Ownership in Technology-Facilitated Works: Exploring the Relationship Between Programmers and Users Through Virtual Worlds

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INTRODUCTION

While eventually there may be enough artificial intelligence that a computer will conceive and execute a work all on its own, creative collaboration with technology currently consists of contributions by the programmer and user.¹ Copyright law has not caught up to this new style of collaboration with technology. Oftentimes, the Terms of Service² ("TOS") defines the relationship between user and programmer, instead of copyright law. The intricacies of the relationship between programmer and user should be controlling who acquires intellectual property rights in outputs, but the problem is that TOS agreements do not comport with the guiding policy reasons for copyright protection and are taking away traditional rights in creation. As man begins to collaborate more and more using technology, the current collaborative ownership framework in copyright law becomes less sufficient to cover today's programmer/user relationship. A new standard is needed.

New technologies almost inevitably instigate new laws. From the book trade prompting the creation of the Statute of Anne³ to the Internet provoking the Digital Millennium Copyright Act,⁴ the law struggles to keep pace with changing technologies.⁵ Normally, when someone uses a tool to create a work, the tool does not affect his or her chances of gaining intellectual property rights in that creation. However, the problem is that, at some point, the creator of the tool has so much control that he or she deserves rights in the output that results from its use. The creator merely

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^{1.} U.S. COPYRIGHT OFFICE, SIXTY-EIGHTH ANNUAL REPORT OF THE REGISTER OF COPYRIGHTS (1965), *available at* http://digital-law-online.info/CONTU/contu17.html# ftn142.

^{2.} Common agreements users must agree to in order to access technology.

^{3.} Statute of Anne, 1710, 8 Ann., c. 1921.

^{4.} Digital Millennium Copyright Act, Pub. L. No. 105–304, 112 Stat. 2860 (1998) (codified at 17 U.S.C. § 1201 et. seq.).

^{5.} See LIONEL BENTLY, UMA SUTHERSANEN & PAUL TORREMANS, GLOBAL COPYRIGHT: THREE HUNDRED YEARS SINCE THE STATUTE OF ANNE, FROM 1709 TO CYBERSPACE (1st ed. 2010).

created a tool, so it is difficult to think of him or her controlling the output if the user has permission to use the tool in the first place. Imagine if the Etch-a-Sketch creator had rights in all the works created on the toy. However, it is arguable that the person who creates a unique connect-thedots pattern has rights in the end drawing. Similarly, the line between programmer and user of technology has blurred, and it is difficult to tell who has rights in the creative outcomes.

The examples discussed throughout this comment are based around video games, and while I refer to the programmer in the singular, this signifies the collective programming team. A video game has many people putting it together, such as coders, visual artists, and story designers. However, for the purpose of this comment, it is helpful to think of them all as one entity: the programmer. Likewise, the user may be one person or it may be a collective group of users. Referring to each group as a distinct singular entity is helpful in illustrating the relationship at issue because that is where the tension lies.

Section I of this comment will explain the programmer/user relationship and the importance of platform-style games. Section II looks at whether works created within platform-style games are copyrightable subject matter and considers who should own the copyright under a traditional framework. Section III discusses the current collaborative ownership framework within the Copyright Act and the problems with applying it to the programmer/user relationship. Section IV looks at today's contracts-based regime and the proliferation of TOS and End-User License Agreements ("EULA"). Section V discusses the objectives of copyright law and how private agreements are undermining those purposes. Finally, Section VI offers a suggestion from the existing scholarship and my suggestion of "severable ownership."

I. THE PROGRAMMER/USER RELATIONSHIP

Technology exists on a user-output spectrum. On one end there is technology where the programmer completely controls the output and there is no creative control by the user; it is a passively consumed commodity. An example is the basic television display: the programmer controls all supplied content, and the user simply watches. On the other end of the spectrum is technology that allows users to almost entirely control the creative output, such as a graphics tablet and stylus. This is an electronic version of a pad and paper that allows the user to draw whatever comes to mind onto a blank "paper" on the computer screen. Intellectual property policy is concerned with the ambiguous situations in the middle.⁶ When both creative input by the programmer and the user create something new and protectable, copyright law is implicated.

Today's video game landscape illustrates this middle ground in the

^{6.} See generally Erez Reuveni, Authorship in the Age of the Conducer, 54 J. COPYRIGHT SOC'Y U.S.A. 285, 298 (2007).

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programmer/user-output spectrum and the realities of the contemporary programmer/user relationship. Most traditional video games follow a linear story created by the programmer that the user plays through. The programmer may create different levels, which are the same for every user, and introduce only a few options as to how the game will be played.⁷ There is a repetitive sequence of the sights and sounds in the game, and the display remains relatively constant during each users' varying participation.⁸ While single player games like this still exist, we now live in the world of games acting as platforms. Games are no longer only comprised of linear stories common among all users. In Massively Multiplayer Online Role-playing Games (MMORPGs), users assume the likeness of a character (an avatar), which acts within a persistent world.⁹ The "environment exists independent of any specific player, and each individual player's actions can permanently shape the game world."¹⁰ A player may leave the game at any time and then later log back in and see changes that have occurred in the virtual world. These platform-style games have no constrained linear story progression or end, and there is no "winner" in the sense of traditional games.

There are over 600 MMORPGs today, which can be broken into two genres: fantasy games and social games.¹¹ A majority of MMORPGs are medieval or science-fiction-based fantasy games in which players go on quests in order for their characters to gain value.¹² MMORPGs evolved from the pen-and-paper role-playing game Dungeons & Dragons and began as fantasy games.¹³ The current most popular fantasy game is World of Warcraft, which has as many as 10 million subscribers.¹⁴ On the other hand, social games like The Sims Online, Second Life, and There.com are grounded in reality, meaning these games allow people to interact in a virtual world, in ways similar to real world social interactions.¹⁵ As of 2011, Second Life had about one million active users.¹⁶

Even though both genres of MMORPGs feature player interaction, users in fantasy games tend to base interactions only on gaining character value, while users of social games can have a varied array of motivations

^{7.} See Williams Elecs., Inc. v. Artic Int'l, Inc., 685 F.2d 870, 874 (3d Cir. 1982).

