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Who Owns an Avatar? Copyright, Creativity, and Virtual Worlds

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Who Owns an Avatar? Copyright, Creativity, and Virtual Worlds

Tyler T. Ochoa*

ABSTRACT

Today's massively multi-player online role-playing games (MMORPGs) offer their users the ability to create or customize their own avatars with distinctive visual appearances. This Article contends that users who take advantage of that ability are exercising significant creative choices, such that they should be considered the "authors" and copyright owners of their own avatars. The Copyright Act envisions several types of collaborative authorship, including joint authorship, works made for hire, and collective works. None of these models provides a good fit for user-created avatars, because avatars meet some, but not all, of the elements for each model. Here, the two theories underlying copyright law diverge: the incentive theory suggests that game providers are best situated to license games (including avatars) for other uses, while the natural right theory suggests that players deserve to be compensated for their original contributions to the game in creating their own avatars. This Article proposes that each avatar should be considered a joint work between the game provider and the user, and that each avatar should also be considered a contribution to a collective work (the game as a whole).

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Someone else claims to own your house. Your clothes. All of your possessions. The entire world in which you live. If someone else owns all of these things, does he also own you?¹

Massively Multiplayer Online Role-Playing Games (MMORPGs), or virtual worlds, are big business. The most popular MMORPG, Blizzard Entertainment's *World of Warcraft*, had over 10 million subscribers at the end of 2011, each of whom pays a monthly subscription fee.² Revenue from MMORPGs was estimated at \$2.7 billion in North America and Europe in 2010, and is projected to grow to over \$3 billion in 2015.³

One of the more attractive features of these games is the ability of users to create or customize their own avatars. While early MMORPGs provided only a rudimentary degree of customization, more advanced games now provide incredibly detailed options that allow a user to create virtually any type of avatar that he or she can imagine.⁴

The user's investment of time and creativity in creating and customizing an avatar raises a fundamental issue: Who "owns" the

1. This paragraph was adapted from an unpublished student paper written by Roy V. Zemlicka, Santa Clara University School of Law, Class of 2005. The author would especially like to thank Mr. Zemlicka for his role in bringing these issues to my attention, and for many thoughtful hours we spent discussing these issues.

2. *Activision Blizzard Announces Record Fourth Quarter and Calendar Year 2011 Earnings*, ACTIVISION BLIZZARD (Feb. 9, 2012), <http://investor.activision.com/releasedetail.cfm?ReleaseID=647732>.

3. Piers Harding-Rolls, *PC Multiplayer Online Games: MOGs & MMOGs in North America and Europe—2010 Market Review*, SCREEN DIG. (Aug. 9, 2011), http://www.screendigest.com/reports/201179b/2011_08_pc_multiplayer_online_games_mogs_mmogs_in_north_america_and_europe_-_2010_market_review/view.html.

4. See *infra* notes 7-28 and accompanying text.

resulting avatar? For example, suppose that the game provider wants to create a derivative work, such as a comic book or motion picture, based on the online game. Suppose further that instead of (or in addition to) creating its own characters, the game provider wants to use an existing user-created avatar that has gained some notoriety in the online world. If the game provider uses an avatar created by one of the game players, does the player have any basis for complaint? Does the game provider need the permission of the player to use his or her avatar? Does the game provider have to compensate the player, whether or not permission is needed? This Article examines one theory by which such an ownership interest might be acquired: namely, through the operation of federal copyright law.⁵

Part I of this Article describes a typical character-creation process and discusses why the End-User License Agreement (EULA) does not provide a satisfactory answer to the question of ownership. Part II applies basic copyright principles (originality, fixation, works of authorship, and idea expression) to video games and avatars. Part III discusses the five models of authorship and ownership provided by the Copyright Act, and attempts to apply those models to avatars. Part IV discusses the policy implications of assigning ownership to game providers or users and concludes that each avatar should be considered a joint work between the game provider and the user, as well as a contribution to a collective work (the game as a whole).

I. BACKGROUND: AVATARS AND LICENSES

A. Character Creation: An Example

In addressing the question of ownership, it may be helpful to define more precisely what an avatar is and what aspects of an avatar the user or game provider might want to protect. An avatar is a virtual representation of the user, or of the user's alter ego or character, in the virtual world of the game.⁶ An avatar may be

5. One should also consider the possibility that an ownership interest may be acquired through the operation of state law, namely, the right of publicity. See Oliver A. Khan, Note, *Me, Myself, and My Avatar: The Right to the Likeness of Our Digital Selves*, 5 I/S: J.L. & POL'Y FOR INFO. SOC'Y 447, 454-61 (2010). That discussion is beyond the scope of this Article.

6. See *Avatar*, MERRIAM-WEBSTER DICTIONARY, <http://www.merriam-webster.com/dictionary/avatar> (last visited Mar. 3, 2012) (defining avatar as "an electronic image that represents and is manipulated by a computer user"); *Avatar (Computing)*, WIKIPEDIA, [http://en.wikipedia.org/wiki/Avatar_\(computing\)](http://en.wikipedia.org/wiki/Avatar_(computing)) (last updated Mar. 16, 2012) (defining avatar as "the graphical representation of the user or the user's alter ego or character"); *Definition of "Avatar,"* COLLINS ENG. DICTIONARY, <http://www.collinsdictionary.com/dictionary/english/avatar>

considered to have four aspects. The first is the visual appearance of the avatar. Just as a cartoon character has a distinctive visual appearance, an avatar may have a distinctive visual appearance. The second are the “abilities” of the avatar, or how it is capable of moving, and what it is capable of doing (running, flying, fighting, casting spells, etc.). The third is the “behavior” of the avatar, or the manner and sequence in which those abilities are used during the course of game play. The fourth is a subset of the third, and consists of any words or “dialogue” spoken by the avatar during the course of game play.

While the first two aspects may be dictated by the game provider, many MMORPGs offer a wide variety of options for creating and customizing the visual appearance and abilities of one’s avatar. As an example of the type of robust character-creation options offered by current games, consider the character-creation engine of the MMORPG *City of Heroes*.⁷

A user starts by selecting an archetype. There are five “Hero” archetypes and five “Villain” archetypes to select from.⁸ The user then selects one of five “origins” for the avatar’s superpowers (mutant, science, technology, natural, or magic).⁹ The user is then presented with a choice of different “power sets” that are available for that archetype.¹⁰ Each power set is a group of nine related powers or abilities; the avatar starts with the most basic abilities in the power set and acquires more exotic powers as it progresses through the game.¹¹ The user selects a “primary” power set from a list of seven or eight possible power sets and a “secondary” power set from a list of six

(last visited Mar. 3, 2012) (defining avatar as “a movable image that represents a person in a virtual reality environment or in cyberspace”).

7. The character creation process is described generally at *Welcome to City of Heroes: Creating a Hero*, CITY OF HEROES, http://na.cityofheroes.com/en/game_info/welcome_to_city_of_heroes/creating_a_hero.php (last visited Mar. 5, 2012) [hereinafter *Creating a Hero*], and at Hyperstrike, *Guide: A New Player’s Guide to the CoH: Freedom Character Generator*, CITY OF HEROES (Oct. 1, 2011, 3:41 AM), <http://boards.cityofheroes.com/showthread.php?t=273765>. Additional information may be gleaned from watching the following videos demonstrating the character-creation process. See DeadBoomStudios, *City of Heroes Character Creation*, YOUTUBE (Sept. 10, 2009), <http://www.youtube.com/watch?v=Tx59YD3yJK8>; MMOHut, *City of Heroes Character Creation*, YOUTUBE (May 21, 2009), http://www.youtube.com/watch?v=_bycnlahZxk; PhotonHerald, *City of Heroes: Character Generator Overview*, YOUTUBE (Oct. 24, 2011), <http://www.youtube.com/watch?v=iSwNfr0DY28>. Unless otherwise specified, all information in the next four paragraphs is found in these five sources.

8. See *Archetypes: Archetypes Overview*, CITY OF HEROES, http://na.cityofheroes.com/en/game_info/archetypes/archetypes_overview.php (last visited Mar. 5, 2012).

9. See *Creating a Hero*, *supra* note 7.

10. *Id.*

11. *Id.*

to eight.¹² Thus, there are approximately 2,800 different combinations of types of heroes and powers that a user may choose for his or her avatar.¹³

Next, the user creates the visual appearance of his or her avatar. There are three initial choices: male, female, and huge (a giant male).¹⁴ There are four default body types within each category: slim, average, athletic, and heavy.¹⁵ The user can then customize his or her body type with “sliders” that allow the user to specify the following dimensions: height, physique (muscle mass), shoulders, chest, waist, hips, and legs.¹⁶ For example, the user can select any height between forty-eight inches and eighty-four inches.¹⁷ Assuming each of the other sliders has only ten available values (certainly an underestimate), the total number of combinations for body type alone would be 37 million.

Next, the user can choose clothing options for his or her avatar. There are fifteen types of “heads,” each of which has between six and twenty features; and for each feature there are anywhere from four to one hundred additional choices and sub-choices.¹⁸ There are thirteen upper body styles, each of which has at least five features with further choices.¹⁹ For example, the menu for chest ornamentation alone has more than 200 different options.²⁰ There are seven lower body styles, each of which has two to three features with additional choices.²¹ There are seven types of backs, including capes, wings, and backpacks, each with multiple options.²² Some avatars sport weapons, each of

12. See *Powersets*, WIKIA, <http://cityofheroes.wikia.com/wiki/Category:Powersets> (last visited Mar. 5, 2012) (providing a list of powersets for each archetype).

13. Ten archetypes x five origins x eight primary power sets x seven secondary power sets = 2,800 permutations.

14. See *Creating a Hero*, *supra* note 7.

15. *Id.*

16. See generally *Slider (Computing)*, WIKIPEDIA, [http://en.wikipedia.org/wiki/Slider_\(computing\)](http://en.wikipedia.org/wiki/Slider_(computing)) (last updated Nov. 16, 2011) (describing sliders). A “slider” allows the user to adjust a visual display using a button that “slides” (moves horizontally) to provide what appears to be a continuous range of choices, rather than using a pull-down menu with discrete choices. See *id.* Although a slider appears to be analog (continuous), it is in fact digital, in the sense that only a discrete number of options are provided. See generally *id.* The “official” description *Welcome to City of Heroes: Creating a Hero* lists only the first four sliders, but the demonstration videos show the three additional sliders. See sources cited *supra* note 7.

