>18</sup> BENKLER, *supra* note \_\_\_, at 26; see also, e.g., Jedediah Purdy, *A Freedom-Promoting Approach to Property*, 72 U. CHI. L. REV. 1237, 1279 (2005) (“The rise of sophisticated and inexpensive digital technology enables individuals to ‘rip, mix, and burn’ visual elements of the common culture for satirical, editorial, or simply expressive purposes. The same technologies, however, also facilitate monitoring by copyright owners to block newly possible expressive uses. Conjoined with expanded copyright protection, these developments mean that people are prohibited from exercising substantial capacities they would otherwise enjoy, that is, their expressive and political freedom may be significantly restricted.”).

turning fans from passive acolytes to active participants in the artistic process. In postmodern culture, in which existing elements are routinely cut, pasted and blended into new works, computers are providing handy tools for these transformations, and the Internet is supplying an eager audience for the results.”<sup>19</sup>

The creative urge to cut and paste existing cultural artifacts into something new is of course not unique to the digital era. Earlier iterations involved real scissors and real paste, not their electronic equivalents.<sup>20</sup> But in an age in which culture is increasingly saturated by copyrighted images, sounds, and texts, and in which technology facilitates creative remixing, this type of creativity may be especially important.<sup>21</sup> As Jack Balkin observes, “the products of mass media, now everywhere present, are central features of everyday life and thought. Mass media products ... have become the common reference points of popular culture. Hence, it is not surprising that they have become the raw materials of the bricolage that characterizes the Internet.”<sup>22</sup>

Technologically-empowered bricolage may be a natural reaction to media-saturated culture. But its legality under the now expansive law of copyright is often in doubt. Recent controversies that might give contemporary collagists pause include a Sixth Circuit opinion holding that the unauthorized sampling of three unrecognizable notes from a sound recording amounts to infringement<sup>23</sup>; and threatened litigation<sup>24</sup> against “The Gray Album,” in which producer Brian Burton (AKA DJ Dangermouse) combined vocals from Jay-Z’s “The Black Album” with beats sampled from the Beatles’ “White Album” to make what Rolling Stone Magazine declared “an ingenious hip-hop record that sounds oddly ahead of its time,” but which record company EMI labeled an infringement.<sup>25</sup>

Of course, one way to ensure the legality of iterative creativity is to seek and obtain permission from the owners of any copyrighted works incorporated into a new work. Rights clearance is a familiar part of doing business in many creative industries.

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<sup>19</sup> Matthew Mirapaul, *Why Just Listen to Pop When You Can Mix Your Own?*, N.Y. TIMES, Aug. 20, 2001, available at <http://query.nytimes.com/gst/fullpage.html?res=990de5d8113ef933a1575bc0a9679c8b63&scp=1&sq=remix%20culture&st=cse>.

<sup>20</sup> See generally BRANDON TAYLOR, COLLAGE: THE MAKING OF MODERN ART (2004).

<sup>21</sup> This repeats a point I made in Van Houweling, *supra* n. \_\_\_\_, at 1576.

<sup>22</sup> Jack M. Balkin, *Digital Speech and Democratic Culture: A Theory of Freedom of Expression for the Information Society*, 79 N.Y.U. L. REV. 1, 12 (2004).

<sup>23</sup> *Bridgeport Music, Inc. v. Dimension Films*, 383 F.3d 390 (6<sup>th</sup> Cir. 2004); see also *Grand Upright Music, Ltd. v. Warner Brothers Records, Inc.*, 780 F.Supp. 182 (S.D.N.Y. 1991); *Jarvis v. A & M Records*, 827 F.Supp. 282 (D.N.J. 1993). *But cf.* *Newton v. Diamond*, 329 F.3d 591 (9<sup>th</sup> Cir. 2003), amended 388 F.3d 1189 (9<sup>th</sup> Cir. 2004) (holding copying of three notes of a musical composition di minimus).

<sup>24</sup> *Beatles Remix is Banned by EMI*, THE DAILY TELEGRAPH, Feb. 17, 2004.

<sup>25</sup> Lauren Gitlin, *DJ Makes Jay-Z Meet Beatles*, ROLLING STONE, Feb. 19, 2004, available at <http://www.rollingstone.com/news/story?id=5937152>; see also Kelefa Sannah, WITH ARREST OF DJ DRAMA, THE LAW TAKES AIM AT MIXTAPES, N.Y. TIMES, available at <http://www.nytimes.com/2007/01/18/arts/music/18dram.html?fta=y>.

Indeed, the Sixth Circuit alluded to this solution when it directed remix artists to “[g]et a license or do not sample.”<sup>26</sup> Robert Merges has documented how, in some sectors characterized by frequent licensing by repeat players, rights clearance organizations (ASCAP, for example) have arisen that make such licensing relatively simple: blanket licensing schemes allow one-stop licensing of works owned by distributed copyright holders.<sup>27</sup> But other examples, such as those Michael Heller collects in his recent book *The Gridlock Economy*,<sup>28</sup> suggest that rights clearance can sometimes be complicated, expensive, and even impossible. In a notorious example, it took years of work and hundreds of thousands of dollars to clear the rights necessary to re-release the award-winning PBS documentary “Eyes on the Prize.”<sup>29</sup>

Now that technology has made many other aspects of producing and distributing creative works easier and less costly, the difficulty and expense associated with rights clearance loom especially large in comparison. A well-reviewed 2004 documentary film that cost only \$218 to make ultimately involved over \$200,000 in copyright permission fees,<sup>30</sup> prompting a New York Times feature on the costs of documentaries to observe that “[t]oday, anyone armed with a video camera and movie-editing software can make a documentary. But can everyone afford to make it legally?”<sup>31</sup>

Sometimes the difficulty of clearing rights can stifle iterative creativity altogether. For example,<sup>32</sup> rapper Chuck D and other members of the hip-hop group Public Enemy were innovators of musical sampling in the late 1980s, when they released their first record, *It Takes a Nation of Millions to Hold Us Back*. In a 2004 interview, Chuck D described the musical sampling techniques employed on that

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<sup>26</sup> *Bridgeport*, 383 F.3d, at 398.

<sup>27</sup> See Robert P. Merges, *Contracting into Liability Rules: Intellectual Property Rights and Collective Rights Organizations*, 84 CAL. L. REV. 1293 (1996).

<sup>28</sup> MICHAEL HELLER, *THE GRIDLOCK ECONOMY* 9-11 (2008).

<sup>29</sup> See “Eyes on the Prize” *Civil Rights Series Returns to PBS* (NPR Talk of the Nation Transcript, Sept. 26, 2006), available at <http://www.npr.org/templates/story/story.php?storyId=6145871>; Press Release, PBS News, Eyes on the Prize, Produced by Blackside, Returns to PBS on American Experience (Jan. 14, 2006), available at [http://www.pbs.org/aboutpbs/news/20060114\\_eyesontheprize.html](http://www.pbs.org/aboutpbs/news/20060114_eyesontheprize.html); Katie Dean, *Cash Rescues Eyes on the Prize*, WIRED, Aug. 30, 2005, available at <http://www.wired.com/entertainment/music/news/2005/08/68664> (“The 14-part series, which chronicles the history of the civil rights movement in America, has been blocked from television rebroadcast and DVD release by a thicket of copyright restrictions on the hundreds of photos, music tracks and video clips used in its making.”); PATRICIA AUFDERHEIDE & PETER JASZI, *UNTOLD STORIES: CREATIVE CONSEQUENCES OF THE RIGHTS CLEARANCE CULTURE FOR DOCUMENTARY FILMMAKERS* 19 (2004), available at [http://www.centerforsocialmedia.org/files/pdf/UNTOLDSTORIES\\_Report.pdf](http://www.centerforsocialmedia.org/files/pdf/UNTOLDSTORIES_Report.pdf).

<sup>30</sup> Nancy Ramsey, *The Hidden Cost of Documentaries*, N.Y. TIMES, Oct. 16, 2005; Ian Youngs, *Micro-Budget Film Wows Cannes*, BBC NEWS, May 18, 2004, available at <http://news.bbc.co.uk/2/hi/entertainment/3720455.stm> (May 18, 2004); Robert S. Boynton, *How to Make a Guerrilla Documentary*, N.Y. TIMES, July 11, 2004.

<sup>31</sup> Nancy Ramsey, *The Hidden Cost of Documentaries*, N.Y. TIMES, Oct. 16, 2005.

<sup>32</sup> This, too, is an example in HELLER, *THE GRIDLOCK ECONOMY*, *supra* n. \_\_\_\_.



record: “[W]e were taking thousands of sounds. If you separated the sounds, they wouldn’t have been anything—they were unrecognizable. The sounds were all collaged together to make a sonic wall.”<sup>33</sup> But copyright holders soon began suing samplers (and prevailing in court),<sup>34</sup> leading Public Enemy and other hip-hop artists to change their sound. As Chuck D explained: “Public Enemy was affected because it is too expensive to defend against a claim. So we had to change our whole style . . . . That entire collage element is out the window.”<sup>35</sup>

Changes in U.S. copyright law over the past several decades have made negotiating for permission to reuse existing works increasingly daunting. After a series of amendments to the Copyright Act starting in 1976, federal copyright protection is now triggered simply by fixation of an original work in a tangible medium of expression—e.g., by scribbling words on a napkin or typing them onto a computer. In a departure from prior law, formalities like notice, deposit, and publication are not required to secure protection (and no renewal registration is required to take advantage of the longest possible copyright term). Those barriers have been removed and copyright protection is now automatic.<sup>36</sup>

The absence of formalities means that when someone comes upon what appears to be an original work of expression fixed in a tangible medium—an old photograph, for example—she does not know how the work is encumbered by copyright.<sup>37</sup> It could be in the public domain because it was published without notice during a time when copyright could be lost that way; it could be in the public domain because its copyright has expired; or it could be under copyright, held by an unknown copyright holder. Without more information, the only safe assumption is that all of those activities that implicate the exclusive rights granted by copyright (reproduction, public distribution, preparation of derivative works, etc.) are forbidden unless permission is obtained from the copyright owner. But there may be no practical way to identify and communicate with the person from whom permission could be sought—even for well-resourced and lawyered publishers, to say nothing of unlaywered and unsophisticated individual authors trying to determine the provenance and ownership status of their raw materials. The Copyright Office’s recent Report on Orphan Works recognized this difficulty, observing that “a productive and beneficial use” of a copyrighted work can be forestalled “not because the copyright owner has asserted his exclusive rights in the

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<sup>33</sup> Interview with Chuck D by Kembrew McLeod, documented in Kembrew McLeod, *How Copyright Law Changed Hip Hop*, Stay Free! Magazine issue 20, available at [http://www.stayfreemagazine.org/archives/20/public\\_enemy.html](http://www.stayfreemagazine.org/archives/20/public_enemy.html). See generally Heller, *The Gridlock Economy* at 13-

<sup>34</sup> E.g. *Grand Upright Music, Ltd. v. Warner Brothers Records, Inc.*, 780 F.Supp. 182 (S.D.N.Y. 1991); *Jarvis v. A & M Records*, 827 F.Supp. 282 (D.N.J. 1993).

<sup>35</sup> McLeod, *supra* n. \_\_\_\_; see also HELLER, *THE GRIDLOCK ECONOMY*, *supra* n. \_\_\_\_, at \_\_\_\_.

<sup>36</sup> Christopher Sprigman, *Reform(aliz)ing Copyright*, 57 STAN. L. REV. 485 (2004); UNITED STATES COPYRIGHT OFFICE, REGISTER OF COPYRIGHTS, REPORT ON ORPHAN WORKS 15 (January 2006).

<sup>37</sup> See generally William M. Landes & Richard A. Posner, *Indefinitely Renewable Copyright*, 70 U. CHI. L. REV. 471, 477 (2003).

work, or because the user and owner cannot agree on the terms of a license—but merely because the user cannot locate the owner.”<sup>38</sup>

This, then, is one aspect of the relationship between copyright and technologically-empowered creativity. Iterative creativity that samples, mashes, and remixes existing works is increasingly popular and relevant in a media-saturated culture. And these art forms and the means to distribute them widely are increasingly accessible to even individual amateurs with inexpensive technological tools. But unauthorized reuse of existing creative works is often forbidden, or at least called into doubt, by copyright law. And negotiating for authorization can be prohibitively complicated and/or expensive, especially when multiple works are combined in the type of bricolage that digital technology facilitates. Changes in copyright law over the past few decades have exacerbated these difficulties by lengthening the term of protection and removing notice and registration requirements—often making it impossible to even determine the copyright status of a work and the identity of the owner with whom one might negotiate. These challenges are especially daunting to the individual amateurs who would otherwise be empowered by new technologies of creativity and communication.