^{8.} *Id.*

^{9.} PETER LUDLOW & MARK WALLACE, THE SECOND LIFE HERALD: THE VIRTUAL TABLOID THAT WITNESSED THE DAWN OF THE METAVERSE, xv, 8–9 (1st ed. 2007) (describing a persistent world as a virtual environment "that continue[s] to exist no matter who is logged in at any particular moment").

^{10.} Reuveni, *supra* note 6.

^{11.} See Game List, MMORPG, http://www.mmorpg.com/gamelist.cfm (last visited Apr. 28, 2012).

^{12.} Reuveni, *supra* note 6.

^{13.} LUDLOW & WALLACE, *supra* note 9, at 21, 28.

^{14.} Leigh Alexander, *World of Warcraft Hits 10 Million Subscribers*, GAMASUTRA (Jan. 22, 2008), http://www.gamasutra.com/php-bin/news_index.php?story=17062.

^{15.} Reuveni, supra note 6.

^{16.} Singularityu, *Philip Rosedale, Creator of Second Life*, YOUTUBE (Aug. 18, 2011), http://www.youtube.com/watch?v=C04wwLjJ0os.

for their actions. Some users are simply interested in the social interaction they might not have in the real world, other people (and companies) join Second Life in order to promote their real-world business. Some have even used the game as a business, by either setting up shop in the virtual world or by using the assets (such as land) in the virtual world to earn money.¹⁷ This style of gaming has allowed users to go beyond simply playing through a set of pre-fabricated objectives; users of MMORPGs became an essential part of the creativity and creation of the game itself.

In addition to being incredibly popular, MMORPGs are big business for user and programmer alike. Some users have reported making up to \$200,000 a year working within the virtual world alone.¹⁸ Linden Labs, the company behind Second Life, estimates that nearly \$5 million dollars were exchanged between players in January 2006.¹⁹ Corporations are establishing in-game advertising and spending a considerable amount of money to do so.²⁰ There are companies that derive their entire revenue by creating works in Second Life. For example, Electric Sheep Company has created items such as games for Lifetime TV Network and a virtual Pepsi machine.²¹ This is all in addition to the game companies' revenue for software sales and monthly subscription fees.²²

This comment focuses on social games, rather than fantasy games, because they better illustrate the complications that occur when contributions by programmers and users lead to the creation of new works. Most fantasy role-playing games are based around gaining property through the mechanisms created by the programmers, whereas social games are rooted in creations by the users. Social games like Second Life are currently the closest games to the middle point on the user-output spectrum.

Social games also illustrate the greater trend of technology-facilitated works because users are a much greater part of the creative process and output of the game. The relationship between the programmer and user has a whole new dynamic. The programmer takes on the role of platform builder and gives the user tools and space in which to add his or her creative input.²³ "[C]reation is fluid with the actions and creations of one

^{17.} See Mitch Wagner, 12 Things to Do in Second Life That Aren't Embarrassing If Your Priest or Rabbi Finds Out, INFORMATIONWEEK, http://www.informationweek.com/news/personal-tech/229216325 (last visited Apr. 28, 2012).

^{18.} LUDLOW & WALLACE, *supra* note 9, at 10.

^{19.} Kathleen Craig, *Making a Living in Second Life*, WIRED, http://www.wired.com/gaming/virtualworlds/news/2006/02/70153?currentPage=all (last visited Apr. 29, 2012).

^{20.} See Welcome to the RezzMe Advertising[™] Website, REZZME.COM, http://rezzme.com/Advertising/Default.aspx (last visited Mar. 30, 2013).

^{21.} *Services*, THE ELECTRIC SHEEP COMPANY, http://www.electricsheepcompany.com/services/ (last visited Mar. 30, 2013).

^{22.} See Alexander, supra note 14.

^{23.} Yochai Benkler, *Coase's Penguin, or, Linux and the Nature of the Firm,* 112 YALE L.J. 369, 389 (2002).

affecting the creative responses of the other."²⁴ For example, it makes sense that a user has to generate content within the programmer's creation; when a user creates a vehicle to move through the game, he or she must adhere to the programmer's specifications, such as the size and shape of the road. However, the programmers can respond in turn, by creating new roads that compliment user-created vehicles. This new platform-style game puts the user on the more creative end of the user-output spectrum than previous video games and thus deserves a fresh look into copyright protection.

II. COPYRIGHT PROTECTION

A. IS THERE AUTHORSHIP?

Before there can be copyright protection, there must first be copyrightable material. Copyright protects "original works of authorship fixed in any tangible medium of expression."²⁵ As long as the game is stored in an electronic memory device, the fixation requirement is satisfied.²⁶ However, there are two issues concerning authorship for items created within platform style games: (1) What type of work is a video game, and how does that affect copyright limitations? (2) Is there originality when the work is created within the gaming platform rather than on its own?

There is a non-exhaustive enumerated list of kinds of works that can be protected under the copyright statute, two of which are audiovisual and literary works.²⁷ Video games have been considered as works under both of these categories.²⁸ As an audiovisual work, the game is protected as "a series of related images."²⁹ As a literary work, the game is protected as written code.³⁰ When it is considered an audiovisual work, the image on the screen is protected, and non-copyrightable elements are those that are substantially similar to those in the public domain.³¹ However, when the game is considered a literary work, it has two layers: the literal code in which the game is written and the elements created by that code.

