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## Fostering Creativity in Virtual Worlds: Easing the Restrictiveness of Copyright for User-Created Content

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Fostering Creativity in Virtual Worlds:  
Easing the Restrictiveness of Copyright  
for User-Created Content

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## I. INTRODUCTION

“If You Can Imagine It, You Can Build It!”<sup>1</sup> “Your World. Your Imagination.”<sup>2</sup> These are the siren calls of deeply immersive virtual environments that allow users to create the objects that fill the world and, if they have rights to those objects, sell them as well.<sup>3</sup> So maybe you, like millions of others, turn off the TV, log on to the website, download the software and excitedly click “I Accept!” on the Terms of Service or End User License Agreement (“TOS/EULA”). Before you know it, you’ve traded in your physical realm for a virtual one. You’ve jumped into the digitized flesh of an avatar and have given yourself that pleasant aquamarine skin tone you’ve always wanted, while switching gender along the way.<sup>4</sup> Soon, you and some new friends are hanging out in your most recent creation: a Japanese-themed garden, filled with blossoming Lotus flowers that spit fire, which you made by twisting up a set of angel wings with a Lotus flower pattern on it that someone sold you last week.<sup>5</sup> And, because you created it, you assume you own the copyrights to it. But what do these rights entail? What did all those terms in that TOS/EULA say again about retaining or assigning rights? When you sell one of those fire-spitting flowers, and grant a license through a click-box permission for another user to “modify” that flower, and they mold it into their car, what rights do you still have, if any? What exactly did you license to them? Can you be sued for infringing the copyright of the Lotus flower design? Maybe time to log out instead. Sure, “Your Imagination. Your World.”<sup>6</sup> But what rights? And why bother?

In Second Life, one of the most popular “virtual world” platforms, users are expressly informed through the Terms of Service (“TOS”) that they retain the copyrights to the objects they create.<sup>7</sup> In theory, allowing users to retain rights to their creations utilizes the incentive structure of copyright law.<sup>8</sup> But copyright laws were not written to apply to the types of creative expression that virtual environments enable: creation through collaboration and modification of prior existing virtual objects.<sup>9</sup> Further compounding this copyright inadequacy is a

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1. Active Worlds Tour, <http://activeworlds.com/tour.asp#build> (last visited Aug. 23, 2007).

2. Second Life, <http://secondlife.com/> (last visited Aug. 23, 2007).

3. See Second Life, The Marketplace, <http://secondlife.com/whatis/marketplace.php> (last visited Aug. 23, 2007).

4. For articles and demographics related to choices people make in virtual platforms including avatar creation choices, see The Daedalus Project: MMORPG Research, Cyberculture, MMORPG Psychology, The Psychology of MMORPGs, <http://www.nickyee.com/daedalus/> (last visited Aug. 23, 2007).

5. See Jack M. Balkin, *Virtual Liberty: Freedom to Design and Freedom to Play in Virtual Worlds*, 90 VA. L. REV. 2043 (2004).

6. See Second Life, *supra* note 2.

7. See Second Life, TOS § 3.2, available at <http://secondlife.com/corporate/tos.php> (last visited Aug. 23, 2007).

8. The structure is predicated on granting exclusive rights to authors for a limited time. See *Fogerty v. Fantasy*, 510 U.S. 517, 526–27 (1994); *Feist Pub. v. Rural Tel. Serv.*, 499 U.S. 340, 349–50 (1991).

9. See 17 U.S.C. § 101 (2000); Symposium, *Rule & Borders—Regulating Digital Environments*, 21 SANTA CLARA COMPUTER & HIGH TECH. L.J. 807, 811 (2005).

user-based licensing structure that is never clearly defined, and a TOS that does not provide additional explanations of rights.<sup>10</sup> Thus, the total copyright environment is one of unclear rights and potentially infringing creative activity. In addition, because users carry on a robust market for these objects, copyright holders have an incentive to protect and enforce the rights that they believe they have. Ultimately, these problems will restrict and chill, rather than foster the dynamic creativity that virtual environments enable. Therefore, in order for virtual worlds to remain fertile ground for creative development, the current rights-determining structure of copyright as applied to virtual works must evolve to more adequately address creative expression in virtual worlds.

This note will discuss user-created content in the virtual environment of Second Life, and the legal difficulties that arise because of how copyrights to that content are determined. This note will then suggest how those rights can be clarified in order to reduce copyright infringement and provide incentives to maximize creativity. Because Second Life is the only virtual platform that explicitly allows creators to retain their copyrights, and because Second Life has been generating a high amount of commercial activity and societal attention, it will be used throughout this note as the case study. Part II-A will offer a basic background of virtual environments and Second Life. Part II-B will explain the creative process in Second Life. Parts III-A and III-B will discuss the protections and rights for virtual creations that currently exist under copyright law, and how those rights are altered by the TOS/EULA and through user-based permissions which function as licenses. Part III-C will discuss how these rights-determining layers create ambiguities, and foster an environment of infringement. Part IV will briefly discuss the commodification of virtual worlds, focusing on Second Life, and show how this commercial value can become the catalyst for copyright infringement suits. Finally, Part V will propose some solutions to reduce infringement, clarify rights ownership, and provide incentives for maximizing creative activity.

## II. A NEW CREATIVE MEDIUM

### A. Basics and Backgrounds of Virtual Environments

Online virtual worlds are becoming less esoteric to mainstream America and have become a common topic in recent news.<sup>11</sup> Popular music acts have recently

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10. See Balkin, *supra* note 5, at 2049–50.

11. Reuters has even recently embedded a full-time journalist named Adam Reuters in Second Life. Reuters, Second Life News Center, <http://secondlife.reuters.com/> (last visited Aug. 23, 2007). Even the chief executive of Linden Labs, Phillip Rosedale, has recognized the immanency of a lawsuit for copyright infringement. See Toby Sterling, 'Second Life' 3-D World Grows, AP, *reprinted in* USA Today, Oct. 9, 2006, <http://www.theglobeandmail.com/servlet/story/RTGAM.20061008.wlife21008/BNStory/Technology> (last visited Oct. 15, 2007).

staged virtual world concerts.<sup>12</sup> MTV has created a Virtual Laguna Beach based on the television series, in which users can spend time at their favorite places from the show.<sup>13</sup> Educators are exploring new manners of teaching using virtual worlds.<sup>14</sup> As more people become accustomed to interacting, collaborating, creating, and learning in this type of common space without physical boundaries, they participate in the building of the “Metaverse”<sup>15</sup>—a cohesive universe of virtual environments—that began almost thirty years ago.<sup>16</sup>

When the first precursor to current virtual worlds, Multi-User Dungeon (“MUD”), was created in 1979, it was envisioned as an imaginary place where multiple computer users could simultaneously interact in a chat-room like manner.<sup>17</sup> Although the objective of MUD was to solve a puzzle, players could instead choose to not trace the pre-fabricated game experience.<sup>18</sup> Rather, players could create their own experience by exploring the game environment, either alone or with other players.<sup>19</sup> MUD marked the beginning of the virtual world development and a number of other thematic game and non-game related platforms were subsequently established.<sup>20</sup>

In 1990, a leap toward modern virtual environments occurred with the creation of LambdaMOO,<sup>21</sup> a platform that allowed users *themselves* to gener-

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12. See Matt Gross, *It's My (Virtual) World and Welcome to It*, N.Y. TIMES, Nov. 3, 2006, at F1.
  13. See Richard Siklos, *Not in the Real World Anymore*, N.Y. TIMES, Sept. 18, 2006, at C1; Virtual Laguna Beach Home Page, <http://www.vlb.mtv.com> (last visited Aug. 23, 2007).
  14. See Grace Wong, *Educators Explore 'Second Life' Online*, CNN.COM, Nov. 14, 2006, <http://www.cnn.com/2006/TECH/11/13/second.life.university/index.html>.
  15. The concept of a Metaverse and the term itself comes from a book titled Snow Crash. NEAL STEPHENSON, SNOW CRASH (1992). Developers ultimately envision this Metaverse to be an expansive virtual environment where people can fully interact through virtual means in an alternative society. See Cory Ondrejka, *Escaping the Guided Cage: User Created Content and Building the Metaverse*, 49 N.Y.L. SCH. L. REV. 81, 81–83 (2004); see also Balkin, *supra* note 5, at 2043–45.
  16. See F. Gregory Lastowka & Dan Hunter, *The Laws of Virtual Worlds*, 92 CAL. L. REV. 1, 14–28 (2004) (providing an extensive description of the virtual world evolution).
  17. See Dr. Richard A. Bartle, *Virtual Worldliness: What the Imaginary Asks of the Real*, 49 N.Y.L. SCH. L. REV. 19, 20 (2004); Lastowka & Hunter, *supra* note 16, at 18.
  18. See Bartle, *supra* note 17, at 22.
  19. See Lastowka & Hunter, *supra* note 16, at 18.
  20. See *id.* The other platforms that developed directly from MUD ranged from text-based to visual-based environments such as MUCK, an acronym for Multi-User Created Kingdom, MUSH, for Multi-User Shared Hallucination, and MOO, for Multi-User Object Oriented. See *id.* at 19; see also Daniel C. Miller, *Determining Ownership in Virtual Worlds: Copyright and License Agreements*, 22 REV. LITIG. 435, 439–41 (2003).
  21. See Lastowka & Hunter, *supra* note 16, at 20; Felis Rex, *LambdaMOO: An Introduction*, <http://www.lambdamoo.info/> (last visited Aug. 23, 2007). LambdaMOO is still currently in use. It is Telnet based, and can be accessed at <telnet://lambda.moo.mud.org:8888/>. For the creator of LambdaMOO, Pavel Curtis's viewpoint, visit [http://www.g4tv.com/techtv/vault/features/38666/The\\_Incredible\\_Tale\\_of\\_LambdaMOO.html](http://www.g4tv.com/techtv/vault/features/38666/The_Incredible_Tale_of_LambdaMOO.html).

