

FOR SALE—ONE LEVEL 5 BARBARIAN FOR 94,800 WON: THE INTERNATIONAL EFFECTS OF VIRTUAL PROPERTY AND THE LEGALITY OF ITS OWNERSHIP

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I. INTRODUCTION

In an episode of the eighteenth season of *The Simpsons*, Marge Simpson, as a virtual elf, explores the online game of “Earthland Realms,” wherein online gamers develop characters by completing various missions.¹ Throughout the game, Marge attempts to stop her son Bart’s character, “Shadowknight,” from committing carnage and stealing virtual objects such as gold, virtual swords, and jewelry from other players in the game.² Within the game, Shadowknight rises to fame and power by winning and stealing virtual goods from in-game characters.³ When Marge cleans out Shadowknight’s virtual stockpile of booty and redecorates his virtual castle, Bart becomes furious and accidentally kills her elf character.⁴ Bart’s reaction to the “theft” of his virtual property illustrates unresolved questions in online gaming: what is the legal status of virtual property, how have different countries around the world dealt with this question, and is a legislative or a judicial approach more appropriate for resolving this issue?

Virtual property is property that gamers acquire in an online game.⁵ Virtual property varies between games and can include magical amulets, game currency,⁶ or even virtual real property.⁷ Often these goods can be transferred between online gamers who are in the same virtual world.⁸ Virtual property is a common theme in many massively multi-player online role playing games (MMORPGs).⁹ An MMORPG centers around the adventures of a gamer’s avatar, a personally assembled virtual character,¹⁰ such as Bart’s Shadowknight

¹ *The Simpsons: Marge Gamer* (FOX television broadcast Apr. 22, 2007), available at http://wtso.net/movie/100-The_Simpsons_1817_Marge_Gamer.html. Earthland Realms is a parody of both EverQuest and World of Warcraft, two popular online games.

² *Id.*

³ *Id.*

⁴ *Id.*

⁵ See Tom Loftus, *Virtual Worlds Wind Up in Real World's Courts*, MSNBC.COM, Feb. 7, 2005, <http://www.msnbc.msn.com/id/6870901/> (discussing virtual goods and online games).

⁶ *Id.*

⁷ See *id.* (stating that “[a]n island in a virtual world recently sold for \$30,000”).

⁸ See Dr. Richard A. Bartle, *Pitfalls of Virtual Property*, THE THEMIS GROUP, April 2004, at 1, 2–3, <http://www.themis-group.com/uploads/Pitfalls%20of%20Virtual%20Property.pdf> (discussing transfer of ownership within virtual worlds). The term “virtual world” and phrase “in-game” are used in this Note to describe anything that happens within an online game.

⁹ See Loftus, *supra* note 5 (discussing virtual property in MMORPGs).

¹⁰ See Stefan Pratter, *MMORPG: What Is It?*, <http://www.mmorpstuff.com/> (last visited May 11, 2009) (explaining that avatars represent the player in an MMPORG).

or Marge's elf. In MMORPGs, gamers' avatars interact with each other.¹¹ Avatars can fight,¹² trade,¹³ and in some MMORPGs, even steal¹⁴ virtual property from one another. In order to participate in most MMORPGs, gamers subscribe to an online service and pay a real-world fee.¹⁵

Virtual property is an interesting topic for legal study because it can develop a real-world value.¹⁶ Gamers who want to convert their virtual property into real money use online auction sites to sell their items to other gamers; this type of transaction is known as a real money trade or transaction (RMT).¹⁷ An RMT is distinguishable from an in-game transfer between gamers because it involves real money in a recognized national currency.¹⁸ An example of an RMT might be when one gamer sells one level five barbarian to another gamer for 94,800 won¹⁹ on an auction website.²⁰ A gamer can make a sizeable amount of real money from the sale of virtual goods and virtual property.²¹ Consider the case of Anshe Chung, who estimates her net worth at more than one million real dollars, which she earned by speculating on virtual real property in the game *Second Life*.²²

¹¹ See *id.* (explaining that an MMPORG “is a computer game that can be played with thousands of other people in a . . . game world”).

¹² *Id.*

¹³ F. Gregory Lastowka & Dan Hunter, *The Laws of the Virtual Worlds*, 92 CAL. L. REV. 1, 6–7 (2004).

¹⁴ F. Gregory Lastowka & Dan Hunter, *Virtual Crimes*, 49 N.Y.L. SCH. L. REV. 293, 301 (2004).

¹⁵ Kevin W. Saunders, *Virtual Worlds—Real Courts*, 52 VILL. L. REV. 187, 190 (2007). “Real-world” and “real world” are used in this Note to mean everything outside of the online virtual world.

¹⁶ See *id.* at 192 (explaining that “virtual assets . . . may be saleable in real world markets . . .”).

¹⁷ Daniel Terdiman, *eBay Bans Auctions of Game Goods*, CNET NEWS, Jan. 30, 2007, <http://news.cnet.co.uk/software/0,39029694,49287317,00.htm>.

¹⁸ Saunders, *supra* note 15, at 229 (“Assets in virtual worlds are not simply traded or bought and sold using the currencies of the virtual worlds. They are bought and sold using real world currency.”).

¹⁹ Won is the national currency of South Korea.

²⁰ See, e.g., BuyMMOAccounts.com, <http://www.buymmoaccounts.com> (last visited May 11, 2009) (an auction website where a gamer can buy barbarians, hordes, elves, and similar characters for various prices).

²¹ See, e.g., Rob Hof, *Second Life's First Millionaire*, BUS. WK., Nov. 26, 2006, available at http://www.businessweek.com/the_thread/techbeat/archives/2006/11/second_lifes_fi.html (describing *Second Life's* first millionaire). *Second Life* is an MMORPG discussed *infra* notes 48–56.

²² See Hoff, *supra* note 21 (discussing how Chung accumulated virtual real estate).

However, online sales are a bone of contention in the online world because the rightful ownership of virtual property is often disputed, leaving gamers and game companies unsure about the validity of the sales.²³ Game companies do not know whether they or the gamers own the rights to sell, own, and trade virtual property.²⁴

Both in-game exchanges between individual gamers and real-world interactions between the gamers and the game company are relatively ungoverned under the laws of most countries. When disputes arise between gamers and the company as to who owns the game, gamers claim that they have spent time and money developing their avatar, running through levels and earning virtual gold, thereby earning the right to sell whatever virtual property they have earned.²⁵ On the other hand, game companies argue that they own the physical servers and game copyrights; therefore, they own the virtual property within the game as well.²⁶

Exchanges between gamers and game companies are often governed by an End User Licensing Agreement (EULA), which most gamers are required to agree to in some form.²⁷ The EULA dictates the terms of the operation of the game and allows game companies to pre-determine favorable terms of play.²⁸ Interchanges between gamers in-game may also be controlled by the terms of service included in an EULA or a separate set of "community standards" referred to by an EULA.²⁹ This Note concentrates primarily on interactions

²³ See Posting of Jennifer Guevin, *Virtual Property Becomes a Reality* to CNET News Blog, http://www.news.com/8301-10784_3-5748748-7.html (June 15, 2005, 16:44 PDT) (describing "confusion . . . over how virtual property should be treated in the real world . . .").

²⁴ See *id.* (noting the confusion over the treatment of virtual property in the real world); see Jamie J. Kayser, *The New New-World: Virtual Property and the End User License Agreement*, 27 LOY. L.A. ENT. L. REV. 59, 85 (2006) (noting that "[g]ame developers are trying different approaches to modulate the effect that real-world courts will have on their virtual spaces" and that "it is certain courts will have to address them in the near future").

²⁵ See F. Gregory Lastowka & Dan Hunter, *The Laws of the Virtual Worlds*, 92 CAL. L. REV. 1, 37 (2004) ("Participants in virtual worlds clearly see their creations as property.").

²⁶ See *id.* at 37 (pointing out that disputes over whether "the owner of a virtual world's physical server [is] also the owner of virtual castles created on that server . . . have been the subject of real-world litigation . . .").

²⁷ Kayser, *supra* note 24, at 61, 63.

²⁸ *Id.* at 61.

