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Through the Looking Glass: Copyright Protection in the Virtual Reality of Second Life

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THROUGH THE LOOKING GLASS: COPYRIGHT PROTECTION IN THE VIRTUAL REALITY OF *SECOND LIFE*

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I. INTRODUCTION

This is your last chance. After this, there is no going back. You take the blue pill and the story ends. You wake up in your bed and you believe whatever you want to believe. You take the red pill and you stay in Wonderland and I show you how deep the rabbit-hole goes.

-- Morpheus, *The Matrix*¹

At any given moment, hundreds of thousands of people are sitting in front of their computers, playing video games. They have been there for hours and will be there at least until the sun comes up. Some have died there, getting so wrapped up in the game that they forgot to sleep and eat.² This is the world of Massive Multi-Player Online Games (MMOGs). This is wonderland.

When video games emerged as a novelty in the mid-1970s, no one expected that they would eventually outsell Hollywood's film industry's annual box office draw by \$1 billion.³ A growing share of this video game economy belongs to MMOGs.⁴ No longer tied to consoles and fixed partners (think of the classic two-player Pac-Man machine), MMOGs provide complete interactive platforms that function in what have been termed "persistent" worlds because the game does not stop when a particular player leaves the world.⁵ Two critical elements help to explain the nature of these games: (1) the game itself does not reside on any individual's computer system, but rather resides on internet servers accessible to anyone with an internet connection; and (2) the game functions in real time, meaning that players "enter" and "exit" the game without ending the game.⁶

¹ THE MATRIX (Warner Brothers 1999).

² *Man Dies After 3-day Gaming Binge*, CNN, Sept. 17, 2007, <http://www.cnn.com/2007/TECH/09/17/internet.death.ap/index.html?iref=newssearch> (describing the death of a Chinese gamer who played an online game for three consecutive days and collapsed from exhaustion).

³ Matt Krantz, *Video Game College is 'Boot Camp' for Designers*, USA TODAY, Dec. 3, 2002, available at http://www.usatoday.com/money/media/2002-12-03-video_x.htm (discussing the emerging competition among video game developers as evidence of the industry's lucrative potential).

⁴ *Online Gaming Revenues to Triple by 2009*, NEWSWIRE TODAY, Dec. 15, 2005, <http://www.newswiretoday.com/news/2588/> (citing Yuanzhe Cai & Peter Shackelford, *Networked Gaming: Driving the Future*, PARKS ASSOCIATES REPORT, Dec. 2005) (emphasizing the use of networked gaming services, including MMOGs and noting that they will likely account for nearly fifty percent of all online gaming revenue by 2009).

⁵ 2004 PERSISTENT WORLDS WHITEPAPER 29, 29 (IGDA Online Games SIG Steering Committee, ed.), http://www.igda.org/online/IGDA_PSW_Whitepaper_2004.pdf (last visited Oct. 8, 2008).

⁶ PETER LUDLOW & MARK WALLACE, THE SECOND LIFE HERALD: THE VIRTUAL TABLOID THAT WITNESSED THE DAWN OF THE METAVERSE 8-9 (2007) (discussing the fundamental

These two basic qualities make MMOGs virtual worlds with the players acting as citizens or competitors (depending upon the basic premise of the game). As of June 2006, over 16 million people across the globe subscribed to one of the many available MMOG game sites.⁷ Of these online games, one stands out as truly revolutionary. Linden Labs's, *Second Life* has changed the face of MMOGs because "[w]hile most multiplayer games are themed and scripted by a handful of internal designers . . . Second Life has no preset script, and . . . anything a resident creates is theirs."⁸

In fact, the term "game" itself seems to at least be up for debate.⁹ As Edward Castronova, a leading scholar on the economies of these synthetic worlds, points out, these virtual worlds typically have been treated as "distinct playspaces, where the normal rules of economics, law, and government do not apply," but such treatment may or may not be appropriate.¹⁰ In Castronova's assessment, the extent to which an MMOG should be subject to the rules and regulations of the real world hinges on the level of real-world economic benefit the MMOG world provides its players, referring to those worlds in which "[t]he border between the synthetic world and the real world is considered completely porous" as "open worlds."¹¹ Several nations have already arrested "in-world" criminals.¹² The primary reason that misbehavior in these games has been more and more consistently classified as "crime," and thus punishable by real-world courts, is that there are items within the game that have real-world market value.¹³

difference between traditional video games and MMOGs and noting the particular consequences of maintaining a game online rather than on a player's particular computer).

⁷ MMOGCHART.com, <http://www.mmogchart.com/charts> (follow "Total MMOG Active Subscriptions" hyperlink) (last visited Sept. 29, 2008).

⁸ DON TAPSCOTT & ANTHONY D. WILLIAMS, WIKINOMICS: HOW MASS COLLABORATION CHANGES EVERYTHING 126 (2006).

⁹ Edward Castronova, *The Right to Play*, 49 N.Y.L. SCH. L. REV. 185, 193–94 (2004) (discussing the various ways in which meaning undermines the game status of MMOGs); F. Gregory Lastowka & Dan Hunter, *The Laws of the Virtual Worlds*, 92 CAL. L. REV. 1, 10 (2004) (emphasizing the blurring of economic boundaries as an indication of the games growing real world implications).

¹⁰ Castronova, *supra* note 9, at 193. See also Viktor Mayer-Schönberger & John Crowley, *Napster's Second Life? The Regulatory Challenges of Virtual Worlds*, 100 NW. U. L. REV. 1775, 1809 (2006) (discussing the same concept in terms of "permeability").

¹¹ Castronova, *supra* note 9, at 202.

¹² See, e.g., *Dutch Police Arrest Teenage Online Furniture Thief*, REUTERSUK, Nov. 14, 2007, <http://uk.reuters.com/article/oddyEnoughNews/idUKL1453844620071114> (reporting on first arrest of an online thief in Amsterdam); Will Knight, *Computer Characters Mugged in Virtual Crime Spree*, NEW SCIENTIST, Aug. 18, 2005, <http://technology.newscientist.com/channel/tech/dn7865-computer-characters-mugged-in-virtual-crime-spree.html> (detailing Japanese police arrest of a man for mugging scheme in virtual world).

¹³ *Microsoft Warning on Online Games*, BBC NEWS, Aug. 15, 2006, <http://news.bbc.co.uk/2/hi/technology/4794139.stm> (discussing the lucrative black market for in-world assets of MMOGs and

Second Life certainly qualifies as an “open world” on Castronova’s spectrum. Unlike most other MMOGs, *Second Life* lacks the sort of classic goal-accomplishing emphasis. In fact, the primary attraction to *Second Life* for many MMOG players is its commitment to permitting the development of this type of in-world economy.¹⁴ Philip Rosedale, creator of *Second Life*, stated in a press release:

Until now, any content created by users for persistent state worlds, such as Everquest or Star Wars Galaxies, has essentially become the property of the company developing and hosting the world We believe our new policy recognizes the fact that persistent world users are making significant contributions to building these worlds and should be able to both own the content they create and share in the value that is created.¹⁵

The results of this innovative approach to MMOGs is astounding. As of Monday, September 22, 2008, *Second Life* boasted 15,215,360 residents.¹⁶ In 2006, it was expanding at a growth rate of between fifteen and twenty percent per month, making it one of the fastest growing MMOGs on the internet.¹⁷ And *Second Life* is not just for technology geeks. Financial institutions like Wells Fargo and H&R Block have set up shop in *Second Life* for advertising purposes.¹⁸ CMP Technology held a seven-day “professional development summit” in-world as well.¹⁹ Roughly 3,000 residents make an average of \$20,000 per year through their activities within *Second Life*.²⁰ One user, known as Anshe Chung, is a full-time virtual real estate broker and holds \$250,000 (USD) in her *Second Life* account in

the resulting targeting by organized crime).

¹⁴ See generally *The Marketplace*, SECOND LIFE, <http://secondlife.com/whatis/marketplace.php> (last visited Sept. 23, 2008) (promising that users can make “real money That’s right, real money.”).

¹⁵ Press Release, Linden Lab, Second Life Residents To Own Digital Creations: Linden Lab Preserves Real World Intellectual Property Rights of Users of its Second Life Online Service (Nov. 14, 2003), http://lindenlab.com/press/releases/03_11_14.

¹⁶ *Economic Statistics*, SECOND LIFE, http://secondlife.com/whatis/economy_stats.php (last visited Sept. 22, 2008).

¹⁷ TAPSCOTT & WILLIAMS, *supra* note 8, at 126.

¹⁸ Gwen Moran, *Cyber Socializing*, FINANCIAL PLANNING, Oct. 2, 2007, available at <http://www.financial-planning.com/asset/article/528451/cybersocializing.html>.

¹⁹ Patricia Kitchen, *How Local Companies Are Doing Business in Second Life*, L.A. TIMES, Sept. 28, 2007, available at <http://www.latimes.com/news/nationworld/nation/ny-bzkitc0923,0,644134.column>.

²⁰ TAPSCOTT & WILLIAMS, *supra* note 8, at 125.

a combination of Lindens (the currency of *Second Life*) and virtual property.²¹ Kevin Alderman, owner of Eros, LLC, recently sold a piece of virtual property on eBay for \$50,000.²² Indeed, Judge Posner himself has a *Second Life* presence and has given several lectures from within the virtual space on a variety of legal topics, including a discussion of law in such online worlds.²³

The clearest indicator of the openness of *Second Life* is that a federal court held the *Second Life* Terms of Service (TOS) to be unconscionable in *Bragg v. Linden Research, Inc.*²⁴ Furthermore, the operators of *Second Life* are seeking to advance the “openness” of the game by promoting interoperability and free movement among various virtual worlds.²⁵

But there are still countless questions regarding the implications of the *Bragg* decision. If contract law applies, does First Amendment protection apply to speech made within *Second Life*? How exactly should property law apply?²⁶ Should the rules be different for defamation?²⁷ What about the tax consequences for these online earnings?²⁸ And most pertinent to this Note, what about intellectual property rights? In each instance, the courts, and all of modern

²¹ *Id.*

²² Regina Lynn, *Stroker Serpentine, Second Life's Porn Mogul, Speaks*, WIRED, Mar. 3, 2007, http://www.wired.com/culture/lifestyle/commentary/sexdrive/2007/03/sex_drive0330.