Elements created by the code are subject to the idea/expression dichotomy, the useful article doctrine, and the merger doctrine.³² Each of these intricate doctrines is a hurdle to obtaining copyright protection in a particular work. For example, if a user creates a unique pet cat in the game

^{24.} Reuveni, *supra* note 6.

^{25. 17} U.S.C. § 102 (2006).

^{26.} See Stern Elecs., Inc. v. Kaufman, 669 F.2d 852, 855–56 (2d Cir. 1982).

^{27. 17} U.S.C. § 102(a) (2006).

^{28.} See Stern Elecs. Inc., 669 F.2d at 855–56; Apple Computer, Inc. v. Franklin Computer Corp., 714 F.2d 1240, 1249 (3d Cir. 1983).

^{29. 17} U.S.C. § 101 (2006).

^{30.} *Apple Computer, Inc.*, 714 F.2d at 1249.

^{31.} See Midway Mfg. Co. v. Artic Int'l, Inc., 547 F. Supp. 999 (N.D. Ill. 1982).

^{32.} See Apple Computer, Inc., 714 F.2d at 1251–53.

world, it is protected against other people making a substantially similar cat.³³ However, if the cat is protected as a literary work, the user is protected from other people literally copying the code, but not the idea of the cat or the utilitarian aspects of the cat. Given the visually-oriented evolution of computer software today, a work within a virtual world is likely an audiovisual work.

Some critics suggest that user creations within game platforms should only be protected as derivative works instead of wholly original works.³⁴ A derivative work is created when a new author recasts, transforms, or adapts some preexisting copyrighted work.³⁵ However, only the owner of the copyright has the right to create or authorize derivative works based on his or her work.³⁶ Unauthorized derivative works become the property of the original author, and given the large number of users constantly creating within the virtual world, authorization is an unlikely scenario. Concededly, assuming that all works within virtual worlds are derivative works of the larger world, there is little hope for any sort of protection for usergenerated content.

The next requirement for copyright protection is originality. Originality means the author—and no one else—must independently create a work and requires that the work possess some minimal degree of creativity.³⁷ Random and arbitrarily selected numbers, as well as items ordered in an alphabetical or numerical way, are not copyrightable.³⁸ It has been settled that the video game as a whole work contains the requisite originality for copyright protection.³⁹ A user of a traditional linear-story video game does not have any ownership rights in the game because the programmer's algorithmic control gives users very little control over the output of the game.⁴⁰

However, games no longer follow the same storyline for each user, as the users themselves can now have a hand in what is created within the game. New platform-style games can be distinguished by the significant amount of user input. For example, Second Life openly publishes its code to facilitate in-game creation.⁴¹ While the users within a virtual world are constrained by the code of the platform, users are engaging in an activity

^{33.} Assuming the user-created cat is protected as an audiovisual work.

^{34.} See Reuveni, supra note 6.

^{35.} See id.

^{36. 17} U.S.C. § 101 (2006).

^{37.} Feist Publications, Inc. v. Rural Tel. Serv. Co., Inc., 499 U.S. 340, 345 (1991).

^{38.} *Id.* at 362 ("It is equally true, however, that the selection and arrangement of facts cannot be so mechanical or routine as to require no creativity whatsoever."); Southco, Inc. v. Kanebridge Corp., 258 F.3d 148, 153 (3d Cir. 2001) ("The random and arbitrary use of numbers in the public domain does not evince enough originality to distinguish authorship.").

^{39.} Atari Games Corp. v. Oman, 888 F.2d 878, 884 (D.C. Cir. 1989).

^{40.} Stern Elecs., Inc. v. Kaufman, 669 F.2d 852, 856 (2d Cir. 1982).

^{41.} Second Life Develop, SECOND LIFE WIKI (last modified Aug. 20, 2012), http://wiki.secondlife.com/wiki/Second_Life_Develop?lang=en-US.

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more like the use of a graphics tablet mentioned above⁴² than in traditional linear game play. Users build houses, create products, and design games within the virtual world, all of which would be sufficient to satisfy the originality requirement if they stood on their own, as creations using electronic drafting tools. Thus, the user's house, game, or product may be able to satisfy the originality requirement in order to gain copyright protection.

B. WHO IS THE AUTHOR?

Assuming now that there is an original work fixed in a tangible medium, copyright "vests initially in the author or authors of the work."⁴³ While the copyright statute does not define who qualifies as an author, the Supreme Court has called an author an "originator" or "maker."⁴⁴ "Author" is a term of art with an expansive nature. More recently the Court defined the author as "the party who actually creates the work, that is, the person who actually translates the idea into a fixed, tangible expression."⁴⁵ Given the nature of the programmer/user contributions to a work created within a platform-style game, it is difficult to say who actually created it.

When a work is almost completely produced by parameters and rules entirely specified by the programmer, it follows that copyright will vest in the programmer, as is the case in traditional linear video games. Therefore, when we move to the other end of the user-output spectrum (use of an electronic graphic design tablet), copyright vests in the user because the technology is merely a tool to facilitate creativity. The issue is whether user-generated content within a platform-style video game is more like the defined outcome controlled by the programmer of the game or more like a unique creation facilitated by electronic drafting tools. Despite some parameters created by the programmer, the time, effort, and creativity that users expend, along with the user-dependent nature of the game, weighs in favor of granting a copyright for the content users generate.

In fact, copyright almost always belongs to the user of platform-type technology. For example, most user-generated content sites like YouTube, Wikipedia, and Facebook maintain that content is the property of the users and subsequently contract with the user for the use of his or her content.⁴⁶ Programmers of platform-style video games may argue that they have control over the tools of creation and therefore more input than the programmers of these user-generated sites. For example, YouTube allows you to post a video that was filmed and edited on a different platform and

^{42.} Supra Section I.