The practical effect of copyright on technologically-empowered creators is not clear, however. Although copyright may theoretically prohibit many of their activities, and it may be impossible for them to negotiate in advance for permission from the myriad copyright holders whose interests might be implicated by a single act of iterative creativity, many remixers carry on as if copyright law were not relevant to them. As Robert Merges observes, “[i]ndividual remixers who experiment with digital music sampling, video and photo modifications, and homemade enhancements to computer games have essentially no real worries about legal liability. . . [L]ow volume copying at the hands of dedicated remixers flourishes due to the cost of shutting them down (and, increasingly, the realization that allowing remixing on this scale adds to rather than detracts from profits).”<sup>39</sup>

Some unauthorized iterative creativity certainly goes on despite its uncertain legal status, as Merges and others point out. But it is impossible to know to what extent other creators forgo remixing due to fear of legal liability. Answering this difficult empirical question is not my mission here. Instead, I have raised the possibility of technologically-empowered speakers becoming copyright casualties in order to set the stage for discussion of a less-noted, but possibly more important, aspect of the relationship between technology and copyright, to which I now turn.

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<sup>38</sup> UNITED STATES COPYRIGHT OFFICE, REGISTER OF COPYRIGHTS, REPORT ON ORPHAN WORKS \_\_ (January 2006).

<sup>39</sup> Robert P. Merges, *Locke Remixed* ;-, 40 U.C. DAVIS L. REV. 1259, 1262-63 (2007); *see also* Tim Wu, Tolerated Use, <http://ssrn.com/abstract=1132247>; *see also* Tim Wu, Tolerated Use (manuscript available at <http://ssrn.com/abstract=1132247>).

### III. Technology-Empowered Speakers as Autonomous Copyright Owners

Technology-empowered individual creators, potential casualties of a regulatory regime that over-protects the ingredients of iterative creativity, are also among the beneficiaries of copyright law's largess. Copyright's statutory intricacies and subtle jurisprudence may be most accessible to corporate publishers and their lawyers.<sup>40</sup> But the exclusive rights that copyright bestows are available to everyone capable of capturing creativity on a piece of paper or in a computer's memory.

The Copyright Act assigns initial rights to authors, not publishers.<sup>41</sup> The Act thus follows the model of its English predecessor, the Statute of Anne, and rejects the more publisher-centric model of the discarded Stationers' Company regime.<sup>42</sup> Even poor and unsophisticated authors can claim their rights,<sup>43</sup> because under current law it does not cost anything or require any paperwork to trigger copyright protection.<sup>44</sup> Copyright arises as soon as an original work of authorship is fixed in a tangible medium of expression.<sup>45</sup>

Combine the ease of copyright acquisition with the technological tools that allow everyone with a computer and Internet access to be an author and publisher, and now everyone is a potential copyright holder. To be sure, everyone with a pencil is a

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<sup>40</sup> On the complexity and expense of copyright, see generally JESSICA LITMAN, *DIGITAL COPYRIGHT* (2001); Pamela Samuelson, *Preliminary Thoughts on Copyright Reform*, 3 UTAH L. REV. 551 (2007); Van Houweling, *supra* n. \_\_\_\_.

<sup>41</sup> 17 U.S.C. 201(a).

<sup>42</sup> See generally MARK ROSE, *AUTHORS AND OWNERS: THE INVENTION OF COPYRIGHT* 4, 12-25 (1993); see also Pamela Samuelson, *Copyright and Freedom of Expression in Historical Perspective*, 10 J. INTELL. PROP. L. 319, 330 (2003); Wu, *On Copyright's Authorship Policy at 18-19* (manuscript available at <http://ssrn.com/abstract=984947>).

<sup>43</sup> Note, however, that the work-for-hire doctrine (discussed below) can create the legal fiction that employers or commissioning parties are authors. 17 U.S.C. § 101 (2000).

<sup>44</sup> After a series of amendments to the Act starting in 1976, federal copyright protection is now triggered simply by fixation of an original work in a tangible medium of expression--e.g., by scribbling words on a napkin or typing them onto a computer. Registration, notice, deposit, and publication are not required to secure protection (and no renewal registration is required to take advantage of the longest possible copyright term). So even the poorest author, totally ignorant of the law and without funds to pay registration fees, can preserve his exclusive rights. The elimination of copyright formalities was required for U.S. membership in the Berne Convention. But apart from Berne, the formalities of U.S. copyright law had long been criticized as hypertechnical traps for unsophisticated authors. See, e.g., Hearings before the Subcomm. on Patents, Trademarks, and Copyrights of the Comm. on the Judiciary, 89th Cong. (1965) (statement of Abraham L. Kaminstein) ("The present law contains a number of highly technical requirements concerning copyright notice, registration, and deposit, and the recording of assignments which are not only burdensome and difficult to understand but which, in too many cases, result in complete loss of copyright protection."), reprinted in 8 Omnibus Copyright Revision Legislative History 62, 68 (George S. Grossman ed., 2001). See generally Lydia Pallas Loren, *Untangling the Web of Music Copyrights*, 53 CASE W. RES. L. REV. 673 (2003); Christopher Sprigman, *Reform(aliz)ing Copyright*, 57 STAN. L. REV. 485 (2004). Those barriers have been removed and copyright protection is now automatic.

<sup>45</sup> 17 U.S.C. 102.

potential copyright holder and that is nothing new. But copyright becomes much more salient to those who also have the tools to disseminate their work to others. The copyright scheme ensures that technologically-empowered authors of “user-generated content” also produce “user-generated copyright.” And as content proliferates (approximately 1.4 blogs created every second according to a 2007 report<sup>46</sup>) copyrights proliferate as well.

By granting initial rights to individual authors, copyright law makes this kind of proliferation possible. But the law also provides mechanisms for consolidating copyrights—transferring ownership from individual authors to corporations, universities, publishers, record-companies, etc.<sup>47</sup> Indeed, copyright’s work-for-hire doctrine performs this consolidation *ex ante*—declaring that employers (and, under specified circumstances, entities that commission certain types of creative works) are the “authors” (and therefore the initial owners) of works created by their employees in the scope of their employment. Apart from work-for-hire, the law makes clear that copyrights (and individual rights within the copyright bundle) can be transferred after they are created.<sup>48</sup>

When creating and disseminating creative works is expensive—something that must be financed by corporate publishers, universities, or other well-financed entities—many copyrights will be held by those patrons. Creative people who cannot finance their own creativity will work for companies that can, with the product of their creativity attributed to their employers for copyright purposes under the work-for-hire doctrine. Or authors who cannot afford to disseminate their books will assign their copyrights to publishers who can. Thus, although the Copyright Act appears on its face to be solicitous toward individual authors, in many creative fields the standard

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<sup>46</sup> David Sifry, *The State of the Live Web, April 2007*, available at <http://www.sifry.com/alerts/archives/000493.html>.

<sup>47</sup> On the multifaceted role of the notion of individual authorship in copyright doctrine and history, see generally Oren Bracha, *The Ideology of Authorship Revisited*, at 130 (manuscript available at <http://ssrn.com/abstract=869446> (summarizing his study of nineteenth century copyright by characterizing the “ideology of authorship” as “not one coherent and unified vision of original authors who own their intellectual creations,” but rather “the whole complex amalgam or tropes and conceptual structures described above. It incorporates radically different modes of argumentation, deeply conflicting commitments, and ingredients that stand in sharp tension and even outright contradiction with one another.”).

<sup>48</sup> This is easier under the 1976 Act than it was under the previous Copyright Act, with its doctrine of copyright “indivisibility,” discussed further below. See generally 3 Nimmer on Copyright §10.02. The current section 201(d)(2) specifies that “Any of the exclusive rights comprised in a copyright, including any subdivision of any rights specified in section 106, may be transferred . . . and owned separately. The owner of any particular exclusive right is entitled, to the extent of that right, to all of the protection and remedies accorded to the copyright owner by this title.” 17 U.S.C. §201(d)(2); see also NIMMER, *supra*, §10.02, H.Rep., p. 123 (“explicit statutory recognition of the principle of divisibility of copyright”).

practice has been for creators to assign their copyrights to publishers or other consolidators.<sup>49</sup>

With the rise of the technology-empowered creator/disseminator, however, it seems reasonable to expect not only that there will be a proliferation of initial copyrights, but that those copyrights will be less likely to become consolidated in corporate ownership. The do-it-yourself spirit of Web 2.0 might extend to copyright, with authors heeding the advice of a project based at Columbia Law School that urges them to “Keep Your Copyrights.”<sup>50</sup> And, in fact, scholars are increasingly refusing to assign their copyrights to publishers, encouraged by groups like the Scholarly Publishing & Academic Resources Coalition.<sup>51</sup> Independent musicians are managing their own copyrights and operating without record companies.<sup>52</sup> Some businesses that provide platforms for user-generated content make a point of disclaiming any rights to material posted by their users.<sup>53</sup> Organizations like the Free Software Foundation and

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<sup>49</sup> See generally, e.g., Tim Wu, On Copyright’s Authorship Policy, *supra* note \_\_\_, at 3 (“It has long been the stated aspiration of copyright to make authors the masters of their own destiny. Yet more often than not, the real subject of American copyright is distributors—book publishers, record labels, broadcasters, and others—who control the rights, bring the lawsuits, and take copyright as their industries’ ‘life-sustaining protection.’ Modern American copyright history revolves heavily, though not entirely on distributors....”; W. Jonathan Cardi, *Uber-Middleman: Reshaping the Broken Landscape of Music Copyright*, 92 IOWA L. REV. 835, 840 (2007) (describing a standard agreement in the music publishing industry as “requir[ing] the songwriter to assign ownership of the copyrights in his songs to the publisher, retaining only the right to fifty percent of all royalties generated”); *id.* at 848 (“The great majority of copyrighted sound recordings are of musical performances, and most musical sound recordings are owned by five major record labels.... The labels typically claim exclusive ownership in musical sound recordings through work-for-hire agreements and assignments of ownership from the performing artist, producers, and technicians whose creative input makes the sound recording copyrightable.”). Cf. Bracha, *supra* note \_\_\_, at 26-28 (“While the [Statute of Anne] identified the author as the original bearer of the right, reality was quite different. De facto, booksellers continued in most cases to own the copyright. The point is not merely that the norm was full assignment of the copyright to the booksellers, but rather that, in the majority of cases, the terms of the deal were identical to the pre-Statute of Anne situation.”).

<sup>50</sup> See Keep Your Copyrights, <http://keepyourcopyrights.org/about/>. “Copyright was designed to serve artists and creators, but if you give everything up, that idea can just become lip service. Worse, if you give away too many rights, the business to whom you gave up your rights can use your copyrights against you to hinder your later efforts to create or to get paid.” *Id.*

<sup>51</sup> The Scholarly Publishing & Academic Resources Coalition, <http://www.arl.org/sparc/>.

<sup>52</sup> See, e.g., Jon Pareles, *Frustration and Fury: Take It. It’s Free*, N.Y. TIMES, June 8, 2008 (“[Trent Reznor] has joined the superstar exodus from major labels.”); Lars Brandle, *Radiohead in Direct-Licensing Deal for New CD*, BILLBOARD, Oct. 9, 2007, available at [http://www.billboard.com/bbcom/news/article\\_display.jsp?vnu\\_content\\_id=1003655864](http://www.billboard.com/bbcom/news/article_display.jsp?vnu_content_id=1003655864); Eliot Van Buskirk, *Reznor v. Radiohead: Innovatoin Smackdown*, WIRED, Mar. 27, 2008, available at [http://www.wired.com/entertainment/music/news/2008/03/reznor\\_radiohead](http://www.wired.com/entertainment/music/news/2008/03/reznor_radiohead) (“Radiohead and Nine Inch Nails have been taking turns giving the music industry the finger. The British band made headlines last October for releasing *In Rainbows* without the support (read: control) of a record label, and Trent Reznor’s group followed suit with last month’s *Ghosts I-IV*.”).