²³ Wagner James Au, *The Second Life of Judge Richard A. Posner*, NEW WORLD NOTES, http://nwn.blogs.com/nwn/2006/12/the_second_life.html (last visited Sept. 23, 2008).

²⁴ 487 F. Supp. 2d 593, 611 (E.D. Pa. 2007). The court not only heard the breach of contract claim—an indication of openness or permeability in and of itself—but also held that the TOS was a contract of adhesion and effectively asserted real-world law into the virtual one. *Id.* at 606.

²⁵ Press Release, IBM, IBM and Liden Lab Launch Collaboration to Further Advance 3D Internet (Oct. 10, 2007), *available at* <http://www-03.ibm.com/press/us/en/pressrelease/22428.wss>. See also Renay San Miguel, *Google Invites Avatar Banter in Lively Chat Rooms*, LINUX INSIDER, July 9, 2008, <http://www.linuxinsider.com/story/63735.html> (discussing Google's introduction of its own virtual world application that can be integrated into existing web sites).

²⁶ See generally *Bragg*, 487 F. Supp. 2d at 593. The case settled out of court but the property issue is clear: Can the game provider deprive users of its virtual property? See also Benjamin Duranske, *Second Life In-World Attorney 'Monday Beam' Hired for Land Dispute, Expects Settlement, Attorney Fees*, VIRTUALLY BLIND, Feb. 19, 2007, <http://virtuallyblind.com/2007/02/19/second-life-in-world-at-torney-monday-beam-hired-for-land-dispute-expects-settlement-attorney-fees/> (discussing *Second Life* residents hiring an in-world attorney to settle virtual land dispute).

²⁷ See, e.g., Bettina M. Chin, *Regulating Your Second Life: Defamation in Virtual Worlds*, 72 BROOK. L. REV. 1303 (2007) (arguing that virtual world defamation actions should be heard in real-world courts).

²⁸ Benjamin Duranske, *Two Experts Suggest Virtual World Profits May Be Taxable Even Before Conversion to Real World Cash*, VIRTUALLY BLIND, Oct. 23, 2007, <http://virtuallyblind.com/2007/10/23/tax-virtual-profits-in-world> (quoting two tax theorist's possible taxation structures for virtual earnings). See also Benjamin Duranske, *European Second Life Users to Pay Value Added Tax*, VIRTUALLY BLIND, Sept. 27, 2007, <http://virtuallyblind.com/2007/09/27/european-vat-second-life/> (discussing legal application of VAT tax to *Second Life* earnings in Europe).

society for that matter, face a difficult decision. Should we avoid the rabbit hole of virtual worlds altogether and simply maintain that real-world law applies only to real-world claims, or should we pass through the looking glass and recognize the virtual worlds as true, albeit imaginary, extensions of our own society and therefore worthy of the same legal protections and subject to the same regulations?²⁹ The blue pill or the red pill?

II. BACKGROUND

A. *SECOND LIFE*'S INTELLECTUAL PROPERTY REVOLUTION

1. *The Game.* In order to understand the genius behind *Second Life*, one must first understand the traditional structure of the MMOG. MMOGs arose out of the basic video game model in which a player purchased the game and played at home on his or her computer. Some of these early video games were termed "role-playing" games because the games were modeled after open-ended role-playing board games like *Dungeons & Dragons*.³⁰ The attraction of these games was relatively straightforward: The players were in control of their own fates and participated in various adventures and challenges in mythical environments.³¹ With the development of the internet, a myriad of new possibilities became available to software developers working on these games.³² In the mid to late 1990s, a series of role-playing video games enhanced the basic features of an open-ended role-playing game by connecting players through the internet and ultimately through the creation of a three-dimensional environment in which the game took place.³³ These developments led to the emergence of the modern manifestation of the same basic concept: Players create a character for themselves, choose clothing, talents, and any number of relevant characteristics to form what is called an "avatar," and interact with other avatars in this online virtual gaming space created and maintained by the software company.³⁴

In order to fully capitalize on the popularity of these MMOGs, many software developers moved away from the one-time purchase model and adopted a

²⁹ While the possibility of in-world solutions is very interesting, the current TOS outlined in *Second Life* permits users to bring an action into real-world courts. This Note will focus on what a virtual copyright claim would look like in a typical court rather than alternative solutions to these in-world conflicts.

³⁰ MATT BARTON, *DUNGEONS AND DESKTOPS: THE HISTORY OF COMPUTER ROLE-PLAYING GAMES* 13 (2008).

³¹ *Id.* at 19.

³² *Id.* at 398.

³³ *Id.* at 398–99.

³⁴ LUDLOW & WALLACE, *supra* note 6, at 8–9.

licensing/subscription model that not only transferred much of the cost of maintaining the gaming space on the internet, but also increased revenue by continuing to collect from players the longer they played.³⁵ This model led developers to move away from creating games that could be “won” definitively and encouraged the development of those games that could last forever, resulting in a society of gamers who played these MMOGs for many years.

2. *The Third-Party Market.* It should not be surprising that these societies soon developed rules and customs of their own—including a third party market for valuable items and tools to be used within the game itself. It is the development of these virtual world economies that Castronova has become famous for studying.³⁶ The basic trade of in-game goods led to the development of “avatar farms”: Adept players created avatars that would advance in skill and prowess within the MMOG and then sold them to players that wanted a quick upgrade.³⁷ Game developers were incensed because these markets undermined the subscription price model—not only were gamers gaining items and avatars that they did not themselves earn, they were not paying the subscription fees that would normally be required for such advancement.³⁸ As Philip Rosedale pointed out in the press release quoted earlier,³⁹ this reluctance is born out of the fear that trade of in-game assets diminishes the developer’s current and future profitability and that the transactions might make the developers liable for fraudulent transactions over which they have no control.⁴⁰ Herein lies the problem to which *Second Life* provides a remarkably elegant solution: How can game developers capitalize on the inevitable development of these third-party markets without compromising the basic structure of the game itself?

3. *Second Life Revolution.* *Second Life*, rather than attempting to imitate other successful MMOGs, targets this tendency toward independent market development. In some sense this is all *Second Life* really is—a forum in which individual users can build a world and all of the corresponding markets necessary for sustaining such a world; as the game’s site puts it, “Second Life is a 3-D virtual

³⁵ See 2004 PERSISTENT WORLDS WHITEPAPER, *supra* note 5, at 15 (discussing attractiveness of the subscription model).

³⁶ See generally Castronova, *supra* note 9.

³⁷ See Leslie Brooks Suzukamo, *People Pay Real Money for Virtual Advantage*, CHARLESTON GAZETTE, May 6, 2001, available at 2001 WLNR 4389087 (describing the phenomenon of in-game asset sales and outlining their risks).

³⁸ See Molly Stephens, Note, *Sales of In-Game Assets: An Illustration of the Continuing Failure of Intellectual Property Law to Protect Digital-Content Creators*, 80 TEX. L. REV. 1513, 1515–16 (2002) (explaining that game developers are trying to prohibit the sale of in-game objects).

³⁹ Press Release, Linden Lab, *supra* note 15.

⁴⁰ See Stephens, *supra* note 38, at 1519–20 (recognizing that the purchase of in-game objects short-circuits the traditional game system of rewarding players that have invested time and effort into the game by allowing newcomers to purchase such rewards for cash).

world created by its [r]esidents.”⁴¹ The *Second Life* revolution, then, is dependent on two critical elements of the *Second Life* system: (1) the implementation of a currency system, and (2) the development of a means for creating virtual content.⁴² The first element is quite remarkable; instead of charging for subscriptions, *Second Life* is free. But unlike any other MMOG on the market, *Second Life* has employed what can only be called a currency-based profit model—the game requires users to buy and sell in Linden dollars, and thus players must convert their real dollars into Lindens before they can do business in the virtual world.⁴³ Alongside this currency model, *Second Life* provides its users with the necessary software to create content for use in *Second Life*; nothing exists in-world that has not been created by users.⁴⁴ By providing a complete scripting program, however, Linden Labs does not prohibit the translation of 3D objects from other modeling programs into *Second Life*’s prim-based language, thus allowing the item to be imported into the *Second Life* system.⁴⁵ Under this system, of course, a user could theoretically build everything he or she wanted to use in *Second Life* without entering into the market at all, but Linden Labs capitalizes on the impracticality of that possibility by permitting users to sell their creations to others and to participate in the *Second Life* market economy.

4. *Intellectual Property.* Central to the discussion of this Note is the problem that this market-based MMOG structure creates. Like the real world market, creators need a way to protect their creation from copying to encourage creativity and reward ingenuity. To do so, *Second Life* has adopted an intellectual property policy diametrically opposed to that of other game developers: It expressly grants that the intellectual property rights of all user-created content is retained by the user-creator.⁴⁶ *Second Life* has turned other developers’ fear of losing control on its head by actually capitalizing on users’ tendency to create independent markets.⁴⁷

⁴¹ *What is Second Life?*, SECOND LIFE, <http://secondlife.com/whatis/> (last visited Sept. 23, 2008).

⁴² See TAPSCOTT & WILLIAMS, *supra* note 8, at 125–27 (discussing *Second Life*’s development of a consumer-driven economy based on its theory of “prosumption”).

⁴³ *Id.*

⁴⁴ *What is Second Life?*, SECOND LIFE, <http://secondlife.com/whatis/> (last visited Oct. 9, 2008).

⁴⁵ See, e.g., *Creating For Second Life with AC3D*, AC3D, <http://www.invis.com/secondlife.html> (outlining the process for translating AC3D’s modeling language into *Second Life*’s format).