17. See *Creating a Hero*, *supra* note 7.

18. See videos cited *supra* note 7.

19. *Id.*

20. *Id.*

21. *Id.*

22. *Id.*

which has an additional menu tree of choices.²³ There are seventy choices for skin color and 160 choices for uniform colors that can be applied to each option.²⁴ *City of Heroes* boasts that “there are literally millions of possible unique costume combinations,”²⁵ but even taking conservative estimates for the number of sub-menus, one can estimate that there are literally *trillions* of possible unique costume combinations.²⁶

Next, the user may select from multiple “auras” that emanate from the avatar, either all the time or only during combat.²⁷ The user may customize the animation that occurs when he or she exercises various powers. Finally, the user selects a name for his or her avatar, and the user has the option of creating a “battle-cry” and a backstory for his or her avatar.²⁸

B. End-User License Agreements

Many game providers attempt to avoid any inquiry into the ownership of avatars by requiring each player to “agree” to an EULA before playing the game.²⁹ Such EULAs typically provide that the game provider owns not only the computer program that operates the game, but also all copyrightable expression generated by the game program during the course of play. For example, the EULA for Blizzard Entertainment’s *World of Warcraft* states:

All title, ownership rights and intellectual property rights in and to the Game and all copies thereof (including without limitation any titles, computer code, themes, objects, characters, character names, stories, dialog, catch phrases, locations, concepts, artwork, character inventories, structural or landscape designs, animations, sounds, musical compositions and recordings, audio-visual effects, storylines, character likenesses, methods of operation, moral rights, and any related documentation) are owned or licensed by Blizzard.³⁰

23. *Id.*

24. *Id.*

25. *Creating a Hero, supra* note 7.

26. Taking the minimum values for each of the clothing options described above alone yields $15 \times 6 \times 4 \times 13 \times 5 \times 200 \times 7 \times 2 \times 7 \times 70 \times 160 = 5,136,800,000,000$ combinations. This is a conservative estimate, because there are many more sub-menus for several of the options described above.

27. *See* videos cited *supra* note 7.

28. *See* *Creating a Hero, supra* note 7.

29. *See, e.g., World of Warcraft End User License Agreement, BLIZZARD ENT.,* http://us.blizzard.com/en-us/company/legal/wow_eula.html (last updated Oct. 29, 2010).

30. *Id.*

A notable exception is the virtual world *Second Life*, which specifically acknowledges that users own intellectual property rights in anything that they create during the course of play.³¹

There are several reasons, however, why reliance on a EULA provides an unsatisfactory answer to the question of copyright ownership. First, in some instances the user may not have agreed to the EULA.³² Second, even if a EULA exists and the user clicked “I Agree” when presented with the EULA, that EULA may be unenforceable. A court might hold a EULA invalid because it is unconscionable, because it otherwise violates public policy, or because it is preempted by federal copyright law.³³ Third, there are certain attributes of authorship and/or ownership that cannot be assigned by a contract. For example, an author can exercise the right to terminate a transfer of an interest in a copyrightable work “notwithstanding any agreement to the contrary.”³⁴ Fourth, reliance on a EULA is intellectually unsatisfying and logically backwards. To analyze a question of ownership, one should start with the default position by asking who owns what in the absence of an agreement to the contrary. Only after default ownership is determined does one reach the issues of whether the default ownership has been altered by contract, and if so, whether that contract is valid and enforceable.

Whether a EULA is valid and enforceable and whether it is preempted by copyright are questions that are beyond the scope of this Article. Instead, this Article provides the foundation for such

31. See *Terms of Service*, SECOND LIFE, art. 7.1, <http://secondlife.com/corporate/tos.php#tos7> (last updated Dec. 15, 2010) (“You retain any and all Intellectual Property Rights you already hold under applicable law in Content you upload, publish, and submit to or through the Servers, Websites, and other areas of the Service, subject to the rights, licenses, and other terms of this Agreement . . .”). The agreement also grants to Linden Lab, operator of *Second Life*, a “non-exclusive, worldwide, royalty-free” license to use the Content for specified purposes, and grants specified additional licenses to both Linden Lab and other users. *Id.* at art. 7.2.

32. For example, some games may not require a EULA, or a technical malfunction may allow access without agreeing to one. Alternatively, a user who clicked on “I agree” may lend his or her account to another user who did not see or agree to the terms. *Cf. SoftMan Prods. Co. v. Adobe Sys., Inc.*, 171 F. Supp. 2d 1075, 1087 (C.D. Cal. 2001) (holding that a software distributor was not bound by EULA included with software because it did not assent to its terms).

33. See, e.g., Dennis S. Karjala, *Federal Preemption of Shrinkwrap and On-Line Licenses*, 22 U. DAYTON L. REV. 511, 525-34 (1997); Mark A. Lemley, *Beyond Preemption: The Law and Policy of Intellectual Property Licensing*, 87 CALIF. L. REV. 111, 163-67 (1999); Mark A. Lemley, *Intellectual Property and Shrinkwrap Licenses*, 68 S. CAL. L. REV. 1239, 1256 (1995); Nathan Smith, Comment, *The Shrinkwrap Snafu: Untangling the “Extra Element” in Breach of Contract Claims Based on Shrinkwrap Licenses*, 2003 BYU L. REV. 1373, 1409-15.

34. See 17 U.S.C. §§ 203(a)(5), 304(c)(5) (2006). Thus, although “works made for hire” are not subject to termination, a settlement agreement between an author and a publisher that provided that certain works were “works made for hire” was held insufficient to defeat a purported sole author’s right of termination. *Marvel Characters, Inc. v. Simon*, 310 F.3d 280, 288 (2d Cir. 2002).

agreements by analyzing the default ownership issue: In the context of a MMPORG featuring user-created or user-customized avatars, who owns an avatar in the absence of an agreement to the contrary? To answer that question, one must first determine whether an avatar is a copyrightable “work of authorship.”³⁵ After that, one can examine the nature of the creative contributions that the user and the game provider make to an avatar and the implications of those contributions for copyright ownership.

II. BASIC COPYRIGHT PRINCIPLES

A. Video Games as Works

Under the Copyright Act of 1976, “[c]opyright protection subsists . . . in original works of authorship fixed in any tangible medium of expression.”³⁶ Each of these three requirements (originality, fixation, and “work of authorship”) bears closer examination in the context of video games.

“Original,’ as the term is used in copyright, means only that the work was independently created by the author (as opposed to copied from other works), and that it possesses at least some minimal degree of creativity.”³⁷ “[T]he requisite level of creativity is extremely low; even a slight amount will suffice.”³⁸ Thus, “[t]he vast majority of works make the grade quite easily, as they possess some creative spark, ‘no matter how crude, humble or obvious’ it might be.”³⁹ However, the protection afforded to such works is limited by the idea/expression dichotomy, which denies copyright protection to “any idea, procedure, process, system, method of operation, concept, principle, or discovery” embodied in the work (even if it is original).⁴⁰ Although the requisite degree of creativity may have been dubious for some early video games, which consisted only of simple geometric shapes moving in obvious ways and which therefore might not have demonstrated any creativity above and beyond the unprotectable

35. See *infra* notes 57-65 and accompanying text.

36. 17 U.S.C. § 102(a).

37. Feist Publ'ns, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 345 (1991).

38. *Id.*

39. *Id.*

40. 17 U.S.C. §102(b); see, e.g., *Incredible Techs., Inc. v. Virtual Techs., Inc.*, 400 F.3d 1007, 1013-14 (7th Cir. 2005) (holding, where layout of controls for a video golf game was “dictated by functional considerations,” the district court did not err in concluding that screen displays indicating how to operate controls, including arrows to indicate projected flight path of the ball, were not sufficiently original or creative to warrant copyright protection).

idea,⁴¹ there can be little doubt that complex MMORPGs, featuring a vast array of fantasy landscapes, storylines, characters, and challenges, “make the grade quite easily.”⁴²

Under the Copyright Act, “[a] work is ‘fixed’ in a tangible medium of expression when its embodiment in a copy . . . is sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration.”⁴³ Certainly the computer code that generates the audiovisual output of a video game is “fixed” in some permanent form.⁴⁴ The question is whether the audiovisual output generated when the game is played is itself “fixed.” Because video games are interactive, and each player controls the motion of his or her avatar, it can be argued that the audiovisual displays that are generated in real time are not “fixed” within the meaning of copyright law.⁴⁵ In the words of one court:

Strictly speaking, the particular sequence of images that appears on the screen of a video game machine when the game is played is not the same work as the set of images stored in the machine’s circuit boards. The person playing the game can vary the order in which the stored images appear on the screen by moving the machine’s control lever. That makes playing a video game a little like arranging words in a dictionary into sentences or paints on a palette into a painting. 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.⁴⁶

In early cases involving arcade video games, courts answered the question posed above in the negative, reasoning that (1) the audiovisual displays of a video game are highly repetitive and in theory are finite in number, so that if one could hypothetically

41. See, e.g., *Atari Games Corp. v. Oman*, 693 F. Supp. 1204, 1204-07 (D.D.C. 1988) (affirming Register’s denial of registration for video game “BREAKOUT”), *rev’d*, 888 F.2d 878 (D.C. Cir. 1989) (remanding to Copyright Office for reconsideration), *on appeal after remand*, 979 F.2d 242 (D.C. Cir. 1992) (remanding to Copyright Office for further consideration again).

42. *Feist*, 499 U.S. at 345.

43. 17 U.S.C. § 101. A “copy” is a material object, such as a manuscript, canvas, or computer disk, in which a work is fixed. *Id.*

44. *Cf. Stern Elecs., Inc. v. Kaufman*, 669 F.2d 852, 855 n.4 (2d Cir. 1982) (“[A]ll portions of the program, once stored in memory devices anywhere in the game, are fixed in a tangible medium within the meaning of the Act.”). In MMORPGs, however, the code that generates the audiovisual output of a video game is distributed, with some code and data stored on servers maintained by the game provider, and some code and data stored on the CD-ROMs and hard drives possessed by the players. See Tracy V. Wilson, *How MMORPGs Work: The Technology of MMORPGs*, HOWSTUFFWORKS, <http://electronics.howstuffworks.com/mmorgpg6.htm> (last visited Mar. 25, 2012).

45. See H.R. REP. NO. 94-1476, at 53 (1976) (“[T]he definition of ‘fixation’ would exclude from the concept purely evanescent or transient reproductions such as those projected briefly on a screen, shown electronically on a television or other cathode ray tube, or captured momentarily in the ‘memory’ of a computer.”).

46. *Midway Mfg. Co. v. Artic Int’l, Inc.*, 704 F.2d 1009, 1011 (7th Cir. 1983).

recreate the player's movements exactly, the audiovisual displays would be identical; and (2) at a minimum, an arcade game usually has an "attract" mode that repeats a sequence indefinitely until a player inserts a token, and such a sequence alone is sufficiently fixed to be copyrightable.⁴⁷ Ironically, however, as video games become more and more complex, and more and more players are permitted to play the game simultaneously, the case for fixation becomes less and less persuasive. At some point, the audiovisual displays generated by a complex multi-player video game may come to resemble a real-time improvised performance created in part by the players, more than merely "choos[ing] one of the limited number of sequences the game allows him to choose."⁴⁸ This is particularly true if the software incorporates a "randomizing" element, such that a particular action will *not* always result in the same outcome.⁴⁹ Of course, to the extent that such an improvised live performance is itself being simultaneously recorded, as with so-called "machinima,"⁵⁰ the resulting audiovisual work will again qualify as "fixed."⁵¹

47. See, e.g., *id.* at 1011-12; *Williams Elecs., Inc. v. Artic Int'l, Inc.*, 685 F.2d 870, 874 (3d Cir. 1982); *Stern*, 669 F.2d at 855-57. In *Midway*, the court explained:

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 him; he merely chooses one of the sentences stored in its memory, one of the paintings stored in its collection.