<sup>53</sup> Cf. *Bragg v. Linden Research, Inc.*, 487 F.Supp.2d 593, 595-96 (E.D. Pa. 2007) (“In November 2003, Linden announced that it would recognize participants’ full intellectual property protection for the digital content they created or otherwise owned in Second Life. As a result, Second Life avatars may now buy, own, and sell virtual goods ranging “from cars to homes to slot machines.”); Bobby Glushko,

Creative Commons are encouraging individual authors to manage their copyrights in innovative ways.

#### IV. Copyright Atomism

I call this trend toward individual generation, retention, reclamation, and innovative exercise of copyrights “copyright atomism.”<sup>54</sup> Atomistic copyright in the Web 2.0 age is distinct in many ways from the corporate copyright to which we are accustomed. The copyright holders are more numerous (millions of blog authors, tens of thousands of Wikipedia contributors). They are more likely to create small works of authorship (Wikipedia edits for example) that are most useful when combined with the work of others.<sup>55</sup> They are more likely to be anonymous and/or difficult to locate and contact. They are less likely to observe the optional formalities of copyright that might provide others with clear notice of the ownership status of their work.<sup>56</sup> Their preferences for how their works should be exploited may be more idiosyncratic.<sup>57</sup> They may collaborate with each other in ways that are not captured by traditional copyright conceptions of authorship and joint authorship.<sup>58</sup> All of these characteristics are consistent with the sense of autonomy that technology-empowered creators harness and often cherish. But they are not necessarily healthy for the copyright system—or even for technology-empowered individual authors themselves.<sup>59</sup>

The problem is that copyright atomism, combined with problematic features of copyright law described above (lack of notice, extended duration, etc.), seems likely to impose the types of search, tracing, negotiation, and other information and transaction

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*Tales of the (Virtual) City: Governing Property Disputes in Virtual Worlds*, 22 BERKELEY TECH. L.J. 507 (2007).

<sup>54</sup> Cf. Carol Rose, *The Several Futures of Property: Of Cyberspace and Folk Tales, Emission Trades and Ecosystems*, 83 MINN. L. REV. 129, 151 (1998) (“[P]roperty rights in cyberspace fragment what should be seen as an integrated whole.”).

<sup>55</sup> Cf. Justin Hughes, *Size Matters (Or Should) in Copyright Law*, 74 FORDHAM L. REV. 575, 575 (2005) (“In our new recombinant culture, digitization allows very small bits and pieces to be copied and reused with extreme ease, while the Internet makes unprecedented amounts of such bits and pieces instantly available for such reuse. If the res of independent copyright protection shrinks to a ‘microwork,’ this recombinant culture is burdened.”).

<sup>56</sup> KEEN, *supra* note \_\_\_, at 23 (“Who ‘owns’ the content created by the fictional movie characters on MySpace? Who ‘owns’ the content posted by bloggers...? This nebulous definition of ownership, compounded by the ease in which we can now cut and paste other people’s work to make it appear as if it’s ours, has resulted in a troubling new permissiveness about intellectual property.”).

<sup>57</sup> See generally BENKLER, *supra* note \_\_\_, and SHIRKY, *supra* note \_\_\_ (both discussing the ways in which inexpensive technology facilitates creativity and collaboration by people with a diverse set of motivations).

<sup>58</sup> See generally Margaret Chon, *New Wine Bursting from Old Bottles: Collaborative Internet Art, Joint Works, and Entrepreneurship*, 75 OR. L. REV. 257 (1996).

<sup>59</sup> But cf. Tim Wu, *On Copyright’s Authorship Policy*, available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=984947](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=984947) (arguing in favor of decentralized, author-focused copyright).

costs that have been associated with the proliferation, fragmentation,<sup>60</sup> and customization<sup>61</sup> of property rights in both the tangible<sup>62</sup> and intangible property<sup>63</sup> contexts. Michael Heller's work has drawn our attention, in particular, to resource under-use that can arise when property rights fragment and proliferate into an "anti-commons."<sup>64</sup> Thomas Merrill and Henry Smith focus on the information costs externalities imposed by idiosyncratic property rights.<sup>65</sup> In my own work I have examined how these costs may be imposed by emerging intellectual property licensing practices.<sup>66</sup> Ironically, these costs may be especially burdensome for the un-lawyered and unsophisticated individual creators whose activities are producing copyright atomism.

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<sup>60</sup> On the consequences of property fragmentation, see Michael A. Heller, *The Boundaries of Private Property*, 108 YALE L.J. 1163 (1999); Michael A. Heller, *The Tragedy of the Anticommons: Property in the Transition from Marx to Markets*, 111 HARV. L. REV. 621 (1998); see also James M. Buchanan & Yong J. Yoon, *Symmetric Tragedies: Commons and Anticommons Property*, 43 J.L. & ECON. 1, 1-13 (2000); Norbert Shulz, Francesco Parisi & Ben Depoorter, *Fragmentation in Property: Towards a General Model*, 158 J. INSTITUTIONAL & THEORETICAL ECON. 594, 594-613 (2002); Frank I. Michelman, *Ethics, Economics, and the Law of Property*, in ETHICS, ECONOMICS, AND THE LAW 3, 15 (J. Roland Pennock & John W. Chapman eds., 1983). *But cf.* F. Scott Kieff, *Coordination, Property, and Intellectual Property: An Unconventional Approach to Anticompetitive Effects and Downstream Access*, 56 EMORY L.J. 327, 394 (2006) ("While at first blush (given the way Heller presents the anticommons problem), it would seem that property rights are more a part of the problem than a part of the solution, property rights actually provide individuals with the economic motivation to engage in trades with each other. Indeed, the easier it is for the holder of a property right to engage in such a trade and the greater the value that the individual can extract from the trade...., the greater the motivation and ability of the individual to engage in it.").

<sup>61</sup> On the information cost externalities imposed by idiosyncratic property rights, see Thomas W. Merrill & Henry E. Smith, *Optimal Standardization in the Law of Property: The Numerus Clausus Principle*, 110 YALE L.J. 1 (2000); Thomas W. Merrill & Henry E. Smith, *The Property/Contract Interface*, 101 COLUM. L. REV. 773 (2001).

<sup>62</sup> On interesting example of fragmentation of black farm ownership, see Hanoch Dagan & Michael A. Heller, *The Liberal Commons*, 110 YALE L.J. 549 (2001); Thomas W. Mitchell, *From Reconstruction to Deconstruction: Undermining Black Landownership, Political Independence, and Community Through Partition Sales of Tenancies in Common*, 95 NW. U.L. REV. 505 (2001); Phyliss Craig-Taylor, *Through a Colored Looking Glass: A View of Judicial Partition, Family Land Loss, and Rule Setting*, 78 WASH. U. L.Q. 737 (2000).

<sup>63</sup> See generally Stewart E. Sterk, *Property Rules, Liability Rules, and Uncertainty About Property Rights*, 106 MICH. L. REV. 1285, 1298 (2008) (describing search costs in intellectual property context); Clarisa Long, *Information Costs in Patent and Copyright*, 90 VA. L. REV. 465 (2004); Robert P. Merges, *The Law & Economics of Employee Inventions*, 13 HARV. J.L. & TECH. 1, 13 (1999) ("Holdups are common in the intellectual property context because discrete intellectual property rights often cover individual components of a complex, multicomponent product.").

The difficulties encountered by the producers of the documentary *Eyes on the Prize* illustrate the challenges of clearing rights to numerous fragmented works. See Katie Dean, *Bleary Days for Eyes on the Prize*, WIRED (Dec. 22, 2004); Patricia Aufderheide & Peter Jaszi, *Untold Stories: Creative Consequences of the Rights Clearance Culture for Documentary Filmmakers*, available at <http://www.centerforsocialmedia.org/rock/index.htm>.

<sup>64</sup> Heller, *supra* note \_\_\_\_.

<sup>65</sup> Merrill & Smith, *supra* note \_\_\_\_.

<sup>66</sup> Molly Shaffer Van Houweling, *The New Servitudes*, 96 GEO. L.J. 885 (2008).

## V. The New Consolidators and Their Critics

Despite the atomistic tendencies that I associate with proliferating technologically-empowered authorship, there are some anti-atomistic features of today's creative environment. Notwithstanding predictions that lower transaction costs would render media intermediaries and their consolidation function obsolete—a different pattern of consolidation is emerging in which a new generation of intermediaries are consolidating copyrights generated by technology-empowered individuals.

Some of the fastest-growing and most successful sites operating on the Internet today are those that provide individuals with Web platforms that host and distribute user-generated content. When the business press buzzes about Web 2.0, the topic is often the prospects for these new Internet intermediaries: Facebook, YouTube, Flickr, MySpace, et al. The terms of service that govern these platforms for user-generated content often purport to effect transfers or licenses of contributors' copyrights and thus to consolidate ownership in the hands of the platform owners. Sometimes the terms specify that copyright to the user-generated content is assigned to the platform owner; often they purport to extract an exclusive or non-exclusive license for the platform owner to exercise the rights otherwise reserved to the copyright owner. For example, the Facebook terms of service include the following:

By posting User Content to any part of the Site, you automatically grant, and you represent and warrant that you have the right to grant, to the Company an irrevocable, perpetual, non-exclusive, transferable, fully paid, worldwide license (with the right to sublicense) to use, copy, publicly perform, publicly display, reformat, translate, excerpt (in whole or in part) and distribute such User Content for any purpose, commercial, advertising, or otherwise, on or in connection with the Site or the promotion thereof, to prepare derivative works of, or incorporate into other works, such User Content, and to grant and authorize sublicenses of the foregoing.

This language grants Facebook the right to both exercise and sublicense rights that would otherwise be exclusive to the individual authors (qua copyright holders) who post content on the site. It thus consolidates copyright authority that would otherwise be atomized—distributed among millions of individual Facebook subscribers, separated in time and space, often anonymous or pseudonymous, and usually with unknown preferences regarding the reuse of their work. As a consequence of this consolidation, someone who wants to reuse the content posted on Facebook need not identify, contact, and negotiate with these original authors, because Facebook itself can unilaterally sublicense all of the content posted on the site—avoiding the transaction costs that might otherwise be generated by copyright atomism.



Lucasfilm’s “Starwars Mashup Service” is a more extreme example of copyright consolidation. Lucasfilm has made clips, images, and sound from Star Wars movies available for fans to remix into their own digital film collages. As authorized derivative works, the resulting “mashups” are eligible for copyright protection, with ownership initially accruing to the fan-authors.<sup>67</sup> But the Starwars Mashup Service terms of service provide that each mashup author grants Lucasfilm an “*exclusive*, royalty free, worldwide license in all rights titles and interests of every kind and nature” in the mashup film.<sup>68</sup> The license is perpetual, irrevocable, and transferable.<sup>69</sup> Although this does not by its terms purport to be an outright assignment of the entire copyright, it might as well be. Not only can Lucasfilm exercise and transfer rights that are otherwise exclusive to the copyright holder, it becomes the *exclusive* rights holder, who can object to unauthorized copying, etc., even by the mashup author.<sup>70</sup>)

The creativity contributed to Facebook and the Starwars Mashup Service is dispersed. The creators are individuals located all over the world who are certainly not employees of Facebook or Lucasfilm. But the copyrights are at least partially consolidated—in that all of copyright’s exclusive rights, with regard to the entire collection of individual contributions, can be exercised by one entity. And that entity can also serve as a point of negotiation for others who would like to be authorized to do things with the works that copyright law otherwise forbids. The information, search, and transaction (particularly assembly) costs that I suggested might be caused by copyright atomism are mitigated by this consolidation.

Although consolidating copyrights in the hands of Web 2.0 platform owners promises to solve some of the potential problems I associate with copyright atomism, these copyright practices that resist the tendency toward atomism have triggered objections sounding in author autonomy.<sup>71</sup>

Nicholas Carr is one of several observers who have characterized (and decried) these practices as “digital sharecropping”:

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<sup>67</sup> 17 U.S.C. 103. If the films incorporated preexisting copyrighted work without authorization, and outside the bounds of fair use or other copyright exceptions, they would not be eligible for copyright protection.

<sup>68</sup> Star Wars MashUps Terms of Service, *available at* <http://www.starwars.com/welcome/about/mashup-copyright> (emphasis added).

