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# Making Virtual Copyright Work

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# ARTICLE

## MAKING VIRTUAL COPYRIGHT WORK

*MATTHEW R. FARLEY\**

“[C]opyright is intended to increase and not to impede the harvest of knowledge.”<sup>1</sup>

### INTRODUCTION

Virtual worlds are online environments that are both persistent and dynamic. As they evolve, an increasing number of virtual worlds rely on user creation to innovate and actuate robust economies. User creation is often so indispensable that some virtual worlds and their economies would collapse without sustained, user-driven development. With so much at stake, it has become imperative for virtual-world providers to incentivize user creation, and unsurprisingly, their hasty answer has been copyright law. This Article argues, however, that some features of traditional copyright law are too restrictive, and others too lenient, to effectively promote user creation in virtual worlds. This shortcoming will prove fatal to virtual worlds if interpretive, legislative, or normative alternatives are not developed and implemented.

The popularity of interactive virtual worlds is difficult to overstate. Users spent a staggering 481 million hours logged in to a popular virtual

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<sup>1</sup> *Harper & Row, Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 545 (1985).

world, *Second Life*, in 2009.<sup>2</sup> At one time in South Korea, online activities – virtual-world gaming prominent among them – were more popular than television.<sup>3</sup> Given this growing popularity, commentators have suggested that within the next decade, virtual worlds like *Second Life* will become a primary venue for entertainment and commerce.<sup>4</sup>

Innovation is routine in many virtual worlds. For example, in June 2009, The Dares were the first band to perform simultaneously live on stage and in virtual space within a massive online game.<sup>5</sup> Currently, an Italian nonprofit organization is creating virtual-world facilities for disabled and elderly individuals to communicate and engage with one another, collaborate on productive endeavors, and even earn a living through virtual technology.<sup>6</sup> “Virtual sandboxes”<sup>7</sup> like *Second Life* are replete with user-generated content and activity due in large part to the expansive opportunities to create within their bounds.<sup>8</sup> Additionally, in 2003, *Second Life* departed from popular industry practice and disclaimed ownership of the copyrights to content created in-world;<sup>9</sup> future games will likely follow its lead.

*Second Life*’s move to restore copyright ownership to its users raises questions about applying copyright law to virtual creations and the sensi-

<sup>2</sup> T. Linden, *Second Life Blogs, Features: 2009 End of Year Second Life Economy Wrap Up*, SECOND LIFE BLOGS (Jan. 19, 2010, 9:00:05 AM), <https://blogs.secondlife.com/community/features/blog/2010/01/19/2009-end-of-year-second-life-economy-wrap-up-including-q4-economy-in-detail>.

<sup>3</sup> A poll the South Korean government published in May 2005 found that virtual-world activities were more popular than television among South Koreans ages 9 to 39. Barbara Demick, *Gamers Rack Up Losses*, LOS ANGELES TIMES, Aug. 29, 2005, at A1, available at <http://articles.latimes.com/2005/aug/29/world/fg-games29>.

<sup>4</sup> Nathan Brown, VARA Rights Get a Second Life 1 (Feb. 25, 2010) (unpublished comment) (on file with author) (suggesting that *Second Life* and other virtual worlds will become the primary way to do business on the Internet).

<sup>5</sup> *The Dares + Free Realms = New Guinness World Record*, VIRTUAL WORLDS NEWS (June 3, 2009, 11:49 AM), <http://www.virtualworldsnews.com/2009/06/the-dares-freerealms-new-guinness-world-record.html>.

<sup>6</sup> Mattia, *Oasis Foundation Virtual World: A New Way of Caring*, ISN VIRTUAL WORLDS BLOG (Jan. 19, 2010), <http://www.isnvirtualworlds.com/blog/2010/01/19/oasis-foundation-virtual-world-a-new-way-of-caring/> (The project seeks to “1. Act as [a] communication and collaboration environment to inform, communicate and interact with the public in an innovative way. 2. Be a collaboration and activity platform for the disabled.”).

<sup>7</sup> This term refers to virtual worlds that are primarily directed toward socialization and creation, much like a sandbox.

<sup>8</sup> Cory Ondrejka, *Escaping the Gilded Cage: User Created Content and Building the Metaverse*, in THE STATE OF PLAY: LAW, GAMES, AND VIRTUAL WORLDS 158, 162-63 (Jack M. Balkin & Beth Simone Noveck eds., 2006); *FAQ—Frequently Asked Questions*, SECOND LIFE, <http://wiki.secondlife.com/wiki/FAQ> (last modified Oct. 20, 2010, 5:28 PM).

<sup>9</sup> See *Second Life: Facts for the Visitor*, WIRED (Oct. 2006), <http://www.wired.com/wired/archive/14.10/slfacts.html>.

bility of doing so. On the one hand, pushing traditional copyright principles into virtual worlds presents a host of problems that threaten to stifle creation therein.<sup>10</sup> On the other hand, requiring players to assign away rights in their virtual works obliterates the incentive to create that copyright law embodies.<sup>11</sup> A delicate balance between creator encouragement and public access must be struck, as these hindrances to virtual creation are potential threats to the vitality of virtual worlds themselves.

This Article proposes measures that attempt to strike the balance between creation and access. The virtual-world community is not likely to persevere with the little copyright protection it currently enjoys.<sup>12</sup> Creativity will dwindle and the rich, energetic settings that make virtual worlds so attractive to businesses and entertainers will follow suit.<sup>13</sup> At the same time, because much of the creativity in virtual worlds is derivative in nature, virtual creators are also unlikely to benefit from strong copyright protections.<sup>14</sup> Therefore, current interpretation of copyright law must be revisited and revised before applying it to virtual worlds. Part I details virtual worlds and, in particular, the features that set *Second Life* apart. Part II asks whether virtual works are copyrightable at all and answers in the affirmative, and then discusses authorship and ownership issues in virtual worlds. Part III discusses what copyright means for virtual worlds, including just how important creativity and continued incentives to create are for the survival of virtual worlds. Finally, Part IV argues that, while copyright will be imposed on virtual worlds, broadening the scope of fair use in virtual worlds and imposing a compulsory license for virtual derivatives will encourage creativity and more effectively serve the purpose of copyright law.

## I. VIRTUAL WORLDS

Virtual worlds are generally described as online environments that

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<sup>10</sup> See Jennifer Granick, *Second Life Will Save Copyright*, WIRED (Nov. 20, 2006), <http://www.wired.com/gaming/virtualworlds/commentary/circuitcourt/2006/11/72143>.

<sup>11</sup> See *id.*

<sup>12</sup> *Id.* (Detailing reduced economic activity in response to weak copyright enforcement).

<sup>13</sup> See Cory Ondrejka, *Escaping the Gilded Cage: User Created Content and Building the Metaverse*, in *THE STATE OF PLAY: LAW, GAMES, AND VIRTUAL WORLDS* 158, 172 (Jack M. Balkin & Beth Simone Noveck eds., 2006) (asserting that residents will inevitably supplant developers in creating content and acknowledging that innovation is the driving force behind sustained virtual-world growth).

<sup>14</sup> See James Grimmelmann, *The State of Play: Free as in Gaming?*, LAWMEME (Dec. 4, 2003, 12:25:25 AM), <http://lawmeme.research.yale.edu/modules.php?name=News&file=print&sid=1290>.

are both persistent and dynamic.<sup>15</sup> They continue to exist independently of any single player's presence (persistence), and they are constantly evolving (dynamism) even when a player turns his or her computer off.<sup>16</sup> In general, virtual world users are represented in game by an avatar or proxy.<sup>17</sup>

Virtual worlds vary widely. Some virtual worlds are scripted and others are non-scripted.<sup>18</sup> Some are fantasy-based worlds, filled with elves and dragons, while others are highly realistic approximations of life.<sup>19</sup> Some virtual worlds provide an opportunity to connect and interact with other like-minded individuals, while others focus on growing virtual economies and even offer players the opportunity to earn profits.<sup>20</sup> Perhaps most importantly for this Article, some virtual worlds grant players the ability to customize their appearance and create unique virtual property. At least one of those virtual worlds – *Second Life* – also promises players intellectual property rights over their virtual creations.<sup>21</sup> While strands of this discussion will apply across virtual worlds, it is these latter worlds, where creation and copyright ownership command the attention of users, that are the true focus of this Article.

#### A. GAME WORLDS AND SOCIAL WORLDS

Game worlds are the original virtual worlds. It was online, fantasy-based role-playing games that popularized virtual space.<sup>22</sup> Today, *World*

<sup>15</sup> F. Gregory Lastowka & Dan Hunter, *Virtual Worlds: A Primer*, in THE STATE OF PLAY: LAW, GAMES, AND VIRTUAL WORLDS 13, 15 (Jack M. Balkin & Beth Simone Noveck eds., 2006).

<sup>16</sup> See *id.*

<sup>17</sup> Ryan Vacca, *Viewing Virtual Property Ownership Through the Lens of Innovation*, 76 TENN. L. REV. 33, 36 (2008).

<sup>18</sup> Juliet M. Moringiello, *What Virtual Worlds Can Do for Property Law*, 62 FLA. L. REV. 159, 169 (2010).

<sup>19</sup> Compare Linden Labs, Terms of Service Agreement ¶¶ 7.1, 7.2, <http://secondlife.com/corporate/tos.php> (last updated Oct. 6, 2010), with World of Warcraft, Terms of Use Agreement ¶ 4, <http://www.worldofwarcraft.com/legal/termsofuse.html> (last updated Oct. 29, 2010).

<sup>20</sup> For example, the object of *Sims Online* was socializing, whereas the *There.com* realm allowed users to upload and sell virtual items. See Yochai Benkler, *There is No Spoon*, in THE STATE OF PLAY: LAW, GAMES, AND VIRTUAL WORLDS 180, 181 (Jack M. Balkin & Beth Simone Noveck eds., 2006). Both *Sims Online* and *There.com* closed down. See, e.g., Chris Sherman, *There.com Shutting Down on March 9th*, VIRTUAL WORLDS NEWS (Mar. 2, 2010), <http://www.virtualworldsnews.com/2010/03/therecom-shutting-down-on-march-9th11.html>.

<sup>21</sup> Linden Labs, Terms of Service Agreement ¶ 7.1, <http://secondlife.com/corporate/tos.php> (last updated Oct. 6, 2010).

<sup>22</sup> See Joshua A.T. Fairfield, *The End of the (Virtual) World*, 112 W. VA. L. REV. 53, 57-58 (2009).

of *Warcraft* dominates the game-world market.<sup>23</sup> In *World of Warcraft*, as is typical of game worlds, users slay monsters, complete pre-scripted adventures, and develop skills to advance their medieval- or fantasy-themed avatars.<sup>24</sup> User-generated creation, while possible, is not intended or advocated by game-world designers like those of *World of Warcraft*.