ate content and alter the geography of the environment.<sup>22</sup> Users could create different “rooms,” designate these rooms as private, and could thereby control access to portions of the environment. As new areas were created, others could be dissolved.<sup>23</sup> In addition to creating rooms, users could also create expressive and interactive objects that formed the content of the world. User-created objects ranged in type from a bird that would repeat random lines of dialogue script that it “hears,” to firework displays and gardens.<sup>24</sup> Users could even enter into “blenders” or “blackholes” to eradicate themselves, thereby committing “MOOicide” when they were overly immersed in LambdaMOO.<sup>25</sup> Thus, LambdaMOO was an ever-evolving, persistent, and user-created textual world.

As technology advanced in terms of graphics, software tools, and especially bandwidth, programmers were able to create more immersive and detailed environments.<sup>26</sup> While previously many of the multi-user environments were textual, the technological advances allowed developers and programmers to create multi-user *visual* environments.<sup>27</sup> Generally referred to as Massively Multiplayer Online Environments (“MMOs”), distinctions exist between the types of MMOs that are created primarily as role-playing games (Massively Multiplayer Online Role-Playing Games or “MMORPGs”), and multi-user platforms that are more open virtual environments.<sup>28</sup> One distinction between MMORPGs and other MMOs is based on whether the platform is focused on “leveling.”<sup>29</sup> The leveling games place a player in a vast realm, generally fantasy themed,<sup>30</sup> where the players perform tasks towards the ultimate goal in the game while achieving greater abilities through successful performance.<sup>31</sup> After a certain number of tasks are accomplished or points are gained, a player moves up in level, and the player’s tools and abilities increase correspondingly.<sup>32</sup> Although

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22. See Lastowka & Hunter, *supra* note 16, at 18.

23. See *id.* at 21. For a map of a few of the rooms created, visit LambdaMOO, House & Grounds, <http://www.lambdamoo.info/lambdamoomap/lambdamoomap.htm#> (last visited Aug. 23, 2007).

24. See Lastowka & Hunter, *supra* note 16, at 21.

25. The immersiveness of the world has hooked many people into chunks of life spent in LambdaMOO. MOOicide helps those who can’t help themselves by destroying their avatar so they can return to their physical being. Of course, nothing prevents the user from starting over with an entirely new “life.”

26. See Lastowka & Hunter, *supra* note 16, at 24–25.

27. See Balkin, *supra* note 5, at 23.

28. See Caroline Bradley & A. Michael Froomkin, *Virtual Worlds, Real Rules*, 49 N.Y.L. SCH. L. REV. 103, 123–25 (2004).

29. See Lastowka & Hunter, *supra* note 16, at 26–29.

30. See *id.* at 16–17.

31. See *id.* at 16 (describing “leveling” from the Dungeons & Dragons role-playing game). For a directory of MMORPG’s, visit MMORPG.com, <http://www.mmorpg.com/index.cfm?bhcp=1> (last visited Aug. 23, 2007). See also Multiplayer Online Games Directory, <http://www.mpodg.com/games/genre.asp?id=9> (last visited Aug. 23, 2007).

32. See Lastowka & Hunter, *supra* note 16, at 16; see also Ondrejka, *supra* note 15, at 89.

leveling games have an intensely social aspect—many tasks can only be accomplished by groups of players—the experience is primarily focused on the goals of the game. Non-leveling MMOs are focused much more on social and creative aspects, and while they can be a themed experience, they are not end-goal driven.<sup>33</sup>

Second Life, a non-leveling MMO, was launched in 2003.<sup>34</sup> The designers created the platform to be more like an open canvas, rather than a theme-based world.<sup>35</sup> Unlike themed or leveling games, the Second Life platform eliminates thematically-imposed parameters and allows users to have broad control over their expressive and interactive activity. Second Life, in its barest form, appears as an open terrestrial realm, with a basic geography of rolling meadows, streams, and mountains. Similar to LambdaMOO, *users* fill in the content and shape the world with their creations.<sup>36</sup> In addition, the tools provided by Second Life allow groups to create collaboratively, thereby fostering social networks and a sense of community.<sup>37</sup> By enabling users to collaboratively create the world they inhabit, Second Life has provided clear direction toward the building of the “Metaverse.”<sup>38</sup>

### B. *Virtual Creation*

Users in MMOs engage in creative expression primarily through controlling the appearance of their onscreen image, which is commonly referred to as an “avatar.”<sup>39</sup> Although players of thematic *leveling* games control much of their actions and interactions, as well as having a quantum of creative control over the shape and characteristics of their avatar, players are limited to the thematic constraints of the platform.<sup>40</sup> In a fantasy-themed leveling game, players might be able to shape the features of their avatar to the extent of certain character types, such as an elf. However, in Second Life a user has almost limitless control of her

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33. See Lastowka & Hunter, *supra* note 16, at 8–10. There.com, The Sims Online, and Activeworlds are examples of non-leveling virtual environments other than Second Life.

34. See Ondrejka, *supra* note 15, at 87.

35. See *id.* at 87; Brad Cook, *Second Life: Build Anything, Be Anyone, Set Your Own Agenda*, <http://www.apple.com/games/articles/2005/07/secondlife/> (quoting Cory Ondrejka) (last visited Aug. 23, 2007). For a series of in-world snapshots of Second Life, visit Snapzilla: Postcards from Second Life, <http://www.sluniverse.com/pics/pic.aspx?id=101826> (last visited Aug. 23, 2007).

36. See Ondrejka, *supra* note 15, at 87–88.

37. See *id.* at 88.

38. See *id.* at 87 (noting that by “the end of May, 2004, users had created more than one million objects, over 300,000 objects with scripted behaviors, and over 300,000 pieces of clothing.”).

39. Avatar is a Hindu term for the physical incarnation of a deity. See Lastowka & Hunter, *supra* note 16, at 6.

40. An exception is “mods”—external programs that allow players to alter their gaming experience. See Ondrejka, *supra* note 15, at 85; see also *Micro Star v. Formgen, Inc.*, 154 F.3d 1107 (9th Cir. 1998); *Lewis Galoob Toys, Inc. v. Nintendo*, 964 F.2d 965 (9th Cir. 1992).

avatar's appearance.<sup>41</sup> Upon entering Second Life, users are outfitted with a human-shaped template, which can be drastically altered by clicking boxes, and by using sensitive slider-controls to shift the color and shape of every portion of their avatar's body.<sup>42</sup> Users can even create avatars that have no resemblance to a human form, creating animal forms, or a form that no one has ever seen.<sup>43</sup> This radical reshaping can occur not only through the tools provided in-world, but also through external tools such as Photoshop.<sup>44</sup> Users can also save each of their avatar shapes and can keep them in an inventory closet, wearing them as outfits at the click of a button.

Although users spend hours shaping their avatars, a primary attraction of Second Life is the ability to craft various interactive objects that can then become part of the landscape. The simplest manner in which users create these objects is by clicking an option that opens a small window where the user can find a set of building tools. The user then selects from primary building block choices, called graphic primitives, or "prims." The user controls and manipulates the dimensions of the prims, attaches other modified prims to it, colors the resulting object, and through a separate function, applies a variety of textures to designated portions of the object. Each created object can then be fashioned together like a set of malleable Lego blocks to form more complex objects.<sup>45</sup> Users can then build a virtual car or dancehall piecemeal through this method of "atomistic construction."<sup>46</sup> A function also allows the user to create an exact replica of an object. Replicating facilitates easier building because if a user is building anything with multiple parts, such as a structure composed of bricks, the user only has to reproduce the original object, and then join the replicated pieces. Basic template shapes, such as sets of clothes and furniture, a spectrum of colors, and textures ranging from tile to steel, are also available.<sup>47</sup> Additionally, in-world physical characteristics, such as gravity, are programmed to match the external world,

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41. See Second Life Knowledge Base, Avatar and Appearance, <http://secondlife.com/knowledgebase/category.php?id=16> (last visited Aug. 23, 2007).