<sup>69</sup> Star Wars MashUps Terms of Service, *available at* <http://www.starwars.com/welcome/about/mashup-copyright>.

<sup>70</sup> Note that this is, in a way, a variation on the default regime that governs derivative works. Had Lucasfilm not authorized the mashups, and assuming that they fell outside the bounds or any other exception to copyright’s coverage, the ownership provisions of the Copyright Act would deny the mashup authors the status of copyright owners. 17 U.S.C. 103 (“[P]rotection for a work employing preexisting material in which copyright subsists does not extend to any part of the work in which such material has been used unlawfully.”).

<sup>71</sup> Just as property rules aimed at limiting fragmentation, proliferation, and idiosyncratic claims have met resistance sounding in freedom of contract. *E.g.* Richard Epstein, *Notice and Freedom of Contract in the Law of Servitudes*, 55 S. CAL. L. REV. 1353 (1983).

In a twist on the old agricultural practice of sharecropping, the site owners provide the digital real estate and tools, let the members do all the work, and then harvest the economic reward.<sup>72</sup>

He elaborates:

By putting the means of production into the hands of the masses but withholding from those masses any ownership over the products of their communal work, the World Wide Computer provides an incredibly efficient mechanism for harvesting the economic value of the labor provided by the very many and concentrating it in the hands of the very few.”<sup>73</sup>

In an editorial in the Washington Post, Lawrence Lessig specifically targeted the Starwars Mashup Service: “Upload a remix and George Lucas, and only Lucas, is free to include it on his Web site or in his next movie, with no compensation to the creator. . . . Put in terms appropriately (for Hollywood) over the top: The remixer becomes the sharecropper of the digital age.”<sup>74</sup>

These critiques raise important concerns about author autonomy and distributive justice that should be part of any debate about copyright policy and practice.<sup>75</sup> But they give short shrift to countervailing concerns about the unfortunate consequences of copyright atomism—consequences that may be especially harmful to the very landless remixers whom Lessig and others champion. For the next great Starwars fan who wants to mashup all of the mashups into a giant mega mashup, the difficulty associated with getting individualized permission from each individual, far-flung, unsophisticated, author, may be insurmountable. Lucasfilm is undoubtedly a tough negotiator. But at least it is a potential negotiator—a singular known entity with a mailing address. There is something to be said for this type of consolidation in terms of lowering the transaction and information costs I associate with atomism.

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<sup>72</sup> Carr, *supra* note \_\_\_, at 137. Cf. Billy Bragg, *The Royalty Scam*, THE NEW YORK TIMES (Mar. 22, 2008), available at <http://www.nytimes.com/2008/03/22/opinion/22bragg.html> (arguing that social networking site Bebo.com should have paid royalties to the artists who posted their music there when its founders sold the site to AOL for \$850 million).

<sup>73</sup> Carr, *supra* note \_\_\_, at 142; see also *id.* (“[B]usinesses are using the masses of Internet gift-givers as a global pool of cut-rate labor.”); *id.* at 147 (“In the YouTube economy, everyone is free to play, but only a few reap the rewards.”)

<sup>74</sup> Lawrence Lessig, *Lucasfilm’s Phantom Menace*, The Washington Post, at A23 (July 12, 2007), available at <http://www.washingtonpost.com/wp-dyn/content/article/2007/07/11/AR2007071101996.html>.

<sup>75</sup> In previous work I explored the relationship between distributive justice and copyright. See Molly Shaffer Van Houweling, *Distributive Values in Copyright*, 83 TEX. L. REV. 1535 (2005).

Perhaps, though, there are ways to alleviate atomism without sacrificing so much author autonomy and ownership. I explore some of those possibilities after taking a detour through copyright history.

## VI. Tracing Atomism and Autonomy in Copyright History

Although the extent of copyright atomism caused by the contemporary explosion of authorship is new, the problems with which I associate atomism have been encountered before on a smaller scale. In this part I trace the history of copyright law's previous encounters with fragmented, proliferating, and idiosyncratic ownership. These encounters demonstrate the enduring relevance of my concerns within copyright policy, highlight countervailing interests, and provide some lessons about how the unfortunate consequences of atomism might be alleviated without unduly threatening important copyright values.

### A. The Pre-Modern Era: Proto-Copyright and the Stationers' Company

Before the emergence of copyright as we now understand it—the intangible right to control reproduction and certain other uses of works of authorship—a much more limited form of control was available to the owners of manuscripts, who could limit access to (and thus copying of) the physical manifestations of authorship. As literary historian Mark Rose explains:

In the Middle Ages the owner of a manuscript was understood to possess the right to grant permission to copy it, and this was a right that could be exploited, as it was, for example, by those monasteries that regularly charged a fee for permission to copy one of their books. Perhaps this practice might be thought to imply a form of copyright, and yet the bookowner's property was not a right in the text as such but in the manuscript as a physical object made of ink and parchment.<sup>76</sup>

Notice how simple this proto-copyright was in comparison with today's fragmented and uncertain intangible rights. Rights to a work of authorship were inseparable from ownership of the chattel that embodied it. Chattel ownership was in turn governed by relatively simple personal property rules emphasizing exclusive possession—the simplest and most transparent of property regimes.<sup>77</sup> The current

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<sup>76</sup> MARK ROSE, *AUTHORS AND OWNERS: THE INVENTION OF COPYRIGHT* 9 (1995).

<sup>77</sup> Cf. Henry Hansmann & Reinier Kraakman, *Property, Contract, and Verification: The Numerus Clausus Problem and the Divisibility of Rights*, 31 J. LEGAL STUD. 373, 384 (2002) (“Of all verification rules, possession is the most primitive and commonplace. In theory, verification could be based only on possession. . . . The advantages of this system are obvious. It is easy to understand, cheap to administer, and generally unambiguous. It is, in fact, reasonable close to the approach taken to most chattels.”)

possessor was the only relevant owner, for Blackstone reports that the early common law refused to recognize future interests in items of personal property.<sup>78</sup>

This system of proto-copyright was simple, but it was also extremely limited. An author could not both retain control over his work and have it widely-read, for once the manuscript was copied he lost control over the work.<sup>79</sup> This crude protection may have befitted the middle ages, when literacy rates were low, authorship was not esteemed, and reproduction of books was laborious and rare.<sup>80</sup> But increasing literacy in the late Middle Ages and the invention and spread of the printing press in Europe in the second half of the fifteenth century dramatically expanded the potential market for mass-produced books.

In response to these changes (and to enhance their own control over the literature reaching their citizens) European governments began in the fifteenth and sixteenth centuries to grant exclusive rights to publish books.<sup>81</sup> In England, these rights were eventually granted to the Stationers' Company—the monopolistic printers' guild chartered by the English Crown in 1557.<sup>82</sup> The Company in turn distributed rights to print individual titles to its members. The available evidence suggests that

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<sup>78</sup> “By the rules of the ancient common law, there could be no future property, to take place in expectancy, created in personal goods and chattels; because, being things transitory, and by many accidents subject to be lost, destroyed, or otherwise impaired, and the exigencies of trade requiring also a frequent circulation thereof, it would occasion perpetual suits and quarrels, and put a stop to the freedom of commerce, if such limitations in remainder were generally tolerated and allowed. . . . But now that distinction is disregarded: and therefore if a man either by deed or will limits his books or furniture to A for life, with remainder over to B, this remainder is good.” 2 WILLIAM WILLIAM BLACKSTONE, COMMENTARIES ON THE LAWS OF ENGLAND 398 (1765-69); *see also* Van Horne v. Campbell, 100 N.Y. 287 (1885) (“In the early period of the law, as is well known, future estates in personal property were not permitted. It was originally held that a gift of personalty for life was an absolute gift, so as to invalidate any further limitations. . . .”); Merrill & Smith, *supra* note \_\_\_, at n. 63 and accompanying text (“Personal property is restricted to fewer available forms of ownership than real property. A number of standard reference works state that personal property is subject to the same elaborate structure of forms that applies to estates in land (including future interests). Yet the case law does not fully support this broad proposition.”).

<sup>79</sup> “The first copyright known to Europe of the Middle Ages may therefore be considered as that which inhered in the Common Law control of property in the manuscript. It was a copyright which had, of course, nothing whatever to do with the rights of an original producer in the literary production.” 2 GEORGE HAVEN PUTNAM, BOOKS AND THEIR MAKERS DURING THE MIDDLE AGES 484 (1897).

<sup>80</sup> *See generally* 1 PUTNAM, *supra* note \_\_\_, at 9-11. Putnam summarizes three stages in the production and distribution of literature in Europe in the Middle Ages. The manuscript trade arises only in the final stage, beginning at the end of the 15<sup>th</sup> Century. And even then, “[t]he costliness of the skilled labour required for the production of manuscripts, and the many obstacles and difficulties in the way of their distribution, caused the development of the book-trade to proceed but slowly.”

<sup>81</sup> ROSE, *supra* note \_\_\_, at 12 (“The earliest genuine anticipations of copyright were the printing privileges, which first appeared in fifteenth-century Venice.”); *see also* BENJAMIN KAPLAN, AN UNHURRIED VIEW OF COPYRIGHT 2-3 (1967) (“Caxton founded his press in Westminster in 1476, and soon afterward the Crown began to take an acute interest in this dangerous art and to assert prerogative rights regarding it. A Royal Printer appeared in 1485, and from 1518 onward came a stream of royal grants of privileges and patents for the exclusive printing of particular books or books of stated kinds.”).

<sup>82</sup> *See generally* LYMAN RAY PATTERSON, COPYRIGHT IN HISTORICAL PERSPECTIVE 28-77 (1968).

these intangible rights of exploitation were initially tied to physical manuscript ownership: members registered the titles of manuscripts that they owned (and for which they at least sometimes paid authors).<sup>83</sup> But once granted, the rights existed apart from chattel ownership. They were transferable, divisible, and potentially perpetual.<sup>84</sup>

Measured against the simplicity of proto-copyright manuscript ownership, these new intangible rights were more numerous, more fragmented, and more complicated—more atomized, to use my terminology—as the intangible rights were divorced from possession of a physical chattel. But the degree of atomization possible during this era was limited because book publishing was the exclusive privilege of the Stationers' Company (and because the entire scheme applied only to books, not to other types of creativity).<sup>85</sup> The universe of both initial copyright owners and transferees was constrained by the exclusivity of this monopolistic club. What's more, the Company's practices helped to address some of the complexity associated with property atomism. For example, tracing costs were limited because the Company maintained a Registry in which the titles of works and the names of the Company members entitled to publish them (as well as assignments of rights from one member to another) were entered.<sup>86</sup> In addition, the extent to which rights could proliferate through generations of inheritance was limited because upon the death of a Company member his rights were not dispersed unpredictably among his heirs, but instead reverted to the Company (which might in turn give them to his widow, but only for her lifetime).<sup>87</sup>

The limited membership of the Stationers' Company, the control the Company exercised over copyright ownership (including transfers and inheritance), and the Company's systems for keeping track of copyright ownership thus lowered the tracing and transaction costs that might otherwise have been associated with the creation of intangible rights in literary works. The history of the Stationers' Company thus demonstrates the potential for consolidated ownership and registration systems to address some of the challenges posed by copyright atomism. But the rules and

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<sup>83</sup> PATTERSON, *supra* n. \_\_\_, at 52; *see also* KAPLAN, *supra* note \_\_\_, at 5 (“Right of copy was the stationer’s not the author’s. Living authors furnished some of the material for the printing mills, and increasingly these manuscripts had to be purchased in a business way . . . ; but upon entry the author dropped away and it was the stationer who had the right of multiplication of copies against others of the Company, which is to say, speaking imprecisely, against all those eligible to print.”).

<sup>84</sup> ROSE, *supra* note \_\_\_, at 12 (“One secured, the right to print a particular book continued forever, and thus a ‘copy’ might be bequeathed or sold to another stationer or it might be split into shares among several stationers.”)

<sup>85</sup> *See generally* PATTERSON, *supra* note \_\_\_, at 32 (“[T]he charter of the Stationers’ Company gave it an almost complete monopoly of printing. . . .”) [Note the distinctions between printers, booksellers, and publishers explained by Patterson at 44.]

<sup>86</sup> PATTERSON, *supra* note \_\_\_, at 51; *see also id.* at 55-63 (describing the evolution of the registration, which he concludes started as a mere custom but developed into a requirement).