Another faction of virtual worlds is focused on user interaction and, quite frequently, limited commercial activity. *There.com* was the paradigm for this type of social world.<sup>25</sup> *There.com* held itself out as a place where users could network with others, shop, listen to music, and explore the virtual world.<sup>26</sup> While *There.com* offered more expansive creative opportunities to its users than game worlds – users were permitted to upload and sell items – it also featured limitations that made it less interesting for copyright. *There.com* was described as a “commercialized walled garden” where users were encouraged to “come, linger, [and] spend.”<sup>27</sup> Users were not encouraged to create the world around them, but rather to consume it and pay for it. Similarly, *Sims Online*, another social world, did not allow users to purchase properties or create or submit custom content. In many ways social worlds lack direction, but they also lack the unfettered freedom to create and to engage other players, a characteristic that virtual worlds typically boast. This anomaly is perhaps leading to the demise of the social virtual world: *Sims Online* closed in late 2008<sup>28</sup> and *There.com* shut down in March 2010.<sup>29</sup>

## B. SECOND LIFE: THE “METAVERSE”

*Second Life* was released in 2003 by Linden Lab, a San Francisco-based company founded in 1999 by Philip Rosedale.<sup>30</sup> Its residents own

<sup>23</sup> See Leigh Alexander, *World of Warcraft Hits 10 Million Subscribers*, GAMASUTRA.COM (Jan. 22, 2008), [http://www.gamasutra.com/php-bin/news\\_index.php?story=17062](http://www.gamasutra.com/php-bin/news_index.php?story=17062).

<sup>24</sup> See *World of Warcraft Guide*, WORLD OF WARCRAFT, <http://www.worldofwarcraft.com/info/basics/guide.html> (last visited Oct. 31, 2010).

<sup>25</sup> See generally THERE.COM, <http://www.there.com/info/homepage> (last visited Oct. 31, 2010).

<sup>26</sup> *What is There? Quick Facts*, THERE.COM, <http://www.there.com/info/company/quickfacts> (last visited Oct. 31, 2010).

<sup>27</sup> James Grimmelmann, *The State of Play: Free as in Gaming?*, LAWMEME (Dec. 4, 2003, 12:25:25 AM), <http://lawmeme.research.yale.edu/modules.php?name=News&file=print&sid=1290>.

<sup>28</sup> See Jack Schofield, *The End of the Line for The Sims Online*, THE GUARDIAN TECHNOLOGY BLOG (Apr. 30, 2008, 3:20 PM), <http://www.guardian.co.uk/technology/blog/2008/apr/30/theendofthelineforthesi>.

<sup>29</sup> *There.com Closed on March 9th, 2010*, THERE.COM <http://www.there.com/info/announcement> (last visited Oct. 31, 2010).

<sup>30</sup> *About Linden Lab*, LINDEN LAB, <http://lindenlab.com/about> (last visited Oct. 31, 2010);

and build the digital world's infrastructure, including homes, vehicles, nightclubs, stores, landscapes, clothing, games, islands, schools, companies, government organizations, libraries, and more.<sup>31</sup> The game developers and programmers are responsible only for the skeleton of *Second Life*; filling in and building the substance of *Second Life* is left entirely to players.<sup>32</sup> Anyone can sign up for a free membership by registering with *Second Life* and creating an avatar in the virtual world.<sup>33</sup>

*Second Life* is teeming with diverse experiences and opportunities. MIT and Harvard hold virtual classes in *Second Life*,<sup>34</sup> various federal agencies have a presence in *Second Life*,<sup>35</sup> and a number of corporate entities use *Second Life* to bolster their brands and exploit a unique marketplace,<sup>36</sup> to name just a few examples.<sup>37</sup> Even the U.S. Army has a presence in *Second Life*.<sup>38</sup>

*Second Life's* economy is based on "Linden dollars" – currency that presently trades at about 250 Lindens to the U.S. dollar.<sup>39</sup> Millions of Linden dollars change hands every month for resident-created goods and services, and they can be bought and sold on LindeX, *Second Life's* official Linden dollar exchange.<sup>40</sup> As a testament to the strength of the *Sec-*

*What Is Second Life?*, LINDEN LAB, <http://lindenlab.com/pressroom/general/factsheets/sloverview> (last visited Oct. 31, 2010).

<sup>31</sup> See *The Technology Behind the Second Life Grid™ Platform*, LINDEN LAB, <http://lindenlab.com/pressroom/general/factsheets/technology> (last visited Oct. 31, 2010) (listing many different items *Second Life* users can create).

<sup>32</sup> See *What is Second Life?*, LINDEN LAB, <http://lindenlab.com/pressroom/general/factsheets/sloverview> (last visited Oct. 31, 2010).

<sup>33</sup> *Id.*

<sup>34</sup> Katie Stuhldreher, *Adventurous Avatars: Drexel Opens a New Educational Frontier in Cyberspace*, PHILADELPHIA INQUIRER, July 28, 2007, at B1, available at [http://www.philly.com/philly/education/20070728\\_Adventurous\\_avatars.html](http://www.philly.com/philly/education/20070728_Adventurous_avatars.html).

<sup>35</sup> See, e.g., Henry L. Davis, *It's Cool to Treat Cancer; Roswell Park, with Interactive Input from Student Bloggers, Aims to Attract Generation Y's Future Doctors and Researchers Through Its Hip New Web Site*, BUFFALO NEWS, Dec. 18, 2007, at A1 ("Visitors [to *Second Life*] can create avatars and explore the site with the [Center for Disease Control]'s virtual staff member.").

<sup>36</sup> See, e.g., Scott Morrison, *A Second Chance for Second Life—Northrop, IBM Use Virtual World as Setting for Training, Employee Meetings*, WALL ST. J., Aug. 19, 2009, at B5.

<sup>37</sup> *Second Life* also features language education, virtual art exhibitions by both virtual-only and real-world galleries, live music performances by real-life bands and disc jockeys, a multitude of religious organizations complete with worship services, and at least eight official virtual government embassies (these include Maldives, Sweden, Estonia, Colombia, Serbia, Macedonia, the Philippines, and Albania). See, e.g., Republic of Maldives, Ministry of Foreign Affairs, Maldives Virtual Embassy, <http://www.foreign.gov.mv/v2/topics.php?event=3> (last visited Nov. 22, 2010).

<sup>38</sup> See *Army Debuts Second Life Island, Virtually*, U.S. ARMY (Dec. 10, 2008), <http://www.army.mil/-newsreleases/2008/12/10/14966-army-debuts-second-life-island-virtually/>.

<sup>39</sup> *LindeX Market Data*, SECOND LIFE, <http://secondlife.com/statistics/economy-market.php> (last visited Nov. 8, 2010) (the average rate of exchange on Nov. 8, 2010 was 258 Linden dollars to one United States dollar).

<sup>40</sup> See *id.* Millions of Linden dollars are bought with or sold for real-world money each day.

*ond Life* economy, by the game's own account, more than fifty players earned over \$100,000 in 2009.<sup>41</sup> The economy of *Second Life* is by far the most robust of all virtual worlds, weighing in at \$567 million in gross profits at the end of 2009 – a growth of 65% over 2008's figures.<sup>42</sup> Despite the real-world economic downturn in 2009, *Second Life*'s economy boomed in nearly every respect, illustrating a significant feature of virtual economies and virtual worlds: they are replete with resources that are practically infinite and utterly inexhaustible.

*Second Life* has been characterized as a “new means of interaction, much as the Internet itself was.”<sup>43</sup> It has also been called the “Metaverse,” a fictional world lifted from the cyberpunk science fiction novel *Snow Crash* by Neal Stephenson.<sup>44</sup> The comparison is striking: Stephenson's Metaverse features interaction via a distinctive avatar, a virtual economy complete with a real-estate market, a subculture of users who choose to remain in the Metaverse rather than return to reality, expansive in-world transportation systems, and no clear objective.<sup>45</sup> “[T]he most important contrast between the Metaverse and a traditional game space is that the former bends to the whims and desires of the user within a given set of rules, whereas the latter is tailored and controlled by the designer to convey a specific experience to the player.”<sup>46</sup> The developers of *Second Life* have acknowledged and embraced this characterization,<sup>47</sup> as evidenced by in-world nods to the portrayal.<sup>48</sup>

The features of *Second Life* that make it analogous to Stephenson's Metaverse, and especially its healthy economy, are the same qualities that make it especially attractive and exciting for the law.<sup>49</sup> That *Second*

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<sup>41</sup> 2009 End of Year *Second Life* Economy Wrap Up, SECOND LIFE BLOGS (Jan. 19, 2010, 9:00 AM), <https://blogs.secondlife.com/community/features/blog/2010/01/19/2009-end-of-year-second-life-economy-wrap-up-including-q4-economy-in-detail>. This figure assumes each account is associated with an individual player.

<sup>42</sup> *Id.*

<sup>43</sup> Juliet M. Moringiello, *What Virtual Worlds Can Do for Property Law*, 62 FLA. L. REV. 159, 169 (2010).

<sup>44</sup> See, e.g., THE METAVERSE JOURNAL – VIRTUAL WORLDS NEWS, <http://www.metaversejournal.com/> (last visited Oct. 31, 2010) (online fan newspaper of *Second Life*); see generally NEAL STEPHENSON, *SNOW CRASH* (1992).

<sup>45</sup> See generally NEAL STEPHENSON, *SNOW CRASH* (1992).

<sup>46</sup> Neil Alphonso, *Snow Crash: Discovering the Metaverse*, in SPACE TIME PLAY: COMPUTER GAMES, ARCHITECTURE AND URBANISM: THE NEXT LEVEL 144, 144 (Friedrich von Borries et al. eds., 2007).

<sup>47</sup> See Kevin Maney, *The King of Alter Egos Is Surprisingly Humble Guy*, USA TODAY, Feb. 5, 2007, at 1B.

<sup>48</sup> The *Second Life* world has its own online news and entertainment sources, *Metaverse TV* and *The Metaverse Tribune*, which are housed on “Metaverse Island.” See *Media & TV*, SECOND LIFE, <http://secondlife.com/destinations/media> (last visited Oct. 31, 2010).

<sup>49</sup> These features include an economy that is integrated with real markets and virtual property

*Life* “bends to the whims and desires of the user,” allowing expansive creative opportunities that often surpass those available in real life, makes the game a unique case study for copyright law.

## II. COPYRIGHT LAW IN VIRTUAL WORLDS<sup>50</sup>

Federal copyright law exists to promote creation of artistic works by granting authors certain exclusive rights to exploit their works for a limited period of time.<sup>51</sup> The exclusive rights granted by the copyright regime provide authors with the economic incentive to continue producing creative works for the benefit of the public.<sup>52</sup> In this quid pro quo of sorts, Congress carries out the constitutional mandate to promote progress, revising the scope and duration of copyright protection to do so.<sup>53</sup> This scheme is ultimately justified by a utilitarian rationale that assumes better, or at least more, works will be created if authors are provided an opportunity to profit from their creative works.<sup>54</sup>

### A. COPYRIGHTABILITY OF VIRTUAL WORKS

The current scope of copyright protection includes literary, musical, dramatic, choreographic, pictorial, audiovisual, audio, and architectural works.<sup>55</sup> Video games and video game components, including virtual worlds, are afforded copyright protection under this categorical defini-

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regimes. See generally F. Gregory Lastowka & Dan Hunter, *The Laws of the Virtual Worlds*, 92 CALIF. L. REV. 1 (2004).

<sup>50</sup> The scope of this Article is limited to the application of domestic copyright law to virtual spaces. The enforceability of United States copyright law to foreign users is questionable, and policy choices like those advanced in this Article may fracture at international boundaries.

<sup>51</sup> See U.S. CONST. art. I, § 8, cl. 8.