²⁹ See, e.g., Second Life Terms of Service, <http://secondlife.com/corporate/tos.php> (last visited May 11, 2009) (displaying the terms of service for Second Life); Second Life Community Standards, <http://secondlife.com/corporate/cs.php> (last visited May 11, 2009) (displaying the community standards with respect to intolerance, harassment, indecency, and other issues for Second Life).

between players and the game creator, as these produce a more visible tension in the real world.³⁰

Virtual worlds are attracting a large and growing population of users, and economists have asserted that these virtual economies directly impact real world economies.³¹ Further, these virtual worlds can function as laboratories for investigations into new forms of law, social interaction, and other experiments.³² This Note focuses on the issue of virtual property within virtual worlds. Part II of this Note consists of an assessment of the history of virtual property and the world of online gaming. Part III assesses additional methods for regulating the virtual property disputes in the virtual world—namely private contracts between parties in the form of an EULA. Part IV appraises both existing and proposed legislation that targets virtual property in China, South Korea, Hong Kong, Australia, and the United States.³³ It also evaluates whether these countries, through their laws, have designated an “owner” of virtual property. Part V proposes various solutions, particularly the use of adverse possession to allow gamers in different countries to claim ownership over virtual property. In light of the ineffective nature of EULAs and the unique characteristics of virtual property,³⁴ countries should rely on judicial

³⁰ There are numerous other potential methods of dispute resolution between gamers in-game: informal ostracizing by other players, in-game court systems, and mediation. Saunders, *supra* note 15, at 228. Professor Saunders provides a comparison to baseball; just as baseball players play by the rules of the game and should not be governed in a typical court, neither should real-world laws govern the disputes of the virtual world. *Id.* However, the line is not so easily drawn between real-world and in-game exchanges when issues in the virtual world affect issues in the real world; for example, YouTube posts of an intentional virtual attack on a gamer’s avatar were eventually taken down by administrators after the gamer complained. See Warren Ellis, Opinion, *Second Life Sketches: Two Worlds – Fame and Infamy*, REUTERS.COM, Jan. 5, 2007, <http://secondlife.reuters.com/stories/2007/01/05/second-life-sketches-two-worlds-fame-and-infamy/>.

³¹ See Lastowka & Hunter, *supra* note 13, at 8–11 (discussing an economic analysis of virtual worlds in relation to the real world market).

³² *Id.* at 11–12. Just as states serve as laboratories for the federal government, the virtual world can serve as a laboratory for the real one. Cf. *Gonzalez v. Raich*, 545 U.S. 1, 42 (2005) (O’Connor, J., dissenting) (stating that “a single courageous State may, if its citizens choose, serve as a laboratory; and try novel social and economic experiments without risk to the rest of the country” (quoting *New State Ice Co. v. Liebmann*, 285 U.S. 262, 311 (1932) (Brandeis, J., dissenting))).

³³ There have been recent events in European countries that have drawn attention to virtual theft, but those developments will not be analyzed here. See Lester Haines, *Dutch Teen Swipes Furniture from Virtual Hotel*, REGISTER.CO.UK, Nov. 14, 2007, http://www.theregister.co.uk/2007/11/14/habbo_hotel_heist/ (reporting on an arrest for “virtual burglary”).

³⁴ See *infra* Part III.

decisions to define ownership in lieu of legislation that is likely to be over- or under-inclusive. A judicial approach will allow the courts to sculpt the law piece by piece, thereby avoiding the creation of ineffective or inappropriate laws.

II. WHY ALL THE FUSS ABOUT VIRTUAL PROPERTY—WHAT IS IT AND HOW DID IT DEVELOP?

Some academics argue that the virtual world has existed for centuries in the myths and legends that eventually were memorialized into written fairy tales or other fictional literature.³⁵ However, the more traditional notion of what today's society considers a virtual world developed as early as 1976 when Will Crowther created a simplistic computer game for his children called ADVENT.³⁶ Multi-User Dungeon 1 (MUD1) was the first game that allowed social interaction between game characters on computers.³⁷ MUD1 was developed in 1979 by Roy Trubshaw and Richard Bartle at Essex University in England.³⁸ Since then, the popularity and the complexity of these virtual worlds have changed and now include highly complex transactions and sales of online virtual property.³⁹ Today, many virtual worlds exist as a product of MMORPGs, discussed below.

A. Types of MMORPGs

There are two types of MMORPGs: goal-based and player interaction-based.⁴⁰ Goal-based MMORPGs, such as EverQuest, World of WarCraft, or EVE Online, center around the gamer overcoming certain levels, fighting with

³⁵ Lastowka & Hunter, *supra* note 13, at 14–15.

³⁶ *Id.* In ADVENT, users would type textual commands to their characters to navigate through a cave based on a real-life cave in Kentucky. *Id.*; Edward Rothstein, *In the Intricacy of a Text Game, No Object Is Superfluous, No Formulation Too Strange*, N.Y. TIMES, Apr. 6, 1998, at D3.

³⁷ Lastowka & Hunter, *supra* note 13, at 18. MUD1 was a text based game where users tried to achieve the level of wizard by obtaining points. *Id.* Among other ways, users could obtain points by killing other players. *Id.*

³⁸ T.L. TAYLOR, PLAY BETWEEN WORLDS: EXPLORING ONLINE GAME CULTURE 22 (2006).

³⁹ See *supra* notes 5–30 and accompanying text.

⁴⁰ See Bobby Glushko, Note, *Tales of the (Virtual) City: Governing Property Disputes in Virtual Worlds*, 22 BERKELEY TECH. L.J. 507, 509–10 (2007) (distinguishing problem-solving and adventuring based games from games that focus on interpersonal relationships).

other characters, forming alliances, and gaining a certain amount of points.⁴¹ The games allow the gamer to create an avatar that could be anything from a dwarf, an ogre, or an elf to a spaceship captain.⁴² The gamer then looks for adventure through the game's levels, and concentrates on building up strength and agility points by slaying monsters or collecting items.⁴³ The games also feature virtual economies with virtual gold.⁴⁴ These games seem to have the same basic premise: the combination of adventure with role playing in a virtual world.

Player-interaction-based MMORPGs revolve around gamers' interactions in a virtual world similar to the real world, such as in games like *Second Life*,⁴⁵ *Weblo*,⁴⁶ or *The Sims Online*.⁴⁷ *Second Life* was created by Philip Rosedale in 2001.⁴⁸ After a slow start, users eventually flocked to the game, and its

⁴¹ See Chris Couper, *Everquest: Synopsis*, <http://www.allgame.com/cg/agg.dll?p=agg&sql=1:16457> (providing a summary of the game, how it is played, and its unique features) (last visited Dec. 30, 2008); T.J. Deci, *Synopsis: World of WarCraft*, <http://www.allgame.com/cg/agg.dll?p=agg&sql=1:36669> [hereinafter Deci, *Synopsis: World of WarCraft*] (last visited Dec. 30, 2008) (providing a summary of the game, how it is played, and its features); T.J. Deci, *Synopsis: EVE Online*, <http://www.allgame.com/cg/agg.dll?p=agg&sql=1:31660> [hereinafter Deci, *Synopsis: EVE Online*] (last visited May 11, 2009) (providing a summary of the game, how it is played, and its features).

⁴² See Couper, *supra* note 41 (explaining that gamers may play this game as different types of elves or an ogre); Deci, *Synopsis: World of WarCraft*, *supra* note 41 (stating that game includes "player-controlled . . . [d]warves"); Deci, *Synopsis: EVE Online*, *supra* note 41 (explaining that gamers may play as starship or spaceship captains).

⁴³ Couper, *supra* note 41; Deci, *Synopsis: World of WarCraft*, *supra* note 41. For example, *Lineage II* is extremely popular in Korea and involves a virtual world where gamers can build points through battles. T.J. Deci, *Synopsis: Lineage II*, <http://www.allgame.com/cg/agg.dll?p=agg&sql=1:38616> (last visited May 11, 2009).

⁴⁴ See David Barboza, *Ogre to Slay? Outsource it to the Chinese*, N.Y. TIMES, Dec. 9, 2005, at A1 (discussing "gold coins and other virtual goods . . . that . . . can be transformed into real cash"). Problems develop when entrepreneurial gamers sell virtual gold in the real world. See *id.* (noting that these gold farmers operate like textile mills and toy factories that exploit the cheap labor available in China, may violate the terms of service, and distort the games). Gold farming is the large-scale business where an entrepreneur obtains virtual property in an MMORPG and then sells it online for real-world money. See *id.* (describing the "harvesting [of] artificial gold coins . . . that . . . can be transformed into real cash").