<sup>87</sup> *See* PATTERSON, *supra* note \_\_\_, at 47. The Company practice was to grant a life interest to surviving widows. *Id.* at 48.

practices of the Stationers' Company era had quite different motivations and consequences. They were designed to limit competition for the benefit of the members of the Company, and to create a publishing bottleneck that facilitated censorship by the Crown.<sup>88</sup> They also privileged publishers vis-à-vis authors, whose rights were still limited to simple manuscript ownership, whose publishing outlets were limited by the Company's monopsony, and who were the ultimate objects of the Crown's censorship. As for book readers: they were subject to monopoly pricing and to a censored book marketplace.

## **B. The Early Modern Era: The Statute of Anne and the Copyright Act of 1790**

### **1. The Statute of Anne**

Due in part to objections to both censorship and monopoly,<sup>89</sup> the English Licensing Acts that protected the Stationers' Company monopoly expired in 1694 and were replaced in 1710 with the Statute of Anne—the prototype for the first U.S. Copyright Act.<sup>90</sup> One of the Statute's key innovations was granting intangible rights to control printing of new books not to printers or booksellers but rather to authors—for an initial term of 14 years and a renewal term of 14 more years if the author was still living.<sup>91</sup> Thus, for the first time, authors were granted rights to their intangible works of authorship separate from ownership of the physical manuscripts in which the works were embedded. They could retain their rights or assign them to whomever they pleased, no longer limited by the Stationers' Company monopoly or the censorship of the expired Licensing Acts. They could make this choice multiple times, because the Statute's gave authors both an initial 14 year term and a contingent renewal term of 14 years, which would “return to the authors . . . if they are then living.”<sup>92</sup>

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<sup>88</sup> See, e.g. ROSE, *supra* n. \_\_\_, at 15 (“The guild was concerned with the regulation of the book trade, and the state was concerned with the regulation of public discourse.”); Kaplan, *supra* note \_\_\_, at 3 (“When Queen Mary chartered the stationers in 1557, the fellowship, in exchange for the large trade advantages they then secured, undertook to become in practical effect sompnours and pursuivants of the royal censorship. . . .”). Abrams at 1135-36: “This concern for censorship culminated when Queen Mary Tudor ultimately traded a monopoly over the printing of books for royal censorship with the chartering of the company of Stationers in 1557. Only members of the Company of Stationers could legally print books and only books authorized by the Crown could be published.”

<sup>89</sup> See generally Rose at 32-34. Rose stresses, in particular, objections to the Stationers' Company monopoly, concluding that “on the conflict between the traditional ideology of hierarchy and regulation and the emergent ideology of the market, [the House of] Commons appears to have understood very well what it was doing. In the name of free trade it was seeking to end a monopolistic system of privilege and control with roots in an archaic concept of royal prerogative.” (33-34). *Id.* at 44 (“The idea of limiting the term of copyright appealed to those who were concerned about monopolies and restraint of trade.”).

<sup>90</sup> See generally PATTERSON, *supra* note \_\_\_, at 143.

<sup>91</sup> Statute of Anne sec. XI (“[A]fter the expiration of said term of 14 years, the sole right of printing or disposing of copies shall return to the authors thereof, if they are then living”).

<sup>92</sup> Statute of Anne sec. XI.

By replacing the state-sanctioned monopoly power and censorial bottlenecks of the Stationers' Company and the Licensing Acts with intangible rights distributed widely to individual authors, the Statute of Anne thus appears to have embraced the authorial autonomy that was given short shrift under the preceding regime.<sup>93</sup> It was also attentive to the users who had been paying monopoly prices to stationers, establishing a procedure for challenging unreasonable prices.<sup>94</sup> The Statute of Anne is therefore often touted as the first true copyright statute,<sup>95</sup> reflecting the values of authorial autonomy, user access, and ultimately “encouragement of learning” that remain at the core of Anglo-American copyright. But these laudable innovations also risked imposing the transaction and information costs that come with atomism. The universe of copyright holders was vastly expanded beyond the Stationers' Company membership and the ownership of any given work could be fragmented among multiple owners whose interests could shift over time.

Of course, the publishers who lobbied for the legislation championed the rights of authors but surely intended to retain as much as possible the control and protection they enjoyed under the prior regime.<sup>96</sup> And, initially, copyright practice produced neither as much authorial autonomy nor as much atomism as the Statute in theory allowed. Despite their newly-granted rights, authors largely continued to assign their copyrights to the same publishers<sup>97</sup> (who maintained their old monopolistic practices<sup>98</sup>)

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<sup>93</sup> See generally Kahn at 230, asserting that the Statute of Anne “was a response to concerns about the power wielded by the Stationers' Company” and that “[i]ts promoters intended to restrain the power of the publishing industry and destroy its monopolistic structure.”

<sup>94</sup> Statute of Anne sec. IV.

<sup>95</sup> [examples]

<sup>96</sup> [cites] E.g. Kaplan at 8-9: “It is hard to know how far the interests of authors were considered in distinction from those of publishers. There is an apparent tracing of rights to an ultimate source in the fact of authorship, but before attaching large importance to this we have to note that if printing as a trade was not to be put back into the hands of a few as a subject of monopoly—if the statute was indeed to be a kind of ‘universal patent’—a draftsman would naturally be led to express himself in terms of rights in books and hence of initial rights in authors. A draftsman would anyway be aware that rights would usually pass immediately to publishers by assignment, that is, by purchase of the manuscripts as in the past. . . . Although reference in the text of the statute to authors, together with dubious intimations in later cases that Swift, Addison, and Steele took some significant part in the drafting, have lent color to the notion that authors were themselves intended beneficiaries of the parliamentary grace, I think it nearer the truth to say that publishers saw the tactical advantage of putting forward authors' interests together with their own, and this tactic produced some effect on the tone of the statute.” Rose at 47: “The booksellers were pressing for an act that would, as far as possible, restore the control of the trade they had enjoyed in the days of licensing.” John Feather, *Publishing, Piracy, and Politics: An Historical Study of Copyright in Britain* 64 (1994) (observing that the Statute of Anne “wholly ignored the authors of books”).

<sup>97</sup> And the publishers continued their collusive practices despite their theoretical vulnerability to competition. E.g. Patterson at 152. “Although [the booksellers] maintained a fiction of public sales, in practice, the catalogues of copyrights for sale were sent to a chosen few, and other persons were rigorously excluded from the auctions.”

<sup>98</sup> See Feather.

under the same terms as before.<sup>99</sup> They assigned their contingent renewal terms as well, a practice upheld by the English courts.<sup>100</sup> As Diane Zimmerman reports: “Eighteenth century writers who attempted to keep their copyrights, it is said were either unable to find a publisher at all or, if they did, were exposed to punitive actions by the publishing establishment for their temerity.” Therefore, “the practice of transferring the full copyright to the publisher ab initio was established tradition well before the beginning of the nineteenth century, and authors (unless they were exceptional) probably have never had much choice in the matter.”<sup>101</sup> Similarly, L. Ray Patterson observes: “[t]hat the author was entitled by the statute to hold the copyright of his works did not really disturb the booksellers. They simply insisted on having the copyright before they would consent to publish a work. If the author refused, he ran the risk, if the bookseller accepted at all, of having the promotion of his book ignored.”<sup>102</sup>

But there were important counter-examples of authors claiming and profiting from their new rights.<sup>103</sup> In fact, the first case decided under the Statute of Anne was initiated by the executor of an author’s estate, not by a publisher.<sup>104</sup> Ironically, authors’ bargaining power was likely enhanced by the failed eighteenth century campaign for judicial recognition of a perpetual common law authorial copyright. By rejecting the notion of perpetual common law copyright in *Donaldson v. Beckett* (1774),<sup>105</sup> the House of Lords weakened the market power of the London booksellers (which was based in part on their claimed ownership of the rights to popular works for which the statutory copyright had expired). A more competitive publishing marketplace meant more potential bargaining partners for authors. It also made publishers who could no longer rely on a perpetual stream of revenue from their old copyrights more dependent on living authors. As John Feather describes in his history of British copyright: “By 1800, the mutual dependence of authors and publishers was recognized on both sides, for in the aftermath of [*Donaldson*] the publishers needed a

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<sup>99</sup> Oren Bracha, *The Ideology of Authorship Revisited*, SSRN draft at 26-27.

<sup>100</sup> *Carnan v. Bowles*, 2 Bro. C.C. 80, 29 Eng. Rep. 45 (Ch. 1786); *Rundell v. Murray*, Jac. 315, 37 Eng. Rep. 868 (Ch. 1821); [cite Fred Fisher and secondary sources].

<sup>101</sup> Diane Leenheer Zimmerman, *Authorship Without Ownership: Reconsidering Incentives in a Digital Age*, 52 DEPAUL L. REV. 1121, 1140 (2002-2003) [look at her sources].

But Oren Bracha reports that over the course of the eighteenth century, “in a growing number of cases authors’ compensation increased and, more importantly, contractual mechanisms for the retention of some control and for profit sharing were more frequently employed.” Bracha draft at 27. [Check additional sources: Belanger, *Publishers And Writers in Eighteenth Century England* at 22; Collins, *Authorship in the Days of Johnson* 42 (1929); Feather, *The Publishers and Pirates: British Copyright Law in Theory and Practice, 1710-1775*, 22 *Publishing History* 5, 16 (1987)].

<sup>102</sup> Patterson at 152.

<sup>103</sup> Feather at 123: “In the eighteenth century, a few authors had indeed exploited the law. They were exceptional, but far more writers began to benefit from the exertions of these few, as the relationships between authors and publishers changed.”

<sup>104</sup> Rose at 49 (describing *Burnet v. Chetwood*, 1720). But Rose goes on to note that “*Burnet v. Chetwood* was unusual: most of the early cases that arose under the statute involved major London booksellers seeking injunctions . . . against other booksellers.”

<sup>105</sup> 98 Eng. Rep. 257 (1774).



constant stream of new books if they were to continue to make profits from works protected by the law.”<sup>106</sup>

But even as British authors gained more power during the eighteenth century to retain and/or bargain over their statutory copyrights, the proliferation of ownership was accompanied by practices that continued to limit and ameliorate the effects of atomism. For example, the remedies provided by the Statute were only available if the work had been registered prior to publication—providing a mechanism for keeping track of widely dispersed ownership.<sup>107</sup> The rights were applicable only to books, limiting the subject matter into which ownership could proliferate. And with respect to each book, the Statute granted only exclusive rights to print, with the consequence that ownership was seldom divided with respect to intended use. Finally, the consequences of complexity were ultimately limited by the duration of the rights—the finiteness of which was established by *Donaldson*.

Measured against the preceding regime, the Statute of Anne managed to inject some measure of authorial autonomy and consumer protection without triggering large costs in terms of atomism. It rejected (in theory, anyway) one anti-atomism device: mandatory consolidated ownership of copyrights by members of a closed club.<sup>108</sup> But consolidation was still achieved through private ordering. And while the universe of potential owners was much larger than before, the registration requirement aimed to keep track of them. Finally, the limited duration, subject matter, and scope of protection constrained the number of rights and the ways in which they were sliced and diced.

## 2. The Copyright Act of 1790

The Statute of Anne and the practices that emerged in its wake set the stage for the enactment of copyright law in the United States. The provisions of the Copyright Act of 1790 largely mirrored the Statute of Anne. The Act granted 14-year initial and renewal terms and required registration.<sup>109</sup> Its subject matter was “maps, charts, and books.” And its scope covered “printing, reprinting, publishing and vending.”

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<sup>106</sup> Feather at 123. See also Patterson at 177-78, concluding that “[i]t was the only decision which would destroy the monopoly of the booksellers, and there is little question that the decision was directly aimed at that monopoly.”

<sup>107</sup> Statute of Anne sec. II; see also KAPLAN, *supra* note \_\_\_, at 7 (“[T]o prevent infringement by innocent mistake, it was provided that the forfeiture and penalty could not be exacted with respect to new books unless the title to the copy was entered, before publication, in the register book at the Hall of the Stationers’ Company.”) [Were transfers recorded as well?]

<sup>108</sup> See generally Patterson at 147 (“Although the author had never held copyright, his interest was always promoted by the stationers as a means to their end. . . . The draftsmen of the Statute of Anne put these arguments to use, and the author was used primarily as a weapon against monopoly.”)