⁴⁶ TAPSCOTT & WILLIAMS, *supra* note 8, at 126; see also Mayer-Schönberger & Crowley, *supra* note 10 (suggesting that Linden Labs’s decision to give users intellectual property rights will change the MMOG market as its competitors recognize the value gained from this sort of “permeability”). *Second Life*’s TOS Agreement recognizes that “Residents retain intellectual property rights in the original content they create.” *IP Rights*, SECOND LIFE, http://secondlife.com/whatis/ip_rights.php (last visited Sept. 23, 2008).

⁴⁷ See TAPSCOTT & WILLIAMS, *supra* note 8, at 125–26 (quoting Sony Online Entertainment president’s position that granting IP rights to users is counter intuitive). See also *Bragg v. Linden*

The *Second Life* modeling tool that is used to create in-world items permits the creator to determine the transferability of the object he or she has created.⁴⁸ The system is relatively simple: When a user marks his or her content as “no copy,” “no mod” (modification), or “no trans” (transfer), the servers at Linden Labs tag the content and will not allow another user to violate the original creator’s instructions.⁴⁹ But *Second Life* is replete with users capable of decoding the initial modification protection. Further, the development of an open source program “copybot” that permits users to copy content in disregard of the creators’ intellectual property controls was almost inevitable, demonstrating the limitation of internal source code solutions that will invariably be cracked.⁵⁰ One of the first copyright infringement suits involving *Second Life* illustrates another potential problem resulting from the necessary transfer of data among servers that a savvy user can exploit to create additional copies of an otherwise protected item.⁵¹

Absent a satisfactory internal solution, *Second Life* promises to act on any Digital Millennium Copyright Act (DMCA) violations.⁵² But the removal of infringing items is not always satisfactory, and the user’s only remaining recourse is to file suit for copyright infringement. The TOS agreement in *Second Life* expressly grant all property rights to the creator of an in-world object, thus implicitly giving users an opportunity to bring real-life charges for copyright infringement.⁵³ Two such suits have been filed, and their resolution will set the course for the legal regulation of virtual intellectual property to follow.

5. *The Lawsuits.* On October 24, 2007, Eros, LLC, filed a copyright infringement claim in the Middle District of Florida, alleging that Robert Leatherwood and ten other unidentified parties “ha[ve] been making and selling, and continue[] to make and sell numerous unauthorized copies of Eros’s virtual

Research, Inc., 487 F. Supp. 2d 593, 596 & n.6 (discussing Linden Labs’s consistent promotion of the economic opportunity available as a result of its permitting users to retain the IP rights in items that users themselves create or develop).

⁴⁸ *Second Life Help*, SECOND LIFE, <http://secondlife.com/app/help/building/permissions.php> (last visited Oct. 9, 2008) (explaining the basics of the *Second Life* Permissions system).

⁴⁹ *Id.*

⁵⁰ See Adam Reuters, *Outcry as ‘Copybot’ Threatens Copyright Protection*, SECOND LIFE REUTERS, Nov. 14, 1996, <http://secondlife.reuters.com/stories/2006/11/14/outcry-as-copybot-threatens-copyright-protection/> (demonstrating not only the danger of these programs but their risk to the system as well); see also Daniel Terdiman, *‘Second Life’ Faces Threat to Its Virtual Economy*, CNET NEWS, Nov. 15, 2006, http://www.news.com/2100-1043_3-6135699.html.

⁵¹ Complaint, Eros, LLC v. Simon, No. 1:07cv04447 (E.D.N.Y. Oct. 24, 2007), 2007 WL 3194460 [hereinafter Complaint, Simon].

⁵² *DMCA: Digital Millennium Copyright Act*, SECOND LIFE, <http://secondlife.com/corporate/dmca.php> (last visited Sept. 23, 2008) (outlining mechanisms for compliance with 17 U.S.C. § 512).

⁵³ *Terms of Service*, SECOND LIFE, <http://secondlife.com/corporate/tos/php> (last visited Oct. 20, 2008).

products within Second Life.”⁵⁴ Eros, LLC, specializes in the creation and sale of adult-themed items, most notably a “Sex-Gen” bed that permits purchasers to have virtual sexual experiences through the 150 animations programmed into it.⁵⁵ These beds were virtual objects in the classic sense of the term—furniture for a user’s home. The bed, however, also was encoded with animation that would allow two users in contact with the bed at the same time to have sex by initiating animation depicting the particular characteristics of both avatars copulating.⁵⁶ The beds allow users to select from number of different positions when the avatars get on the SexGen bed.⁵⁷ To clarify, Eros creates adult-themed content for users in *Second Life*, sells the content for profit, and now claims that these third parties have created copies of these items and are selling them without Eros’s permission. Although the parties have settled the lawsuit, the court nevertheless demonstrated its willingness to bring the alleged defendants into court by granting Eros’s subpoena of Paypal, Linden Labs, Charter Communications, and AT&T for information that led to the identification of Leatherwood as primary defendant.⁵⁸

In a separate action, Eros, LLC joined five other *Second Life* business people in a suit alleging copyright infringement by the operator of an in-world storefront.⁵⁹ The allegations of the second suit are much clearer. The plaintiffs assert that the defendant took advantage of a “fairly well known Second Life security flaw” that permits users to make copies of items by “moving the objects from their inventory to the world (causing them to be registered on the server) during times of heavy lag or, in a related exploit, immediately before a server crashes or is rolled back,” so that “[w]hen the server catches up to the requests,

⁵⁴ First Amended Complaint, *Eros, LLC v. Leatherwood*, No. 8:07-CV-01158-SCB-TGW (M.D. Fla. Oct. 24, 2007), available at <http://docs.justia.com/cases/federal/district-courts/florida/flmdce/8:2007cv01158/202603/11/> [hereinafter Complaint, Leatherwood].

⁵⁵ Miguel Lopez, *Second Life Resident Sued for Copyright Infringement*, WIRED, July 5, 2007, <http://blog.wired.com/games/2007/07/second-life-res.html>.

⁵⁶ James A. Wagner, *Second Life Avatar Sued for Copyright Infringement*, GIGOM, July 4, 2007, <http://gigom.com/2007/07/04/second0life-avatar-sued-fore-copyright-infringement> (last visited Oct. 20, 2008).

⁵⁷ See *supra* note 55 and accompanying text.

⁵⁸ *Eros, LLC v. John Doe*, Sept. 9, 2007, <http://www.citmedialaw.org/threats/eros-llc-v-doe>.

⁵⁹ Complaint, Simon, *supra* note 51.

duplicate items are created.”⁶⁰ On December 3, 2007, a judgment by consent was entered into the court indicating that all parties have agreed on a settlement.⁶¹

6. *Indications of More Suits to Come.* While these are the first infringement claims involving *Second Life* that have been filed in federal court, a number of rumblings indicate a coming flurry of infringement actions. Marc Bragg, the plaintiff in *Bragg v. Linden Research, Inc.*, is threatening to sue again, this time calling for a class-action lawsuit against “Land Bot” users.⁶² World famous furniture designer Herman Miller is also attempting to compromise with owners of what his company has termed knock-off products.⁶³ Implicit in this announcement is the assertion that the real-world copyright protection afforded Miller, a high-end furniture designer, is equally applicable in *Second Life*, not because the owner of a knock-off has copied any computer code, but because the aesthetic expression within the useful article is still protectable in a virtual platform. Trademark questions are in play as well; Alyssa LaRoche successfully registered her avatar, Aimee Weber, with the trademark office.⁶⁴ There are also significant trademark questions for existing brands, highlighting the potential problems with an economy that lacks sufficient regulation to prevent unlawful exploitation.⁶⁵

⁶⁰ Benjamin Duranske, *Six Major Second Life Content Creators Sue Alleged Copyright Infringer in NY Federal District Court*, VIRTUALLY BLIND, Oct. 27, 2007, <http://virtuallyblind.com/2007/10/27/content-creators-sue-rase-kenzo/>. See also Kathianne Boniello, *Unreality Byte\$: Online Dwellers Sue Qns. “Cheater” for Virtual Theft*, N.Y. POST, Oct. 28, 2007, available at http://www.nypost.com/seven/10/28/2007/news/regionalnews/unreality_byte.htm (explaining process by which the plaintiffs believe the *Second Life* system exposed their virtual goods to such risks).

⁶¹ Benjamin Duranske, *Second Life Content Creators’ Lawsuit Against Thomas Simon (aka Avatar ‘Rase Kenzo’) Settles; Signed Consent Judgment Filed*, VIRTUALLY BLIND, Dec. 3, 2007, <http://virtuallyblind.com/2007/12/03/kenzo-simon-settlement/>.

⁶² Land-bots are program codes that immediately appear to purchase land that is mistakenly listed or mispriced allowing their users to snap up large amounts of land without engaging in the traditional search. Benjamin Duranske, *Commentary: Bragg Agitates for Class Action Lawsuit Against Second Life Landbot Users*, VIRTUALLY BLIND, Oct. 15, 2007, <http://virtuallyblind.com/2007/10/15/bragg-landbot-class-action/>.

⁶³ Herman Miller Combats Knockoffs in *Second Life* with Freebies, VIRTUAL WORLDS NEWS, Oct. 7, 2007, <http://www.virtualworldsnews.com/2007/10/herman-miller-c.html>. See also Seola Sassoon, *Shock! Fashion Designer Knockoff*, SECOND LIFE HERALD, Jan. 30, 2007, http://www.secondlifeherald.com/slh/2007/01/disappearing_de.html (discussing wide-spread presence of unauthorized brand usage in *Second Life*); Benjamin Duranske, *Second Life Hairstyle Raises Copyright Question*, VIRTUALLY BLIND, Feb. 15, 2007, <http://virtuallyblind.com/2007/02/15/second-life-hairstyle-copyright-question/> (discussing liability for alleged copies in virtual world where everything is based on prims foundational element of 3D modeling used to build items in *Second Life*).