¹⁷ U.S.C. § 201 (2006). 43.

Burrow-Giles Lithographic Co. v. Sarony, 111 U.S. 53, 57-58 (1884). 44.

Cmty. for Creative Non-Violence v. Reid, 490 U.S. 730, 737 (1989). 45.

Steven Hetcher, User-Generated Content and the Future of Copyright: Part Two-Agreements Between Users and Mega-Sites, 24 SANTA CLARA COMPUTER & HIGH TECH. L.J. 829, 830 (2008).

retains copyright separate from YouTube itself.⁴⁷ However, the house a player creates within Second Life is subject to the coding restrictions and tools available for building, which is limited by the game's programmers. While video games are not a clear case of absolutely distinct user-generated content aggregated on a website, they are not different enough where users should be denied authorship over the programmer for their unique creations.

Arguably, both the programmer and the user have creative input in new in-game creations, and both may satisfy a "but-for test," so why not give ownership to both?⁴⁸ It has been suggested that copyright is flawed because it assumes that works are the product of a single, guiding author.⁴⁹ Copyright has a number of doctrines that guide ownership decisions when it is unclear that the work is the result of one author, such as joint works, works made for hire, and collective works.⁵⁰ Given the complications of authorship in a work that has both programmer and user contributions, perhaps looking at other ways ownership can vest outside of a singular author will help give some guidance.

III. OWNERSHIP IN COLLABORATIVE WORKS

Joint works, works made for hire, and compilations are ways that ownership can vest besides initial ownership by the author. A joint work is a "work prepared by two or more authors with the intention that their contributions be merged into inseparable or interdependent parts of a unitary whole."⁵¹ Under this doctrine, the programmer and user must know each other, work together, and intend for their contributions to be merged to attain a copyright. Because of the nature of this relationship, each author is a co-author and has full rights to license the entire work.⁵² Generally, joint works have a small number of authors. Too many authors can lead to practical problems in administration of the copyright, prohibitive transaction costs, and chilling markets for creative works.⁵³ Given the separation between programmers and users of video games and the practical problems of characterizing all creative users as authors, creative contributions by users within platform style games should not qualify as joint works.

A work made for hire is a collaborative work for an employer or other third party.⁵⁴ Courts classify a work as made for hire when it is completed in the scope of employment or when it is "specially ordered or

^{47.} See YouTube Terms of Service, § 6, YOUTUBE, http://www.youtube.com/t/terms (last updated June 9, 2010).

^{48.} Burrow-Giles Lithographic Co., 111 U.S. at 61.

^{49.} Reuveni, supra note 6, at 307.

^{50. 17} U.S.C. § 101 (2006).

^{51.} *Id.*

^{52.} Childress v. Taylor, 945 F.2d 500, 505 (2d Cir.1991).

^{53.} See Reuveni, supra note 6, at 309.

^{54. 17} U.S.C. § 201 (2006).

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commissioned for use as a contribution to a collective work."⁵⁵ While users are clearly not employees in the traditional sense, a formal employeremployee relationship need not exist in order for this doctrine to apply. Courts look to a number of factors based on agency law in determining whether a work is made for hire.⁵⁶ The factors encompass the idea that there must be more than a cursory relationship between the two parties by looking at who has control over the manner and means by which the product is created.⁵⁷ Because users can decide if they want to work on something inside a virtual world, and then decide all aspects of that work, users should not be considered employees under the work made for hire doctrine.

The second way in which ownership of copyright can vest in an employer is if a work is specifically ordered or commissioned and is one of the enumerated categories of works within the Copyright Act. The parties must also agree and sign a written instrument that the work is a work made for hire.⁵⁸ Audiovisual works are one of the enumerated categories, so depending on the court's categorization of a video game as a literary or audiovisual work, as discussed above,⁵⁹ the work may fit the statute or may need to be part of an express agreement.

Given the proliferation of TOS agreements in platform-style video games, it is possible that a company could stipulate that any work within a virtual world is made for hire. These TOS agreements may then be considered express agreements. In either case, users have a good argument that the work was never specially ordered or that they were never commissioned for their contributions. Programmers do not know the users and therefore cannot "commission" them to do a work, and users do not receive consideration for the work. Therefore, users should not have to give up their potential property rights under this doctrine.

A compilation is a "work formed by the collection and assembling of preexisting materials or of data that are selected, coordinated, or arranged in such a way that the resulting work as a whole constitutes an original work of authorship."⁶⁰ Collective works are a subset of compilations where the preexisting materials are separate and independent works in

Cmty. for Creative Non-Violence v. Reid, 490 U.S. 730, 751-52 (1989) (citations omitted).

^{55. 17} U.S.C. § 101 (2006).

^{56.} Factors that the court considers are: the hiring party's right to control the manner and means by which the product is accomplished; the skill required; the source of the instrumentalities and tools; the location of the work; the duration of the relationship between the parties; whether the hiring party has the right to assign additional projects to the hired party; the extent of the hired party's discretion over when and how long to work; the method of payment; the hired party's role in hiring and paying assistants; whether the work is part of the regular business of the hiring party; whether the hiring party is in business; the provision of employee benefits; and the tax treatment of the hired party.

^{57.} Id. at 750–52.

^{58. 17} U.S.C. §§ 101–201.

^{59.} See supra Section II.

^{60. 17} U.S.C. § 101 (2006).

themselves.⁶¹ While this seems like the most likely candidate for describing the programmer/user relationship, the problem with this test is that it assumes that there preexisting materials were assembled and complied into a series of works and that the resulting work can be copyrighted and remain unchanged.⁶² The persistent nature and ever-changing world-building process within virtual worlds precludes user-generated works from being copyrighted as compilations.