704 F.2d at 1012.

48. *Midway*, 704 F.2d at 1012. Thus, in a recent case involving the online game *World of Warcraft*, the court distinguished between the "individual non-literal elements" of the game, i.e., "the 400,000+ discrete visual and audible components of the game, such as a visual image of a monster or its audible roar," and the "dynamic non-literal elements" of the game, i.e., the "real-time experience of traveling through different worlds, hearing their sounds, viewing their structures, encountering their inhabitants and monsters, and encountering other players." *MDY Indus., LLC v. Blizzard Entm't, Inc.*, 629 F.3d 928, 942-43 (9th Cir.), *amended by* 2011 WL 538748 (9th Cir. 2011) (denying rehearing). While the court concluded that the game's "dynamic non-literal elements constitute a copyrighted work," its analysis of the issue was cursory and was apparently not contested by either party. *Id.* at 953. Had it been contested, the court might have concluded that the "dynamic non-literal elements" are transient and cannot be "perceived, reproduced, or otherwise communicated for a period of more than transitory duration." See 17 U.S.C. § 101 (defining "fixed"); *Cartoon Network LP v. CSC Holdings, Inc.*, 536 F.3d 121, 129-30 (2d Cir. 2008) (finding that data embodied in a random-access memory "buffer" for only 1.2 seconds at a time was not "fixed"); see also H.R. REP. NO. 94-1476, at 53 (1976).

49. Cf. *Random Number Generation*, GIANT BOMB, <http://www.giantbomb.com/random-number-generation/92-816> (last visited Apr. 15, 2012) ("Random Number Generation is a concept that appears in 65 games[.].").

50. "Machinima" is defined as "filmmaking within a real-time, 3D virtual environment, often using 3D video-game technologies." *The Machinima FAQ*, ACAD. MACHINIMA ARTS & SCI., <http://www.machinima.org/machinima-faq.html> (last updated Aug. 3, 2005); see also *Machinima*,

The Copyright Act lists eight categories of works of authorship: literary works; musical works; dramatic works; pantomimes and choreographic works; pictorial, graphic, and sculptural works; motion pictures and other audiovisual works; sound recordings; and architectural works.⁵² Computer programs, however, defy easy categorization because of their inherently dual nature. A computer program comprises both the computer code that generates the audiovisual output and the audiovisual output that results when that program runs on a machine. It is now well established that the code comprising a computer program is copyrightable as a literary work,⁵³ both in its source code and object code forms,⁵⁴ and that the screen displays and accompanying sounds generated by a computer program are copyrightable as an audiovisual work.⁵⁵ Nonetheless, the Copyright Office does not require dual registration of computer programs; instead, a single registration of either type is sufficient to protect both the code that operates the program and any audiovisual displays that it generates.⁵⁶

WIKIPEDIA, <http://en.wikipedia.org/wiki/Machinima> (last updated Apr. 4, 2012) (“Machinima is the use of real-time 3D computer graphics rendering engines to create a cinematic production. Most often, video games are used to generate the computer animation.”). Some video games provide the ability to record video directly, while others require the use of additional software to record video generated by the game. See Jonathan Strickland, *How Machinima Works: Machinima Basics*, HOWSTUFFWORKS, <http://entertainment.howstuffworks.com/machinima1.htm> (last visited Mar. 25, 2012).

51. 17 U.S.C. § 101 (“A work consisting of sounds, images, or both, that are being transmitted, is ‘fixed’ for purposes of this title if a fixation of the work is being made simultaneously with its transmission.”).

52. *Id.* § 102(a). Although the statute uses the word “include,” indicating that the categories are illustrative and are not exclusive, no reported case has yet recognized a copyright in a work that could not fit comfortably within one or more of the existing categories. See *id.*

53. See *id.* § 101 (“‘Literary works’ are works, other than audiovisual works, expressed in words, numbers, or other verbal or numerical symbols or indicia, regardless of the nature of the material objects . . . in which they are embodied.”); H.R. REP. NO. 94-1476, at 54 (1976) (“The term ‘literary works’ . . . also includes computer data bases, and computer programs to the extent that they incorporate authorship in the programmer’s expression of original ideas, as distinguished from the ideas themselves.”).

54. See *Apple Computer, Inc. v. Formula Int’l Inc.*, 725 F.2d 521, 525 (9th Cir. 1984); *Apple Computer, Inc. v. Franklin Computer Corp.*, 714 F.2d 1240, 1247-49 (3d Cir. 1983).

55. See 17 U.S.C. § 101 (“‘Audiovisual works’ are works that consist of a series of related images which are intrinsically intended to be shown by the use of machines, or devices . . . together with accompanying sounds, if any, regardless of the nature of the material objects, . . . in which the works are embodied.”).

56. See U.S. COPYRIGHT OFFICE, CIRCULAR 61: COPYRIGHT REGISTRATION FOR COMPUTER PROGRAMS 4 (2011), available at <http://www.copyright.gov/circs/circ61.pdf> (“The Copyright Office has consistently believed that a single registration is sufficient to protect the copyright in a computer program and related screen displays, including video games, without a separate registration for the screen displays or a specific reference to them on the application for the computer program.”). If one registers with paper forms, registration of a computer program

B. Avatars as Works

When one confronts the question of ownership of user-created avatars, one must first confront a threshold question: Is an avatar a “work of authorship” that may be registered or protected separately from the game in which it appears, or is an avatar merely a component of the video game as a whole?

An analogy may be drawn to those cases that have considered whether a character is protected by the copyright in the works in which the character appears, such that no one may use the character in any sequels, prequels, or other derivative works without the permission of the copyright owner in the underlying work. The standard that has emerged is that a literary character is protected only if, and only to the extent that, the character has specific and consistent traits and characteristics that are sufficiently distinctive (and original) to constitute “expression” rather than an unprotectable “idea.”⁵⁷ Graphic characters, such as comic book and video game characters, meet this standard more easily, because the visual depiction of the character is more likely to be sufficiently distinctive to constitute original expression.⁵⁸ While most of these cases treat the

on Form TX as a literary work is “usually appropriate”; however, the Copyright Office will permit registration of an entire computer program on Form PA as an audiovisual work, “if pictorial or graphic authorship predominates.” *Id.* at 2, 4.

57. See, e.g., *Gaiman v. McFarlane*, 360 F.3d 644, 659-61 (7th Cir. 2004) (Count Nicholas Cogliostro in *Spawn*); *Suntrust Bank v. Houghton Mifflin Co.*, 268 F.3d 1257, 1266-67 (11th Cir. 2001) (Scarlett O’Hara, Rhett Butler, and others in book *Gone with the Wind*); *Silverman v. CBS Inc.*, 870 F.2d 40, 49-50 (2d Cir. 1989) (finding that Amos n’ Andy were “sufficiently delineated” in radio scripts to be placed in the public domain); cf. *Nichols v. Universal Pictures Corp.*, 45 F.2d 119, 121 (2d Cir. 1930) (opining in dicta that Sir Toby Belch and Malvolio from *Twelfth Night* might be protectable, “but it would not be enough . . . [to use] a riotous knight who kept wassail to the discomfort of the household, or a vain and foppish steward who became amorous of his mistress”).

The major contrary holding is *Warner Bros. Pictures, Inc. v. Columbia Broadcast Systems, Inc.*, 216 F.2d 945 (9th Cir. 1954), in which the court held (in dicta) that Sam Spade, the detective in *The Maltese Falcon*, was not copyrightable. “It is conceivable that the character really constitutes the story being told, but if the character is only the chessman in the game of telling the story he is not within the area of the protection afforded by the copyright.” *Id.* at 950. However, as Judge Posner correctly observed, “[t]hat decision is wrong, though perhaps understandable on the ‘legal realist’ ground that Hammett was not claiming copyright in Sam Spade—on the contrary, he wanted to reuse his own character but to be able to do so he had to overcome Warner Brothers’ claim to own the copyright.” *Gaiman*, 360 F.3d at 660.

58. *Gaiman*, 360 F.3d at 660-61; *Walt Disney Prods. v. Air Pirates*, 581 F.2d 751, 753-55 (9th Cir. 1978) (Mickey Mouse and other Disney characters); see, e.g., *Warner Bros. Inc. v. Am. Broad. Cos.*, 720 F.2d 231, 240-42 (2d Cir. 1983) (Superman); *Detective Comics, Inc. v. Bruns Publ’ns, Inc.*, 111 F.2d 432, 433-34 (2d Cir. 1940) (same); *Fleischer Studios, Inc. v. Ralph A. Freundlich, Inc.*, 73 F.2d 276, 278 (2d Cir. 1934) (Betty Boop). But see *Amaretto Ranch Breedables v. Ozimals, Inc.*, 97 U.S.P.Q.2d (BNA) 1664 (N.D. Cal. 2010) (suggesting that “a virtual animal that requires ‘food’ to ‘live’” is an unprotectable idea under 17 U.S.C. § 102(b)).

character as simply a copyrightable aspect of the underlying work or works,⁵⁹ some of them suggest that the character is or would be subject to copyright as a separate work.⁶⁰

Deciding whether copyright law should treat an avatar as a separate “work” is a difficult question. The Copyright Act lacks a definition of a “work,” but one must be mindful that “[t]he smooth functioning of copyright law depends upon an implicit ‘minimum size’ principle.”⁶¹ For this reason, the Copyright Office will not register “[w]ords and short phrases such as names, titles, and slogans.”⁶² However, the Copyright Office *will* register a drawing of a character as a “pictorial, graphic, or sculptural work,” or a written description of a character as a “literary work.”⁶³ Moreover, while the Copyright Office states that such a registration does not protect the character’s “intangible attributes,”⁶⁴ courts deciding infringement cases will protect not only the specific visual depiction or literary description of a character, but also “the totality of the characters’ attributes and traits” as they have been developed in a series of pictorial, literary, or audiovisual works.⁶⁵ Thus, as a practical matter at least, it seems that an audiovisual work (such as a “machinima”) that depicts an

59. See, e.g., *Warner Bros. Inc. v. Am. Broad. Cos.*, 720 F.2d at 235 (“Plaintiffs own the copyrights in various works embodying the character Superman and have thereby acquired copyright protection for the character itself.”); *Air Pirates*, 581 F.2d at 754 (“The fact that its characters are not the separate subject of a copyright does not preclude their protection . . .”).

60. See, e.g., *Fleischer Studios, Inc. v. A.V.E.L.A., Inc.*, 654 F.3d 958, 962 (9th Cir. 2011) (“There is no doubt that a separate Betty Boop character copyright exists.”); *Walt Disney Co. v. Powell*, 897 F.2d 565, 570 & n.10 (D.C. Cir. 1990) (finding that, while Mickey and Minnie Mouse “are certainly distinct, viable works with separate economic value and copyright lives of their own,” only two copyrights were infringed, rather than the six different poses represented on the t-shirts entered in the record or the single copyright in the movie *Steamboat Willie*, in which both characters first appeared).