⁴⁵ See Daniel Terdiman, *Second Life Teaches Life Lessons*, WIRED, Apr. 5, 2005, <http://www.wired.com/gaming/gamingreviews/news/2005/04/67142> (describing *Second Life* "as an open-ended environment that . . . allow[s] players to fly, drive fantastical vehicles, dress up in outlandish outfits and build just about anything they [can] imagine"); see also *infra* notes 48–50.

⁴⁶ See *infra* notes 57–58 and accompanying text for a discussion of the game.

⁴⁷ See *infra* notes 59–61 and accompanying text for a discussion of the game.

⁴⁸ Jessica Bennett & Malcolm Beith, *Millions Flock to Virtual Free World*, N.Z. HERALD,

current membership is approximately eight million users; two million signed-on between June and July of 2007 alone.⁴⁹ Second Life is a unique virtual world that is structured similarly to the real world, with an in-game economy and in-game laws that apply to a gamer's avatar.⁵⁰ Any disputes between the gamer and Linden Lab⁵¹ are governed by California state law.⁵² If the gamer is located outside of the United States, he retains intellectual property rights to the extent that he has such rights under the laws in his jurisdiction, while if the gamer is located inside the United States, U.S. laws apply.⁵³ Second Life's burgeoning economy is based on the virtual "Linden dollar," which between November 30 and December 30, 2008 had an exchange rate ranging between 250 to 272 Linden dollars to 1 U.S. dollar.⁵⁴ After exchanging their money, players are able to buy objects—like virtual shirts, fireworks, and homes—in the virtual world for their virtual characters.⁵⁵ The gamers can create items and patent, copyright, or trademark them in Second Life under U.S. intellectual property law, and take the issue to a U.S. court if need be.⁵⁶

Weblo, a Canadian game with more than 40,000 members, follows a social-network model, where subscribers can join at different levels, build user profiles, and buy virtual properties.⁵⁷ If gamers attract enough interest for their

July 28, 2007, at B14.

⁴⁹ *Id.*

⁵⁰ See Second Life, Terms of Service, paras. 1.4, 4.1, <http://secondlife.com/corporate/tos.php> (last visited May 11, 2009) (describing the nature of Second Life currency and referring to community standards and rules of conducts).

⁵¹ Linden Lab is the controller and operator of Second Life. *Id.* para. "General Provisions."

⁵² *Id.* para. 7.1.

⁵³ *Id.* paras. 3.2, 7.1, "General Provisions."

⁵⁴ See *id.* para. 1.4 (referring to "Linden [d]ollars"); Second Life, LindeX Market Data, <http://secondlife.com/whatis/economy-market.php> (last visited May 11, 2009).

⁵⁵ See Second Life, What Is Second Life?, <http://secondlife.com/whatis/> (last visited May 11, 2009) (stating that gamers have a marketplace open to them that supports transactions worth millions of U.S. dollars); see also Second Life, XStreet SL Marketplace, <http://www.xstreet.com/modules.php?name=Marketplace> (last visited May 11, 2009) (listing thousands of items for sale in Second Life, including shirts, fireworks, and homes).

⁵⁶ See Second Life, IP Rights, http://secondlife.com/whatis/ip_rights.php (last visited May 11, 2009) (stating that users "retain intellectual property rights in the original content they create in the Second Life world"); see also Second Life, *supra* note 50, para. 3.2 (discussing intellectual property rights including patent, copyright, and trademark rights). Though the terms of service do not provide for suits between gamers, virtual copyright disputes may result in a suit in U.S. court. See, e.g., Jonathan Richards, *Second Life Sex Bed Spawns Virtual Copyright Action*, TIMESONLINE, July 4, 2007, http://technology.timesonline.co.uk/tol/news/tech_and_web/article2025713.ece (reporting on "the first known case of virtual copyright").

⁵⁷ *Virtual Real Estate*, THE GRAND RAPIDS PRESS, Aug. 10, 2007, at A1; Tessa Wong,

property through their Weblo websites, blogs, and message boards, they can make money through advertising or selling their property.⁵⁸ The Sims Online is a multiplayer online version of The Sims, where players direct their avatars through a virtual world where there is no ultimate objective.⁵⁹ The players can work and thereby earn virtual currency known as simoleans.⁶⁰ Much like reality, the accumulation of virtual goods and simoleans allows a player to gain wealth, reputation, and social standing.⁶¹

These player-interaction-based games also center on the obtainment of virtual property, but in these games the status of virtual property is more certain due to the games' marketing schemes and EULAs. Weblo actually advertises that gamers can make real money through participation in the game.⁶² Second Life explicitly states in its EULA that Second Life users are creating an intellectual property interest in their Second Life goods.⁶³ However, in either type of game, progress can be measured by the gamers' accumulation of virtual "real property" and chattel, such as virtual currency.⁶⁴

B. Virtual Property Versus Real-World Property

When virtual property is compared with real-world property, parallels exist. For example, like real-world property, virtual property is persistent because it continues to exist on the main server after the gamer turns off his computer.⁶⁵ Also, similarly to real property, a gamer has the right to exclude other gamers from her virtual goods.⁶⁶

⁵⁷ 'Singapore' Sold Online for \$207, STRAITS TIMES, July 8, 2007, available at <http://business.asiaone.com/Business/News/My%2BMoney/Story/A1Story20070710-17804.html>.

⁵⁸ *Virtual Real Estate*, *supra* note 57, at A1.

⁵⁹ The Sims Online, [Virtualenvironments.info](http://www.virtualenvironments.info/the-sims-online.html), <http://www.virtualenvironments.info/the-sims-online.html> (last visited May 11, 2009).

⁶⁰ *Id.*

⁶¹ *Id.*

⁶² What is Weblo?, Weblo.com, <http://www.weblo.com/main/index.php?Action=Main.WhatIsWeblo> (last visited May 11, 2009).

⁶³ Second Life, Terms of Service, *supra* note 50, paras. 3.2, 5.3. Second Life's EULA also says that the game company can disconnect, delete, or otherwise alter a user's account at any time, and that Linden dollars are only redeemable for real currency at the discretion of Linden Lab, which makes their ultimate legal status still uncertain. *Id.* paras. 1.4, 5.3.

⁶⁴ Saunders, *supra* note 15, at 227.

⁶⁵ *Id.* at 191 (noting the persistence of virtual worlds); see Glushko, *supra* note 40, at 511 (describing virtual property as persistent and explaining that "[v]irtual property does not disappear when the player turns off her computer").

⁶⁶ Compare RESTATEMENT (FIRST) OF PROP. § 7(a) (1936) ("A possessory interest in land

However, virtual property differs from real-world property in several ways. Virtual property might be transferable within the game from player to player, but it is not transferable or accessible outside of the game and the game's platform.⁶⁷ Virtual property exists in a different form than physical property; it is essentially lines of computerized code, ones and zeros, which only spring into existence when that code is interpreted by a machine.⁶⁸ This characteristic does not preclude legal protection however; the law often protects intangible property such as domain names⁶⁹ or intellectual property rights.⁷⁰

There are also different types of virtual property within both types of MMORPGs. Virtual property sales can be quantified into three categories: sales of virtual currency (e.g., gold), items (e.g., weapons, clothing, and land), and gamers' accounts.⁷¹

C. Traditional Property Theories as Applied to Virtual Property

Both game companies and gamers have feasible legal theories to support their interests in the ownership of virtual property,⁷² and these theories can be

exists in a person who has . . . a physical relation to the land of a kind which gives a certain degree of physical control over the land, and an intent so to exercise such control as to exclude other members of society in general"), with David P. Sheldon, Comment, *Claiming Ownership, But Getting Owned: Contractual Limitations on Asserting Property Interests in Virtual Goods*, 54 UCLA L. REV. 751, 761 (2007) (stating that "[v]irtual-world participants do act as if virtual items are their property" by excluding others from possessing the items and enforcing their rights through the legal process).

⁶⁷ See Glushko, *supra* note 40, at 512–13 (discussing how a player may not take a spaceship from one game's virtual world and fly it in another game's virtual world).

⁶⁸ *Id.* at 512.

⁶⁹ See Joshua Fairfield, *Virtual Property*, 85 B.U. L. REV. 1047, 1055 (2005) (identifying a domain name as an example of virtual property); *id.* at 1055 n.30 (noting the protections for URLs provided by U.S. law).

⁷⁰ See generally Prioritizing Resources and Organization for Intellectual Property Act of 2008, Pub. L. No. 110-403 (2008) (enhancing remedies for violations of intellectual property laws).