While it is likely that user-generated contributions could be original works of authorship, it is difficult to discern ownership given the nature of the programmer/user relationship and the current collaborative creation framework in the Copyright Act. The new relationship created when a programmer's contributions to technology facilitate a user's creation, therefore, does not fit into any of these existing categories.

IV. TODAY'S CONTRACTS-BASED REGIME: POWER TO THE PROGRAMMER

Taking ownership of a work involving the use of technology is especially difficult because of the proliferation of use agreements. Today, almost every computer program and video game has a TOS or EULA that binds the user to a number of conditions set by the program's creators. These conditions often take the form of grant-back provisions where programmers allow users access to the game in exchange for the right to use and control contributions within the game space.⁶³ Because of the proliferation of TOS/EULA agreements, contract law often controls the determination of ownership, and copyright law may only be reflected within the agreement at the discretion of the people drafting the agreements (here, the game company). This section analyzes common TOS agreement terms and discusses the significance of these terms in the larger context of programmer power through contracts.

A. EXAMPLES OF TERMS OF SERVICE AGREEMENTS

The terms of use for World of Warcraft are representative of most MMORPGs in the marketplace. The programmers of the game give users a limited license to access the service online solely for their own noncommercial entertainment purposes by accessing it with an authorized unmodified software program.⁶⁴ Some terms concerning copyright that affect the user/programmer relationship are: (1) Users cannot "exploit" the game for any commercial purpose including performing services within the game for payments outside the game; (2) Users cannot "modify or cause to be modified" any part of the game without express authorization by

^{61.} *Id*.

^{62.} See Reuveni, supra note 6, at 308–09.

^{63.} Id. at 321.

^{64.} World of Warcraft Terms of Use, BLIZZARD ENTERTAINMENT (last updated Aug.

^{22, 2012),} http://us.blizzard.com/en-us/company/legal/wow_tou.html.

Blizzard (the company that releases the game); (3) In a section that is written in all capital letters, users must agree that they do not have any ownership or other property interest in their account because it is owned by Blizzard; (4) Users do not have any right or title to any content that appears in the game.⁶⁵

Second Life is an oft-cited example of a liberal ownership policy. Similar to the World of Warcraft TOS, users are granted a license to access and use the game, and the programmers can suspend or terminate an account when the user violates the TOS.⁶⁶ However, users own intellectual property in the content that they "upload, publish, and submit" to Second Life.⁶⁷ As defined within the TOS, content includes: "works of authorship, creative works, graphics, images, textures, photos, logos, sounds, music, video, audio, computer programs, applications, animations, gestures, text, objects, primitives, scripts, and interactive features."⁶⁸ Second Life does not allow users to transfer or assign their accounts to a third party without the prior written consent of the game publisher; in this case, Linden Lab.⁶⁹ However, the game has an elaborate exchange system where users can buy (with various real world currencies), sell, or trade Linden dollars (in-game currency).⁷⁰

Two non-virtual world examples of relevant TOS agreements are Draw Something and Facebook. Draw Something is a Pictionary-style game where a user draws a picture and another user guesses the word that the drawing is meant to represent.⁷¹ The TOS states that the content created is a "collective work and/or compilation, pursuant to U.S. copyright laws," and that any use of content must be personal and non-commercial. Meanwhile, the social network Facebook is a traditional user-generated content site. While users own all the content and information that they post on Facebook, they grant the company a "non-exclusive, transferable, sublicensable, royalty-free, worldwide license to use any IP content" that they "post on or in connection with Facebook."⁷²

B. SIGNIFICANCE

Despite the different formats for these Terms of Service, they have similar problematic terms. This section discusses three problems with TOS agreements governing ownership decisions. First, there are problems in the wording of the agreements, which will hinder a user if he or she were to

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^{65.} *Id*.

^{66.} Second Life Terms of Service, SECOND LIFE (last updated Dec. 15, 2010), http://secondlife.com/corporate/tos.php.

^{67.} *Id*.

^{68.} *Id.*

^{69.} *Id*.

^{70.} *Id*.

^{71.} Terms of Service, OMGPOP, http://omgpop.com/#/info/tos (last visited Apr. 28, 2012).

^{72.} *Statement of Rights and Responsibilities*, FACEBOOK (last revised June 8, 2012), http://www.facebook.com/legal/terms.

litigate on the terms alone. Second, there are problems with the way that the terms interact with other areas of law. Finally, there are policy concerns as to how much power agreements such as these should have.⁷³

These TOS agreements are flawed, and it is likely that users will run into problems with interpretation of the terms if litigated in a court. For example, the Second Life TOS does not mention a user's ability to *create*, only to "upload, publish, and submit."⁷⁴ This is ambiguous because there is no clear definition for these terms. "Upload" and "submit" seem to imply that the user created the item elsewhere and subsequently placed it within the game. "Publish" may imply some sort of creation, but Black's Law Dictionary defines publish as "To distribute copies (of a work) to the public."⁷⁵ While the creators of Second Life purport to give their users more ownership in their generated content than other games, it is unclear exactly what users own, given the ambiguity in TOS terms.⁷⁶

Another commonly used provision in TOS agreements is the restriction of the use of all components of the game for noncommercial use only. For example, if someone wanted to reproduce a work created within the game for commercial use (imagine a coffee table book filled with funny drawings from Draw Something), the user who created it must obtain permission from the developer before such use could transpire. This may simply be the law of contracts at work; however, on another level, such provisions take away possible property rights in a powerful way.