61. Justin Hughes, *Size Matters (Or Should) in Copyright Law*, 74 *FORDHAM L. REV.* 575, 578 (2005).

62. 37 C.F.R. § 202.1(a) (2012).

63. See U.S. COPYRIGHT OFFICE, CIRCULAR 44: CARTOONS AND COMIC STRIPS 1 (2010), available at <http://www.copyright.gov/circs/circ44.pdf> (“Cartoons and comic strips are among the types of works of authorship protected by copyright. This protection extends to any copyrightable pictorial or written expression contained in the work. Thus a drawing, picture, depiction, or written description of a character can be registered for copyright.”).

64. *Id.* (“Protection does not, however, extend to the title or general theme for a cartoon or comic strip, the general idea or name for characters depicted, or their intangible attributes.”).

65. See, e.g., *Warner Bros. Inc. v. Am. Broad. Cos.*, 720 F.2d 231, 241 (2d Cir. 1983).

In determining whether a character in a second work infringes a cartoon character, courts have generally considered not only the visual resemblance but also the totality of the characters’ attributes and traits. A pertinent consideration . . . is the extent to which the allegedly infringing character captures the “total concept and feel” of the copyrighted character.

Id. (citations omitted) (quoting *Roth Greeting Cards v. United Card Co.*, 429 F.2d 1106, 1110 (9th Cir. 1970)).

avatar's visual appearance and distinctive attributes could be registered with the Copyright Office, and that the copyright in such a work would provide a significant amount of protection if that avatar, or a "substantially similar" avatar, was used outside the context of the game.

Assuming that an avatar may constitute a separate "work of authorship," are the other requirements of copyright satisfied? While the fixation requirement is undoubtedly met for some aspects of one's virtual identity, it may pose more of a difficulty for others. The visual appearance of an avatar and the avatar's abilities are defined by data stored permanently on a hard drive—either on a server maintained by the game provider or on the user's computer—and are sufficiently permanent to be considered "fixed."⁶⁶ As noted above, however, the "dynamic, non-literal elements" of the game, including the behavior and dialogue of the avatars, are created interactively in real time during game play and may be too transient to be considered fixed.⁶⁷ However, this behavior and dialogue may be considered a "performance"⁶⁸ that is being "transmitted"⁶⁹ to the "public,"⁷⁰ and the Copyright Act clearly states that if a transmission of a live performance is being simultaneously fixed, it is considered "fixed" for

66. See 17 U.S.C. §101 (2006) (defining "fixed"); *Matthew Bender & Co. v. W. Publ'g Co.*, 158 F.3d 693, 703 (2d Cir. 1998).

[T]he definition of 'copies' is intended to expand the 'fixation' requirement to include material objects that embody works capable of being perceived with the aid of a machine, thereby ensuring that reproductions of copyrighted works contained on media such as floppy disks, hard drives, and magnetic tapes would meet the Copyright Act's 'fixation' requirement.

Matthew Bender, 158 F.3d at 703.

Note that "copyright ownership and ownership of [the] material object in which the copyrighted work is embodied are entirely separate things." H.R. REP. NO. 94-1476, at 124 (1976); see 17 U.S.C. § 202. Thus, the fact that the user does not own the hard drive on which the data representing his or her avatar are stored does not preclude the possibility that the user owns the copyright in the avatar.

67. See *supra* notes 50-52 and accompanying text.

68. See 17 U.S.C. §101 ("To 'perform' a work means to recite, render, play, dance, or act it, either directly or by means of any device or process or, in the case of a motion picture or other audiovisual work, to show its images in any sequence or to make the sounds accompanying it audible.").

69. See *id.* ("To 'transmit' a performance or display is to communicate it by any device or process whereby images or sounds are received beyond the place from which they are sent."). In a MMORPG, the behavior of and dialogue spoken by an avatar are received by other users on computers that are remote from the place from which they are sent.

70. See *id.* ("To perform or display a work 'publicly' means . . . (2) to transmit or otherwise communicate a performance or display of the work . . . to the public, by means of any device or process, whether the members of the public capable of receiving the performance or display receive it in the same place or in separate places and at the same time or at different times.").

purposes of the Copyright Act.⁷¹ While such “performances” are not invariably saved for posterity, in many instances the game play and dialogue are permanently recorded in the form of “machinima.”⁷² In such instances, the behavior and dialogue of the avatar will also be considered “fixed.”

Whether an avatar is “original” is a more problematic issue that requires further examination.

C. Avatars and Originality

As noted above, in order to receive copyright protection a character must be detailed and distinctive enough to be distinguished from a generic character of the same type.⁷³ A “generic” avatar, such as an unadorned human figure with a smiley face, almost certainly would not qualify for copyright protection.⁷⁴ Similarly, an avatar based on a preexisting copyrighted character may not exhibit enough incremental or added originality to qualify for copyright protection.⁷⁵

71. See *id.* (“A work consisting of sounds, images, or both, that are being transmitted, is ‘fixed’ for purposes of this title if a fixation of the work is being made simultaneously with its transmission.”).

72. See *supra* notes 52-53 and accompanying text.

73. See *supra* notes 57-65 and accompanying text; see also *Nichols v. Universal Pictures Corp.*, 45 F.2d 119, 121 (2d Cir. 1930) (“[T]he less developed the characters, the less they can be copyrighted . . .”).

74. Cf. *Universal Athletic Sales Co. v. Salkeld*, 511 F.2d 904, 909 (3d Cir. 1975) (holding that a wall chart with “rugged” stick figures demonstrating use of athletic equipment was not infringed by similar wall chart with “more delicate” stick figures); *Smith v. Wal-Mart Stores, Inc.*, 537 F. Supp. 2d 1302, 1314-15 (N.D. Ga. 2008) (holding that yellow “smiley face” was not inherently distinctive, and Wal-Mart did not present sufficient evidence of acquired distinctiveness for trademark protection).

75. See 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, as distinguished from the preexisting material employed in the work . . .”); see, e.g., *Entm’t Research Grp., Inc. v. Genesis Creative Grp., Inc.*, 122 F.3d 1211, 1221-24 (9th Cir. 1997) (holding that eight-foot high costumes based on the Pillsbury Doughboy, Geoffrey the Giraffe, and Cap’n Crunch were not sufficiently original to qualify for copyright as a derivative work); *Durham Indus., Inc. v. Tomy Corp.*, 630 F.2d 905, 909-11 (2d Cir. 1980) (holding that wind-up plastic toys based on Mickey Mouse, Donald Duck, and other Disney characters were not sufficiently original to qualify for copyright as a derivative work).

Indeed, to the extent that a user-created avatar is “based upon” a copyrightable character that is owned by a third party, rather than by the game provider, the user cannot claim an implied license from the game provider, and the avatar might be deemed to be infringing. Cf. *Marvel Enters., Inc. v. NCSOFT Corp.*, 74 U.S.P.Q.2d (BNA) 1303 (C.D. Cal. 2005) (denying motion to dismiss claims of copyright infringement based on allegations that users could create avatars based on Marvel characters while playing defendant’s *City of Heroes* online video game).

In addition, an avatar that “embod[ies] little more than an unprotected idea” will not be protected.⁷⁶

Nonetheless, it seems likely that many (or at least some) user-created avatars will possess the minimal “creative spark” necessary to be considered “original.” Indeed, courts have said that almost anything short of “slavish copying” satisfies the standard.⁷⁷ Assuming that is the case, one must then ask: Who is the “author” or “authors” of that “work”? In other words, who contributed the “minimal degree of creativity” necessary to make the work copyrightable?

Under one view, which might be called the “deterministic” view, a game provider may assert that, because the software code that operates the game dictates an avatar’s appearance, capabilities, and behavior, the avatar is not “original” to the user, but is the product of the creativity of the programmers who created the software. The deterministic view, however, ignores the elements of originality that are added by the individual players. Although an avatar cannot do anything that the program does not permit, it is a stretch to say that an avatar’s appearance and behavior are *dictated* by the program. It is more correct to say that the avatar’s appearance and behavior are *constrained* by the program, but that the program allows the user some freedom to create an avatar’s appearance and to control an avatar’s behavior within the limits of those constraints.

Whether this freedom is sufficient to enable copyrightable authorship depends on the degree of freedom that the program provides to the player. At some point, a computer program may provide such a wide range of choices to the user that the resulting product can no longer be considered the sole product of the creative authorship of the programmer, but must be considered to be the product (at least in part) of the user’s creative authorship of the user.

76. Walt Disney Prods. v. Air Pirates, 581 F.2d 751, 755 (9th Cir. 1978); *see, e.g.*, Gaiman v. McFarlane, 360 F.3d 644, 660 (7th Cir. 2004) (“If a drunken old bum were a copyrightable character, so would be a drunken suburban housewife, a gesticulating Frenchman, a fire-breathing dragon, a talking cat, [or] a Prussian officer who wears a monocle and clicks his heels . . . [This would be so] even though such stereotyped characters are the products not of the creative imagination but of simple observation of the human comedy.”); Rice v. Fox Broad. Co., 330 F.3d 1170, 1175-76 (9th Cir. 2003) (holding that the title character of “The Mystery Magician” video was not protected by copyright).

77. *See, e.g.*, Gaste v. Kaiserman, 863 F.2d 1061, 1066 (2d Cir. 1988) (“Although slavish copying involving no artistic skill whatsoever does not qualify, a showing of virtually any independent creativity will do.” (citation omitted)) (musical work); Bridgeman Art Library, Ltd. v. Corel Corp., 36 F. Supp. 2d 191, 196-97 (S.D.N.Y. 1999) (“[M]any photographs, probably the overwhelming majority, reflect at least the modest amount of originality required for copyright protection. . . . [S]lavish copying, although doubtless requiring technical skill and effort, does not qualify.”).

After all, a word-processing program is copyrightable,⁷⁸ but that does not mean that the programmer owns the copyright in any literary works that are written using that program. A paint program is copyrightable, but that does not mean that the programmer owns the copyright in any pictures that are created using that paint program.⁷⁹ Instead, in such cases the copyright properly belongs to the person who used the program as a tool to create a literary or pictorial work. By analogy, the computer program that controls a MMORPG can be viewed as a tool provided to the user, which he or she then uses to create a copyrightable work.

While early video games offered only a highly constrained degree of interactivity, today's MMORPGs often permit an extremely wide range of choices for the appearance and behavior of an avatar.⁸⁰ With regard to visual appearance, for example, if a game only provides the user with a choice of four fully realized characters, it cannot realistically be said that a user performs an act of "authorship" in choosing one of the four. On the other hand, if a game provides the user with several trillion possible combinations of characteristics, as in the *City of Heroes* example described above,⁸¹ and the user decides which specific combination of characteristics to assign to the avatar, it cannot realistically be said that the programmer is the sole "author" of the avatar; instead, the user must at least be considered a joint author, if not the sole author.⁸² Drawing the line between those two extremes will require a fact-specific inquiry into the degree of freedom

78. Cf. 17 U.S.C. § 101 ("A 'computer program' is a set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result."); *Apple Computer, Inc. v. Franklin Computer Corp.*, 714 F.2d 1240, 1251 (3d Cir. 1983) (stating in dicta that application programs are copyrightable).