⁶⁴ Caleb Booker, *Avatars Seek Trademark Protection*, METAVERSE, Sept. 26, 2007, <http://metaverse.com/25-sep-2007/avatars-seek-trademark-protection>. See also Benjamin Duranske, *‘Aimee Weber’ (TM) Gets USPTO Stamp of Approval for Pigtails, Tutu, Wings, Tights, and Stompy Boots*, VIRTUALLY BLIND, Sept. 21, 2007, <http://virtuallyblind.com/2007/09/21/aimee-weber-trademark/>.

⁶⁵ Benjamin Duranske, *Rampant Trademark Infringement in Second Life Costs Millions, Undermines*

All of these suits and attempts to assert proprietary rights in *Second Life* ask (and attempt to answer) a very important question: What protection is available for intellectual property interests in *Second Life* in particular and virtual worlds generally?

B. PROTECTION UNDER THE COPYRIGHT ACT OF 1976

1. *The Purpose of the Act.* The core purpose of the Copyright Act has been to “promote the Progress of Science and useful Arts.”⁶⁶ Within this purpose, however, exists a well-documented tension between the encouragement of an individual author or creator, accomplished by protecting the individual’s creative works, and the promotion of a more general progress of science and art, accomplished by preventing an individual’s “exclusive rights” from overreaching and becoming monopolistic.⁶⁷

Of particular importance to the purpose of copyright protection is its application to emerging and developing creative forms. The Judiciary Committee itself noted:

The history of copyright law has been one of gradual expansion in the types of works accorded protection. . . . [S]cientific discoveries and technological developments have made possible new forms of creative expression that never existed before. In some of these cases the new expressive forms — electronic music, filmstrips, and computer programs, for example — could be regarded as an extension of copyrightable subject matter Congress had already intended to protect, and were thus considered copyrightable from the outset without the need of new legislation.⁶⁸

Of course, treating new forms of creative expression as extensions of already protected subject matter does not always suffice. In 1976, the National Commission on New Technological Uses of Copyrighted Works (CONTU) discussed this tension as it related to computer software programs.⁶⁹

Future Enforcement, VIRTUALLYBLIND, May 4, 2007, <http://virtuallyblind.com/2007/05/04/trademark-infringement-vws/>.

⁶⁶ U.S. CONST. art. I, § 8, cl. 8.

⁶⁷ H.R. REP. NO. 94-1476, at 50 (1976), as reprinted in 1976 U.S.C.A.N. 5659, 5663 (noting the Department of Justice’s contention that Title II will create unwarranted monopoly).

⁶⁸ See *id.* at 51 (discussing the general subject matter of copyright).

⁶⁹ See generally NATIONAL COMMISSION ON NEW TECHNOLOGICAL USES OF COPYRIGHTED WORKS, FINAL REPORT (1978) [hereinafter CONTU].

2. *Computer Programs as Literary Objects.* As noted, the Copyright Office has had to adapt to the progress it promotes, and CONTU outlined four principal objectives for copyright protection in the context of computer software:

1. Copyright should proscribe the unauthorized copying of these works.
2. Copyright should in no way 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.⁷⁰

Such aims are hardly debatable as they are consistent with the basic purposes of copyright protection in general. But the principal problem that Congress faced (and courts continue to face) in attempting to protect computer programs under the Copyright Act is that programs are a confusing mix of processes, ideas, and expressions.⁷¹ Section 102(b) of the 1976 Act makes clear that “any idea, procedure, process, system, [or] method of operation” is not protected by copyright law.⁷² Because computer programs necessarily include a combination of all of these unprotected elements, some have argued that copyright protection is inappropriate for computer software.⁷³ CONTU, however, concluded that computer software should be treated primarily as literary writings.⁷⁴ Because the committee recognized computer software’s primary function as machine-control, it considered copyright an appropriate means of protecting a programmer’s ability “to make a machine perform any conceivable process” *without* overreaching by inappropriately protecting the electro mechanical foundations of the machine

⁷⁰ *Id.* at 12. Central to CONTU’s analysis is its premise that the development of computer software is far more expensive than the duplication of such software once it has been developed. *Id.* at 10.

⁷¹ Steven R. Englund, Note, *Idea, Process, or Protected Expression? Determining the Scope of Copyright Protection of the Structure of Computer Programs*, 88 MICH. L. REV. 866, 866 (1990).

⁷² 17 U.S.C. § 102(b) (2000).

⁷³ See Lawrence D. Graham & Richard O. Zerbe, Jr., *Economically Efficient Treatment of Computer Software: Reverse Engineering, Protection, and Disclosure*, 22 RUTGERS COMPUTER & TECH. L.J. 61, 101, 141 (1996) (outlining the risks associated with protecting this combination of protected and unprotected elements through copyright and arguing that copyright is inefficient and results in overprotection); see also David G. Luetttgen, *Functional Usefulness vs. Communicative Usefulness: Thin Copyright Protection for the Nonliteral Elements of Computer Programs*, 4 TEX. INTELL. PROP. L.J. 233, 248 (1996) (arguing that copyright protection is inappropriate because computer programs are functional rather than communicative).

⁷⁴ CONTU, *supra* note 69, at 15–16.

itself.⁷⁵ While there is no question that the code itself is of critical importance, the development of more and more advanced computer software and video games has complicated the matter considerably. As video games and computer software have proliferated, the courts have developed an elaborate and creative means of providing what it believes to be appropriate copyright protection.

3. *The Idea-Expression Dichotomy, Useful Articles, and the Merger Doctrine.* While expressing some doubts about the rationale for classifying computer programs as literary works, the courts have complied with Congress's determination and set out to establish a means by which the protectable elements of computer programs could be separated from unprotectable elements.⁷⁶ Three basic principles are critical to determining what elements of computer programs are protectable: (1) the "idea-expression" dichotomy, (2) the "process-expression" doctrine that precludes useful articles from protection, and (3) the merger doctrine, which denies protection to those expressions that are so closely related to the ideas themselves that they cannot be separated.⁷⁷

In classifying computer programs as literary objects, the courts have consistently held that the literal elements of the software are certainly protected against copying, but that the protection of non-literal elements of the software are protectable only to the extent that those elements can be classified as expressions rather than ideas.⁷⁸ Judge Learned Hand notes that "as soon as literal appropriation ceases to be the test, the whole matter is necessarily at large," because establishing a line between the idea and its expression is difficult.⁷⁹ In attempting to draw the line, Judge Hand determined that the most general statements of the subject of a literary work are the least worthy of protection because those elements are most abstract and thus ideas; consequently, the more particular and concrete the element of the work, the more it is worthy of protection.⁸⁰

When one considers current computer programming technology, this idea-expression dichotomy is complicated by the current tools used to "write" software. At the time of CONTU, software developers were, in fact, writing code line by line.⁸¹ But in a few short years, software development changed drastically

⁷⁵ *Id.* at 20.

⁷⁶ Arthur R. Miller, *Copyright Protection for Computer Programs, Databases, and Computer-Generated Works: Is Anything New Since CONTU?*, 106 HARV. L. REV. 977, 988 (1993).

⁷⁷ Englund, *supra* note 71, at 875-77.

⁷⁸ Miller, *supra* note 76, at 996-99 (citing *Whelan Assocs., Inc. v. Jaslow Dental Lab, Inc.*, 797 F.2d 1222 (3d Cir. 1986) and *Lotus Dev. Corp. v. Paperback Software Int'l*, 740 F. Supp. 37 (D. Mass. 1990)).

⁷⁹ *Nichols v. Universal Pictures Corp.*, 45 F.2d 119, 121 (2d Cir. 1930).

⁸⁰ *Id.*

⁸¹ CONTU, *supra* note 69, at 28.

with the arrival of Computer-Aided Software Engineering (CASE) programs.⁸² CASE tools permitted software engineers to create elaborate software without actually writing a line of code.⁸³ Such design software makes severing the idea from the expression in software cases all the more complicated because it allows developers to “write” software via conceptual flow charts and hierarchies, while the CASE program itself writes the line code that will establish the final product.⁸⁴ Therefore, at least in theory, the software authors who use this tool are creating abstract designs and functional diagrams that are much less concrete rather than authoring specific “texts” of code, undermining the principle assumption of treating software as a literary object.⁸⁵ Furthermore, permitting the copyright of designs or schematics had already been held to be impermissible because of the limits such copyrights would place on new creations.⁸⁶

The useful article principle places further limits on the protection of a work of authorship by denying protection to the utilitarian elements of a work because they have “intrinsic utilitarian function that is not merely to portray the appearance of the article or to convey information.”⁸⁷ Such a determination is primarily an assessment of function, as the language of 17 U.S.C. § 101 suggests.⁸⁸ First, one must recognize that the traditional distinction here has been between art and utilitarian objects.⁸⁹ Courts have consistently refused to permit the aesthetic elements of a predominately functional object to create a false monopoly by its characterization as art.⁹⁰ In the realm of computer software, the useful article doctrine is difficult because in some sense, the entire program is utilitarian in nature, and courts have struggled to draw distinctions.⁹¹

When applying the useful article principle to copyright protection of software, the merger doctrine has emerged as the judiciary’s general decision to err on the side of innovation rather than overextending protection. Courts must consider

⁸² See *What is a CASE Environment?*, CARNEGIE MELLON SOFTWARE ENGINEERING INSTITUTE, http://www.sei.cmu.edu/legacy/case_what.html (last visited Oct. 9, 2008) (describing computer-aided software engineering (CASE)).

⁸³ Joseph G. Arsenault, Comment, *Software Without Source Code: Can Software Produced By a Computer Aided Software Engineering Tool Be Protected?*, 5 ALB. L.J. SCI. & TECH. 131, 133 (1994).

⁸⁴ *Id.* at 142.

⁸⁵ *Id.* at 143.

⁸⁶ *Id.* at 156.

⁸⁷ 17 U.S.C. § 101 (2000).