⁷¹ Glushko, *supra* note 40, at 510; see also Michael Meehan, *Virtual Property: Protecting Bits in Context*, 13 RICH. J.L. & TECH. 7, paras. 7–8 (2006) (discussing types of virtual property and the "market for virtual property").

⁷² These theories have been covered at length by various pieces of scholarship, and so will only be covered generally here as a framework to understanding the international treatment of virtual property rights. See, e.g., Steven J. Horowitz, Note, *Competing Lockean Claims to Virtual Property*, 20 HARV. J.L. & TECH. 443 (2007) (comparing gamers and game creators' labor-based claims to the products of virtual worlds); Theodore J. Westbrook, Note, *Owned: Finding a Place for Virtual World Property Rights*, 2006 MICH. ST. L. REV. 779 (2006) (arguing

better assessed and critiqued in courts by judges than in congressional houses by politicians. This is because judges are more likely than legislators to look to traditional property theories when presented with novel virtual property issues. Game companies argue that a discussion of property theory is only relevant when the EULA of a game does not specify ownership of in-game virtual property; gamers counter that property rights should override the EULA, or alternatively, that the EULA is unconscionable in some situations.⁷³ The most prevalent theories applied to virtual property include the Lockean labor theory, utilitarian theory, and personality theory.⁷⁴

English philosopher John Locke postulated that the ownership of property was created by the input of a user's labor.⁷⁵ Both gamers and developers may employ the Lockean labor theory to explain their views, raising the question of what actually qualifies as "labor" within the virtual realm.⁷⁶ Game designers initially expend effort, money, and resources to create the framework of the game world.⁷⁷ One critic stated, when referring to game creators, "[t]heir creations maintain the story lines, or at least the backgrounds against which story lines develop"⁷⁸ On the other hand, the gamers earn virtual goods through trade or the defeat of a virtual foe.⁷⁹ Gamers argue that they have spent time working to develop the attributes of their avatars, and that

that the utilitarian model provides the best validation for recognizing a property right in virtual goods); Saunders, *supra* note 15 (discussing the role of real world courts in virtual property courts).

⁷³ See *infra* Part II.D. and Part III.

⁷⁴ Horowitz, *supra* note 72, at 451, 451 n.38.

⁷⁵ JOHN LOCKE, TWO TREATISES OF GOVERNMENT 287–88, Book 2, § 27 (Peter Laslett ed., Cambridge Univ. Press 1988) (1690).

⁷⁶ See Westbrook, *supra* note 72, at 791–95 (discussing Lockean theory as it relates to disputes between gamers and developers). Does gaming on the internet qualify as labor? Considering that internet gaming is an expenditure of physical or mental effort, especially as it is sometimes difficult, and is often a service performed by workers for wages, see, e.g., Barboza, *supra* note 44 (describing the activities of Chinese gold farmers who earn up to \$250 each month), it could be considered labor under the traditional definition of labor. Labor is defined as "the expenditure of physical or mental effort especially when difficult or compulsory," or "the services performed by workers for wages." MERRIAM-WEBSTER 15 ONLINE DICTIONARY, <http://www.merriam-webster.com/dictionary/labor> (last visited May 11, 2009).

⁷⁷ Horowitz, *supra* note 72, at 454 ("[Gamers'] Lockean claims to property within the world are limited by the pre-existing, competing claims of the operators who labored to produce the world and all of the products in it.").

⁷⁸ Saunders, *supra* note 15, at 202.

⁷⁹ Horowitz, *supra* note 72, at 454–55.

without their input and interaction, avatars would not exist at all.⁸⁰ The Lockean theory leads to new and unanswered queries, such as when the game creator can destroy the gamer's "property" without recourse.

Jeremy Bentham, the father of utilitarianism, placed importance on providing the greatest good for the greatest number of people.⁸¹ The application of the utilitarian theory of property rights to virtual property would likely support the gamers' claims of ownership. As applied to the virtual world, the millions of individuals⁸² who spend time within virtual worlds benefit from the obtainment of virtual property, potentially outweighing the detrimental effect on game creators. According to the utilitarian theory, gamers would thus be vested with an interest or "own" the virtual property and be able to sell it. Therefore, in the aggregate, the declaration of personal property rights in favor of the gamers could amount to a social good in economic terms. Beyond the economic good that may come from gamers' actions, a substantial individualized good comes from the mere recreation of the "billions of hours per year" that gamers spend in virtual worlds.⁸³

German philosopher Georg Wilhelm Friedrich Hegel put forth the personality theory of property, which posits that private property rights are justified to the extent that the owner has put his or her will into an object and the level to which an owner's personality is intertwined with the object itself.⁸⁴ Under the personality theory of property, gamers have a meritable claim to virtual property,⁸⁵ because gamers self-identify with their avatars,⁸⁶ and their avatars, in turn, develop based on virtual property acquired,⁸⁷ the creator of an avatar could potentially claim rights over that virtual property.⁸⁸ However,

⁸⁰ Westbrook, *supra* note 72, at 792–93.

⁸¹ See JEREMY BENTHAM, AN INTRODUCTION TO THE PRINCIPLES OF MORALS AND LEGISLATION 11–12 (J.H. Burns & H.L.A. Hart eds., The Athlone Press 1970) (1823) (introducing "the principle of utility").

⁸² Eight million people alone play Second Life. Bennett & Beith, *supra* note 48.

⁸³ Westbrook, *supra* note 72, at 796.

⁸⁴ G.W.F. HEGEL, ELEMENTS OF THE PHILOSOPHY OF RIGHT 75–76 (Allen W. Wood ed., Cambridge Univ. Press 1991) (1822).

⁸⁵ See Westbrook, *supra* note 72, at 799 (stating "[c]ommentators have found personality theory particularly applicable to virtual property . . .").

⁸⁶ See *id.* at 797–99 (explaining that under personality theory "private property rights are essentially linked to personhood and identity" and noting that gamers "often strongly identify with their avatars").

⁸⁷ E.g., an avatar's shield or armor.

⁸⁸ See Westbrook, *supra* note 72, at 797 (discussing personality theory and its applicability to virtual property). Westbrook qualifies this application, stating that this theory might oversimplify gamers' rights and that gamers could be considered co-owners of the avatar with

although the personality theory might strongly support the ownership of a gamer's in-game avatar, the theory is weaker when used in defense of the ownership of virtual land or gold. Although gamers might be able to argue that they have personalized their virtual property by adding a house, some shrubs, or other special items, it is highly unlikely that they have been able to intertwine their personalities with fungible virtual gold. In response, game creators may argue that when the game was created, it was a product of their ideas and imagination and is therefore an extension of their personality.

In 2000, Raph Koster, a longtime game designer for both *Ultima Online* and the *Star Wars Galaxies* MMORPGs,⁸⁹ created a satirical document called the *Rights of Avatars*, based on the *Bill of Rights* and the 1789 *Declaration of the Rights of Man*.⁹⁰ He playfully stated that the avatars have come together to form a social community and are therefore governed by a social contract, and that property rights may arise when the populace tries to grant them to themselves.⁹¹ In one of his nineteen enumerated rights of avatars, he stated that “[s]ince property is an inviolable and sacred right, and the virtual equivalent is integrity and persistence of data, no one shall be deprived thereof except where public necessity, legally determined per the code of conduct, shall clearly demand it”⁹² Although his document was satirical, it could be used as a blueprint for players and administrators to create a more gamer-friendly EULA.⁹³

D. The Current Situation

There is a huge amount of investment potential in virtual worlds. One Gartner Research study estimated that “four [out] of every five people who use

the developer. *Id.* at 800.

⁸⁹ Raph Koster's Website, Raphael S. Koster's Curriculum Vitae, <http://www.raphkoster.com/cv.shtml> (last visited May 11, 2009).

⁹⁰ Raph Koster's Website, *Declaring the Rights of Players*, Aug. 27, 2000, <http://www.raphkoster.com/gaming/playerrights.shtml>.

⁹¹ Raph Koster's Website, *Declaring the Rights of Players, A Declaration of the Rights of Avatars*, para. 2, Aug. 27, 2000, <http://raphkoster.com/gaming/playerrights.shtml>.

⁹² *Id.* art. 16.