42. See *id.*

43. For some examples of avatars, visit 2nd Look Image Gallery, Second Life Screenshots, <http://www.2ndlook.org/thumbnails.php?album=lastup&cat=2&page=5> (last visited Aug. 23, 2007).

44. See Second Life Fashion Design: Using the Templates, [secondlife.com/developers/resources/pdfs/Using\\_the\\_SL\\_Fashion\\_Design\\_Templates.pdf](http://secondlife.com/developers/resources/pdfs/Using_the_SL_Fashion_Design_Templates.pdf) (last visited Aug. 23, 2007). Users can also purchase avatars created by third parties. See, e.g., SL Exchange, Featured Avatars, <http://www.slexchange.com/modules.php?name=Marketplace&CategoryID=2> (last visited Aug. 23, 2007).

45. See Second Life Fashion Design: Using the Templates, *supra* note 44, at 91 (quoting Ralph Koster from 2002 Game Developer's Conference); Jessica Mulligan, *Much Water Under the Bridge, Much Beer Over the Dam . . .* (Sept. 3, 2002), [http://www.skotos.net/articles/BTH\\_33.shtml](http://www.skotos.net/articles/BTH_33.shtml) (last visited Aug. 23, 2007).

46. For a more comprehensive discussion of atomistic creation in Second Life, see Ondrejka, *supra* note 15, at 90-93.

47. For a description of clothing, see Andrew Lavalley, *Now, Virtual Fashion*, WALL ST. J., Sept. 22, 2006, at B1.



thereby allowing users to rely on physical “realities.”<sup>48</sup> Permeability and density are embedded into objects—a building with a wall cannot ordinarily be penetrated.

Second Life also enables a simple script, which allows users to write code to give their objects action.<sup>49</sup> A user can write a script for a car that allows for motion and steering upon command. A flying pet that follows a user around can be quickly fashioned, a user can light candles that burn down, and whole ecologies can grow from seed to tree to flower to death, with bees pollinating the plants causing rebirth.<sup>50</sup>

When users want to craft, or continue crafting their objects, they can access the platform-provided tools through an edit option that re-opens the building tools window. If a user does not want to leave his or her creation lying around—and many regions do not allow for a user to simply leave their objects around—users can store their works in an inventory which appears in a folder window. Because many users want to create a persisting environment where they and other users can experience their creation, the user will purchase or rent land. Here, the user can also create her own landscapes and set rules, permitting or banning activities such as building, or commerce by non-authorized users.

Once a user has created an object, the user controls permissions that allow or disallow other users from certain types of activity including subsequent transfers, modifications, and identical copying.<sup>51</sup> The permissions are enabled through click-boxes that appear as part of the editing menu. If a user allows others to modify his object, then any user that has access to the object can edit and modify the object using the same tools in the same manner in which the creator fashioned it. Thus, through modification, an object becomes raw creative material for subsequent users and becomes an ever-evolving collaborative creation. Multiple users all working together can work on a large project as a construction team. If both copying and modification permissions are enabled, then another user can copy and modify the copy to create an object that is formed from another’s underlying work. Upon transfer of an object, the new user can then set any of the enabled permissions for subsequent transfers.

The total collaborative experience is enhanced by users posting and providing scripts, which are either given away or sold within and without the platform through a library-themed forum, in-world instructions that users post at various

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48. See Ondrejka, *supra* note 15, at 92.

49. See *id.* at 92–93.

50. The Second Life area Svarga, which can be found at coordinates (7, 123), is an area where plants grow and replicate, requiring “gardening” to ensure the area does not become overgrown. Please note that this area may have changed since the publication of this note, as many of the areas may change over time in Second Life.

51. For an explanation of permissions, combinations, and what a user can do, visit the following Second Life forum post: <http://forums.secondlife.com/showthread.php?t=6729> (last visited Sept. 30, 2007).

locations, and simple in-world inter-avatar interaction.<sup>52</sup> Groups also form around themes or projects. Thus, the content of the environment builds on itself, becoming a robust experience of creative work through multiple modifications and collaborations.

In addition to world-provided tools, creators also use programs such as Photoshop and other external tools to pre-fabricate textures and shapes.<sup>53</sup> A user can upload the textures, which are then integrated and applied to objects. Additionally, users can upload pictures, video, and sound clips, “projecting” images onto created screens for presentation, or can stream video or music from an off-world site.

Users can also record images on screen, either in motion or still. Still shots consist of a user taking a “screen grab,” a snapshot picture of where they are at a certain moment. These screen grabs can be exported out of the platform, then re-imported, either as the raw image file or after external modification through Photoshop or other tools, and applied like a texture.<sup>54</sup> With additional tools, users can also create “machinima”—movies created in virtual environments.<sup>55</sup> Rather than snapshots, a user can record the experience as the user ordinarily finds it, in motion. Users can gather other users and play out scenes, creating films acted out by avatars. These can be shown either internally within the platform or externally outside of the platform. Thus, this wide palette of tools available to users fosters an enormous amount of artistic creativity; collaboratively and individually.

### III. RIGHTS AND RESTRICTIONS TO CREATIVE EXPRESSION

#### A. *What Rights Does a Creator Have?*

Virtual activities can give rise to various forms of intellectual property rights.<sup>56</sup> In particular, creative virtual expressions are potential subjects of copyright, and can therefore be protected under the U.S. copyright laws.<sup>57</sup> Copyright law, based on Article I, Section 8, Clause 8 of the U.S. Constitution,<sup>58</sup> grants a

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52. For descriptions of building and scripting, visit Second Life, Content Creation Forum, <http://forums.secondlife.com/forumdisplay.php?f=294> (last visited Sept. 4, 2007).

53. See Lavalley, *supra* note 47; see also, Second Life Fashion Design: Using the Templates, *supra* note 44.

54. See Second Life: Knowledge Base, Snapshots, <http://secondlife.com/knowledgebase/article.php?id=132> (last visited Aug. 23, 2007).

55. See Matthew Brett Freedman, *Machinima and Copyright Law*, 13 J. INTELL. PROP. L. 235, 238–41 (2005); Machinima, <http://www.machinima.com> (last visited Aug. 23, 2007); Machinima Festival, <http://festival.machinima.com> (last visited Aug. 23, 2007).

56. The implication of having an assignment provision in the TOS/EULA is the recognition of the assigned rights.

57. 17 U.S.C. § 101 (2000). This assumes that U.S. jurisdiction applies to the particular world in which the object was created.

58. U.S. CONST. art I, § 8, cl. 8 (“To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.”); see

bundle of five exclusive yet divisible rights to a creator of an original creative expression for a period of time, if that work fulfills the minimal requirements of copyright law.<sup>59</sup> If the author can control the rights to that copyrighted expression, she can demand payment for reproductions, performances, displays, and other uses of work that she controls.<sup>60</sup> The intention of copyright law is to encourage authors to continue creating new works, thereby contributing valuable creations to society, as well as eventually adding to the public domain by providing raw creative material for use by others once the term of the copyright has expired.<sup>61</sup>

In order for any work to qualify for copyright, it must be an “original work of authorship fixed in any tangible medium of expression.”<sup>62</sup> Copyright protects the creative expression of an idea, and not mere facts or ideas.<sup>63</sup> Although a creative work may meet these minimal qualifications for copyright to vest, the statutory scheme contains numerous nuanced provisions that address the scope of particular rights in various scenarios in which a creative work could be used, and specifies types of expression from sound recordings to architectural works.<sup>64</sup>

Digital creations in virtual worlds are the subjects of copyright because the software code that underlies a work, or the “script” embedded in the virtual object, is considered a literary work, one of the enumerated copyrightable subject matter categories.<sup>65</sup> A virtual object can also be protected as an audio-visual

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Paul Goldstein, *Derivative Rights and Derivative Works in Copyright*, 30 J. COPYRIGHT SOC'Y U.S.A. 209 (1983) (discussing theories underlying copyright law).