79. Cf. *Berkla v. Corel Corp.*, 66 F. Supp. 2d 1129, 1133 (E.D. Cal. 1999) (distinguishing "[t]he ultimate creations by the computer operator" from a program that "allow[s] the computer operator to create realistic singular plants, bushes or flowers, or . . . a near infinite variety of natural looking gardens and landscapes"), *aff'd on other grounds*, 302 F.3d 909 (9th Cir. 2002).

80. See *supra* notes 7-28 and accompanying text.

81. See *supra* notes 7-28 and accompanying text.

82. Consider an analogous situation, in which someone sponsors a contest inviting the general public to submit a haiku poem composed from a list of only ten two-syllable words and ten three-syllable words. There are only a limited number of ways in which those twenty words can be arranged to form lines of five, seven, and five syllables. In fact, because each seven-syllable line must contain one three-syllable word and two two-syllable words, and each five-syllable line must contain one of each, the total number of possible permutations is 10⁷, or ten million. Surely the law would say that the members of the public are the "authors" of their respective poems, and the law would not ascribe any authorship to the contest sponsor, even though it created the constraint. The same would be true even if the contest sponsor provided software that automated the process of selecting the words.

provided to the user.⁸³ For example, if the game provides a “template,” such that all characters of that type strongly resemble one another, then the ability to “customize” that template with only minor changes might be deemed to involve only minimal originality, akin to coloring in the lines in a coloring book.⁸⁴ However, where a game allows the user to customize the avatar’s dimensions, body parts, facial expressions, headgear, clothing, and other specific details, as in the *City of Heroes* example described above,⁸⁵ then the ability to design a unique avatar by selecting and combining the desired characteristics should be deemed to be sufficiently creative to constitute copyrightable authorship.⁸⁶

Similarly, with regard to behavior, if a user is in a maze-type game, he or she may be able to move only in four directions: forward, backward, left, and right. A user in a fully realized virtual world, however, may have almost as many choices of where to move as a human being has during the course of a day. Moreover, whereas there may be only a few ways in which a “stick figure” avatar can move (*e.g.*, walk forward or backward, leap, punch, and kick), a fully articulated avatar may have limbs that can be moved independently in a way that mimics human behavior. Such complexity of motion offers the possibility that one could use an avatar to create copyrightable “pantomimes and choreographic works” authored by the user.⁸⁷ At the very least, any original dialogue “spoken” by the avatar and recorded in the course of game play could be considered to be a literary work, of which the user is the “author.”

83. For example, if an MMORPG provides a choice of only ten characteristics for an avatar, each of which has four possible values, 1,048,576 potential combinations are possible. But each game will differ in the number of characteristics it permits, the number of values for each of those characteristics, and the decision as to whether those values are dependent or independent (*i.e.*, some groups of choices may necessarily go together).

84. In such a case, the resulting avatar might be deemed to be a “derivative work” of the template. *See infra* note 118 and accompanying text.

85. *See supra* notes 7-28 and accompanying text.

86. *Cf. Kregos v. Associated Press*, 937 F.2d 700, 704 & n.3 (2d Cir. 1991) (selecting nine items out of a group of twenty items could be original, because there were 167,960 possible combinations available).

87. 17 U.S.C. § 102(a)(4) (2006). “Pantomime is the art of imitating or acting out situations, characters, or some other events with gestures and body movement.” U.S. COPYRIGHT OFFICE, COMPENDIUM II OF COPYRIGHT OFFICE PRACTICES § 460.01 (1984). “To register a work as a pantomime, the movements must be described in sufficient detail to enable the work to be performed from such description, or an actual performance must be captured on some form of film or videotape.” *Id.* § 463. To qualify, however, there must be “[a] significant amount of copyrightable matter in the form of specific gestures,” and not merely “a few stock gestures.” *Id.* § 461.

III. AUTHORSHIP AND OWNERSHIP

In addition to the eight categories of works listed in section 102(a), works of authorship can be characterized in a different way that focuses on the nature of “authorship” contributed to the work. The Copyright Act contemplates works of sole authorship as a default, and four types of collaborative authorship: works of joint authorship, derivative works (successive authorship), works made for hire, and collective works.⁸⁸ Ownership of copyright in an original work of authorship depends on the type of work that has been created,⁸⁹ which in turn depends on the relationship of the purported authors to one another and the nature of the contributions that they have made to the work.⁹⁰ When one attempts to apply this statutory scheme to multi-player online video games, however, one finds that none of the four models of collaborative authorship is a good fit for the type of relationship that exists between users and game providers.

The Copyright Act provides that “[c]opyright in a work protected under this title vests initially in the author or authors of the work.”⁹¹ The default type of authorship contemplated by the Act is sole authorship, in which a single individual creates a work without any significant input from others. While many scholars have criticized the myth of “Romantic” authorship as a cultural artifact of the nineteenth century, it continues to hold considerable sway over the landscape of copyright.⁹² Whatever its merits, however, sole authorship is of little significance here, as a complex multi-player video game will rarely, if ever, be the work of a single author.

The game provider would like to characterize the entire video game, including any avatars that are created or customized by users, as a “work made for hire,” or a work created by one or more people who are working for someone else. “[A] work for hire can arise through one of two mutually exclusive means, one for employees and

88. See 17 U.S.C. § 101 (defining “joint work,” “derivative work,” “work made for hire,” and “collective work”).

89. See, e.g., *id.* § 103 (defining the subject matter of copyright to include compilations and derivative works, and limiting the scope of copyright in such works); *id.* § 201 (defining ownership of copyright in ordinary works, joint works, works made for hire, and contributions to collective works).

90. See *id.* § 101 (defining “joint work,” “derivative work,” “work made for hire,” and “collective work”).

91. *Id.* § 201(a).

92. See, e.g., Peter Jaszi, *Toward a Theory of Copyright: The Metamorphoses of “Authorship,”* 1991 DUKE L.J. 455, 456; Martha Woodmansee, *The Genius and the Copyright: Economic and Legal Conditions of the Emergence of the ‘Author,’* 17 EIGHTEENTH-CENTURY STUD. 425, 426-27 (1984).

one for independent contractors”⁹³ First, “a work prepared by an employee within the scope of his or her employment” is automatically a work made for hire.⁹⁴ Second, a “specially ordered or commissioned” work is a work made for hire if it falls within one of nine specified categories in the statute and there is a signed, written agreement that the work is a work made for hire.⁹⁵ Adopting the “deterministic” view described above, a game provider may assert that because an avatar’s appearance, abilities, and behavior are dictated by the software code that operates the game, the avatar is not “original” to the user, but is the product of the creativity of the programmers who created the software.⁹⁶ Because the programmers are either employees acting within the scope of their employment or independent contractors with written “work made for hire” contracts, the computer program would be considered a “work made for hire” under the Copyright Act,⁹⁷ and the game provider would be considered both the “author” of the program and the sole copyright owner.⁹⁸ While this solution offers a simple and straightforward way of resolving the issue of ownership, it conveniently ignores the aspects of creative authorship that are contributed by the players of the game.⁹⁹ In addition, to the extent that the users are considered “independent contractors,” their contributions cannot be works made for hire, because they are neither “specially ordered [n]or commissioned” works,¹⁰⁰ nor have the parties

93. *Cmty. for Creative Non-Violence v. Reid*, 490 U.S. 730, 742-43 (1991).

To determine whether a work is for hire under the [1976 Copyright] Act, a court first should ascertain, using principles of general common law of agency, whether the work was prepared by an employee or an independent contractor. After making this determination, the court can apply the appropriate subsection of [the] § 101 [definition].

Id. at 750-51.

94. 17 U.S.C. § 101(1) (defining “work made for hire”).

95. *Id.* § 101(2) (defining “work made for hire”).

96. *See supra* text following note 77.

97. 17 U.S.C. § 101 (defining “work made for hire”). Because one of the nine categories listed in § 101(2) is “as a part of a motion picture or other audiovisual work,” it is clear that the contribution of an independent contractor to a video game can be a “work made for hire” if there is a signed, written agreement.

98. *Id.* § 201(b) (“In the case of a work made for hire, the employer or other person for whom the work was prepared is considered the author . . . and, unless the parties have expressly agreed otherwise in a written instrument signed by them, owns all of the rights comprised in the copyright.”).

99. *See supra* notes 78-84 and accompanying text.

100. 17 U.S.C. § 101(2) (defining “work made for hire”); *see Playboy Enters., Inc. v. Dumas*, 53 F.3d 549, 562-63 (2d Cir. 1995) (a work is “specially ordered or commissioned” only if the hiring party was “the ‘motivating factor’ in the creation of the works”); STAFF OF H. COMM. ON THE JUDICIARY, 89TH CONG., SUPPLEMENTARY REGISTER’S REP. ON THE GENERAL REVISION OF U.S. COPYRIGHT LAW 67 (Comm. Print 1965) (“[I]n the . . . special cases specifically

entered into a signed written agreement.¹⁰¹ Indeed, it is difficult to conceptualize how an avatar could be considered a “work made for hire” when the game provider has paid nothing for its creation; instead, players are paying the game provider for the privilege of creating avatars.

A “joint work,” or a work of joint authorship, is defined as “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.”¹⁰² Absent a written agreement between the joint authors, joint authorship results in an equal division of ownership in the resulting work and the ability of each joint owner to license the work independently of the others.¹⁰³ Thus, if a work has more than a few authors, joint ownership becomes difficult to manage and practically unworkable. Consequently, courts have been reluctant to embrace the statutory definition literally, particularly where the contributions of the purported authors are relatively unequal.¹⁰⁴ Case law reveals that courts have added two criteria to the definition of joint authorship. First, deriving substantive content from the word “author,” courts have required that each purported joint author has contributed copyrightable expression, not merely ideas or research, to the final product.¹⁰⁵ Second, courts have required that all contributors

mentioned . . . the work will be considered a ‘work made for hire,’ *but only if it is in fact ‘specially ordered or commissioned’ for that purpose . . .*” (emphasis added)).

101. While a click-on EULA may be enforceable under state contract law, it may not be considered to be “a written instrument signed by” the parties within the meaning of 17 U.S.C. § 101(2). *But see* 15 U.S.C. § 7001(a)(2) (“[A] contract relating to [interstate or foreign commerce] may not be denied legal effect, validity, or enforceability solely because an electronic signature or electronic record was used in its formation.”); 2 WILLIAM F. PATRY, PATRY ON COPYRIGHT § 5:50 (2012). In any case, none of the EULAs examined by the author have used the phrase “work made for hire.” PATRY, *supra*, § 5:75.