<sup>52</sup> See, e.g., *Harper & Row, Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 546 (1985) (stating that the Constitution’s grant of copyright power to Congress “is a means by which an important public purpose may be achieved. It is intended to motivate the creative activity of authors and inventors by the provision of a special reward . . . [to] . . . the individual author in order to benefit the public.”) (quoting *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 429 (1984), and *id.* at 477 (Blackmun, J., dissenting)); *Mazer v. Stein*, 347 U.S. 201, 219 (1954) (stating that copyright law is intended “to afford greater encouragement to the production of literary [or artistic] works of lasting benefit to the world.”) (quoting *Washingtonian Pub. Co. v. Pearson*, 306 U.S. 30, 36 (1939)); *United States v. Paramount Pictures, Inc.*, 334 U.S. 131, 158 (1948) (“[R]eward to the author or artist serves to induce release to the public of the products of his creative genius.”).

<sup>53</sup> For example, the copyright term has been extended twice in the past four decades to provide additional incentive for authors to continue producing creative works. See Copyright Act of 1976, Pub. L. No. 94-553, § 301, 90 Stat. 2541, 2572-76 (1976); Sonny Bono Copyright Term Extension Act of 1998, Pub. L. No. 105-298, § 102, 112 Stat. 2827, 2827-28 (1998).

<sup>54</sup> See generally William M. Landes & Richard E. Posner, *An Economic Analysis of Copyright Law*, 18 J. LEGAL STUD. 325 (1989).

<sup>55</sup> 17 U.S.C.A. § 102(a) (Westlaw 2010).

tion in two major ways. First, the code constituting the underlying computer program is a “literary work.”<sup>56</sup> Second, the visual and audio output produced by the game is an “audiovisual work.”<sup>57</sup> Additionally, any of the traditional categories of copyrightable works can also be digitized in the virtual world.<sup>58</sup>

The subject matter of copyright extends only to “original works of authorship fixed in any tangible medium of expression, now known or later developed, from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device.”<sup>59</sup> In other words, provided that a work falls within one of the categories listed above, the copyrightability of a work will depend on whether the work is original – which requires both independent creation<sup>60</sup> and some modicum of creativity<sup>61</sup> – and fixed. Player-created virtual works generally meet both of these criteria for copyrightability.<sup>62</sup> However, both components defining the affirmative scope of copyright protection are uniquely implicated by virtual works of authorship.

The originality prong, the first consideration, is implicated by less-independent virtual creations for which every possible creative work was contemplated and essentially preempted by the game’s programmers.<sup>63</sup> For instance, in the game *Spore*, players are invited to create unique animal species using body parts from an array of real and imagined animals.<sup>64</sup> While the actual number of animal parts in the game *Spore* al-

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<sup>56</sup> 17 U.S.C.A. § 102(a) (Westlaw 2010); 1 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 2.04[C] (2010).

<sup>57</sup> 17 U.S.C.A. § 102(a)(6) (Westlaw 2010); Midway Mfg. Co. v. Artic Int’l, Inc., 704 F.2d 1009, 1011 (7th Cir. 1983) (construing “audiovisual work” broadly to include video games, a view that has never been significantly questioned).

<sup>58</sup> For example, a player could create a dance to be performed by his or her avatar exclusively in the virtual world. This creation would give rise to three copyrights – in the written code, in the visual output, and in the actual choreographic arrangement. Barring any Terms of Service (TOS) or End User Licensing Agreement (EULA) considerations, the player’s permission would be required to (1) use the underlying code to reproduce the dance in another avatar, (2) take a screenshot or make a movie of the dance occurring, or (3) perform the dance in real life.

<sup>59</sup> 17 U.S.C.A. § 102(a) (Westlaw 2010).

<sup>60</sup> See 1 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 2.01[A] (2010).

<sup>61</sup> *Id.* § 2.01[B].

<sup>62</sup> See Erez Reuveni, *On Virtual Worlds: Copyright and Contract Law at the Dawn of the Virtual Age*, 82 IND. L.J. 261, 275 (2007); Dan L. Burk, *Copyright and Feminism in Digital Media*, 14 AM. U. J. GENDER SOC. POL’Y & L. 519, 536-37 (2006) (explaining that although the copyright statute was not drafted with digital works in mind, most digital works will meet the subject matter, originality, and fixation requirements for copyrightability).

<sup>63</sup> This is not to say that the requisite modicum of creativity will not be present, but simply that independent arrival at a particular work is problematic, especially when the parameters of player creativity are narrow.

<sup>64</sup> See SPORE.COM, <http://www.spore.com/ftl> (last visited Oct. 31, 2010).

lows for an incredible number of combinations, one can easily imagine a similar species-creation engine with more limited options. For example, imagine an engine that allows players to interchange only three body parts – head, torso, and limbs – from three animals, yielding only twenty-seven unique combinations or unique creatures. This very limited scope of creative opportunity draws the notion of independent creation into serious doubt.<sup>65</sup> After all, how can it be said that one of the twenty-seven possibilities truly owes its creative origin to the player, rather than the game programmer who defined the parameters of the species-creation engine?<sup>66</sup>

In dealing with copyrightability of some first-generation video games, the Seventh Circuit touched on the relevance of user interaction in a meaningful way.<sup>67</sup> A video game manufacturer in *Midway Manufacturing Co. v. Artic International, Inc.* was enjoined from selling video game circuit boards that embodied two classic games, *Pac-Man* and *Galaxian*.<sup>68</sup> Parallels to the *Spore* example described above are evident in the court's discussion:

Playing a video game is more like changing channels on a television than it is like writing a novel or painting a picture. The player of a video game does not have control over the sequence of images that appears on the video game screen. He cannot create any sequence he wants out of the images stored on the game's circuit boards. The most he can do is choose one of the limited number of sequences the game allows him to choose. He is unlike a writer or a painter because the video game in effect writes the sentences and paints the painting for

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<sup>65</sup> The Supreme Court has characterized the independent-creation requirement of originality in the following manner: "Originality does not signify novelty; a work may be original even though it closely resembles other works so long as the similarity is fortuitous, not the result of copying." *Feist Publ'ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 345 (1991). In such limited circumstances as the above example, it is difficult to seriously consider similarity between any two created species "fortuitous."

<sup>66</sup> See Candidus Dougherty & Greg Lastowka, *Copyright: Copyright Issues in Virtual Economies*, E-COMM. L. & POL'Y, May 2007, Vol. 9, No. 5, draft available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1092285](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1092285). This difficulty is roughly analogous to the authorship problem courts faced in dealing with first-generation video games. Because of the minimal level of player creativity in early video games, most courts found that player input was not sufficiently like other creative endeavors to confer copyright protection for the (arguably unique) gaming outputs players caused to occur (or "created"). See, e.g., *Midway Mfg. Co. v. Artic Int'l, Inc.*, 704 F.2d 1009, 1011 (7th Cir. 1983) ("The question is whether the creative effort in playing a video game is enough like writing or painting to make each performance of a video game the work of the player and not the game's inventor. We think that it is not.")

<sup>67</sup> *Midway Mfg. Co.*, 704 F.2d at 1010-12; see F. Gregory Lastowka & Dan Hunter, *The Laws of the Virtual Worlds*, 92 CALIF. L. REV. 1, 22-28 (2004) (detailing the history of visually depicted virtual worlds).

<sup>68</sup> *Midway Mfg. Co.*, 704 F.2d at 1010-11.

him; he merely chooses one of the sentences stored in its memory, one of the paintings stored in its collection.<sup>69</sup>

In the complex virtual worlds that dominate the market today, this originality problem is far less pronounced than the above example suggests. For example, the opportunity for creation in Linden Lab's *Second Life* is nearly boundless, and it is neither predetermined nor meaningfully limited by Linden Labs.

The second consideration, the fixation requirement, requires a work to take relatively stable form or permanent embodiment.<sup>70</sup> This means that certain creations – unrecorded live broadcasts, for instance – would likely be too evanescent or transient to meet the tangibility requirement of copyright.<sup>71</sup> At first blush, virtual creations might seem to lack the requisite fixation element because they are nothing more than bits of information projected onto a particular computer screen at any given time. However, because virtual-world creations are supported by underlying strings of computer code that are stored on the game developer or host's servers (independent of external communication with any particular user), they very likely meet the requirement of tangibility or fixation.<sup>72</sup> Thus, as a virtual sculptor, artist, or architect in a virtual world such as *Second Life*, a player would receive protection for his or her work the instant the virtual-world servers save the work so that it can be subsequently accessed by any member of the virtual community.

## B. AUTHORSHIP

Under federal copyright law, the creator of original expression in a work is its author.<sup>73</sup> Creative works can be singularly created, jointly created by two or more authors, or made for hire.<sup>74</sup> Modern copyright

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<sup>69</sup> *Id.* at 1012.

<sup>70</sup> See 17 U.S.C.A. § 101 (Westlaw 2010) (definition of “fixed”).

<sup>71</sup> The fixation requirement is more nuanced than mere permanent embodiment. For example, fixation requires author control over the embodiment or author permission to embody the work. See 17 U.S.C.A. § 101 (Westlaw 2010) (“A work is ‘fixed’ in a tangible medium of expression when it is embodied in a copy or phonorecord, *by or under the authority of the author . . .*” (emphasis added)).

<sup>72</sup> An initial controversy emerged over whether statutory fixation occurred in digital media given its seemingly fleeting nature. This question was answered in the affirmative. See *MAI Sys. Corp. v. Peak Computer, Inc.*, 991 F.2d 511, 518-19 (9th Cir. 1993) (finding that a temporary memory copy is sufficiently fixed for purposes of infringement); *Stern Elecs., Inc. v. Kaufman*, 669 F.2d 852, 855-56 (2d Cir. 1982) (finding permanent embodiment in computer memory devices).

<sup>73</sup> See 17 U.S.C.A. § 201 (Westlaw 2010).

<sup>74</sup> *MAI Sys.*, 991 F.2d at 519 (finding that a temporary memory copy is sufficiently fixed for purposes of infringement); *Stern Elecs., Inc.*, 669 F.2d at 856 (finding permanent embodiment in

law prefers singular authors.<sup>75</sup> This conclusion may be drawn from the stringent requirements for joint authorship<sup>76</sup> and works made for hire.<sup>77</sup> Copyright law also assumes that works remain static once fixed, a postulate that is seriously challenged by the “malleability of hypermedia.”<sup>78</sup> More precisely, the collaborative creative process in virtual worlds is often quite seamless:

Developers often create only the virtual world’s skeleton, encouraging players to create new material that the developers integrate into the game space. The interplay between developer and player-based creation is fluid, with the actions and creations of one affecting the creative responses of the other. This collaborative cycle yields new and evolving plot elements, in-game events, social groups, and economic structures over which neither the developer nor the player can realistically claim sole creative ownership.<sup>79</sup>

It should be immediately apparent that copyright law would be especially ill-suited to define and recognize the collaborative authorship that is common in virtual worlds. Despite the difficulty of forcing virtual-world authorship problems into copyright law’s traditional definitions, those definitions will facilitate a meaningful analysis unless and until reform comes about.

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computer memory devices).