⁸⁸ *Id.* See generally Stephen Langs, *The Definitional Scope of an Intrinsic Utilitarian Function Under the 1976 Copyright Act: One Man’s Use Is Another Man’s Art*, 20 W. NEW ENG. L. REV. 143 (1998).

⁸⁹ See *Kieselstein-Cord v. Accessories By Pearl, Inc.*, 632 F.2d 989, 991–92 (2d Cir. 1980) (discussing the distinction between artful elements of a belt buckle and its function as a buckle).

⁹⁰ *Id.*

⁹¹ *Sony Computer Entm’t, Inc. v. Connectix Corp.*, 203 F.3d 596, 603 (9th Cir. 2000) (citing *Sega Enters. Ltd. v. Accolade, Inc.*, 977 F.2d 1510 (9th Cir. 1992)).

the merger doctrine and determine whether or not “there is only one way to express an idea” and whether “the expression contained in a particular structural element has merged with the process that the program is performing.”⁹² CONTU expressly recognized that the very nature of computer programs limits the modes of expression, stating, “In the computer context, this means that when specific instructions, even though previously copyrighted, are the only and essential means of accomplishing a given task, their later use by another will not amount to infringement.”⁹³ Therefore, those claiming infringement not only must demonstrate that the elements of their computer program qualifies as a concrete, non-utilitarian expression that is severable from the abstract idea out of which it is born, but also they must establish that the means of expression in the particular case is not so limited by the technical requirements of the software that only one such expression is available.

4. *The Abstract-Filtration-Comparison Test.* In an effort to clarify these competing doctrines and concerns that come with attempting to appropriately limit copyright protection for computer software, the courts adopted the abstraction-filtration-comparison test from *Computer Associates International, Inc. v. Altai, Inc.*⁹⁴ The three-part test requires first that the court determine the “levels of abstraction,” as suggested by Judge Learned Hand, to eliminate those elements of the program that are too abstract to be treated as expression.⁹⁵ The second step of the test filters out those elements that are too abstract.⁹⁶ Finally, the court examines the remaining elements seeking to be protected and compares them to the work of the alleged infringer to determine whether or not infringement occurred.⁹⁷ The test enables the court to distinguish ideas from expression, without relying solely on the presence or absence of directly copying the computer code itself.⁹⁸ Furthermore, the test permits the court to isolate distinct elements of a program and determine its protectability as a distinct element, rather than requiring verbatim copying of a substantial amount of the program.⁹⁹ The test, however, has not been applied to virtual items, and the question remains as to whether the virtual works in MMOGs like *Second Life* are sufficiently protected by such a test.

⁹² Harbor Software, Inc. v. Applied Sys., Inc., 925 F. Supp. 1042, 1048 (S.D.N.Y. 1996).

⁹³ CONTU, *supra* note 69, at 20.

⁹⁴ Computer Assocs. Int'l, Inc. v. Altai, Inc., 982 F.2d 693, 706–14 (2d Cir. 1992).

⁹⁵ Miller, *supra* note 76, at 1002. See also *Altai*, 982 F.2d at 706.

⁹⁶ *Altai*, 982 F.2d at 707.

⁹⁷ *Id.* at 710.

⁹⁸ Miller, *supra* note 76, at 1006–07 (emphasizing the abstraction-filtration-comparison test in *Altai* as recognition that software is a “complex hierarchy” of ideas and expression that is not limited to the written code).

⁹⁹ *Id.* at 1003.

5. *Copyright Protection for Audiovisual Works.* An alternative to the abstract-filtration-comparison test is to simply treat the item like an audiovisual work rather than a literary work. Before videogames were primarily treated as computer software, the large consoles that sat in the arcades were no less protectable, but their copyright protection depended on characterizing their screen displays as audiovisual works.¹⁰⁰ When treated as such, the courts apply a relatively straightforward, if more subjective, access and substantial similarity test.¹⁰¹ Because “direct evidence of copying often is unavailable,” the courts have used this alternative test to determine whether or not infringement can be inferred from the circumstances.¹⁰²

*Atari, Inc. v. North American Philips Consumer Electronics Corp.*¹⁰³ provides a good, if somewhat outdated, example of this two-part test because the Copyright Office has since required that a videogame be registered as either a literary work or an audiovisual work.¹⁰⁴ But, as will become apparent, the analysis in *Atari* bears reconsidering in light of the *Second Life* copyright infringement claims.

Under the two-part test, plaintiffs must first establish that the alleged infringer had access to the work such that copying was possible.¹⁰⁵ The second element of the test is largely an exercise in Learned Hand’s idea-expression dichotomy analysis.¹⁰⁶ In *Atari*, when comparing the Pac-Man game to a rival “K.C. Munchkin” game, Judge Wood first considered the elements of the Pac-Man game that he believed to be protectable; the central “gobbler” figure and the “ghost monsters” were considered “wholly fanciful creations, without reference to the real world” and therefore protectable.¹⁰⁷

Comparing the gobbler and the ghosts in K.C. Munchkin, the court found substantial similarity sufficient to support the inference of infringement because the defendant’s ghosts had several “blatantly similar features” including the “V-shaped ‘mouth’ ” of the gobbler and the “peculiar ‘eye’ and ‘leg’ movement” of the ghosts.¹⁰⁸ While the court did not find exact similarity, it carefully upheld the

¹⁰⁰ JOHN W. HAZARD, COPYRIGHT LAW IN BUSINESS AND PRACTICE § 3:2 (1989) (defining “screen display”).

¹⁰¹ *Atari, Inc. v. N. Am. Philips Consumer Elecs. Corp.*, 672 F.2d 607, 614 (7th Cir. 1982).

¹⁰² *Warner Bros. Inc. v. Am. Broad. Cos.*, 654 F.2d 204, 207 (2d Cir. 1981).

¹⁰³ *Atari*, 672 F.2d 607.

¹⁰⁴ HAZARD, *supra* note 100.

¹⁰⁵ *Warner Bros.*, 654 F.2d at 207.

¹⁰⁶ *Atari*, 672 F.2d at 615–16.

¹⁰⁷ *Id.* at 617–18.

¹⁰⁸ *Id.* at 618.

traditional ordinary observer test,¹⁰⁹ and also noted that the differences might well be a result of inferior display technology in home entertainment systems.¹¹⁰

In addition to these visual similarities, the court also considered extrinsic evidence that, while somewhat conclusory, suggests a conscious attempt to take advantage of Pac-Man's success: Several retailers referred to K.C. Munchkin as "Odyssey's PAC-MAN."¹¹¹ The court found this attempt to capitalize on Atari's success, despite the absence of internal infringement, still constituted an inappropriate attempt to capitalize on someone else's protected work.¹¹²

Several commentators, Nimmer chief among them, have criticized the "total concept and feel test" as too vague for computer programs consisting ultimately of binary code.¹¹³ Indeed, the Ninth Circuit backed away from this approach in *Apple Computer, Inc. v. Microsoft Corp.*, upholding the lower court's application of a virtual identity standard when considering nonliteral elements of computer software because the opportunity for variation is more limited than other audiovisual and artistic works.¹¹⁴ The Second Circuit, however, has defended the test, noting specifically that the test first isolates protectable aesthetic elements before turning to the aggregate combination of these elements that may constitute infringement.¹¹⁵ The Seventh Circuit has also recognized computer programs right to at least some protection as an audiovisual work.¹¹⁶

To say that MMOGs in general and *Second Life* in particular can be distinguished from games like Pac-Man and a basic computer GVI is an understatement. Does the vast difference, primarily resulting from the creation of these virtual and persistent worlds, warrant a reconsideration of copyright protection afforded to such programs? Consider what is termed "machinima."¹¹⁷ Courts have generally rejected the argument that the performance element of a video game—that a player's performance is constantly altering the audiovisual

¹⁰⁹ A basic tenet of copyright law is that infringement should be based on whether or not the "ordinary observer," rather than some exceptionally trained expert, would find the accused work to be infringing. 4 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 13:03[E][1][a] (2008) (noting that this test "scrupulously avoids such expert testimony").

¹¹⁰ *Atari*, 672 F.2d at 618 & n.12.

¹¹¹ *Id.* at 619.

¹¹² *Id.*

¹¹³ 4 NIMMER & NIMMER, *supra* note 109, § 13.03[A][1](c).

¹¹⁴ *Id.* at 1446–47.

¹¹⁵ *Tufenkian Import/Export Ventures, Inc. v. Einstein Moomjy, Inc.*, 338 F.3d 127, 134 (2d Cir. 2003).

¹¹⁶ See *Traicoff v. Digital Media, Inc.*, 439 F. Supp. 2d 872, 881 (S.D. Ind. 2006) ("The audiovisual product that is embodied in the computer program is copyrightable as an audiovisual work." (citing *Midway Mfg. Co. v. Artic Int'l, Inc.*, 704 F.2d 1009, 1012 (7th Cir. 1983))).

¹¹⁷ See generally Matthew Brett Freedman, Note, *Machinima and Copyright Law*, 13 J. INTELL. PROP. L. 235, 238 (2005) (defining Machinima as "shooting film in virtual reality").

representation—sufficiently undermines the game as an audiovisual work.¹¹⁸ But the court has not addressed audiovisual protection in this particular context.¹¹⁹ Freedman suggests that the court might treat the virtual world in which the audiovisual work is created as analogous to a pictorial representation of an architectural work.¹²⁰ Under this construct, the audiovisual work created within the game would be protectable to the extent that the images it captures were “visible from public places.”¹²¹ While admitting that the analogy is not perfect, Freedman asserts that such treatment best advances the goals of copyright law by encouraging creative works for public benefit without harming the interests of the copyright holders of virtual spaces.¹²²

All of this is to say that the copyright protection of computer software is complicated enough without MMOGs contributing to the confusion by introducing a virtual realm where copyrighted items are bought and sold with real dollars, treated as useful objects in a virtual space, and receive claim protection in real world courts. The analysis that follows attempts to clarify the central problems arising out of virtual intellectual property in *Second Life*, discusses the adequacy of an abstract-filtration-comparison test, and discusses the advantages and disadvantages of a more subjective analysis at this stage in technological history.