102. 17 U.S.C. § 101; *see also* H.R. REP. NO. 94-1476, at 120 (1976) (“[A] work is ‘joint’ if the authors collaborated with each other, or if each of the authors prepared his or her contribution with the knowledge and intention that it would be merged with the contributions of other authors . . . [into] a unitary whole.”). The House Report states that a collective work is distinguished from a joint work because in a collective work, “the elements of merger and unity are lacking.” H.R. REP. NO. 94-1476, at 120 (1976).

103. *See* H.R. REP. NO. 94-1476, at 121 (1976) (“Under the [Act], . . . coowners of a copyright would be treated generally as tenants in common, with each coowner having an independent right to use or license the use of a work, subject to a duty of accounting to the other coowners for any profits.”).

104. *See, e.g.,* Thomson v. Larsen, 147 F.3d 195, 200-05 (2d Cir. 1998); Erickson v. Trinity Theatre, Inc., 13 F.3d 1061, 1069-71 (7th Cir. 1994); Childress v. Taylor, 945 F.2d 500, 506-08 (2d Cir. 1991).

105. *See, e.g.,* Thomson, 147 F.3d at 200; Erickson, 13 F.3d at 1069-71; Childress, 945 F.2d at 507-08. *But see* Gaiman v. McFarlane, 360 F.3d 644, 658-59 (7th Cir. 2004) (suggesting in dicta that uncopyrightable contributions may combine to form a copyrightable work).

intended to be joint authors,¹⁰⁶ or alternatively, that “authorship” be limited to those contributors who exercised creative control over the final product.¹⁰⁷

The situation here exemplifies the type of case in which courts have been reluctant to find joint authorship. Under the literal language of the Copyright Act, one could consider players and programmers to be joint authors because they intend that their contributions be “merged” into a single virtual world (or audiovisual work).¹⁰⁸ It is unlikely, however, that either the game provider or a court would consider a division of copyright ownership that granted equal shares to all of the players and the game provider to be equitable. The game provider’s contribution, which includes all of the backgrounds, all of the monsters and other challenges, the basic storyline, and a large number of characters, makes up a far greater proportion of the creative expression embodied in the game than do the individual avatars contributed by each of the players. Moreover, while the players may have made copyrightable contributions to the final result, “authorship is not the same thing as making a valuable and copyrightable contribution.”¹⁰⁹ With regard to motion pictures, another highly collaborative art form with multiple contributors, courts have held that not every person who contributes copyrightable expression to the final product is a joint author.¹¹⁰ Instead, these courts have chosen to vest authorship and ownership in a more limited set of persons who have creative control: “sometimes the producer, sometimes the director, possibly the star, or the screenwriter.”¹¹¹ If joint ownership of the entire game was the alternative, it is likely that a court would hold that the game provider ultimately retains creative control, at least as a practical matter, since the game provider could rewrite the code to restrict the user’s choices more drastically and it could choose to delete or terminate any avatars of which it did not approve. Such a ruling would leave a user who

106. See, e.g., *Thomson*, 147 F.3d at 201-05; *Erickson*, 13 F.3d at 1069; *Childress*, 945 F.2d at 507-08.

107. See *Aalmuhammed v. Lee*, 202 F.3d 1227, 1234 (9th Cir. 2000) (stating that “authorship” depends on multiple factors, including who exercised control over the final product, objective manifestations of shared intent, such as credit, and the “audience appeal” of the contributions).

108. See H.R. REP. NO. 94-1476, at 120 (1976) (“[A] motion picture would normally be a joint [work] rather than a collective work with respect to those authors who actually work on the film, although their usual status as employees for hire would keep the question of coownership from coming up.”).

109. *Aalmuhammed*, 202 F.3d at 1232.

110. See, e.g., *id.* at 1233.

111. *Id.*

contributed copyrightable expression with nothing more than a *quantum meruit* claim.¹¹²

The timing of the contributions of various authors may make the difference between a joint work and a derivative work. A “derivative work” is defined as “a work based upon one or more preexisting works, such as a translation, musical arrangement, dramatization, fictionalization, motion picture version, sound recording, art reproduction, abridgment, condensation, or any other form in which a work may be recast, transformed, or adapted.”¹¹³ Thus, if two authors collaborate on a work, the result is a joint work; but if an author creates a work, and subsequently a second author lawfully creates a second work based upon the first work, then the second work is considered a “derivative work,” and the second author is the *sole* author of the derivative work, rather than being a joint author with the first author.¹¹⁴ Derivative authorship, however, is inferior to joint authorship. While a joint author owns a portion of the copyright in the entire work, a derivative-work author only owns a copyright in the original material added to the derivative work, and obtains no rights in the underlying work.¹¹⁵ Thus, if the derivative-work author’s right to use the underlying work expires or is revoked, he or she cannot continue to exploit the derivative work, because doing so would infringe the copyright in the underlying work.¹¹⁶

112. *Id.* at 1236-37 (reversing dismissal of *quantum meruit* claim on statute of limitations grounds).

113. 17 U.S.C. § 101 (2006).

114. See H.R. REP. NO. 94-1476, at 164-65 (1976) (“[A]lthough a novelist, playwright, or songwriter may write a work with the hope or expectation that it will be used in a motion picture, this is clearly a case of separate or independent authorship rather than one where the basic intention behind the writing of the work was for motion picture use. In [such a] case, the motion picture is a derivative work within the definition of that term . . .”). Of course, the “author” of the derivative work may in turn be either a sole author, a group of joint authors, or the employer or commissioning party in the case of a derivative work made for hire.

115. See 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, as distinguished from the preexisting material employed in the work, and does not imply any exclusive right in the preexisting material.”).

116. See *Stewart v. Abend*, 495 U.S. 207, 220-21 (1990) (holding that distribution of the movie *Rear Window* during the renewal term of the short story on which it was based infringed the copyright in the story absent renewed permission from the copyright owner of the story). There are two statutory exceptions to this principle. First, if the renewal term in a copyright is not timely registered:

[T]hen a derivative work prepared under authority of a grant of a transfer or license of the copyright that is made before the expiration of the original term of copyright may continue to be used under the terms of the grant during the renewed and extended term of copyright without infringing the copyright . . .

Applying this model of authorship, one could characterize all user-created avatars as derivative works of the game, which is the underlying audiovisual work. If an avatar is a derivative work, then the "author" of that work (the user) will have some rights in the avatar, including the right to prevent others from copying it, but the user will not be able to use or exploit the avatar without permission from the owner of the copyright in the underlying work (the game provider). This characterization may be appropriate in two circumstances. First, as noted above, if an avatar is "based upon" a preexisting copyrighted character, then that avatar may be considered to be a derivative work of that preexisting character.¹¹⁷ Second, if the avatar is "based upon" a template provided by the game and the game allows only a minimal degree of customization, such that all avatars based on that template strongly resemble one another, then each of the variations may be considered to be "derivative" of the underlying template.¹¹⁸

Not all avatars, however, should be considered derivative works. If the game offers a sufficiently wide variety of options, such that users can change and manipulate the template the game provides to form characters that are not "substantially similar" to the template, then to the extent that a player uses the character-creation engine to realize a character from his or her own imagination, a court should conclude that user is the sole author of the resulting avatar, rather than finding that it is a derivative work "based upon" the work of the programmers who provided a programming tool.¹¹⁹ Similarly, to the extent that the program provides a sufficiently high degree of freedom of movement, the "behavior" of the avatar should be considered to be the sole product of the creative imagination of the user, rather than "derivative" of the program that enables that movement.¹²⁰ In any

17 U.S.C. § 304(a)(4)(A). Second, where the author of the underlying work or his or her heirs exercises a statutory right of termination (as opposed to a negotiated right, or a right arising out of a breach of contract), then "[a] derivative work prepared under authority of the grant before its termination may continue to be utilized under the terms of the grant after its termination." *Id.* §§ 203(b)(1), 304(c)(6)(A).

117. See *supra* note 77 and accompanying text.

118. Cf. H.R. REP. NO. 94-1476, at 62 (1976) (noting that a derivative work "must incorporate a portion of the copyrighted work in some form").

119. Adapting the analogy discussed above, if someone uses a word processor to write an essay, that essay is not considered to be a "derivative work" of the word-processing software. See *supra* note 78 and accompanying text. If someone uses a paint program to create a picture of an avatar, that picture is not considered to be a "derivative work" of the application software that was used to draw it. See *supra* note 79 and accompanying text.

120. To the extent that "behavior" is fixed in the form of "machinima," however, the machinima is likely to incorporate some of the backgrounds and scenery provided by the game

event, any dialogue spoken by the avatar is typically due entirely to the creative choices of the player, rather than to the creativity of the programmer who provided the software.¹²¹

Finally, a “collective work” is “a work, such as a periodical issue, anthology, or encyclopedia, in which a number of contributions, constituting separate and independent works in themselves, are assembled into a collective whole.”¹²² Under this view, each avatar may be considered to be an individual contribution to a collective work. Because “[c]opyright in each separate contribution to a collective work is distinct from copyright in the collective work as a whole, and vests initially in the author of the contribution,”¹²³ each user would be the “author” of his or her own avatar and would own the copyright in the avatar,¹²⁴ while the game provider would be the “author” of the computer program and of any audiovisual displays that the program generates without significant input from the user.¹²⁵ While a statutory default provision gives the owner of copyright in the collective work (the game provider) a limited non-exclusive privilege to reproduce and distribute the avatar in the context of online play,¹²⁶ the game provider would have to negotiate any further rights in the

provider, and therefore the machinima would likely be considered to be a “derivative work” of the underlying game.

121. Some games provide users with a menu of choices or pre-programmed shortcuts for simple dialogue; but even then, the decisions of which phrases to select and when to say them are the user's. While individual snippets of dialogue are not copyrightable, see 37 C.F.R. § 202.1(a) (2012) (listing “words and short phrases” as “examples of works not subject to copyright”), a collection of dialogue will likely display sufficient originality to be copyrightable.

122. 17 U.S.C. § 101 (2006) (defining “collective work”).

123. *Id.* § 201(c).

124. A collective work is a type of “compilation.” *Id.* § 101 (noting that “[t]he term ‘compilation’ includes collective works”). The copyright in a compilation “extends only to the material contributed by the author of such work, as distinguished from the preexisting material employed in the work.” *Id.* § 103(b).

125. See H.R. REP. NO. 94-1476, at 122 (1976) (“[T]he rights of the owner of copyright in a collective work . . . extend to the elements of compilation and editing that went into the collective work as a whole, as well as the contributions that were written for hire by employees of the owner of the collective work, and those copyrighted contributions that have been transferred in writing to the owner by their authors.”).