<sup>75</sup> Erez Reuveni, *On Virtual Worlds: Copyright and Contract Law at the Dawn of the Virtual Age*, 82 IND. L.J. 261, 271 (2007) (citing *Aalmuhammed v. Lee*, 202 F.3d 1227, 1233 (9th Cir. 2000)) (defining an author as “the person to whom the work owes its origin and who superintended the whole work, the ‘master mind.’”); see also Molly Torsen, *Intellectual Property and Traditional Cultural Expressions: A Synopsis of Current Issues*, 3 INTERCULTURAL HUM. RTS. L. REV. 199, 207 (2008) (explaining that Western copyright law assigns rights to individual people and that joint authorship has a narrow interpretation); Dan L. Burk, *Copyright and Feminism in Digital Media*, 14 AM. U. J. GENDER SOC. POL’Y & L. 519, 537 (2006) (copyright law tends to assume that protected works are the product of a single author).

<sup>76</sup> See Laura G. Lape, *A Narrow View of Creative Cooperation: The Current State of Joint Work Doctrine*, 61 ALB. L. REV. 43, 51-74 (1997); see also Margaret Chon, *New Wine Bursting from Old Bottles: Collaborative Internet Art, Joint Works, and Entrepreneurship*, 75 OR. L. REV. 257, 263-66 (1996) (discussing copyright law’s presumption that creative works have a single author). See generally Peter A. Jaszi, *Toward a Theory of Copyright: The Metamorphosis of “Authorship,”* 1991 DUKE L.J. 455 (1991) (discussing the concept of the “author” in American copyright law, including the development of joint authorship and works for hire).

<sup>77</sup> See 1 MELVILLE B. NIMMER & DAVID NIMMER, *NIMMER ON COPYRIGHT* § 5.03 (2010) (noting that works made for hire must be created within the scope of employment or specially commissioned, expressly agreed to in writing beforehand, and fall within enumerated categories of works to qualify).

<sup>78</sup> Dan L. Burk, *Copyright and Feminism in Digital Media*, 14 AM. U. J. GENDER SOC. POL’Y & L. 519, 537 (2006).

<sup>79</sup> Erez Reuveni, *On Virtual Worlds: Copyright and Contract Law at the Dawn of the Virtual Age*, 82 IND. L.J. 261, 272 (2007) (internal footnotes and citations omitted).

### 1. Joint Authorship

“A ‘joint work’ is a work prepared by two or more authors with the intention that their contributions be merged into inseparable or interdependent parts of a unitary whole.”<sup>80</sup> Joint authorship requires that (1) the authors each contribute more than de minimis authorship;<sup>81</sup> (2) each author’s contribution is independently copyrightable;<sup>82</sup> and (3) the parties fully intended to be joint authors, as evidenced by an objective manifestation.<sup>83</sup> Joint authorship is an especially pronounced possibility in the case of virtual worlds, because in many cases they are collaborative in nature. In the most advanced virtual worlds, the original developer designs the game’s rough topography while the participants experience and actualize the game’s many possibilities. Surely, both actors have a hand in creation of this latter type – player creation.

In the context of virtual games, joint authorship seems particularly relevant to two kinds of player creation: creation of the player’s avatar and all other player creations, such as the design of the player’s home or virtual artwork. Avatar creation is roughly analogous to a concept already well developed in copyright law, the graphic novel or animated movie character.<sup>84</sup>

Whether the persona and visual depiction of a player’s avatar are jointly authored by a virtual world’s developer and participant will depend on whether both parties (1) made the requisite creative contribution and (2) intended to be joint authors.<sup>85</sup> This is necessarily a fact-specific inquiry. In *Second Life*, for instance, players are purposely given great leeway in creating their avatars – many players model their avatars after themselves, but the possibilities are nearly limitless.<sup>86</sup> At the same time, *Second Life* developers are the masterminds behind not only the avatar-creation engine and the possibilities it provides for most players, but also

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<sup>80</sup> 17 U.S.C.A. § 101 (Westlaw 2010) (definition of “joint work”).

<sup>81</sup> See *Erickson v. Trinity Theatre, Inc.*, 13 F.3d 1061, 1070 (7th Cir. 1994).

<sup>82</sup> See *id.* at 1071.

<sup>83</sup> *Aalmuhammed v. Lee*, 202 F.3d 1227, 1234 (9th Cir. 2000).

<sup>84</sup> It is well settled that comic book characters or animated movie characters are copyrightable. See *Walt Disney Prods. v. Air Pirates*, 581 F.2d 751, 755 (9th Cir. 1978).

<sup>85</sup> See 17 U.S.C.A. § 101 (Westlaw 2010) (definition of “joint work”).

<sup>86</sup> Avatars may take any form users choose – humanoid, animal, plant, mineral, machine, to name a few – and vary in any number of physical characteristics – including gender, skin (or external) color, hair color, eye color, body structure, height, weight, age, and so on. In addition to the choices *Second Life* programmers provide, almost every aspect of an avatar is customizable. Over 14,000 complete avatars were for sale at the out-of-world marketplace hosted by *Second Life*, “XStreet.” See XStreet, *Second Life XStreet SL Marketplace*, <https://www.xstreetsl.com/> (last visited Oct. 31, 2010). This figure represents only a fraction of the customization possibilities.

the concept of creating a unique avatar in the first place. Surely this conceptual creativity is substantial and integral,<sup>87</sup> but is it the kind of creative contribution that copyright law contemplated with its joint authorship provision? Probably not, provided that the virtual world houses sufficiently complex character-creation possibilities. In that case, the developer's contribution – the basic avatar possibilities and overall scheme – may be rendered de minimis in comparison to the player's immense creativity in molding a unique persona and corresponding appearance.<sup>88</sup>

To conclude, however, that players are more likely sole authors of their avatars, one need only look to the second requirement of joint authorship: the parties must each intend to be joint authors.<sup>89</sup> In most cases, it cannot be said that virtual-world players intend to share copyright rights in their avatars with the game developer.<sup>90</sup> The truth of this statement, however, will depend on the nature of the virtual world. In scripted worlds, it can be argued that players acknowledge and accept their role as co-author in the ensuing game play as they are confined to more restrictive parameters imposed by the game's designer.<sup>91</sup> In unscripted worlds, however, players create personas, goods, and structures nearly from scratch, and certainly with very little oversight or confinement from game designers. In such a setting, intent to co-author is less likely both on the part of the player and the designer.

When players create other virtual objects, like buildings and artwork, it is even less likely that they intend to be co-authors with the game's designers. By nature, this kind of creation arises almost exclusively in unscripted virtual spaces. Despite this, courts look to a number of factors to deduce whether the parties intended joint authorship in the absence of a contract. For instance, if one party superintends the work

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<sup>87</sup> After all, a player's contribution to the game could not exist without the game producer's initial contribution.

<sup>88</sup> Because they identify very closely with their virtual-world representation, many *Second Life* residents spend hours perfecting their avatars. See Jack M. Balkin, *Virtual Liberty: Freedom to Design and Freedom to Play in Virtual Worlds*, 90 VA. L. REV. 2043, 2047-48 (2004) (stressing the attachment between a player and his avatar).

<sup>89</sup> See 17 U.S.C.A. § 101 (Westlaw 2010) (definition of "joint work").

<sup>90</sup> See Erez Reuveni, *On Virtual Worlds: Copyright and Contract Law at the Dawn of the Virtual Age*, 82 IND. L.J. 261, 282 (2007). But see W. Joss Nichols, *Painting Through Pixels: The Case for a Copyright in Videogame Play*, 30 COLUM. J.L. & ARTS 101, 122-23 (2007) (arguing that intent to play the game in the first place amounts to player intent to co-author).

<sup>91</sup> One author has analogized playing through a scripted game to completing a half-written novel, suggesting that both are most appropriately characterized as joint works. In his view, the video game producer intends players to complete his narrative, and the players intend to contribute to the particular game, amounting to sufficient intent. See W. Joss Nichols, *Painting Through Pixels: The Case for a Copyright in Videogame Play*, 30 COLUM. J.L. & ARTS 101, 125, 128 (2007).

by exercising control over the conception, or if the “audience appeal of the work turns on both contributions and ‘the share of each in its success cannot be appraised,’” a court may find joint authorship.<sup>92</sup> However, in most virtual-world cases and certainly in *Second Life*, the developer cannot reasonably be said to superintend the creation of individual avatars, and audience appeal very likely lies primarily in the independent choices of each player. Therefore, in the absence of a contract establishing the parties as joint authors, courts should be disinclined to find virtual-world developers joint authors of player avatars, at least when the avatar-creation method is sufficiently complex.<sup>93</sup>

A final alternative for establishing joint authorship is an objective manifestation of such, in other words, a binding contract.<sup>94</sup> Virtual-world rights are typically delineated by Terms of Service (TOS) or End User Licensing Agreements (EULAs) to which players must consent in order to commence play.<sup>95</sup> Many of these agreements expressly state that the game host retains all copyright rights over creative endeavors that take place in-game;<sup>96</sup> others expressly concede intellectual property rights to the player.<sup>97</sup> Some virtual-world commentators believe EULAs and TOS are unenforceable and subject to judicial challenge on the grounds of unconscionability.<sup>98</sup> At least one court has indicated that some provisions of TOS will not be enforced in certain circumstances, perhaps lending credibility to such a challenge moving forward.<sup>99</sup> The vast majority of commentators agree, however, that contract-based attacks on virtual worlds are not likely to succeed in the future.<sup>100</sup> Most

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<sup>92</sup> *Aalmuhammed v. Lee*, 202 F.3d 1227, 1234 (9th Cir. 2000).

<sup>93</sup> *Id.*

<sup>94</sup> *Id.* at 1235.

<sup>95</sup> *E.g.*, *Second Life*, Terms of Service, <http://secondlife.com/corporate/tos.php> (last updated Oct. 6, 2010) (“This agreement . . . describes the terms on which Linden . . . offers you access to *Second Life*.”).

<sup>96</sup> *See, e.g.*, *World of Warcraft*, End User License Agreement § 4(A), <http://www.worldofwarcraft.com/legal/eula.html> (last updated Oct. 29, 2010) (stating that all characters, character names, character inventories, and character likenesses are owned or licensed by the production company).

<sup>97</sup> *See* Linden Labs, Terms of Service Agreement ¶¶ 7.1, 7.2, <http://secondlife.com/corporate/tos.php> (last updated Oct. 6, 2010). Linden Labs, the owner of *Second Life*, does, however, require a royalty-free worldwide license to use all works created in-game.

<sup>98</sup> *See, e.g.*, Andrew Jankowich, *EULAW: The Complex Web of Corporate Rule-Making in Virtual Worlds*, 8 TUL. J. TECH. & INTELL. PROP. 1, 53 (2006).

<sup>99</sup> *See* *Bragg v. Linden Research, Inc.*, 487 F. Supp. 2d 593, 612 (E.D. Pa. 2007) (holding that the arbitration clause contained in *Second Life*’s terms of service constituted an unconscionable contract of adhesion under California law and was therefore unenforceable).