⁹³ See Raph Koster's Website, *Declaring the Rights of Players, Advice to Virtual World Admins*, para. 2, Aug. 27, 2000, <http://raphkoster.com/gaming/playerrights.shtml> (stating “the *Declaration of the Rights of Avatars* . . . is a useful tool for players and admins alike: admins who don't know what they are doing can use it as a blueprint, and players can use it to evaluate . . . administrations in search of one they like”).

the internet will participate in Second Life” or another virtual world by 2011.⁹⁴ MMORPGs have gradually become more popular, with players generating over one billion dollars of business in 2006; projections suggest that by 2011 there will be over 10 million subscription accounts generating one and a half billion dollars.⁹⁵ One Dutch study found that on a typical day in Second Life, people spend 1 million real dollars buying and selling virtual objects, and fifty-seven percent of Second Life users spend more than eighteen hours a week online.⁹⁶ Popular companies are beginning to take advantage of the marketing opportunity in the virtual world by establishing a presence in games like Second Life.⁹⁷ Virtual worlds are also a rich source of interest for academics interested in social interactions; as U.K. IBM forum speaker Cliff Dennett says, “[I]t’s millions of people collaborating in virtual project teams around the world with people [they have] never met solving complex strategic and tactical problems using an IT system.”⁹⁸

As early as 2001, online vendors eBay and Yahoo forbade the sale of virtual items, such as fishbone earrings and magic capes, from EverQuest.⁹⁹

⁹⁴ Bennett & Beith, *supra* note 48; Press Release, Gartner, Inc., Gartner Says 80 Percent of Active Internet Users Will Have a “Second Life” in the Virtual World by the End of 2011 (Apr. 24, 2007), <http://www.gartner.com/it/page.jsp?id=503861>.

⁹⁵ Western World MMOG Market: 2006 Review and Forecasts to 2011, Screendigest, <http://www.screendigest.com/reports/07westworldmmog/pdf/07westworldmmog-pdf/view.html> (last visited May 11, 2009).

⁹⁶ Brad Kenney, *Second Life: What Is It? (And Why Should Manufacturers Care?)*, INDUSTRY WEEK, July 27, 2007, available at <http://www.industryweek.com/ReadArticle.aspx?ArticleID=14649> (last visited May 11, 2009); DAVID DE NOOD & JELLE ATTEMA, EPN - SECOND LIFE: THE SECOND LIFE OF VIRTUAL REALITY 17 (2006), available at http://www.epn.net/interrealiteit/EPN-REPORT-The_Second_Life_of_VR.pdf (finding that twenty-four percent of users spent eighteen to thirty hours in Second Life, and thirty-three percent spent over thirty hours in the game).

⁹⁷ Research Alert, EPM Communications, *Virtual Worlds are Impacting Consumer Perceptions of Brands, Whether Marketers Like It or Not*, 25 RESEARCH ALERT 1, 6, Apr. 20, 2007 (providing IBM, Reuters, Nissan, BMW, Reebok, Pontiac, American Apparel, Toyota, etc. as examples of brands who have “established a presence” in Second Life).

⁹⁸ Simon Hendery, *Virtual Worlds Can Bring Real Benefits for Business*, N.Z. HERALD, Aug. 30, 2007, at C4; see also Saunders, *supra* note 15, at 192 (noting an economist’s interest in “the micro and macroeconomic aspects of [virtual] worlds”). For example, individuals who interact regularly in the virtual world may have improved their leadership skills, and can more easily help people resolve business problems. See, e.g., Hendery, *supra*, at C4 (highlighting a survey revealing that “IBM staffers who are also gamers” showed skills like collaboration and problem solving).

⁹⁹ Greg Sandoval, *eBay, Yahoo Crack Down on Fantasy Sales*, CNET NEWS, Jan. 26, 2001, <http://www.news.com/2100-1017-251654.html> (stating that Sony, owner of Everquest, forbade

Additionally, eBay fully banned the sale of all virtual game assets by gamers in January of 2007.¹⁰⁰ At that time, game items such as characters, accounts, currency and items were forbidden ostensibly because that practice would help “protect buyers from purchasing unauthorized or counterfeit merchandise [and would help] intellectual property rights owners protect their rights.”¹⁰¹ But at least one observer speculates that the ban was to prevent getting mired in the complexities of what constitutes ownership in the new field of virtual reality.¹⁰² One method of regulating ownership rights exists through legislation but another exists in the EULA.

III. EULA AS A METHOD OF PRIVATE REGULATION

One way of governing virtual property disputes is through use of an EULA.¹⁰³ EULAs are contracts that provide rules governing interactions between the user and game creator for a piece of software.¹⁰⁴ Before the software will run, a gamer must agree to the EULA by clicking in a box in a pop-up window, agreeing to a contract which is commonly called a “click-wrap agreement.”¹⁰⁵ EULAs provide an interesting twist to the virtual property

the sale of such items, and Yahoo and eBay have “cited their policy on canceling auctions that violate intellectual property rights” in making their decision to forbid the sales).

¹⁰⁰ Geoffrey A. Fowler & Juying Qin, *QQ: China's New Coin of the Realm?*, WALL ST. J., Mar. 30, 2007, at B1.

¹⁰¹ eBay, Digitally Delivered Goods Policy, <http://pages.ebay.com/help/policies/downloadable.html> (following “Why does eBay have this policy?”) (last visited May 11, 2009).

¹⁰² Posting of Zonk to Slashdot, <http://games.slashdot.org/article.pl?sid=07/01/26/2026257> (Jan. 26, 2007). There is an exception to the ban for Second Life property. Daniel Terdiman, *eBay to Exempt “Second Life” Listings from Virtual Items Ban*, CNET NEWS, Jan. 29, 2007, http://www.news.com/8301-10784_3-6154277-7.html (stating that eBay is “not at this point proactively pulling [Second Life] listings off the site” because of the question whether Second Life is, in fact, a game).

¹⁰³ There are other ways of governing virtual property disputes—through legislation as described *infra* notes 160–72, 204–06, 210–12.

¹⁰⁴ See EULA, The Free Dictionary, <http://encyclopedia2.thefreedictionary.com/Eula> (last visited May 11, 2009) (defining EULA as “[t]he legal agreement between the manufacturer and purchaser of software”).

¹⁰⁵ See *id.* (explaining that the EULA may be “displayed on screen at time of installation [and] . . . cannot be avoided,” requires the user to click “Accept” or “I Agree,” and stipulates the terms of usage, whether the user reads them or not); see also Clickwrap, The Free Dictionary, <http://encyclopedia2.thefreedictionary.com/Clickwrap> (last visited May 11, 2009) (stating “[a]lmost all software today uses the clickwrap method, which displays the [EULA] as one of the first screens of the installation program”). See generally Kevin W. Grierson, *Enforceability of “Clickwrap” or “Shrinkwrap” Agreements Common in Computer Software, Hardware, and*

rights dispute; an EULA allows game developers to contract around any legal or common-law rights that the gamer might possess. Judges and courts are familiar with the traditional contractual principles that govern EULAs, and so they are better situated to standardize the acceptance and rejection of EULAs than are the legislators of various countries.

Many EULAs for popular games state that users do not have any rights to virtual goods within the game and that gamers' accounts can be terminated at the game developer's whim.¹⁰⁶ Alternatively, some EULAs represent a mixed approach, prohibiting gamers' ownership of virtual property rights while simultaneously allowing gamers to exchange and sell virtual items within a designated arena, such as the Sony Station Exchange.¹⁰⁷

There are many benefits to EULAs. The Restatement of Contracts states that "[s]tandardization of agreements serves many of the same functions as standardization of goods and services; both are essential to a system of mass production and distribution. Scarce and costly time and skill can be devoted to a class of transactions rather than to details of individual transactions."¹⁰⁸ EULAs are private agreements between parties that respect individuals' autonomy to contract.¹⁰⁹ The contracts are already in place in most games, and both the gamers and the game creators have notice of them since the beginning of the game.¹¹⁰

Internet Transactions, 106 A.L.R. 5th 309, 309 (2003) (stating that some courts "have refused to enforce . . . clickwrap agreements").

¹⁰⁶ Horowitz, *supra* note 72, at 446 (discussing the World of Warcraft terms of use); *see, e.g.*, World of Warcraft Terms of Use Agreement, paras. 2, 8, <http://www.worldofwarcraft.com/legal/termsofuse.html> (last visited May 11, 2009); *Final Fantasy XI User Agreement*, art. 3.1(a), https://secure.playonline.com/supportus/rule_ff11user.html (last visited May 11, 2009).