III. ANALYSIS

A. PROBLEMS WITH THE ABSTRACT-FILTRATION-COMPARISON TEST IN A VIRTUAL CONTEXT

The recent suits brought by Eros, LLC and others focus on the actual copying of code, and, as the settlement of the multi-party suit indicates, protection against such copying should be clear.¹²³ But a larger and more critical question remains: How should the court treat these virtual items when such copying is not so readily apparent? What nonliteral protection should be permitted in a virtual context? Does copyright need to be reconfigured when considered within the context of a persistent world economy?

In answering these questions, this Analysis first considers a court’s likely determination of protectable elements of Eros, LLC’s virtual items as computer

¹¹⁸ HOWARD B. ABRAMS, *THE LAW OF COPYRIGHT* § 5:197 (2007).

¹¹⁹ Freedman, *supra* note 117, at 243.

¹²⁰ *Id.* at 250–51.

¹²¹ *Id.* (discussing the effect of the Architectural Works Copyright Protection Act).

¹²² *Id.* at 253.

¹²³ See Complaint, Leatherwood, *supra* note 54; Complaint, Simon, *supra* note 51.

programs under the abstract-filtration-comparison test, noting the particular complications that such an analysis creates. Second, this Analysis discusses the items' treatment as audiovisual works as a clearer and more appropriate alternative.

1. *CASE Tools Lead to Tortured Abstraction-Filtration Assessments.* Because this analysis will treat the property at issue in the Eros litigation as a litmus test, a brief explanation of the basic structure of that property is important. Eros filed suit alleging the unlicensed reproduction of its SexGen beds.¹²⁴ As described earlier, these beds were encoded with animation that allowed users to engage in virtual sex.¹²⁵

The first step of the abstract-filtration-comparison test requires that the program, in this case the computer code that creates the visual representation of the bed, the animations, and the menu options, be broken down into the appropriate levels of abstraction.¹²⁶ As the court in *Altai* described, "this process begins with the code and ends with an articulation of the program's ultimate function. Along the way, it is necessary essentially to retrace and map each of the designer's steps in the opposite order in which they were taken during the program's creation."¹²⁷ Thus, courts applying the test must start with what they know to be protected as a literary work (i.e., the code itself) and move progressively outward until the expression can be severed from the idea. The court in *Altai* also started with the defendant's program to filter out those elements of the alleged infringer that are "not found in the plaintiff's program" because "this material would have no bearing on any potential substantial similarity between the two programs" and thus would be "wasteful and unnecessarily time consuming."¹²⁸

As with all computer programs, the code itself is clearly copyrightable as a literary work. Therefore the court would examine the code of an allegedly infringing work to determine whether or not there is any overlap. Any overlap found would clearly give rise to substantial similarity and constitute infringement. But moving into the layers of greater abstraction the process becomes much more confusing, and to borrow the words of the *Altai* court, perhaps "wasteful" and "time-consuming."¹²⁹

Attempting to define the intermediate layers of specificity is greatly complicated by the use of multiple CASE tools in actually importing the virtual

¹²⁴ Complaint, Leatherwood, *supra* note 54; *see supra* note 58 and accompanying text.

¹²⁵ *See supra* notes 56–57 and accompanying text.

¹²⁶ Computer Assocs. Int'l, Inc. v. Altai, Inc., 982 F.2d 693, 706 (2d Cir. 1992).

¹²⁷ *Id.* at 707.

¹²⁸ *Id.* at 714.

¹²⁹ *Id.*

items into *Second Life*. In *Altai*, the court was able to examine object code, source code, parameter lists, services required, and then to general outline in that order.¹³⁰ But as previously mentioned, software developers were still actually writing code at the time—and the steps required to produce a program were fairly established.¹³¹

In the context of items created for *Second Life*, there is no real limit to the number of CASE tools that may have been used, leaving the court to sort through which layers should be considered expressions of the program's author and which should be cast aside as mere products of multiple computer-generated translations and modulations of an original expression. There are three separate software engineering programs at work in such a process: the third-party application, the scripting system that converts the code produced by the design tool into a form legible by the *Second Life* build tool ("exporter"), and then the *Second Life* build tool that actually rewrites the script in a form that creates the item as it will exist in-world.¹³²

Therefore, in such cases the court would be asked to first look at the code as translated into *Second Life*; examine the code and parameters entered into the *Second Life* translator program; and then look at the directions, schematics and modules that were used to create the original 3-D model. Furthermore, the court would most likely have to hear from a broad swath of experts in order to determine whether or not any differences in code, scheme, or module should be treated as a distinct expression or merely a product of using different CASE tools.

The answers to such questions are by no means clear and a detailed exploration is beyond the scope of this Analysis. Suffice it to say, the use of CASE tools and translating programs to create and transfer items for retail in *Second Life* makes abstraction and filtration incredibly complex and time consuming.¹³³

2. *The Merger Doctrine.* A second, and equally complicated, consideration results from the use of these CASE tools: Do the limitations that accompany the complicated process required to bring these complex virtual items to *Second Life*

¹³⁰ *Id.*

¹³¹ See Arsenault, *supra* note 83, at 132–35 (discussing the complications that CASE tools have introduced into the analysis).

¹³² Mark Wallace, *Second Life Build Tools Support More Formats*, 3POINTD.COM, Apr. 27, 2007, <http://www.3pointd.com/20070427/second-life-build-tools-support-more-formats> (discussing various exporters that have become available to make "working in more standard formats" more interoperable).

¹³³ The process becomes all the more daunting when one considers the multifunctional nature of the virtual items at issue in the Eros cases. They are, in a real sense, computer programs within computer programs because they both create visual representations and run animations, and all would be subject to the same painstaking analysis.

undermine the basic assumption that an idea can be expressed in an infinite number of ways? While courts are to remember that copyright law is intended to “‘secure a fair return for an “author’s” creative labor,’” it is also designed to “‘stimulate artistic creativity for the general public good.’”¹³⁴ The resulting protection, then, is limited to only those elements that the court believes a reasonable protection of an artist’s labor without creating a monopoly that would undermine the public interest. In *Arnstein v. Porter*, the court describes the critical question in infringement cases as one of “whether the defendant took from plaintiff’s works so much of what is pleasing to the ears of lay listeners, who comprise the audience for whom such popular music is composed, that defendant wrongfully appropriated something which belongs to the plaintiff.”¹³⁵

In a *Second Life* context, the limitations of the software design tools and the lack of control by the designer himself suggest that the court should merge the expression with the idea, making several elements unprotectable by copyright. In *Data East USA v. Epyx, Inc.*, the court focused on the technical limitations of the Commodore computer system itself, which required that developers use “sprites” in creating animations.¹³⁶ “Sprites” are special techniques required to make mobile graphic images.¹³⁷ At the time of the case, sprites were far less sophisticated and thus more limiting, but the same principle should be applicable here when considering the CASE tool requirements. The complicated translation requirements of the CASE tools impose similar inherent limitations of expression in *Second Life*. While far more complex in its requirements than the Commodore system, there are still technical restrictions and limitations in the creation of functional software within the virtual world.¹³⁸ To borrow a description from Jeffrey Gomez, author of the script that translates Blender forms into scripts readable and uploadable in *Second Life*, translating objects into *Second Life* is “like trying to force a canteloupe [sic] into a soup can—meshes are far more freeform than prims.”¹³⁹

Furthermore, particularly unique to *Second Life* is the security risk that results from applying these types of translation tools. Gomez notes, “Second Life is a

¹³⁴ *Altai*, 982 F.2d at 711 (quoting *Twentieth Century Music Corp. v. Aiken*, 422 U.S. 151, 156 (1975)).

¹³⁵ *Arnstein v. Porter*, 154 F.2d 464, 473 (1946) (noting also that the plaintiff’s right is primarily that of potential financial returns).

¹³⁶ *Data E. USA, Inc. v. Epyx, Inc.*, 862 F.2d 204, 209 (9th Cir. 1988).

¹³⁷ *Id.* at n.5.

¹³⁸ See generally Wallace, *supra* note 132 (discussing improvement of *Second Life*’s interoperability with more advanced modeling tools).

¹³⁹ Posting of Jeffrey Gomez to Mark Wallace, *Create SL Objects in Blender—If You Dare*, 3POINTD.COM, <http://www.3pointd.com/20060602/create-sl-objects-in-blender-if-you-dare> (June 3, 2006, 22:35 EST).

razor-thin line of security. . . . [T]he permissions system simply does not provide well for the protection of intellectual property, leading to a general snafu of who-owns-what-when-why-and-how?”¹⁴⁰ Gomez suggests that the risk in creating objects outside of the *Second Life* design software is especially problematic because the current Build tool reduces all imported objects to the same “granularity” making it impossible to distinguish between the relative qualities of competing goods.¹⁴¹ Thus the limitations of the *Second Life* design software and prim-based structure are *very* limiting.

The resulting situation is one in which a creator’s ability to build creative expressions with meaningful copyright protection is limited by the nature of the *Second Life* design software program. Therefore, a court will have to sift through each of the potentially protectable elements and determine at every turn whether the similarity is a result of imitation or of the limits of the CASE tool itself. Such determinations will necessarily result in the failure of the courts to protect copyrighted objects that would otherwise be protectable, except that the current limitations of *Second Life* and its translation requirements result in a merger of idea and expression.

3. *Establishing a Sole Intrinsic Function in Virtual Space.* This Note has already briefly mentioned the inherent problems with attempting to determine whether a computer program should be treated as a useful object and the difficulty that comes with trying to distinguish between purely utilitarian and aesthetic purposes.¹⁴² *Second Life* only exacerbates the problem when considering the program itself.