<sup>100</sup> *See* Paul Riley, Note, *Litigating Second Life Land Disputes: A Consumer Protection Approach*, 19 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 877, 896-97 (2009) (arguing that contract-based attacks on *Second Life* will not succeed); *see also* Erez Reuveni, *On Virtual Worlds: Copy-*

likely, therefore, provisions in a virtual-world TOS or EULA can provide the foundation for joint authorship between players and providers. Nonetheless, in practice, it is far more common for players to assign ownership of solely authored virtual works to the game provider rather than stipulate that all virtual works are jointly authored.<sup>101</sup>

Probably more common than co-authorship among virtual-world developers and users is co-authorship among multiple users.<sup>102</sup> This arrangement complicates licensing possibilities for add-on creators, but it is otherwise largely insignificant.<sup>103</sup>

## 2. *Sole Authorship*

At the outset, an inquiry into the fixation requirement will lend insight into sole designer authorship of various virtual works. For instance, one commentator has suggested a fixation test for determining copyright attribution.<sup>104</sup> This postulates broad copyright ascription for game designers, essentially attributing to them any portion of the game properly characterized as “a pre-determined series of images . . . capable of independent progression.”<sup>105</sup> Increased user freedom in game play, on the other hand, serves to narrow the scope of copyright properly credited to game designers.<sup>106</sup> The logic underlying this suggestion is rather simple: if a user is free to make independent creative choices in game play, relatively unhindered by the game’s designers, those creative choices are not actually fixed in the game. This at least circumscribes the scope of sole designer authorship to those aspects of game play wholly fixed in the game prior to user involvement.

In considering sole versus joint works and the intent to create an in-

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*right and Contract Law at the Dawn of the Virtual Age*, 82 IND. L.J. 261, 286-303 (2007) (discussing the enforceability of EULAs and stating that it is unlikely that a court will void EULAs as unconscionable); David P. Sheldon, *Claiming Ownership, but Getting Owned: Contractual Limitations on Asserting Property Interests in Virtual Goods*, 54 UCLA L. REV. 751, 777 (2007) (“Existing case law tends to weigh against parties attacking EULAs on grounds of unconscionability.”).

<sup>101</sup> See, e.g., Linden Labs, Terms of Service Agreement ¶¶ 7.1, 7.2, <http://secondlife.com/corporate/tos.php> (last updated Oct. 29, 2010) (granting a nonexclusive license to Linden Labs).

<sup>102</sup> See generally Todd David Marcus, *Fostering Creativity in Virtual Worlds: Easing the Restrictiveness of Copyright for User-Created Content*, 52 N.Y.L. SCH. L. REV. 67, 83-85 (2007-2008) (discussing the difficulty of distinguishing sole from joint authorship because add-on creation permeates *Second Life*).

<sup>103</sup> Due to its complexity and insignificance, this issue is beyond the scope of this Article.

<sup>104</sup> W. Joss Nichols, *Painting Through Pixels: The Case for a Copyright in Videogame Play*, 30 COLUM. J.L. & ARTS 101, 116 (2007).

<sup>105</sup> *Id.*

<sup>106</sup> *Id.*

dependent or joint work in particular, an important distinction militates in favor of sole player authorship. Some game developers probably intend players to “complete” their games in the same sort of way that someone could complete an unfinished novel. An especially coherent example of this might be games that invite players to create their own add-on levels, such as *Half-Life*, and play through the game as a unitary whole.<sup>107</sup> In this case, both parties probably intend joint authorship. Other game producers more likely intend for the players to create their own separate, independent works of art within the virtual world.<sup>108</sup> As one scholar observed, “as a user’s interaction increases, gaming becomes more akin to writing a game rather than playing it,”<sup>109</sup> and the game designer can be perceived as either retaining joint authorship rights or conceding sole authorship over in-game creations to players, depending on the amount of player interaction that he or she embeds in the game.

### C. OWNERSHIP

Ownership of the copyright in a creative work “vests initially in the author or authors of the work.”<sup>110</sup> However, like any other property interest, all or a portion of the rights to a creative work may be transferred by the author to another.<sup>111</sup> Seeking to protect their interests in the games they have created and operated, most game providers stipulate that intellectual property rights to works created within the virtual world are licensed or wholly transferred to them for royalty-free use.<sup>112</sup> These terms are typically laid out in the provider’s TOS or EULA, assent to which is uniformly required prior to use of the virtual-world software in the first instance.<sup>113</sup> Both options, transfer of ownership and licensure,

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<sup>107</sup> See *Half-Life 2*, THE ORANGE BOX, <http://orange.half-life2.com/hl2.html> (last visited Oct. 31, 2010) (description of *Half-Life 2*). Valve, the provider of many online games including *Half-Life* and *Half-Life 2*, offers free modification engines to players to create unique worlds called “mods,” and “skins,” or avatar appearances. VALVE DEVELOPER COMMUNITY, [http://developer.valvesoftware.com/wiki/Main\\_Page](http://developer.valvesoftware.com/wiki/Main_Page) (last visited Sept. 22, 2010).

<sup>108</sup> An example is *The Movies*, where creation of the entire story is left to players. See *The Movies Game*, LIONHEAD STUDIOS, <http://lionhead.com/Games/TheMovies/Default.aspx> (last visited Oct. 31, 2010).

<sup>109</sup> W. Joss Nichols, *Painting Through Pixels: The Case for a Copyright in Videogame Play*, 30 COLUM. J.L. & ARTS 101, 128 (2007).

<sup>110</sup> 17 U.S.C.A. § 201(c) (Westlaw 2010).

<sup>111</sup> 17 U.S.C.A. § 201(d) (Westlaw 2010).

<sup>112</sup> See, e.g., Station.com, Terms of Service ¶ VII, <http://www.station.sony.com/en/termssofservice.vm> (last visited Sept. 22, 2010).

<sup>113</sup> See Candidus Dougherty & Greg Lastowka, *Copyright: Copyright Issues in Virtual Economies*, E-COMM. L. & POL’Y, May 2007, Vol. 9, No. 5, draft available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1092285](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1092285).

offer protection for virtual-world providers, and both have drawbacks that threaten to stifle in-world creativity.

*1. Developer-Ownership Model (Transfer of Ownership)*

Transfer of copyright ownership to virtual-world providers is by far the most common approach embedded in TOS and EULA terms.<sup>114</sup> These terms require players to waive all intellectual property rights they may have in their in-game creations and acknowledge that any such rights are the exclusive property of the game provider.<sup>115</sup> While such sweeping contracts have been criticized on multiple grounds<sup>116</sup> and are arguably unenforceable,<sup>117</sup> they are generally upheld by courts and have been since the Seventh Circuit's decision in *ProCD v. Zeidenberg*.<sup>118</sup> The result of these expansive, defensive agreements is hard to overstate: "platform owners essentially hold all rights to anything created within the platform and can determine the ultimate use of any creations, either internally or externally in relation to the platform."<sup>119</sup>

As a consequence of these contract provisions, users are stripped of the financial and personal incentives previously discussed, and the reward system that copyright law contemplated for creators is effectively undermined. At the same time, however, virtual-world providers are afforded complete control over the enforcement of virtual intellectual property rights. This endows them with the ability to open virtual worlds to unfettered legal copying and, presumably, a plethora of add-on creation that would not have otherwise emerged without the unity of copyright ownership in the virtual-world provider. In other words, collecting copyright rights in a single entity necessarily precludes the filing of lawsuits to enforce conflicting rights, as would be the case if individual creators of virtual works retained their intellectual property rights.<sup>120</sup>

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<sup>114</sup> See, e.g., Ultima Online, Ultima Online License Agreement ¶ 5(c), <http://www.uo.com/agreement.html> (last visited Oct. 31, 2010).

<sup>115</sup> See Erez Reuveni, *On Virtual Worlds: Copyright and Contract Law at the Dawn of the Virtual Age*, 82 IND. L.J. 261, 286 (2007).

<sup>116</sup> See, e.g., Daniel C. Miller, *Determining Ownership in Virtual Worlds: Copyright and License Agreements*, 22 REV. LITIG. 435, 462-63 (2003).

<sup>117</sup> *Id.*

<sup>118</sup> See generally *ProCD, Inc. v. Zeidenberg*, 86 F.3d 1447 (7th Cir. 1996); see also Erez Reuveni, *On Virtual Worlds: Copyright and Contract Law at the Dawn of the Virtual Age*, 82 IND. L.J. 261, 289 (2007).

<sup>119</sup> See Todd David Marcus, *Fostering Creativity in Virtual Worlds: Easing the Restrictiveness of Copyright for User-Created Content*, 52 N.Y.L. SCH. L. REV. 67, 79-80 (2007-2008).

<sup>120</sup> See James Grimmelman, *The State of Play: Free as in Gaming?*, LAWMEME (Dec. 4, 2003, 12:25:25 AM), <http://lawmeme.research.yale.edu/modules.php?name=News&file=print&sid=1290>.

## 2. *Player-Ownership Model (Licensure)*

The second, though far more limited, option for virtual-world providers is to mandate licensure of all intellectual property rights for in-world creations.<sup>121</sup> This approach acknowledges that virtual-world users retain full rights in their works and aims to secure nonexclusive rights to use those creations as they appear in the virtual world.<sup>122</sup> When *Second Life* pioneered these terms in its TOS and EULA, public reaction was almost uniformly positive.<sup>123</sup> *Second Life*'s user-base was immediately energized by the announcement, recognizing the new incentives to create that were imposed by the copyright structure.<sup>124</sup>

As at least one commentator was quick to point out, however, *Second Life*'s copyright scheme was not without its drawbacks.<sup>125</sup> By fracturing the once-concentrated copyright ownership regime that was standard in virtual worlds, *Second Life* placed the rights-enforcement onus on individual users.<sup>126</sup> Instead of utilizing an internal reporting mechanism, *Second Life* users were invited to seek recourse for potential copyright infringement in federal court. The chilling effect of this design on creativity, due in large part to the collaborative nature of virtual-world creation, is potentially devastating to the vitality of those worlds.<sup>127</sup>

### III. THE COPYRIGHT CONFLICT IN VIRTUAL WORLDS

Despite virtual worlds' distinctive features and possibilities for unique interaction, many people still view them as nothing more than games. To these individuals, virtual worlds should be insulated from

<sup>121</sup> See, e.g., Linden Lab, Terms of Service Agreement ¶¶ 7.1, 7.2, <http://secondlife.com/corporate/tos.php> (last updated Oct. 29, 2010).

<sup>122</sup> Regardless of who owns the copyright to user-generated content, virtual-world providers always retain significant rights to anything created in-world. See Todd David Marcus, *Creativity in Virtual Worlds: Easing the Restrictiveness of Copyright for User-Created Content*, 52 N.Y.L. SCH. L. REV. 67, 80 (2007-2008) (“[P]atform owners then license back specific rights through provisions in the TOS/EULA.”).

<sup>123</sup> But see James Grimmelman, *The State of Play: Free as in Gaming?*, LAWMEME (Dec. 4, 2003, 12:25:25 AM), <http://lawmeme.research.yale.edu/modules.php?name=News&file=print&sid=1290>.

<sup>124</sup> E.g., Dan Hunter, *Second Life Announcement*, TERRA NOVA (Nov. 14, 2003), [http://terranova.blogs.com/terra\\_nova/2003/11/second\\_life\\_ann.html](http://terranova.blogs.com/terra_nova/2003/11/second_life_ann.html).

<sup>125</sup> See Todd David Marcus, *Fostering Creativity in Virtual Worlds: Easing the Restrictiveness of Copyright for User-Created Content*, 52 N.Y.L. SCH. L. REV. 67, 86 (2007-2008).