¹⁰⁷ Various forums exist for the sanctioned trade of avatars, game items, and other virtual property. One such forum is the Sony Station Exchange. *See* Station Exchange: The Official Secure Marketplace for EverQuest II Players, <http://stationexchange.station.sony.com/livegamer.vm> (last visited May 11, 2009) (describing the Station Exchange as a "marketplace for player-to-player trading of the right to use virtual items" on EverQuest II). Other such forms for buying, selling, and exchange of avatars and items exist. *See* Station Exchange: The Official Secure Marketplace for EverQuest II Players, <http://stationexchange.station.sony.com/livegamer.vm> (providing a forum for buying, selling, and exchange EverQuest II Players) (last visited May 11, 2009); Live Gamer, About Us, http://www.livegamer.com/page_en/about.php?section=2&page=1 (last visited May 11, 2009) (describing itself as a secure and transparent marketplace that protects against fraud and other harms inherent in black market).

¹⁰⁸ RESTATEMENT (SECOND) OF CONTRACTS § 211, cmt. a (1981).

¹⁰⁹ *See supra* notes 104–05 and accompanying text.

¹¹⁰ *See supra* notes 104–05 and accompanying text.

However, there are also downsides to EULAs, especially ones that completely prohibit sales outside or barter within the game. For example, the EULA only covers interactions between the gamer and the game developer, not interactions between the gamers themselves, or between the gamers, game developers, and third parties that may buy gamers' virtual property.¹¹¹ When picking a game, gamers experience a lack of choice regarding the types of EULAs available, as most games now have EULAs which restrict virtual property rights.¹¹² Most EULAs and other click-wrap agreements allow only a "take it or leave it" proposition and users have no opportunity to bargain against unreasonable terms.¹¹³ These contracts of adhesion do not represent the summation of an open agreement between parties, but rather are an imposition of an agreement between parties who do not have equal bargaining power. The developers are then left to their discretion to enforce or ignore their EULAs; even when EULAs entirely ban RMTs, RMTs of in-game goods are nevertheless present as the game creator typically chooses to look away while gamers engage in RMTs.¹¹⁴ EULAs are usually written by the game developer solely for their benefit.¹¹⁵ Because of these reasons, courts in the future may find some EULAs unconscionable and therefore unenforceable.¹¹⁶ In American courts, however, EULAs have been upheld.¹¹⁷ It remains to be seen how South Korea, China, Singapore, and Taiwan's courts will choose to treat EULAs. Ideally, in a world where all individuals are on equal footing, individuals can contract as they wish and may choose to contract away some rights in exchange for other opportunities.¹¹⁸ However, certain American cases

¹¹¹ PODCAST: REGULATING VIRTUAL WORLDS (State of Play V 2007), <http://www.nyls.edu/pages/5098.asp> (follow link to "Regulating Virtual Worlds") (Joshua Fairfield explaining that these agreements do not take third parties into account).

¹¹² See *supra* notes 104–06 and accompanying text.

¹¹³ Horowitz, *supra* note 72, at 446.

¹¹⁴ Westbrook, *supra* note 72, at 804.

¹¹⁵ Glushko, *supra* note 40, at 527.

¹¹⁶ See *id.* at 527–30 (discussing the inadequacy of EULAs and the uncertainty of their enforcement). The author here points out that allowing a game developer to delete a million dollars in assets would be unconscionable, e.g., if Second Life seized the assets of Second Life millionaire Anshe Chung. *Id.* at 530; see, e.g., Bragg v. Linden Research, Inc., 487 F. Supp. 2d 593 (E.D. Pa. 2007) (holding an arbitration provision in the EULA unconscionable).

¹¹⁷ See, e.g., *Capsi v. Microsoft Network*, 732 A.2d 528, 532 (N.J. Super. Ct. App. Div. 1999) (upholding the click-wrap agreement in question).

¹¹⁸ See *Lochner v. New York*, 198 U.S. 45 (1905) (overturning a restriction on working hours of bakers and upholding bakers' freedom to contract); see also *id.* 59–62 (discussing the "liberty of person and freedom to contract").

suggest that individuals may not be allowed to contract away certain rights,¹¹⁹ and so courts in the future may decide not to adhere to EULAs.

Many MMORPGs have EULAs that are similar to those in American games. Red Moon Online, from South Korea, states that all data stored on the servers is the “property [sic] of The Company . . . includ[ing] . . . Characters, Items, Gold, Equipment, Experience points . . . etc.,” and that the gamer has “no legal . . . rights to it of any kind.”¹²⁰ Canadian game Weblo’s terms and conditions state that the gamer is granted a revocable license to use Weblo’s software and site, and that except for personal information submitted by gamers, all other content within the site including “the virtual domain names, properties and celebrity fan sites’ is owned by Weblo or its licensors.”¹²¹ Therefore, these EULAs function in the same way as many American games’ EULAs; they attempt to extinguish ownership rights in the gamer.¹²²

IV. HOW COUNTRIES HAVE REACTED TO VIRTUAL PROPERTY ISSUES

Most countries have not statutorily identified virtual property as property under law. Instead, virtual property law has been shaped by court cases, tax laws, and states’ regulations. As steps taken under a judicial approach can be gradual and targeted to specific factual situations that arise in virtual property disputes, courts are better poised to address these issues than are politicians who may pass overly broad laws. Virtual property issues that have arisen include virtual taxation, gold farming, virtual currency speculation, and virtual

¹¹⁹ See, e.g., *West Coast Hotel Co. v. Parrish*, 300 U.S. 379 (1937) (finding a minimum wage law valid despite the argument that adult employees should be allowed to contract); see also *Coppage v. Kansas*, 236 U.S. 1 (1915) (invalidating employment contracts where workers were prohibited from joining a labor organization). One notable distinction between these cases and the gaming context is that gaming is far from an essential service; this difference suggests the freedom to contract may win out and the EULAs will stand.

¹²⁰ Redmoon Classic, License Agreement, sec. 12, <http://www.redmoonclassic.com/page.php?id=3> (last visited May 11, 2009).

¹²¹ Weblo, Terms and Conditions, secs. 6–7, http://www.weblo.com/main/index.php?Action=Main.terms_conditions (last visited May 11, 2009).

¹²² See *id.* (granting the right to use software but retaining myriad intellectual property rights in Weblo). Both Weblo and Redmoon Classic provide an auction board where users can buy and sell in-game items. See, e.g., Redmoon Classic, RMC eXchange, <http://www.redmoonclassic.com/forums.php?m=topics&s=5> (last visited May 11, 2009) (presenting numerous Redmoon game items that are for sale); Weblo, Online Auction Site, <http://www.weblo.com/auction/> (last visited May 11, 2009) (highlighting several Weblo items for sale). These types of sanctioned auction sites may alleviate the temptation for gamers to resort to unauthorized RMT.

crime.¹²³ Many countries have grappled with these issues and situations. What follows is a comparison of the reactions of several governments to virtual property issues and an assessment of whether these reactions designate an official “owner” of virtual property.

A. *Virtual Property and Taxation*

With large amounts of money exchanging hands,¹²⁴ countries are presented with the quandary of whether and how to tax virtual income. Also, if it is taxed, countries must also address who is obliged to pay the tax. One commentator suggests that virtual income can be divided into two categories: in-game income and real-world income derived from the game.¹²⁵ Although it is clear that earnings from the sale of virtual property in the real world can be taxed, the real question is whether the government can or should tax the in-game interchanges and barbers between the gamers that do not involve a transfer of real money in the real world.¹²⁶ Otherwise, the virtual world could be used as an illegal tax haven, and individuals could potentially avoid capital gains taxes.¹²⁷ Another issue is whether the holders of virtual property should be taxed merely for holding the property, just like people pay local taxes on their homes. The taxation of in-game virtual income or virtual property could

¹²³ See Dan Hunter & F. Gregory Lastowka, *To Kill an Avatar*, LEGAL AFFAIRS, July/Aug. 2003, http://www.legalaffairs.org/issues/July-August-2003/feature_hunter_julaug03.msp (discussing virtual theft, harassment, rape, and murder); Posting of Dale Dietrich to Video Game Law Blog, <http://www.daledietrich.com/gaming/category/hot-topics/virtual-property-taxation/> (last visited May 11, 2009) (providing various blog posts that discuss issues related to the taxation of virtual property).

¹²⁴ See *supra* notes 95–96 (noting that MMORPGs generate more than one billion dollars annually).