126. 17 U.S.C. § 201(c) (“In the absence of an express transfer of the copyright or of any rights under it, the owner of copyright in the collective work is presumed to have acquired only the privilege of reproducing and distributing the contribution as part of that particular collective work, any revision of that collective work, and any later collective work in the same series.”). As to what constitutes a “revision” of a collective work, see *N.Y. Times Co. v. Tasini*, 533 U.S. 483, 484 (2001) (holding that a computer database of articles published in a periodical was not a “revision” of the periodical within the meaning of § 201(c)); *Faulkner v. Nat’l Geographic Enters. Inc.*, 409 F.3d 26, 30 (2d Cir. 2005) (finding that a CD-ROM containing back issues of periodical was a “revision” of the periodical; distinguishing *Tasini*); see also *Greenberg v. Nat’l Geographic Soc’y*, 533 F.3d 1244, 1247-48 (11th Cir. 2008) (en banc) (agreeing with the holding of *Faulkner*).

avatar with the individual author.¹²⁷ Thus, for example, if the game provider wanted to use a particular avatar in a motion picture based on the game, then the game provider would ordinarily have to obtain permission from the person who created the avatar. This model is not a perfect fit, because in a typical collective work, such as an anthology, each contribution remains separate and distinct, while avatars are integrated into the game in a much more fundamental way.¹²⁸ Moreover, in a typical collective work, the owner of the copyright in the collective work owns only the original "selection and arrangement" of works,¹²⁹ whereas here, the game provider has contributed much more creativity than mere selection and arrangement. Indeed, the avatars are not "preexisting" material, and the game provider has neither "selected" the avatars nor "arranged" them. Instead, the *players* decide whether they will contribute avatars and they "arrange" their avatars as part of the interactive game play. Nonetheless, viewing the game as a collective work arguably allows a court to balance the respective contributions of the parties in a more equitable manner than any of the other models.

Accepting that a MMORPG is best viewed as a collective work, and that each avatar is best viewed as a separately copyrightable contribution to that collective work, one must then determine who owns the copyright in each such contribution. In other words, should each individual avatar be considered a joint work of the game provider who provides the template for building an avatar and the users who fill out the template by designing a specific avatar?¹³⁰ If each avatar is a joint work, then both the game provider and the user would have a

127. Cf. *Tasini*, 533 U.S. at 497 ("If there is demand for a freelance article standing alone or in a new collection, the Copyright Act allows the freelancer to benefit from that demand . . .").

128. See H.R. REP. NO. 94-1476, at 122 (1976) ("[T]here is a basic distinction between a 'joint work,' where the separate elements merge into a unified whole, and a 'collective work,' where they remain unintegrated and disparate."); *id.* at 120 ("[A] motion picture would normally be a joint [work] rather than a collective work with respect to those authors who actually work on the film, although their usual status as employees for hire would keep the question of coownership from coming up.").

129. See 17 U.S.C. § 101 ("A 'compilation' is a work formed by the collection and assembling of preexisting materials [i.e., contributions] . . . that are selected, coordinated, or arranged in such a way that the resulting work as a whole constitutes an original work of authorship."); cf. *Feist Publ'ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 350-51 (1991) ("A . . . compilation is eligible for copyright if it features an original selection or arrangement of [materials], but the copyright is limited to the particular selection or arrangement."); *id.* at 360 ("[A] compilation is copyrightable only to the extent that it features an original selection, coordination, or arrangement." (citation omitted)).

130. While the parties did not "collaborate" on the avatar, the definition of "joint works" applies in cases where each party separately prepared his or her contribution "with the intention that their contributions be merged into inseparable or interdependent parts of a unitary whole." 17 U.S.C. § 101.

right to exploit the avatar commercially, but each would also have a duty to share with the other any revenue generated from such commercial exploitation.¹³¹ Moreover, each joint author has a duty to the others not to “waste” the asset (e.g., by licensing it in such a way that destroys its future commercial value).¹³² As a practical matter, this duty may encourage negotiation between the parties for any commercial exploitation that is likely to occur. Whether this outcome is viewed as equitable may depend on the relative contributions of the parties to the finished product. To the extent that the relative contributions of the parties to the avatar are approximately equal, joint ownership seems like an equitable resolution of the issue; but to the extent that one party’s contribution strongly outweighs the other, such as when the game provides the user a degree of freedom that is either very tightly constrained or very lightly constrained, then joint ownership may seem like an unfair windfall to one party or the other.

Alternatively, each individual avatar might itself be considered to be a “compilation,” or a work in which “preexisting materials . . . are selected, coordinated, or arranged in such a way that the resulting work as a whole constitutes an original work of authorship.”¹³³ “A ‘compilation’ results from a process of selecting, bringing together, organizing, and arranging previously existing material of all kinds, regardless of whether the individual items in the material have been or ever could have been subject to copyright.”¹³⁴ To the extent that the character-creation engine operates by offering the user a menu of choices, rather than a free-standing paint program, the avatar could be deemed to be a selection and arrangement of preexisting components. In such a case, the author is the person who made the selection and arrangement (the user); and because the selection and arrangement was made lawfully, the user may claim copyright in the result.¹³⁵ In this situation, while the statutory default would give the

131. See H.R. REP. NO. 94-1476, at 121 (1976) (“[E]ach coowner ha[s] an independent right to use or license the use of a work, subject to a duty of accounting to the other coowners for any profits.”).

132. See 1 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 6.10[B] (2011).

133. 17 U.S.C. § 101.

134. H.R. REP. NO. 94-1476, at 57 (1976).

135. 17 U.S.C. § 103(a). There is, however, the further question whether the game provider can expressly limit the second author’s ability to claim copyright in his or her compilation or derivative work by contract. Under the 1976 Act, a copyright arises automatically as soon as the work is fixed in a tangible medium of expression; no further steps are required to perfect the copyright. *Id.* § 101 (establishing that “[a] work is ‘created’ when it is fixed in a copy or phonorecord for the first time”); *id.* § 302(a) (“Copyright in a work created on or after January 1, 1978, subsists from its creation . . .”). Thus, it would seem that as long as the preexisting material was used lawfully, the second author would own an enforceable copyright in his or her

game provider the privilege to use the avatar in the course of game play,¹³⁶ the user could theoretically enforce his or her copyright against the game provider outside of the game.

This last combination of doctrines seems to provide the best doctrinal fit for user-created avatars that are the product of a structured character-creation engine, such as the one provided in *City of Heroes*.¹³⁷ The game provider owns the copyright in the computer program that operates the game, and in the audiovisual content created by its programmers, as a work made for hire.¹³⁸ That program provides the components or raw materials from which an avatar is constructed.¹³⁹ Each player selects and arranges components provided by the game provider to form an avatar (a compilation), which then becomes the player's contribution to the MMORPG (a collective work). Before accepting this conclusion, however, one should consider how well it fits with the purposes of copyright law.

IV. POLICY IMPLICATIONS

All of the doctrinal analysis above begs the question of whether copyright law *should* provide any rights to users who create or customize their own avatars. When one examines this question, one sees that the two basic theories of copyright law point in divergent directions.

Under the utilitarian view, copyright exists primarily for the benefit of the public, in order to encourage the creation and distribution of new literary and artistic works.¹⁴⁰ Without copyright,

compilation or derivative work regardless of the intent of the author of the preexisting material. In two cases, however, the Seventh Circuit has held that an agreement prohibiting a contractor from claiming copyright in his derivative work was enforceable, even against subcontractors who did not sign the agreement. *See Schrock v. Learning Curve Int'l, Inc.*, 586 F.3d 513, 523-24 (7th Cir. 2009); *Liu v. Price Waterhouse LLP*, 302 F.3d 749, 755 (7th Cir. 2002); *see also* 1-3 NIMMER & NIMMER, *supra* note 132, § 3.06 (“[I]f the pertinent agreement between the parties affirmatively bars the licensee from obtaining copyright protection even in a licensed derivative work, that contractual provision would appear to govern.”).

136. 17 U.S.C. § 201(c); *see supra* notes 127-28 and accompanying text.

137. *See supra* notes 7-28 and accompanying text.

138. *See supra* notes 93-101 and accompanying text.

139. *See supra* notes 14-26 and accompanying text.

140. *See, e.g.*, *Harper & Row Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 558 (1985) (“By establishing a marketable right to the use of one’s expression, copyright supplies the economic incentive to create and disseminate ideas.”); *Twentieth Century Music Corp. v. Aiken*, 422 U.S. 151, 156 (1975) (“Creative work is to be encouraged and rewarded, but private motivation must ultimately serve the cause of promoting broad public availability of literature, music, and the other arts. The immediate effect of our copyright law is to secure a fair return for an ‘author’s’ creative labor. But the ultimate aim is, by this incentive, to stimulate artistic creativity for the general public good.” (footnote omitted)).

copiers would always be able to undercut the initial publisher's price because they have not had to bear the fixed cost of producing the work. Publishers would therefore be unwilling to pay authors for the creation of new works, and only authors who had other sources of income could afford to create.¹⁴¹ By eliminating competition from free-riding copiers, copyright enables publishers to charge more than the efficient marginal price, giving them excess profits that they may use to compensate the author.¹⁴² This view is implicit in the Patent and Copyright Clause of the U.S. Constitution, which states that copyrights and patents may be granted “[t]o promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive right to their respective Writings and Discoveries.”¹⁴³

Under the natural-rights view, the author or creator of a new literary or artistic work has a natural right to profit from the fruits of his or her artistic labor.¹⁴⁴ The natural-rights view finds support in the writings of John Locke, who famously posited that property results from the mixture of a person's labor with anything appropriated from the general state of nature.¹⁴⁵ This view also finds support in the Universal Declaration of Human Rights, which states: “Everyone has the right to the protection of the moral and material interests

141. *Golan v. Holder*, 132 S. Ct. 873, 900 (2012) (Breyer, J., dissenting).

142. Mark A. Lemley, *Property, Intellectual Property, and Free-Riding*, 83 TEX. L. REV. 1031, 1054-55 (2005); see generally William M. Landes & Richard A. Posner, *An Economic Analysis of Copyright Law*, 18 J. LEGAL STUD. 325 (1989).

143. U.S. CONST. art. I, § 8, cl. 8; see *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 429 (1984) (“[This] limited grant 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, and to allow the public access to the products of their genius after the limited period of exclusive control has expired.”); *Mazer v. Stein*, 347 U.S. 201, 219 (1954) (“The economic philosophy behind the clause . . . is the conviction that encouragement of individual effort by personal gain is the best way to advance public welfare through the talents of authors and inventors . . .”).

144. See, e.g., 7 GALES & SEATON'S REGISTER OF DEBATES IN CONGRESS cxx (1831) (“Upon the first principles of proprietorship in property, an author has an exclusive and perpetual right, in preference to any other, to the fruits of his labor.”).