<sup>109</sup> The U.S. registration requirement was interpreted more strictly than in England. See generally Kaplan, *supra* note \_\_\_, at 26-27 (“American law thus started from the same baseline as the English, but with us there was added an insistence on punctilios . . .”).

Like its British predecessor, the Copyright Act bestowed its initial benefit on authors. Here, the solicitude for authorial autonomy may have been more genuine than it initially was under the Statute of Anne. As Paul Goldstein observes, “Writers, not booksellers, led the drive for copyright in the United States.”<sup>110</sup> And authors featured in many of the formative controversies over the meaning of the Act.<sup>111</sup> This shift in advocacy and emphasis partly reflected the changing times. In the decades between 1710 and 1790, authors became more esteemed, more commercially viable, and more influential in both England and the United States.<sup>112</sup> The American experience also reflected different market conditions: there was no history of a publishing monopoly nearly as powerful as the Stationers’ Company.<sup>113</sup>

Despite the more favorable environment for authors, the early practice here was also for authors to assign all of their rights to publishers.<sup>114</sup> Many apparently made these assignments even in advance of registration, as economic historian Zorina Kahn reports that “[i]n the first decade after the enactment of the statute almost a half of all copyrights were issued to ‘proprietors’ such as publishers, rather than authors.”<sup>115</sup> The market conditions made this private ordering less consolidating (and more consistent with author autonomy) than it was under early English practice; but the assignments nonetheless mitigated the atomizing effects of a scheme in which individual authors were copyright owners.

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<sup>110</sup> Paul Goldstein, *Copyright’s Highway* 40 (2003). See also Feather at 151: “Although clearly based on the 1710 British Act, American law went further in specifically recognizing the rights of the author.” [cites Frederick R. Goff, *The First Decade of the Federal Act for Copyright 1790-1800* (1951)].

<sup>111</sup> E.g. *Stowe v. Thomas*, *Wheaton v. Peters*. But cf. Kahn at 241: “[T]he fraction of copyright plaintiffs who were authors (broadly defined) was initially quite low, and fell continuously during the nineteenth century. By 1900-1909, only 8.6 percent of all plaintiffs in copyright cases were the creators of the item that was the subject of the litigation....”

<sup>112</sup> Feather: “The ‘encouragement of learning’ may have originally been little more than a blanket of respectability to cover the naked commercialism of the late seventeenth- and early eighteenth-century booksellers, but it had become the core of the argument about literary property by the mid-1770s.” Jaszi at 471: “The ‘authorship’ construct, although still incomplete when introduced into English law in 1710, was a charged receptacle, prepared to collect content over the next century. Although the concept of ‘authorship’ was introduced into English law for the functional purpose of protecting the interests of booksellers (and continued to do so throughout the eighteenth century and beyond, the term took on a life of its own as individualistic notions of creativity, originality, and inspiration were poured into it. ‘Authorship’ became an ideology. By the early nineteenth century, its array of connotations and associations was essentially complete, and the interests of publishers had disappeared from the public discourse of copyright law.”

<sup>113</sup> Paul Goldstein, *Copyright’s Highway* 40 (2003).

<sup>114</sup> Unlike the Statute of Anne, the Act’s renewal language referred expressly to the possibility that a renewal term could “be continued to” an author’s “assigns,” which the Supreme Court later took to be an adoption of the English courts’ view about the assignability of the contingent renewal term. *Fred Fisher Music Co. v. M. Witmark & Sons*, 318 U.S. 643, 647-50 (1943) (“In view of the language and history of this provision, there can be no doubt that if the present case had arisen under the Act of 1790, there would be no statutory restriction upon the assignability of the author’s renewal interest.”).

<sup>115</sup> Kahn at 236; see also Bracha re interpretation of this data.

Atomism was also limited in the early years under the Copyright Act by the same features noted in the discussion of the Statute of Anne: limited duration, subject matter, and scope of protection. Given the limited universe in which copyright operated (mainly books), the limited ways in which to exploit a copyright (reproducing verbatim copies<sup>116</sup>), and the limited time in which to do so (28 years at most), there was little reason to slice and dice copyrights in complicated ways—and limited consequences if rights were fragmented. As Register of Copyrights Abraham Kaminstein later reflected, “[w]hen copyright consisted solely in the right to multiply copies, transfers were generally of the entire copyright; as long as the rights and the uses of copyright material remained few, the problems incident to transferring one of a bundle of rights were of little consequence.”<sup>117</sup>

But the possibilities for atomism—and the stakes—changed dramatically over the course of the nineteenth century, as the subject matter, scope, and duration of copyright protection all expanded, new models of publishing put a high premium on the ability to assemble material from diverse sources (into encyclopedias, magazines, and other collective works), and newly literate audiences and improved publishing technology expanded the relevant marketplace.<sup>118</sup> To give just a few examples of the legal expansion: in 1831 musical compositions were added to the statutory subject matter; in 1856 dramatic compositions were added; in 1865 photographs were added; in 1870 statues and other works of art were added and copyright holders’ exclusive rights were expanded to cover translations and dramatic adaptations; and in 1897 a public performance right was added for musical compositions. Registrar Kaminstein later reflected on how the copyright landscape had changed by the end of the nineteenth century: “The turn of the century . . . saw copyright departing from its original concentration on the publishing right; it now included rights of translation, dramatization and of public performance in dramatic and musical compositions. Copyright was no longer a single right, but had become an aggregation or bundle of rights, which might conveniently be referred to as ‘copyright’ but was in reality, many

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<sup>116</sup> See *Stowe v. Thomas* (1853) (no exclusive right to translate).

<sup>117</sup> Abraham Kaminstein, *Divisibility of Copyrights*, Study No. 11, in *Copyright Law Revision Studies Nos. 11-13*, prepared for the Senate Judiciary Committee, 86th Congress, 2d Sess., at 1 (1960).

<sup>118</sup> The nineteenth century (even more so than the era that ushered in the Stationers’ Company) was marked by increased literacy and improved printing technologies, vastly expanding the book market and the profession of authorship. See generally Diane Leenheer Zimmerman, *Authorship Without Ownership: Reconsidering Incentives in a Digital Age*, 52 DEPAUL L. REV. 1121, 1130- (2002-2003) [find better sources focused on U.S.]; Siva Vaidhyanathan, *Copyrights and Copyrights: The Rise of Intellectual Property and How it Threatens Creativity* 45 (2001) (“As the American population grew in the first half of the nineteenth century, readership grew and therefore publishing grew.”). Referring to dramatic improvements in printing technology, Diane Zimmerman argues that these changes were “the preconditions that enabled print to emerge as a medium of genuinely mass, rather than elite, communication, and the professional writer to gain acceptance as a member of a recognized occupational class.” Zimmerman, *supra* note \_\_\_\_, at 1134.

copyrights. . . . This is a very different situation from 1790 and the single right of publication.”<sup>119</sup>

### C. Fin de Siècle Anxiety About Atomism

In the wake of this expansion in the scope and stakes of copyright, courts and legislators of the late nineteenth and early twentieth centuries were increasingly expressing anxiety about the consequences of atomistic copyright. One development that reflects anxiety about fragmented ownership of this newly-complicated bundle of rights is the rise of the work-for-hire doctrine, first codified in 1909. As documented in Catherine Fisk’s historical account,<sup>120</sup> the codification “made concrete, as well as catapulted forward, a change that had just begun in the case law”<sup>121</sup> away from a nineteenth century default rule that employee authors were the owners of works they created in the scope of their employment. Both the statutory change and the preceding evolution in the case law were motivated in part by concerns about a problematic type of copyright atomism: individual ownership of contributions to collaborative projects.

As Fisk explains: “The change in default rules between the early nineteenth century and the early twentieth may be explained, in part, by a rise in the number of cases involving employees who participated in collaborative creative processes. The more the courts saw cases in which a number of people had contributed to the work, the more logical it was to accord the copyright to the representative of the collective—that is, the employer.”<sup>122</sup> Individual employee ownership of contributions to collective projects raises the specter that the project as a whole will not be available for exploitation by anyone if transaction costs inhibit the contractual assembly of rights. This danger became more acute as “[t]he kinds of materials that were subject to copyright had expanded to include more materials prepared in a collaborative way in a corporate setting.”<sup>123</sup> Advocates of the statutory change emphasized the needs of the publishers of these collaborative works, “urg[ing] that publishers of encyclopedias and other works requiring the assistance of a large number of people needed some method other than individual assignments to obtain effective ownership of the copyright to the

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<sup>119</sup> Kaminstein study at 3; see also Bracha at 122-23: “In the second half of the nineteenth century the pressures to locate ownership away from authors grew, and the strains on assignability as a mediating mechanism intensified. This intensified pressure was a result of changing economic practices and of the growing relevance of copyright to various branches of industry. Economic and creative projects that were based on a collaborative effort of a large number of individuals gradually became more common and more economically significant. Such works . . . included, for example, catalogs, dictionaries, encyclopedias and magazines. . . . The steady expansion of copyrightable subject matter and the continuous decline of the originality bar brought within the auspices of copyright many of the economic activities that were likely to have such patterns of creation.”

<sup>120</sup> Catherine L. Fisk, *Authors at Work: The Origins of the Work-for-Hire Doctrine*, 15 YALE J.L. & HUMAN. 1 (2003).

<sup>121</sup> *Id.* at 62.

<sup>122</sup> *Id.* at 32.

<sup>123</sup> *Id.* at 68.

complete project.”<sup>124</sup> The problem of assembling assignments could be especially pressing with regard to renewal rights, as the passage of time could made copyright holders difficult to identify and locate, requiring ““searching all over the world for widows and legitimate children.””<sup>125</sup> The codified work-for-hire doctrine removed the need for difficult searches and negotiation by specifying circumstances under which employers and commissioning parties could be deemed the authors (and thus owners of both initial and renewal terms) of copyrighted works prepared by individuals.

The “indivisibility” doctrine also reflects early twentieth century anxiety about atomism. The 1909 Act referred to a single copyright “proprietor.” Cases interpreting the Act gave only this proprietor the right to sue for infringement. Partial “assignments” of copyright were therefore interpreted as mere licenses that did not give their recipients standing to sue. According to the Nimmer treatise’s summary of the cases under the 1909 Act, “The purpose of such indivisibility was to protect alleged infringers from the harassment of successive law suits.”<sup>126</sup> The indivisibility rule thus aimed to avoid proliferation of copyright ownership—proliferation that would complicate the task of defending against lawsuits and the task of avoiding lawsuits by negotiating for permission to use copyrighted works upfront.<sup>127</sup> As Abraham Kaminstein put it in his 1957 study on the issue, “[f]rom the viewpoint of *ease of tracing title* and purposes of suit, it is much simpler to require that only the author or his assignee can control the copyright.”<sup>128</sup> What is more, under the rules in place at the time, to qualify for copyright protection published works had to include a copyright notice identifying the proprietor. Combined, the indivisibility rule and the notice requirement facilitated negotiation for permission to reuse copyrighted works by avoiding some of the information and transaction cost problems I associate with copyright atomism.<sup>129</sup>

One area in which Congress did not act to assuage anxiety about atomism in the 1909 act was renewal. Indeed, the legislative history of the act emphasizes the value of temporal fragmentation of copyrights, using an oft-quoted example from Mark Twain’s experience with *Innocents Abroad* to demonstrate the potential benefit to an author of retaining his renewal term:

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<sup>124</sup> Id. at 63.

<sup>125</sup> Id. at 63, quoting Samuel J. Elder’s statement in 1 Legislative History of the 1909 Copyright Act 56 (B. Fulton Brylawski & Abe Goldman eds., 1976).

<sup>126</sup> 3 Nimmer on Copyright sec. 10.01[A].

<sup>127</sup> Cf. Mark Lemley, *Dealing with Overlapping Copyrights on the Internet*, 22 U. DAYTON L. REV. 547, 569-72 (1997) (noting the difficulties associated with obtaining permission to use divided copyrights when one activity implicates several owners’ rights).

<sup>128</sup> Abraham L. Kaminstein, *Divisibility of Copyrights*, Study No. 11, in Copyright Law Revision Studies Nos. 11-13, prepared for the Senate Committee on the Judiciary, 86th Cong., 2d Sess., 18-22 (1960) (emphasis added).