¹²⁵ PODCAST: REGULATING VIRTUAL WORLDS, *supra* note 111 (Joshua Fairfield discussing the distinction between these types of income).

¹²⁶ See also Grace Wong, *Second Life's Looming Tax Threat*, CNNMONEY, Mar. 9, 2007, http://money.cnn.com/2007/03/02/technology/sl_taxes/index.htm (discussing whether the IRS can tax virtual exchanges); Adam Reuters, *US Congress Launches Probe into Virtual Economies*, REUTERS, Oct. 15, 2006, <http://secondlife.reuters.com/stories/2006/10/15/us-congress-launches-probe-into-virtual-economies/> (stating that Congress is investigating how to tax virtual assets).

¹²⁷ See PODCAST: REGULATING VIRTUAL WORLDS, *supra* note 111 (Joshua Fairfield discussing how a virtual world could be a haven for avoiding taxes). For example, investors could buy a piece of in-game real estate for ten dollars and redeem it later for twenty dollars without being required to pay any tax on the appreciation since there is no current system dealing with in-game transactions.

probably not be accomplished unless a state is willing to pinpoint a definitive property owner; otherwise it would be unclear as to who must be taxed.¹²⁸ States have taken a variety of approaches to the taxation of virtual income and property.

Australia, for example, taxes and assesses barter exchanges in the same way it taxes other transactions.¹²⁹ The Australian Taxation Office (ATO) has stated “[gamers’] income will not be treated any differently than if . . . earned . . . working nine to five in an office.”¹³⁰ If a transaction in a virtual world can be attributed a real-world value, then these transactions may become part of a gamer’s taxable income.¹³¹ If a gamer earns more than 50,000 Australian dollars by exchanging virtual jewelry for virtual gold, then he must get an Australian Business Number (ABN) and register for the goods and services tax (GST).¹³² This taxation method attempts to capture those who might otherwise avoid taxation when using alternative currencies or barter transactions.¹³³ The ATO website explains the situation thus: if Harvey bought a computer from Carol using some form of bartering credit,¹³⁴ then Carol is required to issue Harvey a tax invoice showing the GST and the exchange rate of the bartering credits to Australian dollars, while Harvey is required to give Carol his ABN.¹³⁵ Therefore, although it is clear that RMTs are subject to taxation,

¹²⁸ Game companies likely prefer less outside regulation in the games because it creates massive red-tape issues and taxing reporting requirements. See David J. Mack, Comment, *Itax: An Analysis of the Laws and Policies Behind the Taxation of Property Transactions in a Virtual World*, 60 ADMIN. L. REV. 749, 762–63 (2008) (stating that a capital gains tax and its accompanying reporting requirements would require a great amount of work for both the IRS and for game providers).

¹²⁹ Australian Taxation Office, Bartering and Barter Exchanges, http://www.ato.gov.au/content/downloads/n9748_proof04.pdf.

¹³⁰ Nick Miller, *Virtual World: Tax Man Cometh*, SYDNEY MORNING HERALD, Oct. 31, 2006, <http://www.theage.com.au/news/biztech/virtual-world-tax-man-cometh/2006/10/30/1162056925483.html>.

¹³¹ *Id.*

¹³² *Id.* See Australian Taxation Office, *supra* note 129 (providing that ABN stands for Australian Business Number and GST stands for goods and services tax).

¹³³ See Miller, *supra* note 130 (stating “[traders] in virtual worlds should consider very carefully whether they are conducting a business or a hobby, the Tax Office advises”). As a practical matter, it is unlikely that the government could ever set up an effective system to monitor barter exchange, whether in-game or not.

¹³⁴ Linden dollars or simoleans may be specific examples of bartering credits. See *supra* note 60.

¹³⁵ See Australian Taxation Office, *supra* note 129 (discussing this example with reference to “Better Bartering credits”).

gamers who also make money by trading in-game are not exempt from taxation.¹³⁶ Although the ATO does not provide any guidelines for how such a tax would be assessed or collected, or whether or not gamers officially own the property they are selling, its treatment of online bartered items as bartered property shows that the ATO places the burden of paying taxes on the people who are earning money through the sale of virtual items—the gamers.¹³⁷ This behavior shows that the ATO treats virtual property as legal property of some sort.

The United States Congress' Joint Economic Committee (JEC) has also addressed taxation of virtual world exchanges.¹³⁸ The JEC decided that more study was needed before virtual economies could be taxed by the United States.¹³⁹ In a 2006 press release, Congressman Jim Saxton, Chairman of the JEC, stated that “some uncertainty exists regarding taxes and intellectual property rights” and that any attempt to tax transactions within virtual economies would thus be “a mistake.”¹⁴⁰ Congressman Saxton also noted that clarification was needed regarding the distinction between in-game transactions of virtual goods that generate real money, and therefore could potentially be taxed, and in-game transactions that do not generate real money, and would thus not be taxed.¹⁴¹

Further, Dan Miller, a senior economist for the JEC, said that virtual worlds could be used for money-laundering operations, and suggested it is more likely that virtual crime, rather than taxation of virtual economies, will be the first target of regulation by the United States government.¹⁴² Miller also pointed out that it would be “difficult to determine whether the income [is] taxable in the location of the player, the servers, or the company. The tax consequences could also hinge on whether virtual assets [are] considered property, services,

¹³⁶ See *id.* (discussing taxation of transactions using bartering credits).

¹³⁷ The ATO website mentions nothing about considering this transaction to be illegal or unfair to the game developers. See generally Australian Taxation Office, <http://www.ato.gov.au/> (last visited May 11, 2009).

¹³⁸ See generally Press Release, Jim Saxton, Chairman, Joint Econ. Comm., *Virtual Economies Need Clarification, Not More Taxes* (Oct. 17, 2006), <http://www.house.gov/jec/news/news2006/pr109-98.pdf> (announcing that the JEC “has begun an examination of the public policy issues related to virtual economics”).

¹³⁹ *Id.*

¹⁴⁰ *Id.*

¹⁴¹ *Id.*

¹⁴² Scarlett Qi, *Virtual Crime Beats Tax Collection in Capturing the Government's Attention in Virtual Worlds*, SLLN, Oct. 9, 2007, <http://www.slnn.com/article/dan-miller-metonomics>.

or game winnings.”¹⁴³ The Internal Revenue Service currently taxes barter transactions, and states that the “[i]nternet provides a new medium for the bartering exchange industry,”¹⁴⁴ prompting the following reminder: barterers are taxable.

In sum, although countries have recognized this new issue as an area worthy of note, those that have considered enforcing the taxation of in-game barterers have realized potential problems that will arise with any barter transaction.

The MMORPGs themselves often have tax-like systems in place to tax the goods and interchanges that are made in-game. Second Life taxes the land that exists in its game.¹⁴⁵ If a gamer lives in the European Union, value added tax (VAT) is added to anything that a gamer buys from Linden Lab, whether it is premium account registration, purchases from the land store, land use fees, private region fees, or land auctions.¹⁴⁶ In Weblo, gamers can be a governor or mayor of a virtual state or city; the gamers themselves can then obtain up to 0.5% of every transaction done on their site.¹⁴⁷ Sony Station Exchange¹⁴⁸ charges a service fee of ten percent of the purchase price of any virtual good sold on its exchange site.¹⁴⁹ These methods of taxing real-world revenue might be helpful for providing a model of how in-game transfers, which do not involve real world money, should be taxed. Second Life, Weblo, and the Sony Station Exchange system allow in-game transfers of items.¹⁵⁰ This practice might demonstrate the game creators’ belief that the item functionally belongs

¹⁴³ Dustin Stamper, *Taxing Ones and Zeros: Can the IRS Ignore Virtual Economies?*, TAX ANALYSTS, Jan. 15, 2007, <http://www.taxanalysts.com/www/features.nsf/Articles/23B6E6BBD4CEBBC38525727300691993?OpenDocument>.

¹⁴⁴ Internal Revenue Service, Barter Exchanges, <http://www.irs.gov/businesses/small/article/0,jid=113437,00.html> (last visited May 11, 2009).

¹⁴⁵ See Second Life, Land Pricing & Use Fees, <http://secondlife.com/whatis/landpricing.php> (last visited May 11, 2009) (outlining land use fees billed in addition to membership fees). Second Life says it charges a gamer’s account a “user fee” according to how much property they own; the user fee functions in the same fashion as a tax. *Id.*

¹⁴⁶ Second Life, Value Added Tax, <http://secondlife.com/corporate/vat.php> (last visited May 11, 2009).