The first obstacle in classifying virtual goods as utilitarian objects is that they are necessarily and primarily appearances, as is everything in *Second Life*. Therefore, in order to classify virtual objects as useful objects, one must first clarify the rationale behind such a limitation in the real world to determine its applicability in a virtual context. Such a determination is primarily an assessment of function, as the language of 17 U.S.C. § 101 suggests.¹⁴³ First, one must recognize the fundamental problem *Second Life* poses to a traditional distinction between art and utilitarian objects. While courts refuse to permit the aesthetic elements of a predominately functional object to create a false monopoly by its characterization as art,¹⁴⁴ objects within *Second Life* do not fit cleanly into these categories. Because *everything* is an appearance within a virtual space, the boundary between aesthetics and utility are strongly blurred. The problem is perhaps best

¹⁴⁰ *Id.* (June 3, 2006, 22:19 EST).

¹⁴¹ *Id.* (explaining that the system is too homogeneous to create sufficiently unique items).

¹⁴² See *supra* Part II.B.2–3.

¹⁴³ See *supra* note 88 and accompanying text.

¹⁴⁴ See *supra* note 90 and accompanying text.

demonstrated by the world-famous furniture designer Herman Miller and his attempt to limit knock-off products.¹⁴⁵ The real-life versions of these chairs, which sell for thousands of dollars, are certainly useful objects to the extent that their primary purpose is to function as a place for individuals to sit. But as the case law indicates, in the case of useful objects that simultaneously possess both aesthetic and utilitarian value, “copyrightability ultimately should depend on the extent to which the work reflects artistic expression uninhibited by functional considerations.”¹⁴⁶ When considering “virtual property,” while it is apparently more complicated since the item in question is not tangible in an ordinary sense, a similar dichotomy is certainly apparent.¹⁴⁷ Therefore, a court’s application of the useful article analysis to a virtual article hinges on these “functional considerations,” and therein lies the difficulty.

One might easily argue that this is “just a game” and so everything in *Second Life* should be treated as toys. Consider *Gay Toys, Inc. v. Buddy L. Corp.* in which the court held that a toy plane, while useful, was not a useful object because its usefulness is no different from that of a painting of an airplane—that it portrays the appearance of a real airplane.¹⁴⁸ Because it is not a useful article, the court did not enter into any sort of severability test and remanded for reconsideration as a sculptural work.¹⁴⁹ This line of reasoning suggests that articles like the SexGen bed are not to be considered useful articles under any circumstances because they are pictorial representations inviting a user to “dream and let his or her imagination soar.”¹⁵⁰

Such an assessment, however, ignores the reality of a world like *Second Life*. As Castronova has pointed out, each virtual world serves a distinct purpose along his play-space continuum: Some are purely play spaces, and some are not play spaces at all, but purely extensions of a real-world economy.¹⁵¹ As previously discussed,

¹⁴⁵ See *supra* note 63 and accompanying text.

¹⁴⁶ *Brandir Int’l, Inc. v. Cascade Pac. Lumber Co.*, 834 F.2d 1142, 1145 (2d Cir. 1987) (quoting Robert C. Denicola, *Applied Art and Industrial Design: A Suggested Approach to Copyright in Useful Articles*, 67 MINN. L. REV. 707, 741 (1983)).

¹⁴⁷ David P. Sheldon, *Claiming Ownership, but Getting Owned: Contractual Limitations on Asserting Property Interest in Virtual Goods*, 54 UCLA L. REV. 751, 759 (2007) (explaining that the “bundle-of-rights approach [to property] does not require the object over which a property claim is made to be a tangible thing” because property is, in large, part a hierarchy of relationships among potential users). See also Adam Mossoff, *What Is Property? Putting the Pieces Back Together*, 45 ARIZ. L. REV. 371, 372–73 (2003) (discussing the “disintegration” of property into a bundle of rights without any requisite physical qualities or characteristics).

¹⁴⁸ *Gay Toys, Inc. v. Buddy L. Corp.*, 703 F.2d 970, 973 (6th Cir. 1983).

¹⁴⁹ *Id.* at 974.

¹⁵⁰ *Id.* at 973 (quoting *Gay Toys, Inc. v. Buddy L. Corp.*, 522 F. Supp. 622, 625 (E.D. Mich. 1981)).

¹⁵¹ See *supra* notes 10–11 and accompanying text.

Second Life is an “open world” that actually promotes itself as an extension of the real-world economy and its legal protections; users are arguably doing more than “playing” when they operate businesses like Eros, LLC. Furthermore, one of the principle reasons for creating an open world is to encourage innovation and development within the virtual world context.¹⁵² The presence of such powerful economic factors might make the useful article distinction an important means of preventing a monopolistic application of copyright protection.¹⁵³ Thus one would expect to recognize some useful articles within *Second Life* insofar as such recognition limits the scope of protection and prevents a corporation like Eros from monopolizing the virtual-sex-furniture market.

Most importantly, courts have applied the sole intrinsic function test to prevent precisely this sort of monopoly. The principle, promulgated by the Copyright Office in 1959, was intended to bar articles that were “unique and attractively shaped” from copyright protection if their sole function was utilitarian.¹⁵⁴ The regulation was issued in an effort to limit the application of the Supreme Court’s opinion in *Mazer v. Stein*,¹⁵⁵ which held statuettes used as electric lamp bases were not barred from copyright protection.¹⁵⁶

What is the “sole intrinsic function” of the SexGen bed? The *primary* function is pretty clear: The item enables avatars to share virtual sexual experiences in a variety of ways. But can the animations be separated from this primary function? To put the question another way, have the aesthetic elements of the object¹⁵⁷ so merged with the sole intrinsic function that copyright protection is impossible?

Consider the likelihood of marketability test suggested by Nimmer. Under his assessment, elements of useful objects were considered severable only if they were judged to be marketable for their aesthetic qualities.¹⁵⁸ Nimmer himself noted that, while such an economic test was relatively clear when determining that adding functional elements to a previously existing work of art would not give rise

¹⁵² Mayer-Schönberger & Crowley, *supra* note 10, at 1805–06. See also Bragg v. Linden Research, Inc., 487 F. Supp. 2d 593, 596 & n.6 (E.D. Pa. 2007) (discussing Linden’s consistent promotion of the economic opportunity available as a result of its permitting users to retain the IP rights in items that users themselves create or develop).

¹⁵³ H.R. REP. NO. 94-1476, at 54 (1976), as reprinted in 1976 U.S.C.A.N. 5659, 5659. The House makes clear that utilitarian aspects of copy righted objects are not protectable by copyright. See also Twentieth Century Music Corp. v. Aiken, 422 U.S. 151, 156 (1975) (stating that copyright protection must “ultimately serve the cause of promoting broad public availability”).

¹⁵⁴ Pivot Point Int’l, Inc. v. Charlene Prods., Inc., 372 F.3d 913, n.6 (7th Cir. 2004) (citing 37 C.F.R. § 207.8(a) (1949) and 37 C.F.R. § 202.10(c) (1959)).

¹⁵⁵ 347 U.S. 201 (1954).

¹⁵⁶ *Pivot Point Int’l*, 372 F.3d at n.6.

¹⁵⁷ In this case the primary concern would be the animations, but also include the menu structure and other visual elements of the item as discussed above.

¹⁵⁸ 1 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 2.08[B][3] (2008).

to a new work worthy of protection, when seeking to sever aesthetic elements from functions the test was difficult.¹⁵⁹ This difficulty is more apparent in a virtual world, not only because the aesthetic elements are complex and somewhat difficult to isolate, but also because the marketability itself is not completely clear.

Does the success of the SexGen bed depend upon the quality of the audiovisual experience? Might it be marketable because of its ability to integrate the characteristics of particular avatars using the item in a more realistic way? What about the variation within the program itself? Some element of randomness created by the software makes the variation different every time it is employed. All of these elements are potentially marketable, and thus the test leaves the court essentially with the same complicated problem of unraveling an unwieldy number of potentially marketable elements and determining that some are protectable while others are not, while at the same time attempting to recognize the limitations of the technology itself.

Superior Form Builders, Inc. v. Dan Chase Taxidermy Supply Company, Inc., a case involving a taxidermist's right to copyright protection, provides an interesting analogy to the SexGen bed.¹⁶⁰ In *Superior Form*, the court considered whether animal mannequins are useful articles.¹⁶¹ Interestingly, the court recognized that mannequins had previously been considered useful articles, but that these mannequins were individually sculpted by Superior Form and "provide[] the creative form and expression of the ultimate animal display."¹⁶² Whatever utilitarian aspects were present, the court found that the aesthetic and artistic features in this case were separable and therefore protectable.¹⁶³

Under this rationale, the functional aspects of the SexGen bed that serve an aesthetic end should not be treated as useful articles. Indeed, the animations' software "sculpting" is, at least in a manner of thinking, like the sculpting of a functional mannequin intended to display an animal's pelt in an expressive way. Just as the mannequin in *Superior Form* is built in consideration of several potential visual expressions, the animations' code is written in consideration of similar visual expressions.¹⁶⁴ The medium is different, but the purpose is the same.

¹⁵⁹ *Id.* at n.97.1.

¹⁶⁰ *Superior Form Builders, Inc. v. Dan Chase Taxidermy Supply Co., Inc.*, 74 F.3d 488, 491 (4th Cir. 1996).

¹⁶¹ *Id.*

¹⁶² *Id.* at 494.

¹⁶³ *Id.* The court rejects a comparison to *Carol Barnhart Inc. v. Econ. Cover Corp.*, 773 F.2d 411, 418 (2d Cir. 1985) because the mannequins in that case were intended to display clothes and not designed to portray themselves.

¹⁶⁴ *Superior Form*, 74 F.3d at 494 (noting that "the mannequin can even portray the intensity of flexed body parts, or it can reveal the grace of relaxed ones"). The court highlights the fact that the underlying mannequin is as important to the expression as the external skin that decorates it. That

Therefore, the implication is that even when underlying “sculptural” elements of a visual artistic expression are invisible and arguably primarily functional, they are protectable when they contribute critical elements to the visual expression itself.