<sup>129</sup> Cf. Jessica Litman, *Sharing and Stealing*, 27 HASTINGS COMM. & ENT. L.J. 1, 46 (2004) (making a proposal to “reproduce the functions that notice and indivisibility provided before we abandoned them”).

Mr. Clemens told me that he sold the copyright for *Innocents Abroad* for a very small sum, and he got very little out of *The Innocents Abroad* until the twenty-eight year period expired, and then his contract did not cover the renewal period, and in the fourteen years of the renewal period he was able to get out of it all the profits.<sup>130</sup>

Similarly, the congressional reports accompanying the 1909 revision summarized:

It was urged before the committee that it would be better to have a single term without any right of renewal, and a term of life and fifty years was suggested. Your committee, after full consideration, decided that it was distinctly to the advantage of the author to preserve the renewal period. It not infrequently happens that the author sells his copyright outright to a publisher for a comparatively small sum. If the work proves to be a great success and lives beyond the term of twenty-eight years, your committee felt that it should be the exclusive right of the author to take the renewal term, and the law should be framed as is the existing law, so that he could not be deprived of that right.

Despite Congress's apparent willingness to suffer atomism in the name of author autonomy in this context, the Supreme Court limited the practical consequences of retention of the renewal term, holding in *Fred Fisher Music Co. v. M. Witmark & Sons*<sup>131</sup> that authors could assign their contingent renewal rights along with their initial terms.

[Other early twentieth century examples: First sale (Bobbs-Merrill 1908) reflects anxiety about information costs and anti-competitive impacts of fragmented rights; ASCAP and BMI—voluntary consolidation addresses the transaction costs associated with assembling musical performance rights for public venues and radio stations but raises competition concerns leading to 1940-41 ASCAP and BMI consent decrees;<sup>132</sup> *Pushman* presumption (that transfer of unpublished manuscript or canvas also transfers common-law copyright); *Bartsch v. Metro-Goldwyn-Mayer, Inc.* (interpretation of license to cover new technologies limits fragmentation between licensor and licensee); “new copyright” theory of derivative works.]

[Lessons from this era: the expanding coverage of copyright intensifies concerns about the problems caused by atomism, which can be ameliorated by default rules that consolidate ownership *ex ante*, and by private ordering per ASCAP.]

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<sup>130</sup> Hearings Before Committees on Patents on Pending Bills, 60<sup>th</sup> Cong., 1<sup>st</sup> Sess. At 20 (1908).

<sup>131</sup> 318 U.S. 643 (1943).

<sup>132</sup> “The logic of ASCAP’s operations, particularly the logic of the blanket license, is the logic of monopoly: only by gathering all copyrighted compositions into its repertory could ASCAP give users a blanket license that would enable them to perform any musical composition without fear of a lawsuit.” Goldstein at 57.

Depending on market conditions and the bargaining power of authors, both approaches can threaten author autonomy and competition.]

#### **D. The Age of the Author: 1976-1998**

The 1976 Act is widely viewed as favoring individual authors over publishers and other copyright consolidators. As Jane Ginsburg and Robert Gorman put it: “With the enactment of the 1976 Copyright Act, and its amendments, Congress has—at a number of important points—focused upon potential tensions in the interests of authors and publishers, and has for the most part placed its weight behind the former. Courts too, in the past quarter century, have been asked to rule upon conflicts between authors and publishers, and have tended to find in favor of authors.”<sup>133</sup> Lydia Loren similarly observes that “the emphasis the 1976 Copyright Act placed on the author of a copyrighted work. In many different provisions of the 1976 Act the author is given protection against certain rules from the 1909 Act that were seen as unfair. In particular, many of these rules related to the relationship between author and publisher/distributor.”<sup>134</sup> Similarly, the Supreme Court noted in *New York Times v. Tasini* (citing the views of two Registers of Copyright) that the 1976 Act evinced “intent to enhance the author’s position vis-à-vis the patron.”<sup>135</sup>

[Examples (including some post-1976) include: Work-for-hire limited; *Pushman* Presumption rejected; renewal discarded, but replaced with longer term and termination of transfer; formalities optional; evolution of joint authorship doctrines; *Stewart v. Abend*; *N.Y. Times v. Tasini* and subsequent developments; *Random House, Inc. v. Rosetta Books, LLC*;<sup>136</sup> written instrument requirement;<sup>137</sup> VARA (but very limited).]

[Lessons: The 1976 Act and subsequent developments can be understood as a backlash against anti-atomism techniques that threatened author autonomy. Unfortunately, the resulting reforms facilitated atomism while eliminating the notice and registration requirements that had in the past limited some of atomism’s harmful side-effects. And as a practical matter they may not have enhanced author autonomy

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<sup>133</sup> Robert A. Gorman & Jane C. Ginsburg, *Authors and Publishers: Adversaries or Collaborators in Copyright Law?*, in BENJAMIN KAPLAN ET AL., AN UNHURRIED VIEW OF COPYRIGHT REPUBLISHED (AND WITH CONTRIBUTIONS FROM FRIENDS), at GORGIN 1, 2 (2005).

<sup>134</sup> Lydia Pallas Loren, *Untangling the Web of Music Copyright*, 53 Case W. Res. L. Rev. 673, 674 (2003). See also *id.* at note 13, citing *Tasini*, the termination of transfer provision, and the elimination of formalities as “evidenc[ing] a preference for authors’ rights.”

<sup>135</sup> 533 U.S. 483, 495 n. 3 (quoting Letter from M. Peters to Rep. McGovern, reprinted in 147 Cong. Rec. E182 (Feb. 14, 2001) (quoting Ringer, *First Thoughts on the Copyright Act of 1976*, 22 N.Y.L.S.L.Rev. 477, 490 (1977)), observing that the 1976 represented “a break with a two-hundred-year-old tradition that has identified copyright more closely with the publisher than with the author.”)

<sup>136</sup> 150 F.Supp. 2d 613 (S.D.N.Y. 2001), upheld in 283 F.3d 490 (2d Cir. 2002).

<sup>137</sup> 17 U.S.C. 204(a).

much: concentrated media markets often leave authors with little bargaining power notwithstanding the control the statute gives them by default.<sup>138]</sup>

## **E. The Internet Age: 1998-Today**

[Increased atomism: User-generated content=user generated copyright; novel licensing techniques (open source upheld in *Jacobsen*); erosion of first sale as a practical matter (although patent equivalent upheld in *Quanta*).]

[Further expansions in copyright raise stakes again: expanded duration.]

[Evidence of anxiety about atomism: termination of transfer cases (*Milne*, *Steinbeck*); joint-authorship cases (*Davis v. Blige*); limits on rights of licensees (*Gardner v. Nike*); orphan works proposals.]

## **VII. Alleviating Atomism While Honoring Autonomy**

In this part I begin to explore mechanisms—both voluntary and regulatory—that might alleviate atomism while respecting authorial autonomy.

### **A. Consolidation and Coordination Through Private Ordering**

[Note lessons learned from history: consolidation through private-ordering is a possible solution. But depending on market conditions, private ordering solutions can be anti-competitive and/or coercive (*London booksellers*, *ASCAP*).]

#### **1. Voluntary Assignments to Platform Owners and Other Consolidators**

[Review consolidation model from discussion of Facebook and Lucasfilm.]

#### **2. Public Licensing and License Coordination**

In *Jacobsen v. Katzer*,<sup>139</sup> the Federal Circuit affirmed the technique of public licensing, whereby a copyright holder publicly announces the terms under which their work may be reused by anyone. When a potential licensee is satisfied with the offered terms, she need not enter into individualized negotiations with the copyright holder.

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<sup>138</sup> Noted in Ginsburg & Gorman.

<sup>139</sup> 2008 WL 3395772 (Fed. Cir. 2008).



She may simply proceed to use the work as permitted by (but subject to the limitations of) the public license.

The paradigmatic example of copyright public licensing is the GNU<sup>140</sup> General Public License (GPL)<sup>141</sup> promulgated by the Free Software Foundation. The GPL grants permission to copy, distribute, and modify the computer software programs to which it applies, provided that certain requirements are satisfied.<sup>142</sup> Namely, any copies or modifications that are distributed must be accompanied by their source code and must be available on the GPL's terms.<sup>143</sup> The license announces that any recipient of these copies or modifications "automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions."<sup>144</sup> So if all goes as provided in the GPL, everyone who receives a copy or modified version of the software also receives a license, and their use of the software is subject to the license terms. The GPL is the most prominent license within a family of licenses promulgated by the Free Software Foundation; others include the GNU Free Documentation License (FDL), which was designed to apply to software documentation.<sup>145</sup>

Another family of public licenses moves beyond the realm of computer software and into the realm of culture. Creative Commons is a non-profit organization that promotes licenses that are designed to be applied to a variety of copyrightable works, including music, text, images, and movies.<sup>146</sup> Like the GPL, these licenses permit copying, distribution and, in some cases, modification of covered works, but are subject to certain conditions that copyright holders choose from a menu of terms.<sup>147</sup> Among these is a "share alike" provision, which (like the GPL) requires that derivative works be licensed on the same terms.<sup>148</sup> That is, the creator of a derivative work based upon a work licensed under a Creative Commons share-alike license must give other people permission to copy and modify that derivative work subject to the condition that they do the same with their derivative works, and so on.<sup>149</sup>

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<sup>140</sup> GNU is the software project with which Richard Stallman launched the free software movement. The acronym stands for "Gnu's Not Unix." See Richard Stallman, *The GNU Manifesto* (1993), available at <http://www.gnu.org/gnu/manifesto.html>.

<sup>141</sup> GNU GENERAL PUBLIC LICENSE (Version 3, June 29, 2007), <http://www.fsf.org/licenses/licenses/gpl.html>.

<sup>142</sup> *Id.*

<sup>143</sup> See *id.* at para. 1–3.

<sup>144</sup> See *id.* at para. 6.

<sup>145</sup> GNU FREE DOCUMENTATION LICENSE pmb1. (Version 1.2, 2002), <http://www.fsf.org/licenses/licenses/fdl.html>.

<sup>146</sup> Creative Commons, History, <http://wiki.creativecommons.org/History> (last visited Dec. 31, 2007).

<sup>147</sup> Creative Commons, Choosing a License, <http://creativecommons.org/about/licenses> (last visited Dec. 31, 2007).

<sup>148</sup> *Id.*

<sup>149</sup> *Id.* This requirement of identical permissive licensing of derivatives of a licensed work is often referred to as a "copyleft" provision. See, e.g., LAWRENCE ROSEN, OPEN SOURCE LICENSING:

These public licenses solve some of the problems I associate with copyright atomism. By allowing licensees to bypass individual negotiations with copyright holders, they alleviate some types of search and negotiation costs. Of course, transaction costs may still arise if the potential licensee wants to do something with the work that is covered by copyright but outside the terms of the public license. But at least some subset of reuse can proceed without individual contact or negotiation.

These public licenses do not avoid—and indeed may exacerbate—some of the other costs I associate with copyright atomism. Incompatibility between the various public licenses can make it difficult to combine licensed work—even under circumstances that seem generally consistent with the expressed preferences of the original licensors. For example, both the GPL family of licenses and Creative Commons “share-alike” licenses raise the specter of license incompatibility by requiring that derivative works prepared by the licensee be licensed under the same terms as the licensed work. That means that derivatives based upon GPL-licensed software can only be licensed under the GPL; other licenses—including other licenses that similarly seek to promote the model of open and non-proprietary software development—are incompatible. As for Creative Commons, no two share-alike works can be combined into a new derivative work unless the terms of their respective licenses match. This causes incompatibility even within the Creative Commons system, which offers licensors the choice of two different (non-matching) share-alike licenses.<sup>150</sup> And there are many other non-Creative Commons licensing possibilities that are similarly incompatible with Creative Commons share-alike licenses.

One way to avoid the incompatibility problem is for an entire community to agree to use one license (or a compatible set of licenses). Intermediaries can play a useful coordinating role here. Rochelle Cooper Dreyfuss refers to these as “‘second order solutions:’ policies set by institutions that interact with the participants and share their expertise, but which are more responsive to the public interest.”<sup>151</sup>

Consider the Wikipedia example. Like Facebook and the Starwars Mashup Service, Wikipedia has a copyright policy that specifies the copyright status of contributions to the Wikipedia project.<sup>152</sup> But instead of consolidating rights in the hands of the platform owner, the Wikipedia terms instead coordinate the license choices of all contributors by specifying that everything contributed to Wikipedia is available under the same public license (the GPL FDL). Within the community of Wikipedia contributors, this coordination solves incompatibility problems that might

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SOFTWARE FREEDOM AND INTELLECTUAL PROPERTY LAW 105–06 (2005); Free Software Foundation, What is Copyleft?, <http://www.fsf.org/licensing/essays/copyleft.html> (last visited Dec. 31, 2007).