59. 17 U.S.C. § 102 (2000). The exclusive rights granted are the rights of reproduction, preparation of derivative works, sales or other transfer, performance, and display. *Id.*
60. *See id.*; *see also* Goldstein, *supra* note 58 (discussing the “upper and lower limits to copyright investment.”) That is, an author has an exclusive right, but only in the original expression of ideas. This “lower limit” gives notice to the author that underlying ideas that motivated the expression are free for use in the public domain, so as not to monopolize the elemental building blocks of creative expression. *Id.*
61. *See* Pierce N. Leval, Commentary, *Toward a Fair Use Standard*, 103 HARV. L. REV. 1105, 1107–11 (1990).
62. 17 U.S.C. § 102(a).
63. *See* Harper & Row, Pub. v. Nation Enter., 471 U.S. 539, 547 (1985); Feist Pub., v. Rural Tel. Serv., 499 U.S. 340, 348–49 (1991) (explaining that while facts themselves are not copyrightable, a creative arrangement of those facts qualifies for the monopoly of copyright).
64. 17 U.S.C. § 102(a).
65. *Id.*; *see* Apple Computer, Inc. v. Franklin Computer Corp., 714 F.2d 1240, 1249 (3d Cir. 1983); Miller, *supra* note 20, at 448. Although the code itself is copyrightable in its literary state—that is the order of the coding language, the functionality that the code or script enables is not copyrightable—but rather is protected by patent law. *See also* Molly Stephens, Note, *Sales of In-Game Assets: An Illustration of the Continuing Failure of Intellectual Property to Protect Digital-Content Creators*, 80 TEX. L. REV. 1513, 1521 n.62 (2002) (citing Whelan v. Jaslow Dental Lab, 797 F.2d 1222, 1225 (3d Cir. 1986)). Scripts used to give a virtual object action also fit the “computer program” definition in 17 U.S.C. § 101 as “a set of statements or instructions to be used directly or indirectly in a computer in order to bring out a certain result.” 17 U.S.C. § 102(a)(8).

work,<sup>66</sup> because it meets the “fixation” requirement by being fixed in the read only memory (“ROM”) hardware of a computer, and can then be perceived with the aid of a machine or device.<sup>67</sup> Machinima would also seem to fit within this category.<sup>68</sup> In addition, courts have implicitly accepted the notion that digital images are capable of copyright protection.<sup>69</sup>

Theoretically, virtual world architectural works could be also protected separately under the subject matter category for architectural works.<sup>70</sup> Because building designs that are fixed in a tangible medium of expression are protected, the original features in a virtual architectural work could also be protected. The statutory definition for architectural works includes “buildings, plans, and drawings,” whether they are considered in the “overall form” or the “arrangement and composition of spaces and elements in the design.”<sup>71</sup> These works are subject to the limitation that “individual standard features” are not protected.<sup>72</sup> Thus, these creations could be subject to the more particular protections afforded architectural works beyond other visual, or audio-visual works.<sup>73</sup>

Copyright also affords protection to derivative works.<sup>74</sup> Copyright law defines a derivative work as “a work based upon one or more preexisting works . . . in which a work may be recast, transformed, or adapted . . . .”<sup>75</sup> Thus, the incentives embedded in the copyright structure function by protecting not only the actual expression, but by also protecting conceivable adaptations or transformations of the underlying expression.<sup>76</sup> For example, what starts out as an original work, such as a novel, can become a movie. The images of characters from the

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66. 17 U.S.C. § 102(a)(8).

67. See Stern Elec. v. Kaufman, 669 F.2d 852 (2d Cir. 1982); Furine Blaise, *Game Over: Issues Arising When Copyrighted Work is Licensed to Video Game Manufacturers*, 15 ALB. L. J. OF SCI. & TECH., 517, 530–31 (2005).

68. See Miller, *supra* note 20, at 453.

69. Kelly v. Arriba Soft Corp., 280 F.3d 934 (9th Cir. 2002). Daniel Miller explains that in *Kelly*, the defendant never challenged the potential of thumbnail images to not be worthy of copyright because of the medium, but rather asserted a fair use defense. The court also never questioned or investigated the potential that copyright did not vest because of the medium. See Miller, *supra* note 20, at 449.

70. 17 U.S.C. § 102; see Miller, *supra* note 20, at 451–52.

71. 17 U.S.C. § 101.

72. *Id.*

73. See Miller, *supra* note 20, at 452.

74. 17 U.S.C. § 101.

75. *Id.* Under one theory, the right to create derivative works has evolved to protect an underlying creative work from the potential unauthorized incorporation or adaptation of that work into another work in a different medium to exploit a separate market. See Timothy Everett Nielander, *The Mighty Morphin Ninja Mallard: The Standard for Analysis of Derivative Work Infringement in the Digital Age*, 4 TEX. WESLEYAN L. REV. 1, 11 (1997). See generally 1 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT ch. 3, § 307 (2006) (providing an explanation of the right to create derivative works and compilations) [hereinafter 1 NIMMER ON COPYRIGHT].

76. See Goldstein, *supra* note 58, at 209.

movie can be made into posters, and the images of the posters can then be made into a computer screensaver. In virtual worlds, a virtual car can become a boat, a wall, a dress, an avatar, or anything that a creator imagines. If the work is transformed, then copyright in that new object could vest independently, even if many of the original creative decisions are apparent in the transformed or modified object. If the underlying elements are already protected, then the new copyright protection vests only as to the newly created elements, and the previously protected elements are not folded into the new copyright.<sup>77</sup> Rather, the original author of the novel still retains the copyright in the underlying work.<sup>78</sup> A work does not need to be modified substantially in order to be considered a derivative work, although the originality requirement still exists.<sup>79</sup> Therefore, the result of the continued protection of the underlying material through new transformations places restrictions on how the underlying creation can be subsequently modified or transformed.

Because creators can allow others to modify their work through the code-based permissions in Second Life, works may be built by adapting, recasting, transforming, editing, or modifying an underlying work.<sup>80</sup> If the modification feature is enabled, then editing of the work is possible by the transferee who has control over the modification permission. If the transferee possesses an object for which modification is allowed, then the object can be easily altered to form a new expression—either through minor modifications, such as a change in texture or color, to larger modifications, such as rewriting part of the scripting code, or combining the object with other objects to form a new and different work.<sup>81</sup>

Although copyright law grants broad protections to creators, these protections are subject to certain limitations. One such limitation is the “useful article doctrine,” which applies specifically to “pictorial, graphic, and sculptural works.”<sup>82</sup> Under the useful article doctrine, if a work is created primarily for functional purposes, then the creation is not a proper subject for copyright, except

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77. 17 U.S.C. § 103(b) (“The copyright in a compilation or derivative work extends only to the material contributed by the author of such work, and does not imply any exclusive right in the preexisting material. The copyright in such work is independent of, and does not effect or enlarge the scope, duration, ownership, or subsistence of, any copyright protection in the preexisting material.”).

78. 17 U.S.C. § 103(b); see Lydia Pallas Loren, *The Changing Nature of Derivative Works in the Face of New Technologies*, 4 J. SMALL & EMERGING BUS. L. 57, 62 (2000).

79. See *Kamar Int'l., Inc. v. Russ Berrien & Co.*, 657 F.2d 1059, 1061 (9th Cir. 1981) (finding that animal “soft sculptures” were not copyrightable because the idea of toy animals was already in the public domain and the sculptures lacked originality).

80. See Jennifer Granick, *Second Life Will Save Copyright*, WIRED.COM, Nov. 20, 2006, <http://www.wired.com/news/columns/0,72143-0.html>.

81. See Loren, *supra* note 78, at 62 (discussing digital works where the raw material is used, but is unrecognizable).

82. 17 U.S.C. § 101.

as to the non-utilitarian elements of the creation.<sup>83</sup> Although an object may be considered a useful object, those elements of the design that can still benefit from protection are those that “can be identified separately from and are capable of existing independently of, the utilitarian aspects of the article.”<sup>84</sup> Because virtual objects are inherently visual or audio-visual works, the useful article doctrine does not appear to limit what works can be protected, leading to a greater amount of protected works.<sup>85</sup>

Another limitation to copyright protection is if the works are composed of elements existing in the public domain that do not contain the requisite amount of originality to qualify for protection.<sup>86</sup> Once a creation has achieved the requisite level of originality, it is protected except to those elements that exist in the public domain, or have already been protected elsewhere. Nothing suggests that virtual objects should not be subject to the same limitations. Copyright protection most likely transfers to the virtual world from the underlying protected elements under the right to create derivative works.

In sum, copyright vests in virtual works fewer rights than physical works because virtual creations can be viewed inherently as visual or audio-visual works. Therefore, creators have arguably broader protection over virtual creations and subsequent derivative modifications of those creations than they would have over physical creations.

#### B. *Who Owns the Creation?*

In virtual platforms, as well as in many websites and software applications, rules and rights as to use of that platform are determined when a user agrees to sign onto the site through the TOS/EULA. Like a contract of adhesion, the user must agree to the terms, or will not be allowed to use the site or services that are provided. In almost all TOS/EULA agreements in virtual platforms, provisions require that any rights that might be created by activity in that world are to be assigned to the platform as a term of using the platform.<sup>87</sup> Therefore, the plat-

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83. Section 101 states “[T]he design of a useful article . . . shall be considered a pictorial, graphic, or sculptural work only if, and only to the extent that, such design incorporates pictorial, graphic, or sculptural features that can be identified separately from, and are capable of existing independently of, the utilitarian aspects of the article.” *Id.*; see *Mazer v. Stein*, 347 U.S. 201 (1954) (deciding that copyright vested in useful articles as to their form, but not as to their utilitarian features).

84. 17 U.S.C. § 101.