<sup>126</sup> *Id.* (“As more platforms embrace similar rules and users have more rights, the potential for creators protecting rights through legal action increase[s].”).

<sup>127</sup> *Id.*

real-world laws because they are essentially play spaces.<sup>128</sup> While perhaps intuitively appealing, this view of virtual worlds is incomplete. To be certain, all virtual worlds feature game-like components, but sophisticated virtual worlds like *Second Life* transcend characterization as games and literally spill over into real life and real-world economic markets.<sup>129</sup> As a result, there is a strong urge to integrate virtual worlds into our legal system, by either applying current law or devising unique law to better suit the idiosyncrasies that virtual worlds present. Presumably, this is what drove *Second Life* to acknowledge that user-creators have intellectual property rights in their virtual creations, and it has been widely accepted by legal academics.<sup>130</sup> Thus, for highly integrated virtual worlds like *Second Life*, it makes a great deal of sense to presume that real-world laws are the default and apply in full force where possible.<sup>131</sup> It is therefore appropriate to assume that copyright law applies in virtual worlds with the same force as it does in physical worlds – it is the default rule.

Virtual-world residents spend substantial time, energy, and money developing their avatars and improving their virtual-world experience.<sup>132</sup> Indeed, some game designers create only skeletal worlds to provoke precisely this high level of player investment.<sup>133</sup> Understandably, such intense player involvement leads many users to feel entitled to their virtual creations and the associated intellectual property rights.<sup>134</sup> It follows that players will seek copyright protection for their creative works vis-à-vis game providers. From the game providers' perspective, failing to recognize rights in player creations will disenfranchise and most likely frustrate their client base, ultimately diminishing overall revenues. In this way, user demand pressures game providers to acknowledge the applicability of copyright law to virtual creations and allow player ownership of the consequent rights.

Perhaps more importantly, utilitarian explanations of copyright sup-

<sup>128</sup> See BENJAMIN TYSON DURANSKE, *VIRTUAL LAW: NAVIGATING THE LEGAL LANDSCAPE OF VIRTUAL WORLDS* 57-64 (2008).

<sup>129</sup> See *id.* at 74-77.

<sup>130</sup> *Id.* at 58 (“The assumption that [real-world laws apply to virtual worlds] is largely uncontroversial among attorneys, legal scholars, and people who use virtual worlds to make their living.”).

<sup>131</sup> *Id.* at 57-64.

<sup>132</sup> See Kristina Dell, *How Second Life Affects Real Life*, TIME, May 12, 2008, available at <http://www.time.com/time/health/article/0,8599,1739601,00.html> (“People spend on average about 20 hours a week in alternate worlds like [*Second Life*].”).

<sup>133</sup> See ACTIVE WORLDS TOUR, <http://www.activeworlds.com/tour.asp#> (last visited Nov. 8, 2010) (“If you can imagine it, you can build it! The possibilities are limitless.”).

<sup>134</sup> See Erez Reuveni, *On Virtual Worlds: Copyright and Contract Law at the Dawn of the Virtual Age*, 82 IND. L.J. 261, 275 (2007).

port both finding copyright protection in virtual-world creations and assigning ownership of those creations to players. Utilitarian justifications for copyright law concern the provision of financial incentives to promote new creation.<sup>135</sup> In the context of virtual worlds, this manifests in two important and interconnected ways: by incentivizing player creation and player participation in virtual worlds.<sup>136</sup>

Retaining copyright in virtual creations will undoubtedly incentivize increased player creation. As discussed, the most popular virtual worlds are economically assimilated with the real world, which imposes market demands on players' virtual creations.<sup>137</sup> The ability to control virtual goods with real-world value by harnessing copyright provides a commanding incentive to players to create complex works that other players will desire.<sup>138</sup> Even in a flourishing virtual economy like *Second Life*, however, not all players are interested in profiting. Nonetheless, copyright offers a much-desired level of control over their virtual creations that most players find appealing and encouraging, regardless of their concern for profit.<sup>139</sup>

Retaining copyright in virtual creations will also function as a draw for potential virtual-world players.<sup>140</sup> Most prominently, the increased level of individual creation that copyright encourages will foster a richer virtual environment and a more robust virtual economy.<sup>141</sup> These features, in turn, will undoubtedly increase the virtual world's reputation with consumers and add to the number of residents. And notably, these new residents will feel the benefit of copyright protection for their crea-

<sup>135</sup> See F. Gregory Lastowka & Dan Hunter, *The Laws of the Virtual Worlds*, 92 CALIF. L. REV. 1, 44-46 (2004).

<sup>136</sup> See Erez Reuveni, *On Virtual Worlds: Copyright and Contract Law at the Dawn of the Virtual Age*, 82 IND. L.J. 261, 277 (2007).

<sup>137</sup> See Julian Dibbell, *The Life of the Chinese Gold Farmer*, N.Y. TIMES, June 17, 2007 (Magazine), available at <http://www.nytimes.com/2007/06/17/magazine/17lootfarmers-t.html> (discussing the popularity real-money trading or "RMT," the phenomenon of selling virtual goods for real money).

<sup>138</sup> See Benjamin Duranske, *Virtually Blind*, *Expensive Luxury Knockoffs in Second Life Raise Trademark Stakes* (June 21, 2007), <http://virtuallyblind.com/2007/06/21/expensive-luxury-knockoffs-raise-trademark-stakes/>.

<sup>139</sup> See Erez Reuveni, *On Virtual Worlds: Copyright and Contract Law at the Dawn of the Virtual Age*, 82 IND. L.J. 261, 277 (2007).

<sup>140</sup> See Todd David Marcus, *Fostering Creativity in Virtual Worlds: Easing the Restrictiveness of Copyright for User-Created Content*, 52 N.Y.L. SCH. L. REV. 67, 69 (2007-2008); Dan Hunter, *Second Life Announcement*, TERRA NOVA (Nov. 14, 2003), [http://terranova.blogs.com/terra\\_nova/2003/11/second\\_life\\_ann.html](http://terranova.blogs.com/terra_nova/2003/11/second_life_ann.html) ("This is really really [sic] encouraging and really really [sic] important.").

<sup>141</sup> See James Grimmelmann, *The State of Play: Free as in Gaming?*, LAWMEME (Dec. 4, 2003, 12:25:25 AM), <http://lawmeme.research.yale.edu/modules.php?name=News&file=print&sid=1290>.

tions, incentivizing them to create and further enrich the virtual world.<sup>142</sup> These benefits are both significant and meaningful for players and lucrative for game-world providers.<sup>143</sup>

In summary, virtual-world creative works pose a particularly thorny issue for copyright law. “On the one hand, full copyright liability may seem inappropriate in such an environment, since it might inhibit the broad dissemination of creative works promised by the new technology. On the other hand, carte blanche immunity from copyright liability might erode the commercial value of creative works.”<sup>144</sup> Clearly, some compromise must be struck, and that compromise must be sensitive to the exceptional demands of virtual-world environments.<sup>145</sup>

#### IV. PROMOTING CREATIVITY IN VIRTUAL WORLDS

User creativity is the backbone of *Second Life* and similar virtual worlds. While variations on game and social virtual worlds will continue to emerge, the survival of creative virtual worlds is more clearly aligned with copyright’s constitutional purpose “to stimulate activity and progress in the arts for the intellectual enrichment of the public.”<sup>146</sup> Put simply, creative virtual worlds and the possibilities they present stand for progress as contemplated by the Constitution.<sup>147</sup> Thus, ensuring the proliferation of *Second Life* and its future progeny is an attractive goal for copyright as it pertains to virtual worlds. As noted, both schemes cur-

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<sup>142</sup> Most virtual-world players create because it is easy. “Virtual worlds lend themselves to creativity. In theory, one can imagine something one moment and bring it to life the next.” ANDREW PETER SPARROW, *THE LAW OF VIRTUAL WORLDS AND INTERNET SOCIAL NETWORKS* 54 (2010).

<sup>143</sup> Not only does increased player creation generate tax revenues for Linden (the game taxes all property transfers), it also lowers production costs by obviating the need to employ many programmers.

<sup>144</sup> Michael Botein & Edward Samuels, *Compulsory Licenses in Peer-to-Peer File Sharing: A Workable Solution?*, 30 S. ILL. U. L.J. 69, 69 (2005).

<sup>145</sup> The user base of *Second Life* is (for the most part) ostensibly in favor of some sort of copyright protections for user-created content. As one user stated: “I spend more than 100 hours a week on the content I create and I would be extremely mad if someone could just take my hard work. I have so many [people] who play [Second Life] just [because] of the content I created. From the sounds of it, even filing a DMCA [Digital Millennium Copyright Act notice] will take months to even process and then investigate. . . . I GIVE UP!” Not Happy, Comment to *Features: Copyrights and Content Creation in Second Life*, SECOND LIFE BLOGS (Feb. 23, 2009, 5:07 PM), <http://blogs.secondlife.com/community/features/blog/2006/11/14/copyrights-and-content-creation-in-second-life#comment-655908>. Similar remarks can be observed by browsing the user comments on the same page.

<sup>146</sup> Pierre N. Leval, *Toward a Fair Use Standard*, 103 HARV. L. REV. 1105, 1107 (1990).

<sup>147</sup> See Todd David Marcus, *Fostering Creativity in Virtual Worlds: Easing the Restrictiveness of Copyright for User-Created Content*, 52 N.Y.L. SCH. L. REV. 67, 69 (2007-2008) (noting that virtual worlds enable dynamic creativity, which is a good target for copyright).

rently employed by virtual-world providers – copyright licensure and ownership transfer – unnecessarily impede creativity in unique ways.<sup>148</sup> Whether judicially developed, legislatively mandated, or internally implemented, some change is necessary to smooth the advancement of virtual creation; taking measures to narrow the scope of the copyright monopoly in virtual worlds will reduce the restrictions facing virtual creativity.<sup>149</sup>

#### A. FAIR USE

The fair use of a copyrighted work is not infringement.<sup>150</sup> Fair use is an affirmative defense and one of the most fundamental aspects of the American copyright scheme.<sup>151</sup> Fair use is intimately tied to the constitutional underpinnings of copyright “[t]o promote the Progress of Science and useful Arts,”<sup>152</sup> and it offers shelter ideal for encouraging virtual-world creations.

The fair-use analysis is fact-specific and balances four factors:<sup>153</sup> (1) “the purpose and character of the [secondary] use,” including whether the use is commercial, nonprofit, educational, or otherwise;<sup>154</sup> (2) “the nature of the copyrighted work,” which inquires whether the work is expressive or informative;<sup>155</sup> (3) “the amount and substantiality” of the original work that is used;<sup>156</sup> and (4) “the effect of the use upon the potential market for or value of the copyrighted work.”<sup>157</sup> This section limits discussion to the first and fourth factors because they dominate the fair-use analysis and lend themselves to a meaningful analysis of fair use as applied to virtual works generally.

Resolution of the first factor is very often determinative of the entire fair-use calculus,<sup>158</sup> and whether the use is “transformative” has emerged as the central question.<sup>159</sup> To pass muster as transformative, and thus a

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<sup>148</sup> See generally *id.* at 86 (enforcing legal rights has chilling effect on user creation).