The power behind these agreements comes from the need for a governance system to address conflicts between users.⁷⁷ Because programmers have the power to change the game by modifying the underlying code, they have emerged as the regulators of the system. However, not all conflicts can be resolved by changing the game's code, and written agreements usually resolve most conflicts within the virtual world. After attempts at democracy in the virtual worlds of the 1990s, it was clear that users could not be left to govern themselves, resulting in programmers retaining control, in fear of users leaving the game.⁷⁸ These written agreements are enforced by the omnipotent power of banning people from the game world. The problem is that programmers have created a contracts-based gaming rule structure in the context of real-world law, and conflicts have emerged as to how these two sets of rules should interact.

While it is the general rule that TOS agreements are binding, there are

^{73.} See Yenny Teng-Lee, Fourth Amendment Protection for Users' Information Stored in the Cloud: The Case of Mint.com, 17 INTELL. PROP. L. BULL. 65, 68 (2012) ("[D]eciding a constitutional issue based on user agreements is unsound and goes against the fabric of our society.").

^{74.} Second Life Terms of Service, supra note 66, at § 7.1.

^{75.} Publish Definition, BLACK'S LAW DICTIONARY (West 9th ed. 2009).

^{76.} Second Life Terms of Service, supra note 66, at § 7.

^{77.} Viktor Mayer-Schönberger & John Crowley, Napster's Second Life?: The Regulatory Challenges of Virtual Worlds, 100 Nw. U. L. REV. 1775, 1791 (2006).

^{78.} See id. at 1796.

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number of possible limitations. These limitations include а unconscionability, modifications that require consideration, applicability of terms to individuals who are not parties to the agreement, and the voidability of agreements made by minors.⁷⁹ Unconscionability is the only significant limit acknowledged by the courts. In Bragg v. Linden Research, Inc., the court found an arbitration clause in Second Life's TOS unconscionable when determining whether the clause was enforceable.⁸⁰ The court applied California law, a more user-friendly approach compared national trends, and found procedural and to substantive unconscionability.⁸¹ The court found the arbitration clause unenforceable because there was no notice of the expense and inconvenience of having to arbitrate.⁸² While the courts may find unconscionability in arbitration clauses rather than clauses governing ownership, it is important to illustrate that TOS/EULA agreements are not impenetrable.

The enforceability of TOS/EULA agreements hinges on a balancing of interests. On one side, there are benefits to letting the creator of the game govern the virtual world, but on the other, users must be able to protect their content in a meaningful way. Besides the failed democracy mentioned above,⁸³ game developers have important incentives to govern the game. If users were to litigate every user-generated creation to find out if copyright attaches, programmers would be bogged down by the costs of coordinating a multitude of property right suits.⁸⁴ The fear is that programmers and investors will no longer develop new worlds and innovate because the costs of litigation and chances that they will lose control will be too high.⁸⁵

On the other hand, rulemaking by the programmer has no "guarantee of democratic participation or assurance of transparency."⁸⁶ Two ways users can voice their concern are to "vote with their feet" by choosing which game to participate in or to litigate, neither of which are very practical. The problem with power in choice is the assumption that there is a choice of terms. Additionally, this assumes that players have read the terms, which is not often the case, or that there are enough other choices available.⁸⁷ There is not much differentiation among TOS/EULA agreements, especially among games in the same genre. For example, even

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^{79.} Ross A. Dannenberg, et al., Computer Games and Virtual Worlds: A New Frontier in Intellectual Property Law 19 (1st ed. 2010).

^{80.} Bragg v. Linden Research, Inc., 487 F. Supp. 2d 593, 607 (E.D. Pa. 2007).

^{81.} *Id.*

^{82.} Id. at 611.

^{83.} See Mayer-Schönberger & Crowley, supra note 77.

^{84.} See Reuveni, supra note 6, at 320.

^{85.} *Id.* at 318.

^{86.} See Mayer-Schönberger & Crowley, supra note 77, at 1794.

^{87.} Joe Martin, *Gamestation: We Own Your Soul*, BIT-TECH (Apr. 15, 2010), http://www.bit-tech.net/news/gaming/2010/04/15/gamestation-we-own-your-soul/1; Keith Wagstaff, *You'd Need 76 Work Days to Read All Your Privacy Policies Each Year*, TIME (Mar. 6, 2012),

 $[\]label{eq:http://techland.time.com/2012/03/06/youd-need-76-work-days-to-read-all-your-privacy-policies-each-year/\#ixzz1xJZRJM2a.$

though Second Life has a more liberal user agreement, if someone wants to play World of Warcraft, then he or she probably won't choose to play Second Life. The two games are representative of completely different experiences and targeted at different users. Another reason players choose their game are "network effects," which spring forth when the incentive to use the technology is that other people are using the technology (i.e., "if all my friends are playing World of Warcraft, I don't want to play EverQuest").⁸⁸ There are practical problems with litigation for users as well. Most likely, users do not have enough at stake to justify hiring a lawyer and going to court, and not many users will have enough interest in their creation that litigation would be worth their time and effort.

While there are practical reasons and necessities for programmers to take control of the game, the issues with wording, interaction with other law, and overarching policy give users some sway in changing the contracts-based regime if they get together. In order to change the current contracts-based regime, many users need to act together because the ultimate power is their consumer power. If people stop buying something because they don't like the way it works, the creators have to change the way it works in order to sell more. Thus, in this case, economic incentive may be the best incentive.

V. DIVERGENCE FROM COPYRIGHT'S OBJECTIVES

Beyond the practical problems relating to the contracts regime, the contracts regime also undermines important principles embedded in copyright. The purpose of the Copyright Act is to "promote the Progress of Science and the useful Arts,"⁸⁹ which both encourages individual authors/creators to create and serves the public interest by preventing overreaching and monopolistic use of these rights.⁹⁰ The statute grants a limited monopoly as an incentive for creating original works of authorship. However, when the TOS takes away a user's potential rights in creation, the limited monopoly is undermined because the user cannot exploit the rights that they have earned.⁹¹ In fact, the TOS takes the value of the work users put into their creation and transfers it to the programmers.