85. See *infra* Part V. for a discussion that this limitation should be applied to virtual worlds.

86. See *id.*

87. For one clear example, visit the MMORPG, *Eve Online*, EULA § 11, <http://support.eve-online.com/Pages/KB/Article.aspx?id=291> (last visited Aug. 23, 2007). Whether users have rights, or their avatars separately have rights, is a hotly discussed idea. These range from discussion of whether a user has a tort action against another user for inflicting damage, to whether creations that are assigned through the TOS/EULA are valid. See Symposium, *supra* note 9, at 807–08; see also Ralph Koster, *A Declaration of the Rights of Avatars*, Aug. 27, 2000, <http://www.raphkoster.com/gaming/playerights.shtml>.

form 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. In order to provide users access to these creations, the platform owners then license back specific rights through provisions in the TOS/EULA.<sup>88</sup>

Because users must assign potential rights, they cannot exploit the rights they have earned through creation, and therefore the incentive behind granting the limited monopoly of copyright is undermined.<sup>89</sup> If the TOS/EULA states that rights are assigned to the platform owners and that the user's accounts and objects in their inventory are subject to deletion or modification by the platform owners, then if the platform owners delete a user-created object, the user-creator has little recourse. For a user-creator who might have spent time, energy, and money creating a complex object, at a minimum the loss would be frustrating. This structure also allows *platform owners* to exploit a user's creations rather than the user. The platform owners might take a valued user-created object and sell it. The value that might exist, either monetarily or otherwise, is unceremoniously stripped from the creator.

In contrast to this general scheme of users assigning potential rights to the platform owner, in 2003, Linden Labs, the owner of Second Life, announced that all rights created by users would be retained by the users, rather than assigned to Linden Labs.<sup>90</sup> Reaction was mainly positive, although at least one commentator had reservations rooted in concern about a virtual world becoming more restrictive to creation, rather than less so.<sup>91</sup> The Second Life TOS still requires users to license their creations for almost all types of use to Linden Labs, but enables users to control all other rights to their works. Although allowing users to retain rights to their creative works adds the complication of applying copyright to virtual objects, the incentive structure of copyright is preserved.

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88. See Eve Online, EULA, *supra* note 87, at § 10.

89. Because no users control rights, creators do not need to be concerned about whether they infringe on another user's rights through their creative activities within the platform.

90. See Second Life Press Release, *Second Life Residents to Own Digital Creations*, Nov. 14, 2003, [http://lindenlab.com/press/releases/03\\_11\\_14](http://lindenlab.com/press/releases/03_11_14). The relevant TOS provisions state: "Users of the Service can create Content on Linden Lab's servers in various forms. Linden Lab acknowledges and agrees that, subject to the terms and conditions of this Agreement, you will retain any and all applicable copyright and other intellectual property rights with respect to any Content you create using the Service, to the extent you have such rights under applicable law." Second Life, TOS § 3.2, <http://secondlife.com/corporate/tos.php> (last visited Aug. 23, 2007).

91. See James Grimmelmann, *The State of Play: Free as in Gaming?*, Posting on LawMeme, Dec. 4, 2004, 00:25 EST, <http://web.archive.org/web/20040603114815/http://research.yale.edu/lawmeme/modules.php?name=news&file=article&sid=1290> (last visited Oct. 15, 2007).

C. *Ambiguity, Infringement, and Restriction of Creative Expression*

Because a copyright holder has exclusive control over her creative material, if *all* the works in a virtual environment are potentially subjects of copyright, then *any* new works that are substantially similar to the copyrighted works infringe on that copyrighted work. The following section discusses the basics of copyright infringement, the scope of infringement that occurs simply by engaging in creative activities in Second Life, the ambiguities in determining the extent of protection, and the difficulty in determining ownership of copyright for virtual works.

Copyright infringement occurs when a user makes a “copy” of another’s protected work without permission.<sup>92</sup> “Copy” is a blanket term used to describe an infringement on any of the exclusive rights granted to the copyright holder.<sup>93</sup> In order for a plaintiff to win a case of alleged copyright infringement, she must first establish her own valid copyright, and then prove that another copied her work.<sup>94</sup> If direct evidence of copying is unavailable, copyright infringement may be inferred through a showing that the alleged infringer had access or exposure to, or somehow had known about the copyrighted work, and that the works are “substantially similar.”<sup>95</sup> Courts have created varying tests for determining substantial similarity.<sup>96</sup> One test breaks down substantial similarity into two parts: (1) whether the alleged infringer appeared to use the copyright holder’s work as the basis or template for the infringing work, and (2) whether the appropriation occurred improperly.<sup>97</sup> If two items are created independently of another, and happen to look the same, both works exist independently and no infringement has occurred.<sup>98</sup>

In Second Life, the most direct method of infringement occurs when someone creates an object with particular traits that are substantially similar to an already-existing object with the same traits. One user, X, makes an avatar shape that looks like a cross between a tiger and a crab with a mohawk, and another admiring user, Y, decides that she wants the same. Without asking X, Y uses available tools and creates a strikingly similar facsimile of X’s tiger-crab. Y has just infringed X’s in-world copyright. If Y never saw X’s tiger-crab and was simply having a similar hallucination, and although the works look similar, if X

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92. 17 U.S.C. § 501 (2000).

93. See *S.O.S. Inc. v. Payday, Inc.*, 886 F.2d 1081, 1085 n.3 (9th Cir. 1989).

94. See *Atari v. North Am. Phillips Consumer Elec.*, 672 F.2d 607, 614; 4 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT ch. 13, § 13.01 (2006) [hereinafter 4 NIMMER ON COPYRIGHT].

95. See *Atari*, 672 F.2d at 614.

96. 4 NIMMER ON COPYRIGHT, *supra* note 94, at ch. 13, § 13.03[1] (explaining abstractions test, pattern test, total concept test, feel test, and other tests).

97. See *Atari*, 672 F.2d at 614; 4 NIMMER ON COPYRIGHT, *supra* note 94, at ch. 13, § 13.01[B].

98. See 4 NIMMER ON COPYRIGHT, *supra* note 94, at ch. 13, § 8.01[A].



cannot prove the access element of infringement, then Y should not be held liable. However, if the works are similar enough, then proof of exposure to X's creation becomes less determinative and Y can be liable regardless of Y's excuse.<sup>99</sup>

A second way in which direct copying can occur without permission is through the creation of an object coded to replicate other objects. The introduction of a "CopyBot" into Second Life illustrates this example.<sup>100</sup> CopyBot was created for the specific purpose of being able to make a replica of another's work without permission. Because the device itself can be replicated, many instances of the device have been distributed, and have allowed multiple users to replicate other's objects at will. Although making instant and free replicas of other's objects is not immediately connected to the ordinary creative process, part of the creative process is the ability for users to create such devices, which are copyrightable themselves.<sup>101</sup>

Although Second Life is a platform where new and different objects are being constantly created, a copyright problem arises because users create with much of the same basic building information in a limited universe. Therefore, many of the works bear a strong resemblance to each other, and users can be easily exposed to each other's creations.<sup>102</sup> In the scenario where Y created something independent, yet similar to X's copyrighted creation, if X can prove his own valid copyright, then X would more easily be able to make a case for infringement because the access element would be easy to prove.<sup>103</sup> This is akin to a situation where X's song is played constantly on the radio. Songwriter Y who may never have heard the song, but happened to write a strikingly similar song, could easily be liable for infringement, even though Y might have never heard the song.

In addition to replication, another way in which infringement can easily occur is through modification of existing objects. A user who, through permissions, expressly authorizes modification by another user appears to provide a permanent license to the user who is modifying the creation.<sup>104</sup> But how far does this express authorization for modification extend? When parties create a licensing agreement, that agreement contains bargained-for provisions, including the term and scope of usage of the license.<sup>105</sup> If a permission is granted to use the

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99. *See id.* at ch. 13, § 13.02[B].

100. *See* Ralph Koster's Website, CopyBot, <http://www.raphkoster.com/2006/11/15/copybot/> (last visited Aug. 23, 2007).

101. A group called Libsecondlife, an open source software project for the development of Second Life applications, has taken responsibility for CopyBot's creation. *See generally* Libsecondlife, Libsl vs Copybot, [http://www.libsecondlife.org/wiki/Libsl\\_vs\\_copybot](http://www.libsecondlife.org/wiki/Libsl_vs_copybot) (last visited Sept. 19, 2007).

102. *See* Snapvilla, <http://www.sluniverse.com/pics/Default.aspx?Name=Jackson+Widget> (last visited Aug. 23, 2007) (providing screenshots of Second Life).

103. *See* 4 NIMMER ON COPYRIGHT, *supra* note 94, at ch. 13, § 13.02[B].

104. *See* Symposium, *supra* note 9, at 819.

105. *See* 3 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT ch. 10, § 10.03[7] (2006) [hereinafter 3 NIMMER ON COPYRIGHT].

underlying work for a set term, and a second user creates a derivative work, once the license expires the derivative work becomes a form of copyright infringement.<sup>106</sup> When a user is allowed to modify an existing object, the scope of rights granted is often unclear.<sup>107</sup> Opinions about exactly what the permission to modify means will vary, and a transferee who might make a later-valued derivative object that contains the transferor's underlying creation, would reasonably have an expectation that that he has been given all rights. A transferor might claim otherwise.