<sup>149</sup> See generally *id.* at 91-92 (asserting that a scheme of extensive permissions would result in increased incentives to create).

<sup>150</sup> 17 U.S.C.A. § 107 (Westlaw 2010).

<sup>151</sup> 4 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 13.05 (2010).

<sup>152</sup> U.S. CONST. art. I, § 8, cl. 8.

<sup>153</sup> See 17 U.S.C.A. § 107 (Westlaw 2010).

<sup>154</sup> 17 U.S.C.A. § 107(1) (Westlaw 2010).

<sup>155</sup> 17 U.S.C.A. § 107(2) (Westlaw 2010).

<sup>156</sup> 17 U.S.C.A. § 107(3) (Westlaw 2010).

<sup>157</sup> 17 U.S.C.A. § 107(4) (Westlaw 2010).

<sup>158</sup> See Todd David Marcus, *Fostering Creativity in Virtual Worlds: Easing the Restrictiveness of Copyright for User-Created Content*, 52 N.Y.L. SCH. L. REV. 67, 88 (2007-2008).

<sup>159</sup> 2 HOWARD B. ABRAMS, THE LAW OF COPYRIGHT § 15:42.30 (2009); see also Pierre N.

fair use, a secondary work “must be productive and must employ the [copyrighted] matter in a different manner or for a different purpose from the original.”<sup>160</sup> The heart of this inquiry is the addition of value to the original work by using the copyrighted work as raw material and adding new information or insight.<sup>161</sup>

For the most part, transformation is an integral and pronounced feature of virtual-world creation.<sup>162</sup> Courts or legislators should be sensitive to this feature of virtual worlds in defining the proper scope of fair use in the context of virtual creations.<sup>163</sup> Practically speaking, the incorporation and modification of virtual creations should be viewed with lenience by courts and legislatures so that transformation is more readily found for add-on creations in virtual worlds.<sup>164</sup> Counterfeiting, or using copyrighted works in the same manner and for the same purpose as the original, should not be fair use.

Another aid to virtual-world creativity would be to narrow the definition of the relevant market in the fair-use analysis.<sup>165</sup> The fourth factor, commonly acknowledged as the other important factor in the fair-use analysis,<sup>166</sup> depends entirely on how a secondary work impacts the relevant market, including prospective and derivative work markets.<sup>167</sup> The relevant market in virtual worlds, especially those with real money exchanges, is admittedly difficult to define. In early decisions touching upon the scope of online markets, courts demonstrated a willingness to define relevant markets broadly, encompassing the entire internet.<sup>168</sup> In-

Leval, *Toward a Fair Use Standard*, 103 HARV. L. REV. 1105, 1111 (1990).

<sup>160</sup> Pierre N. Leval, *Toward a Fair Use Standard*, 103 HARV. L. REV. 1005, 1111 (1990).

<sup>161</sup> *Id.*

<sup>162</sup> Todd David Marcus, *Fostering Creativity in Virtual Worlds: Easing the Restrictiveness of Copyright for User-Created Content*, 52 N.Y.L. SCH. L. REV. 67, 88 (2007-2008).

<sup>163</sup> *See id.*

<sup>164</sup> A loose vision of what “transformation” entails for virtual worlds fits with the very nature of virtual spaces where laws of physics and rules of rationality and fit do not always apply. For instance, in a virtual world like *Second Life*, a user can minimally modify and attach two Aston Martins to his or her avatar’s feet and wear them as roller skates. This kind of madcap alternative use is only a slight departure from the original, but it is transformative nonetheless. *See generally id.* at 73-75.

<sup>165</sup> Market substitution is considered under the fourth prong of the fair-use analysis. Market substitution occurs when a secondary work actually or effectively replaces the original work in the marketplace, thereby appropriating profits. A lack of market substitution weighs strongly in favor of finding fair use. *See Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 591 (1994).

<sup>166</sup> 4 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 13.05[A][4] (2010) (characterizing the first and fourth factors as the most important).

<sup>167</sup> *See id.* (noting that both present and future markets are relevant considerations).

<sup>168</sup> *See, e.g., Planned Parenthood Fed’n of Am., Inc. v. Bucci*, 42 U.S.P.Q.2d 1430, 1438 (S.D.N.Y. 1997) (finding that two websites were in the same market for trademark infringement analysis simply because they “compete for the same audience—namely, Internet users who are search-

stead, courts should take a restrictive view on this point, defining the relevant markets, both primary and derivative, narrowly and allowing more leeway for secondary works that restructure virtual creations as different items.

For example, if a secondary creator transforms the depiction of a fire, complete with life-like movement, into a unique hairstyle for virtual avatars, courts should find a fair use. Even if minimal alteration is required to the actual coding, the secondary creator has employed the fire in a different manner and for a different purpose than the original creator intended.<sup>169</sup> Additionally, the relevant market for flamboyant avatar hairstyles is not the same as or closely related to the market for virtual fires, at least if a narrow view of the relevant market is accepted for virtual worlds. Very meaningfully, this understanding of fair use “serves the copyright objective of stimulating productive thought and public instruction without excessively diminishing the incentives for creativity.”<sup>170</sup> Both measures in this section will decrease infringement and alleviate the chilling effect for virtual creation that individual copyright ownership sometimes threatens.

## B. COMPULSORY LICENSING

### 1. *Justification*

In addition to an expansive reading of fair use in virtual worlds, a compulsory license scheme for virtual derivatives would increase access to copyrighted works and promote creativity. A compulsory license scheme is a forced contract that gives the user limited or unlimited use of the work in return for a fixed royalty.<sup>171</sup> Compulsory licenses are justified by balancing private intellectual property rights against a right of public access to the work.<sup>172</sup> The current copyright law provides compulsory licenses for non-dramatic musical compositions,<sup>173</sup> public broad-

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ing for a web site”).

<sup>169</sup> 4 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 13.05[A][1][b] (2010) (citing *Universal City Studios v. Sony Corp. of Am.*, 659 F.2d 963, 970 (9th Cir. 1981)) (stating that mere reproduction of a work in order to use it for the same purpose as the original may not be considered fair use).

<sup>170</sup> Pierre N. Leval, *Toward a Fair Use Standard*, 103 HARV. L. REV. 1105, 1110 (1990).

<sup>171</sup> EDWARD LEE LAMOUREUX ET AL., *INTELLECTUAL PROPERTY LAW & INTERACTIVE MEDIA: FREE FOR A FEE* 52 (2009).

<sup>172</sup> *Id.*

<sup>173</sup> 17 U.S.C.A. § 115 (Westlaw 2010).

casting,<sup>174</sup> retransmission by cable systems,<sup>175</sup> subscription digital audio transmission,<sup>176</sup> and non-subscription digital audio transmission such as internet radio.<sup>177</sup> It has been noted that “compulsory licensing is offered when technology has created new uses for which the author’s exclusive rights have not been clearly established. It is also used when technology has made old licensing methods for established rights ponderous or inefficient.”<sup>178</sup>

In the context of virtual worlds where collaborative or add-on creation is the norm, a compulsory licensing scheme for derivative works is an especially good fit. While, for the most part, current compulsory licenses pertain to performance or distribution rights (they allow secondary users to perform the original work and generally distribute that performance for a fee), the compulsory license proposed in this section pertains to the adaptation right of copyright holders.<sup>179</sup> Regardless of this difference, the compulsory license would operate in much the same way; secondary users would be free to copy virtual works for a predetermined or pre-negotiated royalty for the purpose of adapting them. Importantly, however, this scheme would not permit distribution of unaltered copied works, and such activity would remain illegal.<sup>180</sup> Likewise, insufficient adaptation, transformation, or recasting of the original work does not constitute a derivative work and thus would not be a licensed use of the copyrighted work.<sup>181</sup> Because they would not be covered by the proposed compulsory license, these uses would remain subject to lawsuit by the copyright holder in federal court. The overall goal of a virtual derivatives compulsory license is not to endorse rampant virtual copying, but to acknowledge the unique value of derivative works to achieve progress and to take advantage of virtual-world capabilities to precisely that end.

Interestingly, current law might deliver the same result as a compul-

<sup>174</sup> 17 U.S.C.A. § 118 (Westlaw 2010).

<sup>175</sup> 17 U.S.C.A. § 111(c) (Westlaw 2010).

<sup>176</sup> 17 U.S.C.A. § 114(d)(2) (Westlaw 2010).

<sup>177</sup> 17 U.S.C.A. § 114(d)(1) (Westlaw 2010).

<sup>178</sup> Robert Stephen Lee, *An Economic Analysis of Compulsory Licensing in Copyright Law*, 5 W. NEW ENG. L. REV. 203, 209 (1982).

<sup>179</sup> The non-dramatic musical works compulsory license modifies the reproduction right of copyright holders under very limited circumstances. See 17 U.S.C.A. § 115 (Westlaw 2010).

<sup>180</sup> See 4 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 13.05[A][1][b] (2010) (stating that some kind of “productive use” is necessary for a finding of fair use).

<sup>181</sup> This restriction still leaves ample room for progress in virtual-world creations. See, e.g., Robert J. Morrison, *Deriver’s Licenses: An Argument for Establishing a Statutory License for Derivative Works*, 6 CHI.-KENT J. INTELL. PROP. 87, 89 (2006) (“A derivative work is often more creative than the base work. Even the derivative works that might seem rote can be hiding a substantial amount of creativity.”).

sory license for derivatives, albeit in a less straightforward manner. This possibility stems from the Supreme Court's decision in *eBay, Inc. v. MercExchange, L.L.C.*, in which the Court rejected a contention that injunctions should automatically issue for infringement as a matter of course.<sup>182</sup> Instead, the Court held that when a patent or copyright holder seeks to enjoin further use of his or her intellectual property, a court must weight four factors: (1) whether the right holder has suffered irreparable injury by the infringement; (2) whether remedies available at law (primarily money damages) are inadequate to fully compensate the right holder for his or her injury; (3) whether, considering the balance of hardships between the plaintiff and defendant, an injunction is warranted; and (4) whether the public interest would be served by issuing an injunction.<sup>183</sup> If the court decides against issuing an injunction, the effect is quite similar to a compulsory license: the infringer typically will be ordered to pay royalties or a lump sum to the creator for anticipated future infringements, but the infringer will be permitted to continue using the work.<sup>184</sup> Strikingly, a court is free to order prospective royalties or a lump sum payment *even if the plaintiff objects*, as would be the case if the parties decided to negotiate a forward-looking license, or if the plaintiff preferred to sue periodically to collect for future infringement. This observation elucidates the potentially compulsory character of prospective compensation awards.<sup>185</sup>

In the context of virtual-world user creations, it is entirely possible that an injunction will not issue under *eBay, Inc.*. This is largely because courts will no longer infer irreparable harm from infringement, and the onus is on the plaintiff to affirmatively show irreparable harm beyond what could be remedied by compensatory damages.<sup>186</sup> In addition to this daunting task, virtual-world creators must argue that the public interest is not served by wider in-world dissemination and adaptation of their works.<sup>187</sup> Many of the arguments outlined in Part III cut against this notion, and it is difficult to fathom what damages virtual-world creators

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<sup>182</sup> See *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 392 (2006). The intellectual property right asserted in *eBay* was a patent, but in reaching its decision, the Court drew a parallel between the rights of a patent owner and those of a copyright owner, observing that the Court has "consistently rejected invitations to replace traditional equitable considerations with a rule that an injunction automatically follows a determination that a copyright has been infringed."