<sup>150</sup> See Zachary Katz, *Pitfalls of Open Licensing: An Analysis of Creative Commons Licensing*, 46 IDEA 391 (2006).

<sup>151</sup> Rochelle Cooper Dreyfuss, *Collaborative Research: Conflicts on Authorship, Ownership, and Accountability*, 53 VAND. L. REV. 1161, 1182 (2000).

<sup>152</sup> Wikipedia: Copyrights, available at <http://en.wikipedia.org/wiki/Wikipedia:Copyrights>.

otherwise be posed by atomistic copyright claimed in inconsistent ways by the myriad contributors to Wikipedia.<sup>153</sup>

Similarly, copyrights in MIT's OpenCourseWare materials are generally retained by the faculty members who created them, but are licensed consistently under a specified Creative Commons license.<sup>154</sup> Harvard University's Faculty of Arts and Sciences employs a more strongly consolidating policy, under which faculty members grant Harvard nonexclusive licenses to their scholarly articles, which the University may then make available to the public in an "open-access repository."<sup>155</sup> The policy is subject to waiver at faculty member request.

Funding entities can similarly promote coordinated licensing by specifying the terms under which funded research should be released. For example, the National Institutes of Health now requires that "all investigators funded by the NIH submit or have submitted for them to the National Library of Medicine's PubMed Central an electronic version of their final, peer-reviewed manuscripts upon acceptance for publication, to be made publicly available no later than 12 months after the official date of publication."<sup>156</sup>

Similarly, the European Research Council requires "that all peer-reviewed publications from ERC-funded research projects be deposited on publication into an appropriate research repository where available, such as PubMed Central, ArXiv or an institutional repository, and subsequently made Open Access within 6 months of publication."<sup>157</sup>

Despite this type of public license coordination, there are still problems of inter-community incompatibility.<sup>158</sup> As Dreyfuss points out, "[a] problem with second order private solutions is that more than one entity can formulate them and there is little reason to believe that the formulations will be coordinated, or even consistent, with each other."<sup>159</sup> And, indeed, license incompatibilities make it difficult to combine

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<sup>153</sup> See Wikipedia: Copyrights, available at <http://en.wikipedia.org/wiki/Wikipedia:Copyrights> ("The Wikimedia Foundation does not own copyright on Wikipedia article texts and illustrations. It is therefore useless to email our contact addresses asking for permission to reproduce content. Permission to reproduce content under the license and technical conditions applicable to Wikipedia . . . has already been granted to everyone without request; for permission to use it outside these terms, one must contact all the volunteer authors of the text or illustration in question.").

<sup>154</sup> MIT OpenCourseWare FAQ: Intellectual Property, <http://ocw.mit.edu/OcwWeb/web/help/faq3/index.htm>.

<sup>155</sup> Harvard University Library Office for Scholarly Communication, Open-Access Policy in FAS, <http://hul.harvard.edu/osc/overview.html>.

<sup>156</sup> National Institutes of Health, Revised Policy on Enhancing Public Access to Archived Publications Resulting from NIH-Funded Research, <http://grants.nih.gov/grants/guide/notice-files/NOT-OD-08-033.html>.

<sup>157</sup> European Research Council Guidelines for Open Access, [http://erc.europa.eu/pdf/ScC\\_Guidelines\\_Open\\_Access\\_revised\\_Dec07\\_FINAL.pdf](http://erc.europa.eu/pdf/ScC_Guidelines_Open_Access_revised_Dec07_FINAL.pdf).

<sup>158</sup> This is discussed in more detail in *The New Servitudes*, *supra* note \_\_\_\_.

<sup>159</sup> Cooper Dreyfuss, 53 Vand. L. Rev. at 1189.

Wikipedia entries with contributions to some other like-minded collaborative projects. License incompatibilities abound in the realm of educational resources as well.

### **3. License Standardization**

The compatibility problems encountered by various (proliferating and potentially incompatible) public licensing schemes could be solved by license standardization. Several commentators have proposed this solution. For example, Robert Merges suggests that “the Copyright Act could be amended to provide a statutory ‘safe harbor’ capturing at least some of the attributes of GPL-type licenses. It would become available simply by following statutory notice provisions, such as affixing an “L in a circle” notice (for “Limited Copyright Claimed—Full Copyright Waived”).”<sup>160</sup> To maximize standardization this regime could be exclusive—i.e. idiosyncratic licenses that differed from the Congressionally-endorsed standard would not be enforced (perhaps via a provision that would preempt their enforcement). Or it could simply act to channel preferences toward the license with the government’s imprimatur and clear notice. The first option would do more to limit information costs and confusion, but would be a severe departure from what has become standard intellectual property licensing practice. Both versions of the government standardization scheme may be politically infeasible.

### **4. Trust-like Mechanisms**

[In this section I will discuss the possibility of assigning atomistic copyrights to consolidating intermediaries, but with instructions from the author about the purposes for which the rights should be exercised. Harvard University’s new open access policy seems to fit this model, as does the Free Software Foundation’s policy of encouraging free software authors to assign their copyrights to the FSF. I have explored this idea a bit in *Cultivating Open Information Platforms: A Land Trust Model*, 1 J. TELECOMM. & HIGH TECH. L. 309 (2002).]

## **B. Reducing the Costs of Atomism with Public Law Limits on Copyright’s Reach**

[This section will discuss how limiting the subject matter, scope, duration, and remedies of copyright would lower the stakes for copyright atomism—harkening back

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<sup>160</sup> Robert P. Merges, *A New Dynamism in the Public Domain*, 71 U. CHI. L. REV. 183, 201-202 (2004); see also James Gibson, Comments on *The New Servitudes*, available at <http://uchicagolaw.typepad.com/faculty/2008/02/jim-gibsons-com.html>. Cf. Merrill & Smith, *Optimal Standardization*, *supra* note \_\_\_, at 49-51 (arguing for superiority of government-supplied property standardization over privately supplied standardization).

to the early nineteenth century situation described above. Recent legislative proposals for dealing with the problem of orphan works will provide contemporary examples of this type of solution. The next two sub-sections represent just two of many possible solutions in this category.]

## 1. Liability Rules

Liability rules avoid the costs associated with negotiating permission to use owned resources by removing the owner's veto power and allowing use to go forward—usually subject to a requirement to pay compensation. They are therefore often an attractive solution in situations plagued by high transaction costs of the type I associate with copyright atomism.<sup>161</sup> The Supreme Court has in fact suggested that liability rule treatment might be appropriate in copyright cases in which transaction costs might otherwise block voluntary solutions.<sup>162</sup>

[To be continued, including discussion of variations including “liability rules,”<sup>163</sup> “contracting into liability rules,”<sup>164</sup> etc....]

## 2. Opt-in and Opt-out

If the limits of copyright only applied upon the copyright holder's affirmative request, then re-users would not have to bear the costs of locating copyright holders and asking them for permission. This is not generally how contemporary copyright is understood to operate. Nothing (no notice or registration, for example) is required for authors to qualify for protection. And liability is strict—infringers cannot claim that they didn't know the copyright holder would mind.<sup>165</sup>

We can imagine a different copyright scheme, in which re-users were free to proceed until copyright holders registered their objections. The transaction-cost avoidance potential of such a scheme is an argument frequently offered in support of

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<sup>161</sup> See generally Calabresi & Melamad, *Property Rules, Liability Rules, and Inalienability: One View of the Cathedral*, 85 HARV. L. REV. 1089 (1972); see also Stewart E. Sterk, *Property Rules, Liability Rules, and Uncertainty About Property Rights*, 106 MICH. L. REV. 1285 (2008).

<sup>162</sup> E.g. *New York Times v. Tasini*; see also *Abend v. MCA* and discussion in Sterk, *supra* note \_\_\_\_, at 1330-31.

<sup>163</sup> Abraham Bell & Gideon Parchomovsky, *Pliability Rules*, 101 MICH. L. REV. 1, 7 (2002) (“Pliability rules combine two separate rules; with the passage between the two stages of rule protection triggered by a preset condition. Owing to their amalgamated nature, pliability rules are capable of combining the respective strengths of property and liability rules while avoiding their respective weaknesses.”).

<sup>164</sup> Robert P. Merges, *Contracting into Liability Rules: Intellectual Property Rights and Collective Rights Organizations*, 84 CAL. L. REV. 1293 (1996).

<sup>165</sup> There are limitations on damages available to “innocent infringers,” however.

Google’s Book Search project, which is copying and creating a searchable index of copyrighted books unless copyright holders “opt-out.”<sup>166</sup>

### C. Easing Transactions with Better Information

Many of the problems I associate with copyright atomism stem from the lack of clear information available to people who would like to reuse the creative work that they find on the Internet. Some of the material posted on the Internet is subject to copyright’s restrictions. Some is not—it is in the public domain because it was first published without notice during a time when copyright could be lost that way, or because its copyright has expired. Sometimes the copyright holder is identified and contact information is provided. More often the copyright holder is not identified, is identified inaccurately, or is identified but hard to find. These problems stem in part from the changes in copyright law that made the formalities of notice and registration optional—not prerequisites for copyright protection. But they also stem from the nature of contemporary copyright holders and copyrighted works. Despite the fact that formalities are not required for copyright protection, corporate publishing companies do not publish books without copyright notices. But bloggers publish original works of authorship without copyright notice all of the time.

Several commenters have argued in favor of reformatizing copyright—imposing some type of requirement for notice or registration that would provide information about copyright status and copyright holder identity.<sup>167</sup> Treaty obligations pose a hurdle to implementation of these schemes. Voluntary registration schemes may provide a useful alternative. Or, instead of a centralized registry, information costs could be reduced by better labeling of the old-fashioned kind (©), or new-fangled machine-readable tags that could be attached to and travel with digital works. [To be continued...]

The tangible property context offers some precedent for this type of solution—land recording acts give public notice of the status of land titles and encumbrances and

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<sup>166</sup> See, e.g., Susan Crawford, “Why Google is Right,” [http://scrawford.blogware.com/blog/\\_archives/2005/9/21/1248170.html](http://scrawford.blogware.com/blog/_archives/2005/9/21/1248170.html) (It’s impossible for Google to say to all publishers (what a big world!) ‘tell us what books you WANT us to scan, and we’ll do it.’ . . . So Google is doing the next best possible thing—giving people an easy way to opt out of the project.”); see also Oren Bracha, *Standing Copyright Law on its Head? The Googlization of Everything and the Many Faces of Property*, 85 TEX. L. REV. 1799 (2007); Peter S. Menell, *Knowledge Accessibility and Preservation Policy for the Digital Age*, 44 Hous. L. REV. 1013 (2007); Michael R. Mattioli, *Opting Out: Procedural Fair Use*, 12 VA. J.L. & TECH. 3 (2007).

<sup>167</sup> See, e.g., Christopher Sprigman, *Reform(aliz)ing Copyright*, 57 STAN. L. REV. 485, 494 (2004). Cf. U.S. COPYRIGHT OFFICE, REGISTER OF COPYRIGHTS, REPORT ON ORPHAN WORKS 3 (2006); William M. Landes & Richard A. Posner, *Indefinitely Renewable Copyright*, 70 U. CHI. L. REV. 471, 477 (2003) (describing the tracing costs involved in identifying the copyright holders of old works).

thus address some of the information costs that would otherwise be imposed by hidden servitudes and other unusual property interests.<sup>168</sup>

## VIII. Conclusion

[Taking lessons from the history of copyright law's encounters with atomism, I will assess the solutions I survey above—speculating on which might address the problems I associate with atomism without unduly relying on anti-competitive consolidation (per the Stationers' Company model) or unduly sacrificing author autonomy (which could ultimately backfire, as the 1976 Act experience suggests). My initial intuition is that technology may make solutions focused on information provision more successful and less onerous than they were in the past.]

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<sup>168</sup> See generally Van Houweling, *The New Servitudes*, *supra* note \_\_\_\_, at \_\_\_\_.