Understanding copyright infringement in the context of Second Life derivative works is more complicated. One distinction between a derivative work and a simple reproduction is that the derivative work creates an object in a new market when new material is added that is independent of the original underlying work.<sup>108</sup> But this definition does not work if the entire platform is seen as one market. Defining submarkets in order to understand whether a work infringes a derivative right could be difficult. Is a virtual boat just a boat? Or is a boat a shoe, or a hat, because an avatar can actually attach the object to any part of itself? Or is a boat another building block to create something entirely different?<sup>109</sup> Because each object is a visual or audio-visual work within a single platform, there may be no legal difference between objects within any platform-specific submarkets. It is possible that any creation within a virtual world could be legally considered within the same market, and that any substantial similarity of one creation to another implicates only the right of reproduction. Moreover, if an object can be exported, or the elements of that object can be copied into another virtual world, then infringement occurs external to the platform.<sup>110</sup>

An additional problem arises in determining ownership for jointly-created works. A jointly-created work is one that is "prepared by two or more authors with the intention that their contributions be merged."<sup>111</sup> The definition of a joint work breaks down into two elements:<sup>112</sup> (1) the co-authors each made contributions that were independently copyrightable, and (2) they intended the work

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106. See 1 NIMMER ON COPYRIGHT, *supra* note 75, at ch. 3, § 3.07 (explaining that the new derivative work based on a license only exists as long as the license, and that an actual "new" copyright does not spring from the old so that once the license to the underlying material is terminated, no rights in the derivative work exist) (citing *Ricordi & Co. v. Paramount Pictures Inc.*, 189 F.2d 469 (2d Cir. 1951)); *Gilliam v. Am. Broad. Co.*, 538 F.2d 14 (2d Cir. 1976).

107. See Symposium, *supra* note 9, at 818–19 (Masato Hayakawa & Cory Ondrejka discussing the question of the extent of implied licenses in virtual platforms).

108. See Stephens, *supra* note 65, at 1524 n.85 (citing PAUL GOLDSTEIN, COPYRIGHT § 5.3 (2d. ed. 1986)).

109. See Naomi Abe Voegtli, *Rethinking Derivative Rights*, 63 BROOK L. REV. 1213, 1223 (1997).

110. *But see* *Eliya Inc. v. Kohl's Dep't. Stores*, No. 06 Civ. 195, 2006 WL 2645196 (S.D.N.Y. Sept. 13, 2006) (determining that a shoe did not infringe on a two-dimensional picture of a similar shoe design).

111. 17 U.S.C. § 101 (2000); *Thomas v. Larson*, 147 F.3d 195 (2d Cir. 1998); *Childress v. Taylor*, 945 F.2d 500, 504–07 (2d Cir. 1991); 1 NIMMER ON COPYRIGHT, *supra* note 75, at ch. 6, § 6.07.

112. See *Miller*, *supra* note 20, at 458.

to be jointly created.<sup>113</sup> In a virtual world, where so many works are built upon each other and in collaboration, teasing out the individual creators and their intentions becomes a near impossible process. Further, the attribution function within Second Life, which identifies a creator of an object, only identifies the original creator, and not subsequent modifiers or collaborators.<sup>114</sup> Where would one go to track down the owners of a work that a hundred or a thousand users helped craft? What if one wanted to incorporate the work into another's to build her own work? Transaction costs for obtaining licenses could prove chilling to creation and further development.<sup>115</sup>

Overall, as the number of copyrighted user-created objects increases, new creations could infringe on existing copyrights if the new creation is built from material that already exists, or is substantially similar to already existing objects.<sup>116</sup> Because rights are unclear, a creator who values his original work might either sue, or would prohibit modification of his objects to protect his rights.<sup>117</sup> Either avenue restricts creativity—either through the chilling effect of suit, or from a mechanical restriction on one of the ways in which creation occurs.<sup>118</sup> This is a result that copyright law tries to prevent.

Copyright law has not yet solved any issues in virtual worlds—there have been no cases and Congress has not yet acted.<sup>119</sup> Case law in this area is sparse, relates more directly to videogames, and has limited applicability to current vir-

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113. 17 U.S.C. § 101.

114. This also implicates ownership through collective works where each subsequent contributor can claim copyrights to parts of the whole, and copyright to the whole as such vests separately. 17 U.S.C. § 201(c).

115. See Voegtli, *supra* note 109, at 1223. Jack Balkin refers to this as inhibiting the right to play. Balkin, *supra* note 5, at 2065. See also Michael Abramowicz, *A Theory of Copyright's Derivative Right and Related Doctrines*, 90 MINN. L. REV. 317, 384–85 (2005).

116. See Jennifer Granick, *Second Life Will Save Copyright*, WIREDCOM, Nov. 20, 2006, <http://www.wired.com/news/columns/0,72143-0.html>.

117. A posting about a building found in a Second Life forum attempts to explain the combination of permissions available to a creator, and what these mean. At the very least it is confusing, and moreover, the assumptions of what rights are created is questionable. Posting of Phoenix Linden, <http://forums.secondlife.com/showthread.php?t=6729> (Nov. 13, 2003, 1:41 PST).

118. A recent examination of “free” objects at an item bazaar reveals that almost every single object does not allow further modification. Although suit is a real possibility as values increase, protection of rights through disallowing modification is the seemingly clearer and cheaper immediate route to protecting rights. Additionally, costs for virtual worlds in responding to increased monitoring associated with take-down provisions of the Digital Millennium Copyright Act, 17 U.S.C. § 512(c), will increase, thus translating to higher costs for end-users. See posting of Babbagelinden, <http://blog.secondlife.com/2005/10/29/vegas-or-burning-man/> (Oct. 29, 2005, 7:38 PST).

119. A suit has been filed for breach of contract against Linden Labs which should test how some courts approach virtual property rights. See Plaintiff's Complaint in Civil Action, *Bragg v. Linden Research, Inc.*, No. 06-08711 (Pa. Chester County 2006), available at [http://lawy-ers.com/BraggvLinden\\_Complaint.pdf](http://lawy-ers.com/BraggvLinden_Complaint.pdf). See also Kathleen Craig, *Second Life Deal Goes Sour*, WIREDCOM, May 18, 2006, <http://www.wired.com/news/culture/0,70909-0.html>.

tual world activities.<sup>120</sup> Creators do have the ability to waive some or all of their rights to an object through a Creative Commons license.<sup>121</sup> But creators have little incentive to waive their rights, and therefore rather than offering an extensive solution, the availability of Creative Commons licenses only provides an ill-fitting patch.<sup>122</sup> Thus, the current scheme does not solve any problems, and a new set of solutions are necessary to clarify rights and provide the balance that copyright law attempts to achieve.

#### IV. COMMODIFICATION AND THE IMPLICATIONS FOR CREATIVE EXPRESSION

Commerce is encouraged in Second Life, and a market for user-created objects is flourishing.<sup>123</sup> Sales are made in Linden Dollars, the in-world currency of Second Life, but can be exchanged for real-world money through a currency exchange.<sup>124</sup> Because of the commercial potential of Second Life, physical-based businesses have entered the virtual world, not only to sell in-world replications of their products, but mainly to drive their physical world sales.<sup>125</sup> Nissan, Pontiac, Sun Microsystems, and American Apparel are some of the commercial entities that have established themselves in-world.<sup>126</sup> Starwood Hotels has invested in a virtual hotel chain.<sup>127</sup> A recent article questions whether ad money is being diverted to Second Life from Yahoo.com.<sup>128</sup> A congressional committee has even

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120. *See* *Micro Star v. Formgen, Inc.*, 154 F.3d 1107 (9th Cir. 1998); *Lewis Galoob Toys, Inc. v. Nintendo*, 964 F.2d 965 (9th Cir. 1992).

121. Creative Commons allows a copyright holder to easily waive any of the rights in the copyright bundle. *See* Creative Commons, <http://creativecommons.org/> (last visited Aug. 23, 2007). A Creative Commons license “machine” was introduced into Second Life to allow those users that want to voluntarily relinquish some rights, and maintain others to more easily facilitate that action. *See* Balkin, *supra* note 5, at 2065; Democracy Island, *New Ways to Create and Communicate in Second Life: CC Licenses and Live Video of SL in SL*, [http://nyls.blogs.com/demoisland/2006/01/new\\_ways\\_to\\_cre.html](http://nyls.blogs.com/demoisland/2006/01/new_ways_to_cre.html) (describing the Creative Commons machine available in Second Life) (last visited Aug. 23, 2007).

122. Although Creative Commons provides little solution in this context, nothing should detract from having Creative Commons as a freely available in-world tool for those that want to waive certain rights.

123. *See* Second Life, The Marketplace, <http://secondlife.com/whatis/marketplace.php> (last visited Aug. 23, 2007).

124. *See* Second Life, LindeX Market Data, <http://secondlife.com/whatis/economy-market.php> (last visited Aug. 23, 2007).