145. JOHN LOCKE, *Second Treatise of Government*, in TWO TREATISES OF GOVERNMENT (Peter Laslett ed., Cambridge Univ. Press 1988) (1690). As several authors have pointed out, however, Locke's views are considerably more nuanced when applied to intellectual property. See Wendy J. Gordon, *A Property Right in Self-Expression: Equality and Individualism in the Natural Law of Intellectual Property*, 102 YALE L.J. 1533 (1993); Justin Hughes, *The Philosophy of Intellectual Property*, 77 GEO. L.J. 287 (1988); Alfred C. Yen, *Restoring the Natural Law: Copyright as Labor and Possession*, 51 OHIO ST. L.J. 517 (1990); see also Tom W. Bell & James V. DeLong, *The Great Debate on Intellectual Property*, 24 CATO POLY REP. 8 (2002) (criticizing the view that Locke's labor theory justifies intellectual property and arguing that “[b]ecause they gag our voices, tie our hands, and shut down our presses and our machine shops, copyrights and patents violate the very rights that Locke defended”).

resulting from any scientific, literary or artistic production of which he [or she] is the author.”¹⁴⁶ As a general matter, common-law countries have proceeded from the view that copyright exists primarily to serve the public benefit, while civil-law countries have historically placed a greater emphasis on the natural rights of the author.¹⁴⁷ In recent decades, however, U.S. copyright law has moved closer to the natural-rights model in the interests of international harmonization.¹⁴⁸

Under a purely utilitarian view of copyright, the game provider should be the owner of user-created avatars.¹⁴⁹ Creating and maintaining MMORPGs is a capital-intensive process, which is the very kind of work for which copyright’s financial incentive is most needed.¹⁵⁰ The game provider offers a robust character-creation engine because game players want it, so it is in the game provider’s financial interest to meet this demand. Game providers also likely

146. Universal Declaration of Human Rights, G.A. Res. 217 (III) A, U.N. Doc. A/RES/217(III), Art. 27(2) (Dec. 10, 1948). The Declaration, however, also suggests that some *limits* on intellectual property rights are a natural right. *Id.* at Art. 27(1) (“Everyone has the right freely to participate in the cultural life of the community, to enjoy the arts and to share in scientific advancement and its benefits.”); *cf.* Lea Shaver & Caterina Sganga, *The Right to Take Part in Cultural Life: On Copyright and Human Rights*, 27 WISC. INT’L L.J. 637 (2010) (analyzing the similarly-worded Art. 15 of the International Covenant on Economic, Social and Cultural Rights).

147. *Golan v. Holder*, 132 S. Ct. 873, 901-02 (2012) (Breyer, J., dissenting); *see* Tyler T. Ochoa, *Copyright Duration: Theories and Practice*, in 1 INTELLECTUAL PROPERTY AND INFORMATION WEALTH: ISSUES AND PRACTICES IN THE DIGITAL AGE 133, 138-39 (Peter K. Yu ed., 2007).

148. *See* Ochoa, *supra* note 147, at 147-48; Tyler T. Ochoa, *Is the Copyright Public Domain Irrevocable? An Introduction to Golan v. Holder*, 64 VAND. L. REV. EN BANC 123, 126-31 (2011); Tyler T. Ochoa, *Patent and Copyright Term Extension and the Constitution: A Historical Perspective*, 49 J. COPYRIGHT SOC’Y U.S.A. 19, 44-46 (2001); *see also* *Golan*, 132 S. Ct. at 893 (“[Removal of foreign works from the public domain] continued the trend toward a harmonized copyright regime by placing foreign works in the position they would have occupied if the current regime had been in effect Authors once deprived of protection are spared the continuing effects of that initial deprivation; [restoration] gives them *nothing more than the benefit of their labors* during whatever time remains before the normal copyright term expires.” (emphasis added)); *Eldred v. Ashcroft*, 537 U.S. 186, 216-17 (2003) (upholding copyright term extension, and rejecting the argument that the Copyright Clause embeds a quid pro quo requirement for copyrights); L. Ray Patterson, *What’s Wrong with Eldred? An Essay on Copyright Jurisprudence*, 10 J. INTEL. PROP. L. 345, 357 (2003) (criticizing *Eldred* as “a natural law decision in a positive law world”).

149. This could be accomplished in one of two ways. Either each avatar could be considered to be a work made for hire, *see supra* notes 93-98 and accompanying text, or else a EULA assigning ownership to the game provider could be recognized as valid and enforceable, *see supra* notes 29-34 and accompanying text.

150. *Cf.* Pamela Samuelson & Members of the CPP, *The Copyright Principles Project: Directions for Reform*, 25 BERKELEY TECH. L.J. 1175, 1181 (2010) (Principle 3: “[c]opyright law should facilitate the provision of capital and organization for creative works by providing a set of rights over which parties can reliably transact”).

rely on the ability to monetize their investment by creating derivative works based on the game, such as comic books and motion pictures.¹⁵¹ If their ability to create derivative works would be impaired by game players claiming copyright ownership in their avatars, game providers might perversely be incentivized to offer fewer avatar-customization options. Conversely, game players do not need any financial incentive to customize their avatars; they do it for fun. Indeed, game players are willing to pay money for the privilege of customizing their avatars; they certainly do not need to be paid to bring forth an “optimal” level of avatar creation.

A natural-rights view of copyright, however, leads to the conclusion that game players should own their own avatars. Game players have invested time, money, effort, and creativity in creating and customizing their avatars, and they deserve to be paid if others exploit those avatars. While the Supreme Court has disapproved of “sweat of the brow” as a basis for copyright protection,¹⁵² copyright law does protect “original works of authorship” *automatically*, so long as they are fixed and feature a minimum amount of creativity.¹⁵³ Under this view, it would simply be unfair for the game provider to benefit from the labor and creativity of the players without offering them some type of compensation in return.

Fortunately, it may not be necessary to choose sides. Both the utilitarian and the natural-rights views counsel against viewing the entire MMORPG as a joint work, because a division of ownership in equal shares would not reflect the unequal contributions that each has made to the work, and because the ability of each owner to exploit the work without the permission of others would impede, rather than facilitate, market transactions utilizing the content.¹⁵⁴ Few people would be willing to pay for a license to exploit the MMORPG if they knew that thousands of others had the right to offer similar licenses to others. Likewise, both views counsel against viewing each avatar as a derivative work of the MMORPG, because that would lead to a situation of “blocking copyrights,” in which neither party could exploit the avatar without the permission of the other.¹⁵⁵ However, viewing

151. See, e.g., *Resident Evil*, WIKIPEDIA, http://en.wikipedia.org/wiki/Resident_evil (last updated Apr. 5, 2012) (listing films, novels, and comic books); *Tomb Raider*, WIKIPEDIA, http://en.wikipedia.org/wiki/Tomb_Raider (last updated Apr. 3, 2012) (listing comic books, films, novels, a television series, and theme park rides).

152. See *Feist Publ'ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 352-54, 359-60 (1991).

153. 17 U.S.C. § 102(a) (2006); *Feist*, 499 U.S. at 345, 357.

154. See *supra* notes 103-11 and accompanying text.

155. The copyright owner in the derivative work cannot use the work without the permission of the copyright owner in the underlying work. See *supra* notes 113-17 and

each individual avatar as a contribution to a collective work, while an imperfect doctrinal fit, recognizes the creativity that each player has invested by granting the player a copyright, while still giving the game provider the privilege to exploit the avatar in the context of the game itself.¹⁵⁶

Accepting the view that each avatar is a contribution to a collective work leads to a further inquiry: should each user be the sole copyright owner of his or her avatar, or should the contribution of the game provider in providing the character-creation engine be recognized in some manner? The utilitarian view suggests that the game provider is in the best position to license the avatar to others, while the natural rights view suggests that all valuable contributions should be recognized. Unfortunately, the doctrinal resolution suggested above, in which each avatar is considered to be a compilation, violates both principles, because it would result in the user being the sole owner of his or her avatar.¹⁵⁷ If, on the other hand, each avatar is considered to be a joint work of the game provider and the player, then either party can exploit the avatar without the permission of the other, which helps prevent the copyright in the avatar from impeding the game provider's ability to exploit the entire game.¹⁵⁸ This solution also recognizes the natural right of the player in two ways. First, by giving the player a right to share in the profits made by the game provider, this solution ensures that the player will receive some compensation for the use of his or her avatar.¹⁵⁹ Second, by giving the player an equal right to license the avatar, this solution gives the game provider an incentive to negotiate with the player, and

accompanying text. Conversely, if the derivative work was created lawfully, then the author of the derivative work obtains a copyright in the new material added to the work. 17 U.S.C. § 103(a). The copyright owner in the underlying work cannot use the new material without the derivative author's permission. See Mark A. Lemley, *The Economics of Improvement in Intellectual Property Law*, 75 TEX. L. REV. 989, 1020-21 & n.154 (1997). There is, however, an unresolved issue whether the game provider can limit the second author's ability to claim copyright in the derivative work by contract. See *supra* note 136.

156. 17 U.S.C. § 201(c); see *supra* notes 123-30 and accompanying text.

157. See *supra* notes 124-28 and accompanying text. This resolution also leads to a difficult problem of valuation: How does one value a compiler's contribution to a collective work (an avatar) when the collective-work copyright owner provided the components or raw materials from which that individual compilation was made?

158. See *supra* notes 131-33 and accompanying text.

159. The duty to share any profits might prove to be an impediment to licensing, as it would be difficult to calculate what profits from exploitation of the entire game are "attributable" to the use of any individual avatar. Absent an enforceable EULA, a game provider probably would have to negotiate with the individual players to use specific avatars. The availability of thousands of possible avatars would leave each player with little negotiating power, probably leading to a nominal settlement with each. Unless a particular avatar is a "lead character" in a spin-off, however, a nominal payment may be the appropriate valuation.

it gives the player a bargaining chip to use in such negotiations. Thus, even though a purely doctrinal analysis would suggest that each avatar should be protected as a compilation, a policy-based analysis suggests that each avatar should be protected as a joint work.

V. CONCLUSION

This Article has attempted to apply existing models of copyright authorship and ownership to user-created avatars. This exercise reveals that none of the existing models of collaborative authorship (joint works, derivative works, works made for hire, and collective works) is a good doctrinal fit for this situation, because for each type of work, some elements of the definition are present and some are lacking. This Article proposes that each avatar should itself be considered a joint work between the game provider and the user, and that each avatar should also be considered a contribution to a collective work (the game as a whole). This particular solution strikes the best balance between game provider and player interests. Nevertheless, one must recognize that there is sufficient ambiguity in the statutory definitions that a court could reach a myriad of conclusions.

In short, the Copyright Acts lacks the tools necessary to adequately resolve the types of collaborative authorship problems that are likely to arise from the interactive entertainment of the twenty-first century. Traditionally, Congress has revised U.S. copyright law about once every forty years.¹⁶⁰ As we approach the forty-year anniversary of the 1976 Copyright Act, it is worth thinking about how these problems should be resolved, so that the next revision can provide a model that protects the interests of players and game providers alike.

160. See Act of Oct. 19, 1976, Pub. L. No. 94-553, 90 Stat. 2541; Act of Mar. 4, 1909, ch. 320, 35 Stat. 1075; Act of July 8, 1870, ch. 230, 16 Stat. 198, 212; Act of Feb. 3, 1831, ch. 16, 4 Stat. 436; Act of May 31, 1790, ch. 15, 1 Stat. 124. The major break in this pattern, the sixty-seven-year delay between the 1909 and 1976 Acts, is an anomaly. Congress began the revision process in 1955, only forty-six years after the 1909 Act, but the revision process took twenty-one years to complete.