<sup>183</sup> *Id.* at 391.

<sup>184</sup> H. Tomás Gómez-Arostegui, *Prospective Compensation in Lieu of a Final Injunction in Patent and Copyright Cases*, 78 *FORDHAM L. REV.* 1661, 1672-74 (2010).

<sup>185</sup> The propriety of imposing prospective royalties or a lump-sum payment for future infringement has been challenged by at least one scholar. See *id.* at 1671.

<sup>186</sup> See *eBay*, 547 U.S. at 391.

<sup>187</sup> *Id.*

will suffer beyond monetary harm. In addition, the public interest would be better served by simpler access to copyrighted works in virtual worlds, once again undercutting the argument for virtual copyright infringement injunctions in favor of prospective compensation.

The point of this brief detour is twofold. First, while a compulsory license in virtual creative works may seem implausible or unlikely at first blush, it is sobering to realize that the Supreme Court has endorsed a scheme of strikingly similar character. Second, it is worthwhile to appreciate the increased efficiency of an outright compulsory license as compared to the prospective compensation method in *eBay, Inc.*. Not only would a forthright compulsory license obviate much of the uncertainty inherent in the *eBay, Inc.* balancing test, but it would consume less time for the parties involved while achieving similar results.

## 2. Logistics

What would a virtual derivatives licensing system look like? The system would be similar to those created by the American Society of Composers, Authors and Publishers or The Harry Fox Agency, the organizations that administer audio recording compulsory licenses.<sup>188</sup> A virtual-world provider would manage the licensed transactions, collect predetermined fees from secondary users, and administer those fees pro rata to the copyright owners of the purchased items. From this general framework, two questions inevitably arise: How and by whom would prices be set? How would revenues be collected and distributed to creators?

First, prices would be set by the provider based on the virtual-world economy. Critics of compulsory licenses have expressed doubt about providers' ability to accurately emulate market fluctuations once licensing has wholly subsumed free trade.<sup>189</sup> In the virtual-world system being described, however, a free market continues to endure alongside the compulsory licensing scheme. Indeed, an essential feature of this derivative license proposal is its ability to track the actual pricing that exists in-world for any given virtual item. For instance, to establish the derivative license price of a virtual piano, the provider can survey prices for virtual

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<sup>188</sup> See, e.g., *About HFA*, THE HARRY FOX AGENCY, <http://www.harryfox.com/public/AboutHFA.jsp> (last visited Nov. 8, 2010).

<sup>189</sup> See, e.g., Robert J. Morrison, *Deriver's Licenses: An Argument for Establishing a Statutory License for Derivative Works*, 6 CHI.-KENT J. INTELL. PROP. 87, 98 (2006) ("Having the power to set the de facto rate for statutory licenses [carries] with it a substantial responsibility to do it right. If the rate is set wrong, it could frustrate the entire purpose of the statutory license. If the rate is set too high or too low, it could make copyright a disincentive to creation for both the future base work author and the future statutory licensee.").

pianos being sold directly from one player to another. While the exact piano being licensed may not appear in the virtual-world market, the provider can affix a fairly accurate license fee. This will assuage concerns that, as time progresses, compulsory licensing systems lose the ability to divine what market movements would have been.<sup>190</sup>

Second, derivative license revenues would be collected and distributed by the providers as well. A virtual world that features an internal exchange, as exemplified in *Second Life*, very likely has the necessary infrastructure in place. Therefore, administering license fees would be relatively simple for the provider of such a world.<sup>191</sup> Critically, keeping the licensing structure within the virtual world would obviate the need for judicial or legislative meddling; the provider could simply mandate involvement in the compulsory licensing system in the TOS.

The advantages of a compulsory licensing system are manifold. Administrative costs are kept low by the easy integration with virtual-world exchanges. Compulsory licensing obviates the added cost of direct bargaining and will very likely diminish the number of copyright infringement cases emerging from virtual worlds.<sup>192</sup> Perhaps most importantly, a derivative work compulsory licensing system acknowledges the importance of collaborative or derived creation in virtual worlds and condones it. In addition, licensing derivative works in virtual worlds accepts the more expansive possibilities for creation that exist in them, and it strives to match that increased scope with more liberal derivative use. Mandatory licensing will also essentially decriminalize behavior that is widespread in virtual worlds and ease fear of lawsuits.<sup>193</sup> Additionally, because nearly every virtual-world resident is a creator as well as a consumer of virtual goods, it is a system from which everyone can benefit. Finally, the compulsory license, by offering to sanction otherwise illegal appropriation for a fee, will probably result in significant revenues for

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<sup>190</sup> See S.J. Liebowitz, *Alternative Copyright Systems: The Problems with a Compulsory License*, 1 IP CENTRAL REV. at 11 (May 6, 2004) available at <http://www.ipcentral.info/review/v1n2liebowitz.pdf>.

<sup>191</sup> Additionally, because of the precise nature of digital information, a sliding scale for compulsory fees could be implemented with relative ease. For example, a mechanism to recognize what portion of a derivative work is wholly attributable to the original work could be employed to determine an appropriate fee in certain circumstances. In this case, a small, fixed amount would be charged for each percent of the derivative that is taken from the original.

<sup>192</sup> See, e.g., Robert P. Merges, *Contracting into Liability Rules: Intellectual Property Rights and Collective Rights Organizations*, 84 CALIF. L. REV. 1293, 1294 (1996) (“[Compulsory licenses] conserve on transaction costs either by making it easier to identify and locate rightholders” or by encouraging repeat-play, reciprocal bargaining.).

<sup>193</sup> See FRED VON LOHMANN, A BETTER WAY FORWARD: VOLUNTARY COLLECTIVE LICENSING OF MUSIC FILE SHARING 1 (2008), available at <http://www.eff.org/files/eff-a-better-way-forward.pdf> (stating that a compulsory license in music file sharing will have similar results).

players who create popular, versatile virtual items.

### C. OPEN-CONTENT OPTION

Some creation-based virtual worlds currently feature minimal protections that can be viewed as licensing measures. Most prominently, *Second Life* allows creators to denote their content as “no copy,” “no modification,” or “no transfer.”<sup>194</sup> These features are properly understood as limited and somewhat ambiguous licenses. Permissions like the ones used in *Second Life*’s content-editing engine are woefully inadequate as serious licenses. Unlike genuinely bargained-for licenses, such permissions lack essential terms. For instance, what exactly is licensed by clicking (or not clicking) the various boxes, what is the duration of the purported license, and what further restrictions apply?

One partial alternative to the makeshift permissions scheme exemplified by *Second Life* has already been proposed – a compulsory license for derivative works would obviate the need for bargaining in certain circumstances. Another option is to allow open sourcing of user content by creators. An open content license usually grants unlimited rights of alteration and redistribution to other creators, typically with a single restriction attached that subsequent users must also open-source any ensuing works (in other words, license them under the same terms).<sup>195</sup> Open source or content licensing thus uses copyright as its springboard; in order for a later user to avoid infringing the original, open-sourced work, he or she must attach an open content license to his or her creations if they incorporate components of the original. In this sense, open content licenses are viral.<sup>196</sup>

Offering an open-content option to virtual-world creators will appeal to a niche group. While it is usually true that creators of any content, virtual or otherwise, expect and probably require some degree of control over their works, this is not always the case. Those relatively few *Second Life* users who value a sense of virtual community over profit or control will very likely opt to open-source the content they create. As previously discussed, because copyright presumptively exists in

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<sup>194</sup> *Permissions FAQ*, SECOND LIFE, <http://wiki.secondlife.com/wiki/Help:Permissions> (last modified Apr. 2, 2010).

<sup>195</sup> See, e.g., *The GNU General Public License*, GNU PROJECT, <http://www.gnu.org/licenses/gpl.html> (last visited Nov. 9, 2010).

<sup>196</sup> Open source licenses are viral because the right to use the protected material is contingent on the user disclaiming any rights in his or her own creative additions. In this sense, the open source license presents the world of potential users with an ultimatum: use the work with no authorship claim to your additions, or do not use the work at all.

virtual worlds and vests in the author in *Second Life*, an open content licensing option need only be incorporated into the virtual world's market infrastructure to take effect.<sup>197</sup>

Insofar as open-sourcing protects the original author's intent in crafting his or her work, it is beneficial and will incentivize the initial creation. However, the viral effect of open licensing under the terms set forth above might result in the foreclosure of large virtual markets and will almost certainly shut out add-on users. More to the point, subsequent creators will invariably be presented with the option to either create works from scratch or forgo any profits from works that may incorporate open-sourced content. Arguably, this ultimatum detracts from efficient creative progress in virtual worlds, a prospect that is troubling to some and may result in stripping *Second Life* and similar virtual worlds of their economic appeal.<sup>198</sup>

Virtual worlds may consequently be better served by fine-tuning compulsory licensing than offering open content licensing. This would consist of allowing content creators to set the price of their compulsory licenses to zero rather than to a market value as determined by in-world commerce, as discussed previously. While far from perfect, and an abandonment of the open-content philosophy, effectively allowing a royalty-free license to virtual-content creators may be the best option for market-sensitive virtual worlds where simple and effective add-on creation is fundamental.

By not offering an open-content option, virtual worlds risk losing first creation by those users who value open, non-proprietary communities. An alternative that more accurately reflects the open-source attitude is to license virtual works while allowing more flexibility for downstream content creators. At its most basic, this open license would stipulate that add-on creators are free to use content under an open license, and even to profit from the sale of their creations, but not to restrict adaptation of those creations by later users. Additionally, virtual-world creators are always free to assign the copyrights in their creations to the public domain.

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<sup>197</sup> The option to license user-created content under an open content license could even be listed on the same exchange as content available under a compulsory license. This would facilitate comprehensive licensing.

<sup>198</sup> See, e.g., KEN BROWN, ALEXIS DE TOCQUEVILLE INSTITUTE, OPENING THE OPEN SOURCE DEBATE 4-5 (June 2002), available at <http://www.adti.net/ip/opensource.pdf>.

## CONCLUSION

Immersive virtual worlds that rely heavily on user-generated content are in danger of extinguishing the imagination on which they so seriously rely. Virtual-world users are demanding greater rights over their in-world creations, and providers are strategically ceding ground to assuage their user base and entice continued creation. But the best solution is more complex than imposing traditional copyright principles on virtual creations. As this Article has argued, to do so would mean falling off the horse on the other side – virtual-world creation would be stifled by inhibited exchange, sharing, and add-on creation, an outcome that likewise threatens the vitality of these virtual worlds.

Instead, by taking a deliberate approach and identifying the proliferation of user creativity as a prime objective in virtual worlds, this Article presents a series of alternatives to traditional copyright law. Fair use can serve an especially powerful function in securing the availability of virtual works for future adaptation while allowing the rights-based protections that initial creation may require. Although looked upon with suspicion, a compulsory license for derivative works would function in a similar way and even expand the available universe of works eligible for adaptation. Finally, offering an open-source option ensures that a broad array of virtual-world users will see the intent of their works realized. Handled properly, these alternatives can meaningfully foster the creativity that supports *Second Life* and similar virtual worlds while operating within the framework of accepted copyright principles.