125. *See* Katie Benner, *Investing in the Online Property Boom*, CNNMONEY.COM, Oct. 20, 2006, [http://money.cnn.com/pr/subs/2006/10/20/technology/second\\_life\\_money/index.htm](http://money.cnn.com/pr/subs/2006/10/20/technology/second_life_money/index.htm).

126. *See* Richard Siklos, *A Virtual World but Real Money*, N.Y. TIMES, Oct. 19, 2006, at C2; Peter Valdes-Dapena, *Real Cars Drive into Second Life*, CNNMONEY.COM, Nov. 18, 2006, [http://money.cnn.com/2006/11/17/autos/2nd\\_life\\_cars/index.htm](http://money.cnn.com/2006/11/17/autos/2nd_life_cars/index.htm).

127. *See* Gross, *supra* note 12.

128. *See* Bruce Nussbaum, *Ads Shifting Away From Yahoo to Second Life?*, BUSINESSWEEK ONLINE, Oct. 18, 2006, [http://www.businessweek.com/innovate/NussbaumOnDesign/archives/2006/10/ads\\_shifting\\_aw.html](http://www.businessweek.com/innovate/NussbaumOnDesign/archives/2006/10/ads_shifting_aw.html).

begun discussions about whether to tax income derived from virtual assets.<sup>129</sup> These examples show the legitimate monetary value of virtual creations and thus make the prospect of a lawsuit for copyright infringement more realistic.<sup>130</sup>

Commodification has important implications for another reason: The increase in monetary value can lead to other platforms developing similar rule-sets as Second Life. Although currently Second Life is the only virtual world that allows players to retain copyrights, as virtual objects continue to have physical-world monetary value, more systems will have an incentive to follow Second Life's example, and shift their own rule systems.<sup>131</sup> Many users will likely still participate in multiple virtual worlds, but users would probably spend more of their total time in virtual worlds in which they would best be rewarded for their efforts.<sup>132</sup> Additionally, the greater amount of income a virtual system generates, the greater the incentives to enter become. Creating a new virtual platform that allows users to retain copyrights for their creations becomes a safer investment for those seeking new avenues of financial opportunity. As more platforms embrace similar rules and users have more rights, the potential for creators protecting rights through legal action increase. As legal rights are enforced, the result would again have chilling effects on user creation.

## V. REDUCING THE RESTRICTIONS THAT LIMIT CREATIVE EXPRESSION

The simultaneous application of the three sources that determine rights to virtual objects in Second Life both creates an environment that encourages copyright infringement, and creates a lack of clarity as to ownership of those rights. First, because the copyright laws were not drafted to address the creation of virtual objects; second, because the TOS lacks express language to clearly resolve ambiguities created by copyright laws; and finally, because the TOS/EULA does not attempt to define the limits of user-based permissions which act as licenses between users.

Two conclusions can be drawn from this situation. Once suits are commenced, the lack of clarity about what rights a user-creator actually has, and whether that user has engaged in copyright infringement, could ultimately chill creation rather than providing the incentives that the copyright structure de-

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129. See Press Release, Chairman Jim Saxton, Joint Economic Committee, Virtual Economies Need Clarification, Not More Taxes (Oct. 17, 2006); Adam Pasick, *Virtual Economies Attract Real-World Tax Attention*, REUTERS, Oct. 16, 2006, available at [http://findarticles.com/p/articles/mi\\_zdcis/is\\_200610/ai\\_n19417295](http://findarticles.com/p/articles/mi_zdcis/is_200610/ai_n19417295).

130. See Martin Davies, *Capitalism Encroaches on Virtual Utopia*, THE GUARDIAN, July 6, 2006, available at <http://technology.guardian.co.uk/weekly/story/0,,1813106,00.html>; Balkin, *supra* note 5, at 2064–65.

131. Second Life recorded its one millionth resident in October 2006. See Daniel Terdiman, *'Second Life' Tops 1 Million*, CNET NEWS.COM, Oct. 18, 2006, [http://news.com.com/2061-10797\\_3-6127230.html](http://news.com.com/2061-10797_3-6127230.html).

132. This can also lead to users being able to spend more time in their preferred virtual environment because they can derive income.

mands. Additionally, because virtual objects are a wholly different type of creation from physical objects and can be viewed simultaneously as copyrightable subject matter, useful objects that function as raw building materials for other users, and more traditional property-like chattels, traditional copyright should not apply at all, and entirely new rights should be created within the virtual world platform.<sup>133</sup>

The following section suggests two sets of solutions. The first set addresses ways in which traditional copyright law can be interpreted to apply specifically to virtual creations. The second set addresses rights at the local platform level, utilizing the TOS/EULA and user-based permissions to either work in conjunction with traditional copyright, or to create a new framework of rights specific to a virtual world.

### *A. Interpretations of Copyright Applicable to Virtual Creations*

#### *1. More Fair Use*

One interpretation of copyright to help restore incentives could be through a broad reading of “fair use.”<sup>134</sup> The fair use statute in the copyright scheme provides an affirmative defense after a plaintiff establishes a prima facie case of infringement.<sup>135</sup> Although fair use is a defense, it is considered to be an integral part of copyright intended to ensure that the exclusive rights that copyright provides are not overly restrictive to other creators.<sup>136</sup> The fair use analysis compares the works at issue and essentially seeks to determine whether the new work supersedes the use of the original and subsumes the original, or whether it is being used for a completely different purpose.<sup>137</sup> In the virtual context, a liberal reading of fair use can provide breathing room for creators.

Fair use analysis involves a fact-intensive four-factor approach.<sup>138</sup> The first factor is the purpose and character of the use, and, in part, examines whether the use is for commercial, educational, or other purposes.<sup>139</sup> Second is the nature of the copyrighted work.<sup>140</sup> Third is the amount and substantiality of the portion used in relation to the whole.<sup>141</sup> Fourth is the effect of the use upon

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133. See Granick, *supra* note 80.

134. See 17 U.S.C. § 107 (2000).

135. See *id.* (specifying a number of categories in which fair use applies, although this list is not meant to be exhaustive).

136. See Leval, *supra* note 61, at 1107 (“Fair use should be perceived not as a disorderly basket of exceptions to the rules of copyright, nor as a departure from the principles governing that body of law, but rather as a rational, integral part of copyright, whose observance is necessary to achieve the objectives of that law.”).

137. See *Folsom v. Marsh*, 9 F.Cas. 342, 344–45 (1841).

138. 17 U.S.C. § 107.

139. *Id.*; see also *Campbell v. Acuff-Rose Music, Inc.* 510 U.S. 569, 578 (1994).

140. 17 U.S.C. § 107.

141. *Id.*

the potential market for, or value of, the copyrighted work.<sup>142</sup> The most significant factor of these four, and the one that is often determinative in finding fair use, is the first factor under which the new work is examined as to how “transformative” it is in relation to the prior work.<sup>143</sup> The creation of transformative works has been seen as “at the heart of the fair use doctrine’s guarantee of breathing space within the confines of copyright.”<sup>144</sup>

Transformative use is central to the creation of many virtual objects through modification and collaboration. Although the total fair use analysis is a balancing of factors, because of the nature of the type of creation virtual worlds enable, the transformative factor should weigh more heavily than in an ordinary analysis. Thus, courts would recognize and accord significance to the ordinary creative behavior of substantially incorporating and modifying a prior protected object.<sup>145</sup> In this respect, works in virtual worlds should be considered a companion to appropriation in art and parody.<sup>146</sup> Where there is transformation of the use, such as when a flower becomes a plane, which can then become an avatar twisting and stretching, there could be no “market substitution”<sup>147</sup> even though the original work is substantially used. Less weight should then be accorded to other factors, and a finding of a fair use should be more easily found.<sup>148</sup> This in turn would lead to less infringement, and more creative activity.

## 2. Useful Article Doctrine

In addition to a determination of fair use after infringement is found, another approach would seek to reduce the amount of copyright-protected objects within a virtual environment by applying the useful article doctrine.<sup>149</sup> Because

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142. *Id.*

143. See Leval, *supra* note 61, at 1107.

144. *Acuff-Rose*, 510 U.S. at 579.

145. *Id.* at 581 n.14.

146. A recently decided case in the Second Circuit regarding a Jeff Koons appropriation art piece affirmed this notion of transformative use of an image to create a new, non-infringing, and separately copyrightable work through a re-contextualizing of a work. *Blanch v. Koons*, 467 F.3d 244 (2d Cir. 2006); see also Voegtli, *supra* note 109; Roxana Badin, Comment, *An Appropriate(d) Place in Transformative Value: Appropriation Art’s Exclusion From Campbell v. Acuff-Rose Music, Inc.*, 60 BROOK. L. REV. 1653 (1995).

147. Market substitution is examined under the fourth prong of fair use analysis, and what is sought to be avoided. It occurs when the allegedly infringing work effectively replaces the original in the marketplace, thereby taking profits. A finding that the work is not a market substitute is probative towards a finding of fair use. See *Acuff-Rose*, 510 U.S. at 591.