There are no clear solutions to the complications that virtual property presents the various doctrines of computer software infringement analysis. In fact, they tend to confuse rather than clarify. A court might apply any one of these competing doctrines as it applies the abstract-filtration-comparison test and have a strong argument for its decision. The question remains, however, whether there is a less complicated means of providing adequate protection without requiring such an intensive examination of the software.

B. THE AUDIO-VISUAL MODEL FOR NON-LITERAL INFRINGEMENT: THROUGH THE LOOKING GLASS

The answer to these difficult questions most likely lies in simply shifting the focus of the courts rather than attempting to create some new category of copyrightable material through federal legislation. These items certainly qualify as a new form of creative expression that never existed before, made possible by developing technology, and thus is precisely the sort of form to which copyright law must be applied. The method of that application, however, is not clear.¹⁶⁵ As the recent cases indicate, the current state of technology makes direct copying the most likely sort of infringement in the virtual world probably because it is the easiest.¹⁶⁶ But technology will change, and direct copying will become more difficult with the growth of the virtual economy, which will increase the economic gain to be realized by such infringement. Therefore, it is not difficult to imagine a period in which the issue of non-literal infringement becomes critical. As the above discussion has demonstrated, the court’s current dependence on the actual computer code does little to clarify the situation.

The principle problem in relying on the computer code as stored on hard drives and servers around the world is that the principle use of the item does not occur in that world. *Second Life* is a virtual extension of the real world. Indeed it is designed to blur the line between the reality of life from this side of the computer screen and the life users have created for themselves within it. Therefore, it makes sense that perhaps the first step in establishing an answer to

is, even though the mannequin is not visible, it is still very much a part of the visual, artistic expression. *Id.*

¹⁶⁵ H.R. REP. NO. 94-1476, at 51 (1976), as reprinted in 1976 U.S.C.C.A.N. 5659, 5659 (discussing rationale for use of the phrase “original work of authorship” in an attempt to provide for the emergence of unavoidably unconsidered works).

¹⁶⁶ See *supra* notes 54–58, 140 and accompanying text.

these difficult questions is to pass through the looking glass, as it were, and reapply copyright law from that perspective.

The dissent in the CONTU recognizes the forced construction of computer software as a literary work.¹⁶⁷ In his dissent, Commissioner Hersey writes:

The functions of computer programs are fundamentally and absolutely different in nature from those of sound recordings, motion pictures, or videotapes. Recordings, films, and videotape produce for the human ear and/or eye the sounds and images that were fed into them and so are simply media for transmitting the means of expression of the writings of their authors.¹⁶⁸

While this criticism led Hersey to believe that patent and trade secret protection would be more appropriate protection for computer programs (an interesting discussion beyond the scope of this Note), a somewhat modified question might be asked today: Is the software that creates a virtual item in *Second Life* more or less like a record, film, or videotape? Once one agrees to examine the problem from within the virtual world itself, it becomes clear that the external code is merely “media for transmitting” and that the program’s sole purpose is to communicate “the writing of the author in its audible [and visual] form.”¹⁶⁹

The difference between more typical computer software and video games and virtual items in *Second Life* hinges on the differences between the uses of the two programs. As Hersey points out, the “overwhelming majority” of computer software is used to “transform[], to manipulate, to select, to edit, to search and find, to compile, to control and operate computers.”¹⁷⁰ By contrast, the software that creates these virtual items is not nearly so functional. Its primary function is as a virtual visual representation of a real object, gesture, or interaction. Particularly, the SexGen bed serves primarily to provide end-users with a means to watch an imaginary sexual encounter between two avatars.¹⁷¹

1. *Purpose of Copyright Protection.* As previously discussed, copyright protection primarily serves to “grant authors exclusive rights in their writings to promote the progress of science and the useful arts.”¹⁷² The temporary economic monopoly on these expressions creates an incentive for authors to express their ideas and thereby insures that creative ideas and useful arts will be promulgated for the

¹⁶⁷ CONTU, *supra* note 69, at 28 (Comm’r Hersey, dissenting).

¹⁶⁸ *Id.* at 29.

¹⁶⁹ *Id.*

¹⁷⁰ *Id.*

¹⁷¹ See *supra* note 55 and accompanying text.

¹⁷² CONTU, *supra* note 69, at 14.

progress and benefit of society.¹⁷³ Within *Second Life*, the principal concern should not be on the similarity of the code itself but rather on the similarity between one audiovisual experience and another. Of course, the more subjective audiovisual examination still requires a separation of the idea from the expression, but does not so firmly bind the court's examination of the expression to the actual code, avoiding the Gordian knot of CASE tools and all of the various layers of computer code translation required to create content in *Second Life*. Furthermore, an audiovisual assessment accommodates a very important distinction between virtual products in *Second Life* and other computer programs: in a very "real" sense, *Second Life*'s virtual objects' primary purpose and use remain within the virtual world (on the other side of the looking glass so to speak), while other computer programs are still primarily used to manipulate a computer system and produce a result in the real world.

2. *An Audiovisual Analysis.* The two-part test established in *Atari* certainly simplifies what would otherwise be an extremely complicated examination of various modes and modules of codes and CASE tool programming hierarchies.¹⁷⁴ When examining a virtual item as an audiovisual work, a certain degree of parsing out and careful examination is still required. However, the focus is not on the software itself but on the similarity of the display and experience of the user—precisely the area of most concern to *Second Life* entrepreneurs.¹⁷⁵ Furthermore, the heightened standard applied in *Apple Computer* addresses the limitations of *Second Life* that are so problematic in an abstraction-filtration context.¹⁷⁶

While the virtual identity standard may appear to ostensibly slam the door in the faces of *Second Life* users and declare a free-for-all where no virtual element can be protected, it is important to remember that the *Apple Computer* court recognized that each particular work must be placed on a continuum and that the current state of GUIs placed it closer to a collection of facts than to a true artistic work. Part of the beauty of avoiding complete reliance on the computer code itself is that it allows for greater flexibility as the technology develops and the merger doctrine becomes less applicable.

¹⁷³ Luetgen, *supra* note 73, at 243. Luetgen notes that the benefit to society is clear from the originality requirements under 17 U.S.C. § 102(a). He also points out that underlying this promotion of expression is the notion that a finite number of good ideas are out there, and Congress, by implementing this idea/expression, encourages the dichotomy expression of ideas in a variety of modes, regardless of whether the ideas themselves have already been communicated.

¹⁷⁴ See *supra* notes 101–06 and accompanying text.

¹⁷⁵ See *supra* notes 101–06 and accompanying text.

¹⁷⁶ See *supra* notes 113–14 and accompanying text.

Items like the SexGen bed, however, are most likely to be treated as compilations of unprotectable ideas because of the current limits of the technology. In *Atari Games Corp. v. Oman*, the court explained:

an audiovisual work is analogous to the compilation of facts discussed in *Feist* in this critical respect: both involve a choice and ordering of elements that, in themselves, may not qualify for copyright protection; the author's *selection* and *arrangement*, however, may "entail [the] minimal degree of creativity" needed to bring the work within the protection of the copyright laws.¹⁷⁷

The comparison, then, is virtually dispositive in the SexGen bed context because the limitations of *Second Life* itself make variation among similar objects extremely difficult, and therefore the nonliteral protection of such objects should be limited according to the principles of compilation.

For all of these reasons, applying copyright law in the context of audiovisual content and nonliteral elements of software seems to be the most efficient means of protecting these emerging virtual objects while protecting the public's interest in maintaining an open and competitive marketplace.

IV. CONCLUSION

As F. Gregory Lastowka and Dan Hunter point out, the earliest discussions of law in virtual spaces "endorsed all manner of new possibilities . . . that we might recognize the primacy of social agreements of online communities, defer to these laws over those of national sovereigns, and establish virtual judges to decide cyberspace cases."¹⁷⁸ Modern considerations of virtual law are skeptical that virtual spaces should be any different from real ones, in part because until very recently these worlds were not completely self-governing and in part because of the strength in the real world interest in governing such communities.¹⁷⁹ It is not sufficient to simply assert that these environments are "just a game."¹⁸⁰ In *Second Life*, users have built a virtual economy with real-world economic validity. One of the cornerstones of this economy is the TOS that grants creators of

¹⁷⁷ *Atari Games Corp. v. Oman*, 979 F.2d 242, 245 (D.C. Cir. 1992) (referencing *Feist Publ'n, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340 (1991)).

¹⁷⁸ Lastowka & Hunter, *supra* note 9, at 68.

¹⁷⁹ *Id.* at 69.

¹⁸⁰ *Id.* at 72. Consider also the continuum of play spaces that Castronova discussed, *supra* note 9, at 193.

content all intellectual property rights and protections in those items created by the user. Yet, it is not clear what shape those protections take.

To this point, the suits brought have focused on the actual conversion of lines of code and direct copying of the sort that is easy to identify. The principle challenge has been in locating the real-world identities of the culprits and in having a court formally recognize these property rights as vested in the creator. With the settlement of the multi-party suit and the grant of various subpoenas in the Eros suit, both of these objectives have been accomplished. But more suits and controversies will result, and the question of what sort of copyright protection should be afforded these items when direct copying of code has not been addressed.

While it might seem most logical to treat such virtual items as computer software and therefore literary works protected under the abstract-filtration-comparison construct, such an analysis is unnecessarily complex and the nature of these virtual items and the methods of expression available make treatment as an audiovisual work most appropriate. The treatment of audiovisual works has developed to provide the necessary protection for multimedia works very much like *Second Life's* virtual goods. Most importantly, it does not bind itself to the particular means of recording or embodiment, but rather emphasizes the principle value of the work itself: The experience of its consumers. Thus, those independently created works that are so similar as to be a substitute in the mind of an ordinary observer would be considered infringing regardless of whether or not they are exactly the same. This approach strikes a balance between the interests of the creator, while recognizing the current limits of expression and encouraging innovation.

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