Before Congress enacted the Copyright Act of 1976, it created the National Commission on New Technology Uses of Copyrighted Works (CONTU) to look into issues raised by new technologies. This group listed four goals for copyright that would "provide reasonable protection for proprietors without unduly burdening users of programs and the general

^{88.} Mayer-Schönberger & Crowley, supra note 77, at 1806.

^{89.} U.S. CONST. art. I, § 8, cl. 8.

^{90.} Harris Weems Henderson, *Through the Looking Glass: Copyright Protection in the Virtual Reality of Second Life*, 16 J. INTELL. PROP. L. 165, 176 (2008).

^{91.} Todd David Marcus, Fostering Creativity in Virtual Worlds: Easing the Restrictiveness of Copyright for User-Created Content, 52 N.Y.L. SCH. L. REV. 67, 80 (2008).

public."⁹² These goals were: (1) Copyright should proscribe the copying of unauthorized works; (2) Copyright in no way should inhibit the rightful use of these works; (3) Copyright should not block the development and dissemination of these works; (4) Copyright should not grant anyone more economic power than is necessary to achieve the incentive to create.⁹³ All four goals are completely undermined if TOS agreements override copyright protection. The exact outcomes that the group feared occur in reality when a programmer is allowed to take a user's work, copy it throughout the game, and take complete economic power in a virtual world.

Here is an illustrative example of this policy tension at work. Section 204 of the Copyright Act states that a transfer of copyright ownership must be in writing and signed by the owner of the rights conveyed.⁹⁴ The purpose of this is to protect authors from fraudulent claims and enhance predictability and certainty of ownership.⁹⁵ The problem is that ownership often depends on the TOS. As seen above,⁹⁶ the terms can either claim that the developer owns all of the content created (the user has a vague sense of ownership in things that were "uploaded, published, or submitted,") or, as with most user-generated content, that the companies or developers are granted a non-exclusive license to use the content.⁹⁷ Given the fact that the developers of the game define ownership, any rights that users have in their work under copyright law are taken away before they can be transferred, resulting in developers not having an obligation to explicitly state the fact that users may be conveying rights.

Samuel Johnson's adage further illustrates this problem: "No man but a blockhead, ever wrote except for money."⁹⁸ While there are plenty of other incentives for creation without payment, such as personal enjoyment, reputation boosting, and trading interest, users are still giving away their economic power to the programmers. Perhaps the new version of this proverb should be: "No man but a blockhead, skips the terms of service," because a user should only take the time, energy, and money to create new works if he or she knows the full consequences of those actions.

While users' best bet may be to challenge TOS/EULA agreements as consumers from a business perspective, they also have the weight of the Copyright Act behind them. Because of the power of game creators in

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^{92.} NATIONAL COMMISSION ON NEW TECHNOLOGY USES OF COPYRIGHTED WORKS, FINAL REPORT 12 (July 31, 1978), *available at* http://digital-law-online.info/CONTU/contu5.html.

^{93.} Id.

^{94. 17} U.S.C. § 204 (2006).

^{95.} Konigsberg Int'l v. Rice, 16 F.3d 355, 357 (9th Cir. 1994) (citing Effects Assocs. v. Cohen, 908 F.2d 555, 557 (9th Cir. 1990)).

^{96.} See supra Section IV.

^{97.} Hetcher, *supra* note 46. *See also* Landsted Homes, Inc. v. Sherman, 305 F. Supp. 2d 976, 983 (W.D. Wis. 2002) (non-exclusive licenses do not count as transfers of ownership).

^{98.} Steven Hetcher, User-Generated Content and the Future of Copyright: Part One— Investiture of Ownership, 10 VAND. J. ENT. & TECH. L. 863, 874–75 (2008) (citing JAMES BOSWELL, THE LIFE OF SAMUEL JOHNSON, L.L.D., 302 (R. Hutchins ed., 1952)).

drafting agreements and being able to enforce them through removal from the game, users believe they are not in a position to bargain for rights that were intended within the Constitution.⁹⁹ Both the business motive and the weight of copyright law should make programmers listen to users when they draft new agreements, and should be viewed as incentives for users to talk to legislators about new legislation.

VI. NEW LEGISLATION

A. A PREVIOUS COMMENT

Erez Reuveni suggests three ways to build on the framework already in place: (1) using copyright law as is, assuming that TOS and EULAs will be invalid; (2) allowing the law to be governed by the contractual regime; and (3) giving copyright law preemption over contracts, and judicial power to interpret copyright more broadly. He also suggests creating a new creative work called a "Collaborative Virtual Work."100 His comment focuses on the conductive nature of authorship, showing that the users are constantly consuming creative works as well as "simultaneously adding creative content."¹⁰¹ He suggests that works in persistent and adaptable media, such as the Internet, belong to the programmer, and that any works satisfying the originality and fixation requirements will have copyright in the work for personal non-commercial purposes.¹⁰² The suggested statute would create some stability in knowing who owns what, yet it does not give the user many rights beyond what he or she already has. His proposal does not fix the problem that users are giving up their limited monopoly in their creations for little in return.

Mr. Reuveni suggests that a player (or user) should have to account to a developer when the player seeks to publish a book or license a cartoon based on his creation because the developer's backdrop has value.¹⁰³ If users can take creations from within the game and profit from them, it follows that programmers would not have the incentive to develop the game, and therefore the user is in a better position to forego copyright protection between the two parties. This is a great summary of reasons that users should not have copyright, however, the analysis throughout this comment shows that a new right for users is meant to merely level the playing field, while Mr. Reuveni's suggestion does not go far enough to do so.