148. *Acuff-Rose*, 510 U.S. at 581 n.14. The difference is that in parody there is a comment on the work itself. In virtual objects, there may not be the same comment on the work, but the transformative quality like in parody should still remain.

149. 17 U.S.C. § 101 (2000) (“[T]he design of a useful article . . . shall be considered a pictorial, graphic, or sculptural work only if, and only to the extent that, such design incorporates pictorial, graphic, or sculptural features that can be identified separately from, and are capable of existing independently of, the utilitarian aspects of the article.”).

this doctrine limits what material is worthy of copyright protection, applying it would place a greater amount of basic building materials in the public domain, allowing creators to use these forms with less fear of infringement.

The useful article doctrine limits protection for the subject matter of pictorial, graphic, and sculptural works to their mechanical or utilitarian aspects.<sup>150</sup> As described earlier, this does not preclude all aspects of a useful article from protection. Rather, the protection extends only to elements “that can be identified separately from, and are capable of existing independently of, the utilitarian aspects of the article.”<sup>151</sup> The underlying reason is a policy that there should not be a cross-over between design patents and copyright, because copyright is about artistic creations, and not about utility.<sup>152</sup> Of course what can be conceived of conceptually as an artistic creation is problematic, and goes toward a much deeper philosophical debate.<sup>153</sup> In practice, courts have developed different tests to approach the conceptually separable issue in order to identify the copyrightable elements of a work.<sup>154</sup>

The useful article doctrine could apply to a virtual context like Second Life because many objects are used primarily for their utility, and not simply for their artistic value. Certain objects function with comparatively similar utility as physical objects. Wings that make an avatar fly faster, a blimp that carries an avatar away, a slot machine, or clothes that an avatar wears are all examples of objects that fit a more traditional type of utility or applied art definition. All of these objects could still contain separable copyrightable elements similar to their physical counterparts.

But virtual objects are also objects of utility for another more vital reason. Because objects build on each other as part of the integral process in which new objects are created, many objects also function as building blocks for new works, and are therefore utility objects themselves.<sup>155</sup> Basic user-created templates that

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150. 17 U.S.C. § 101; *see also* *Mazer v. Stein*, 347 U.S. 201 (1954) (holding that the statuette base of a lamp was copyrightable as separable from the lamp’s utilitarian aspects); *Kisselstein-Cord v. Accessories by Pearl, Inc.*, 632 F.2d 989, 990 (2d Cir. 1980) (upholding copyright for belt buckles); 1 NIMMER ON COPYRIGHT, *supra* note 75, at ch. 2, § 2.08 [3].

151. 17 U.S.C. § 101.

152. *See* Patent For Designs, 35 U.S.C. § 171 (2000) (“Whoever invents any new, original and ornamental design for an article of manufacture may obtain a patent therefor, subject to the conditions and requirements of this title.”); Robert C. Denicola, *Applied Art and Industrial Design: A Suggested Approach to Copyright in Useful Articles*, 67 MINN. L. REV. 707, 707–08 (1983); Michael J. Lynch, *Copyright in Utilitarian Objects: Beneath Metaphysics*, 16 U. DAYTON L. REV. 647, 656 (1991).

153. *See* Denicola, *supra* note 152, at 647.

154. *See* 1 NIMMER ON COPYRIGHT, *supra* note 75, at ch. 2, § 2.08 (B)[3]; *Brandir Int’l Inc. v. Cascade Pacific Lumber Co.*, 834 F.2d 1142, 1145 (2d Cir. 1987) (identifying conceptual separability for elements where the designers choices were made independent of functional choices) (citing Denicola, *supra* note 152, at 707).

155. *See* Voegtli, *supra* note 109, at 1213–14 (discussing how digital creations serve as raw creative materials).



are more complex than ordinary prims and are commonly used for creation would fit in this category. The same plane that functions as a plane could also be a template for another type of craft, or could be used in combination with other objects to form something completely different. The underlying idea is that avatars regularly use objects that could be subjects of copyright as raw creative materials.<sup>156</sup>

*B. Localizing Rights Through the TOS/EULA and User-Based Permissions*

Reducing ambiguity in rights could also be achieved locally through the TOS/EULA within a particular virtual world, and localized further through code-based and user-controlled licensing. The TOS/EULA, which acts as the contract applicable to all users within a platform, can expressly define the application of copyright, the contours of those rights, and the scope of rights granted through user-based permissions.<sup>157</sup>

The TOS can clearly address copyrights in Second Life through various provisions. One provision would simply have users agree not to file suit for particular in-world uses, such as modification when building something new. A second provision could require users to settle their disputes through an in-world dispute resolution system.<sup>158</sup> Finally, the TOS could define the terms and scope of the license permissions. While defining these terms might result in the same rights that copyright would ordinarily provide, the difference would be clarity for users.<sup>159</sup>

A second solution that can be implemented locally is a complete waiver to copyrights through the TOS/EULA. This would eliminate copyright concerns, and would allow a platform to create the overarching layer of rights that users have to their creations.<sup>160</sup> The TOS/EULA would expressly define the nature and rights of the various and particular virtual property types within that platform, thereby more specifically addressing the type of creativity that the particular platform enables. A user might have slightly different rights to her modified avatar shape, than to a motorcycle or sculpture, instead of having all rights labeled uniformly through the limited application of copyright. Additionally, by

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156. *Id.*

157. See Andrew Jankowich, *Eulaw: The Complex Web of Corporate Rule-Making in Virtual Worlds*, 8 TUL. J. TECH. & INTELL. PROP. 1 (2006).

158. One Second Life user has made a dispute resolution proposal. James Miller's Dispute Resolution Proposal, <http://www.dragonscoveherald.com/blog/index.php?p=602> (last visited Aug. 23, 2007).

159. See Symposium, *supra* note 9, at 819.

160. See David R. Johnson & David Post, *Law & Borders—The Rise of Law in Cyberspace*, 48 STAN. L. REV. 1367, 1384 (1996) (“[T]reating Cyberspace as a distinct place for purposes of legal analysis does more than resolve the conflicting claims of different jurisdictions: It also allows the development of new doctrines that take into account the special characteristics of the online ‘place.’”).

eliminating reliance on the haphazard and poorly applicable copyright scheme, a rewritten TOS/EULA would afford a platform the opportunity to write clear rules directed towards fostering maximum creativity.

Through either of the above solutions, the TOS/EULA could also work in conjunction with a much more expansive set of code-based user permissions that function as licenses. Not only would these permissions provide a greater range of choices for a user to license rights, but it would also redirect the primary rights relationship predicated on the TOS/EULA of platform-to-user, to a relationship predicated on creator-based permissions of user-to-user. Creative choices would expand because a creator could set specific permissions to allow modification of color, texture, physical structure, script, or other aspects of the object. A user could also disallow other users from modifying the structural integrity of the object, but allow attachment to other objects as part of a collaborative structure. Limits to the extent of modifications can also be coded into permissions through a user-controlled tool, much in the same way avatars are commonly modified.<sup>161</sup> Then, not only would the type of permissible modifications be established, but so would the extent to which a user would allow others to modify a specific characteristic. Thus, the user-based permissions supported by the TOS/EULA would more accurately reflect express licenses.

More extensive licensing provided by a platform would also help restore balanced incentives in a commercial platform. Extensive permissions would permit a user to set prices for specific combinations of permissions. Greater flexibility in prices would provide a buyer-side incentive because a buyer could purchase different copies of the same object at different price levels for different combinations of permissions rather than purchasing an object with limited permissions, or as is usually the situation, no permissions enabled. A seller would also be more inclined to allow other users to modify or otherwise utilize her object for creative purposes if she, the creator of that object, could still preserve some of her identifying features.

## VI. CONCLUSION

Virtual platforms are at a turning point in terms of how they approach legal rights for user-created content. The practice of requiring users to assign all potential rights generated from their creations has begun to move toward allowing users to retain rights. But, although this direction appears to be beneficial for providing an incentive to increase creativity, liberating rights through a TOS/EULA to allow users to retain copyright is more complex than a simple decree. Rather, this liberalization of rights has led to an environment where rights are unclear, infringement is rampant, and the ultimate result will be chilled creativity. For these blossoming worlds to continue to expand based on user creations,

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161. See Symposium, *supra* note 9, at 811–12.

## FOSTERING CREATIVITY IN VIRTUAL WORLDS

any rights that users have must be addressed more specifically; first at the copyright interpretative level, and then, more importantly, at the localized platform level. At the local level, the TOS/EULA can clearly and accurately define the sets of rights that users have based on the creativity that occurs in that platform. At an even more localized layer, an expansive set of well defined code-based user licenses can let the users themselves have the greatest control over their creations. Approached thoughtfully and deliberately, these sources of rights-determination could provide the most appropriate set of incentives to encourage the greatest amount of creative activity for these evolving virtual worlds that are flourishing with content created by the users themselves.