B. A NEW SOLUTION: SEVERABLE OWNERSHIP

While creation of a new type of work is a thoughtful solution, my idea

^{99.} U.S. CONST. art. I, § 8, cl. 8.

^{100.} Reuveni, supra note 6, at 332.

^{101.} *Id*.

^{102.} Id. at 332-33.

^{103.} Id. at 331-33.

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is a new type of ownership, which can better parse out the complicated nature of the relationship between the programmer and user. Harkening back to the programmer/user-output spectrum, the question is whether the work by the user is more like using a tool, or whether the programmer controls creation to the point of gaining rights in the output. Because the unique situation of platform-style gaming falls so close to the middle, it may be considered a whole new concept altogether. As both the user and the programmer have creative endeavors at stake, I suggest dividing up ownership into something called "severable ownership."

Severable ownership is based on the concept of conceptual severability, a doctrine that courts use to separate useful articles that are eligible for patent protection from non-useful articles that are eligible for copyright protection, despite the fact that they are part of the same physical object.¹⁰⁴ Professor Paul Goldstein describes the way this works: "[A] pictorial, graphic or sculptural feature incorporated in the design of a useful article is conceptually separable if it can stand on it's own as a work of art traditionally conceived, and if the useful article in which it is embodied would be equally useful without it."105 My concept differs in that the separation is between the user's contributions and the programmer's contributions in order to determine the scope of copyright ownership of the respective parties, rather than distinguishing what is useful (thus unprotectable under copyright) and what is not.

Severable ownership should be added to § 201 of the Copyright Act, which defines types of ownership, particularly when the situation is more complicated than initial authorship in a singular author or creator.¹⁰⁶ Ideally it would read:

§ 201 (f) Severable Ownership – When a work is created within a piece of technology whose programmer, developer, or designer has shaped the creation in some way, a user of the technology gains copyright in works of authorship he or she creates when the work can be severed from the program it resides in. Factors to determine if there is severability include:

(1) Coding – Does the user's creation consist of code that is all in one piece or is it mixed in with pieces of the programmer's code? (2) Algorithmic Control – Does the programmer control the outcome through some sort of algorithm or formula?

(3) Results Differentiation – Does the user have enough input to make something truly unique? (Think of a Spin Art machine, where the concept is similar every time, yet the results vary considerably);

(4) Medium Differentiation – Does the user intend to use the work in a different medium than originally conceived?

This new type of ownership is not meant to supersede limitations on

^{104.} Pivot Point Int'l, Inc. v. Charlene Products, Inc., 372 F.3d 913, 917 (7th Cir. 2004).

PAUL GOLDSTEIN, COPYRIGHT: PRINCIPLES, LAW & PRACTICE § 2.5.3, (3d ed. 105. 2013).

^{106. 17} U.S.C. § 201 (2006).

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copyright, like the requirements for copyrightable subject matter. However, it is meant to be separate from a derivative work, and to preempt the contractual regimes or should be considered inalienable in order to get around the problem of waiver within TOS/EULA Agreements.

For example, a user makes a car in Second Life and wants to publish a picture in a real-world publication discussing the future of vehicle design. Right now, he or she would need permission from the owners of the game before it can be published. With severable ownership, courts can weigh if the car (1) has an interwoven coding; (2) was the result of a programmer's algorithm; (3) looks like everyone else's car; or (4) is intended for use only in Second Life, to decide if the user has copyright in the car. If the user meets any of these factors, then he or she may not gain copyright in the vehicle.

There are several advantages to this new type of ownership. One advantage is that this ownership gives programmers and developers something to work around when developing the next game. It gives users more bargaining power because the users know they may have ownership in something that they can separate from the game and take with them. It also takes part of the monopoly of the creation of the video game away from the programmers and developers. Programmers will have to develop new content that works with user's ability to take their creations elsewhere.

On the other hand, there are possible problems with this type of ownership. For example, once judges are allowed to sever some types of creation, will they be able to sever more types of creation? Courts already protect separate creations within a work when they copyright characters, despite the fact that they are an integrated part of a book.¹⁰⁷ Courts will not be able to sever ownership in creations that fall under a different type of ownership in § 204. For example, movies will still be works made for hire; therefore, someone who created part of a movie would not be able to claim severable ownership in his or her piece of the creation. Another possible problem is that courts may be inundated with infringement suits concerning the virtual world and the programmers who no longer have the power to mediate. Some people may also argue that programmers will no longer have an incentive to innovate if they do not have a monopoly. While this is a worthwhile concern, there will be an incentive for innovation as long as there is a business motive. Users may even be more excited to join virtual worlds if they can take their projects with them.

All in all, severable ownership codifies a potential solution to an existing problem because of the complications with the programmer and user relationship and the lack of court decisions to use for guidance. Severable ownership provides some guidance, but still takes heed of the fact that there are contributions by both the programmer and user in the

^{107.} See generally J.C. Sander, The End of Arbitrary Findings of Secondary Meaning: A Call for the Expansion of Trademark Status of Literary Characters, 17 INTELL. PROP. L. BULL. 1 (2012) (discussing the different ways that characters can gain intellectual property rights).

creative process. Most importantly, however, it is able to balance policy interests by giving users some form of power when they want to shape the way the game is played.

CONCLUSION

Ultimately, this comment is about the complicated relationship between the programmer and user when both contribute to technology and create something new. On the one hand, there are good reasons for programmers to control the work, and because of the evolution of the contracts based-regime, they do claim complete control over the dominion of the game. However, users need some sort of incentive to create and should be allowed protection of the fruits of their labor under the Copyright Act. Providing users with severable ownership will help all parties know who owns what and how to proceed with creation and game development in the future.