¹⁴⁷ Wong, *supra* note 57.

¹⁴⁸ Sony Station Exchange was opened in 2005 and allows gamers to sell and exchange virtual property from Everquest II. See Daniel Terdiman, *Sony Scores with Station Exchange*, CNET NEWS, Aug. 25, 2005, http://news.cnet.com/Sony-scores-with-Station-Exchange/2100-1043_3-5842791.html (discussing the success of the then recently launched Station Exchange).

¹⁴⁹ See *id.*

¹⁵⁰ See *supra* notes 55, 107, 122, 147–48 and accompanying text.

to the gamer; otherwise, forums and methods for transfer of virtual items would likely not be encouraged or regulated.

B. Gold Farming

In addition to taxation concerns, some states have entered the virtual property debate because of concerns over gold farming. Gold farming is the large-scale business where an entrepreneur obtains virtual property in an MMORPG and then sells it online.¹⁵¹ A gold farmer will often employ any number of workers who are paid a flat rate to accumulate gold in a real-world, computer-filled factory.¹⁵² The gold farmer then can sell or trade the gold or other items online.¹⁵³ Gold farmers and others also sometimes create “bots,” computer programs which run avatars automatically and allow them to collect virtual property without actually being present.¹⁵⁴ Authorities have uncovered gold farming operations in China,¹⁵⁵ South Korea,¹⁵⁶ and Mexico;¹⁵⁷ one 2005 estimate stated there were over 100,000 Chinese young people engaged in these operations.¹⁵⁸

Big gaming companies, irritated at these perceived abuses of the system, have been fighting back worldwide through lawsuits and lobbying of local governments.¹⁵⁹ Theoretically, gold farmers have a lesser claim to virtual

¹⁵¹ See Barboza, *supra* note 44 (describing the “harvesting [of] artificial gold coins”).

¹⁵² See *id.* (discussing “online gaining factories . . . in China”). The workers make money in any number of ways, such as, by mining for points or repeatedly killing easy-to-slay foes. *Id.*

¹⁵³ *Id.*

¹⁵⁴ World of Warcraft Announcements, Bot-Using Accounts Banned (Dec. 7, 2004), <http://www.worldofwarcraft.com/news/announcements.html>. In World of Warcraft, bots were banned in 2004. *Id.*

¹⁵⁵ Barboza, *supra* note 44.

¹⁵⁶ See Kim Tae-jong, *Gaming Bill Has Holes—A Lot of Them*, KOREA TIMES, Dec. 25, 2006 (discussing the proposed bill’s inclusion of “a prohibition on the trading of cyber money”).

¹⁵⁷ JULIAN DIBBELL, *PLAY MONEY: OR, HOW I QUIT MY DAY JOB AND MADE MILLIONS TRADING VIRTUAL LOOT 18–20* (2006).

¹⁵⁸ Barboza, *supra* note 44.

¹⁵⁹ See Mark Hefflinger, *Blizzard Sues Virtual Gold Sellers for Spamming “World of Warcraft” Players*, DMW DAILY, June 1, 2007, <http://www.dmwmedia.com/news/2007/06/01/blizzard-sues-virtual-gold-sellers-for-spamming-world-of-warcraft-players> (reporting on a lawsuit filed by the company operating World of Warcraft against “a company it [Blizzard] says has spammed players with ads for its service that sells virtual gold used in the game”); see also *CDC Games Achieves Major Success in Shutdown of Illegal Pirate Server Operator*, CDC GAMES, Nov. 12, 2007, <http://www.cdcgames.net/cdcgames/news071112.html> (discussing efforts by the Online Games Alliance Against Piracy, which include lobbying relevant

property than an individual gamer does. Instead of playing the game for its intended use, recreation, with successful players having the added benefit of making money, gold farmers treat gaming solely as a commercial business. Therefore, states are likely to give gold farmers even less protection than the ordinary gamer. The legislation discussed below gives a general overview as to how countries choose to treat these large-scale virtual property traders and developers.

The South Korean Ministry of Culture and Tourism (MCT) recently proposed a bill that would make gold farming illegal.¹⁶⁰ The bill, which was sent to the Korean National Assembly in December 2006, officially prohibits the business of buying, selling, or exchanging virtual money; however, the small-scale trade of virtual items is still allowed.¹⁶¹ There are some flaws in the bill, as virtual currency was not defined.¹⁶² The bill was ostensibly directed at the prevention of illegal gambling,¹⁶³ but in practice, the new law would benefit Korean online game companies like NCsoft while punishing profit-driven trading of online items.¹⁶⁴ The MCT also stated it "will prohibit the trading of [virtual] items by 'unfair' and 'illegal' ways . . . to 'promote' the healthy growth of the game industry."¹⁶⁵ In 2007, South Korea passed The Bill for Promoting the Game Industry into law with the help of MCT's Game Industry Division.¹⁶⁶ The final version of the bill provides that any gamer engaging in bulk-item trade or using hacking software can be fined up to the equivalent of \$50,000 U.S. and jailed for up to five years.¹⁶⁷ Korean gold farmers have created the Digital Asset Distribution Promotion Association (DADPA) to lobby for their interests.¹⁶⁸

government bodies).

¹⁶⁰ See Tae-jong, *supra* note 156 (discussing the proposed bill's inclusion of "a prohibition on the trading of cyber money").

¹⁶¹ *Id.*

¹⁶² *Id.*

¹⁶³ See *id.* (referring to hazardous gambling).

¹⁶⁴ Cho Jin-seo, *Ban on Cyber Asset Trading Clouds Game Industry*, KOREA TIMES, May 10, 2007; see Tae-jong, *supra* note 156 (discussing the potential impact on MSoft as compared to the impact on item trading companies). The trading occurs on sites like Itembay, About Itembay, <http://www.itembay.ca/about.php> (last visited May 11, 2009).

¹⁶⁵ Jin-seo, *supra* note 164.

¹⁶⁶ See *Online 'Gold Farming' More Than a Game* (American Public Media July 9, 2007), <http://marketplace.publicradio.org/shows/2007/07/09/PM200707097.html> (referring to the Game Industry Division and the passage of this bill).

¹⁶⁷ *Id.*

¹⁶⁸ Posting of Nate Anderson to Ars Technica, <http://arstechnica.com/news.ars/post/20070124-8693.html> (Jan. 24, 2007, 12:24 CST); Colin McInnes, *South Korean Gold Farmers Form*

China also has a strong gold farming economy. For a day's work, a Chinese gold farmer can earn about the equivalent of \$4 American dollars.¹⁶⁹ Critics complain that the actions of Chinese gold farmers are causing inflation within the game; as more virtual gold floods the virtual gold market, the real world value of virtual gold owned by other players goes down.¹⁷⁰ The only response that the Chinese government has instituted is a limit on the number of hours that Chinese teens can spend per day on the computer—after five hours, online games will rescind all points gained by an underage gamer.¹⁷¹ President Hu Jintao spurred the creation of the regulation when he ordered regulators promote a “healthy online culture”; the time limit is part of an effort to curb online gaming addictions.¹⁷²

Gold farming is not limited to the countries of China and Korea. Gold farming in the United States came to gamers' attention in 2002 when gold farming company Blacksnow Interactive¹⁷³ filed a lawsuit against Mythic Entertainment, Inc.¹⁷⁴ Mythic, operator of the MMORPG *Dark Age of Camelot*, was made aware of Blacksnow's online business selling the game's gold on eBay.¹⁷⁵ Blacksnow had a gold farming factory in Tijuana, Mexico

Lobbying Group, GAMEPOLITICS, Jan. 28, 2007, <http://www.gamepolitics.com/2007/01/28/south-korean-gold-farmers-form-lobbying-group>.

¹⁶⁹ *China's 'Gold Farmers' Play a Grim Game* (National Public Radio broadcast May 14, 2007).

¹⁷⁰ *See id.* (discussing inflation caused by “extra gold by gold farmers”). China's fastest rising currency is not the yuan, but is the virtual, in-game QQ coin, created in 2002 by Tencent Holdings Ltd. to allow users to buy items in Tencent's virtual world. Fowler & Qin, *supra* note 100. After other online sites began accepting QQ coins in 2006, the ensuing large amount of online trading and buying of QQ coins caused speculation by Yiping Huang, the chief Asia economist of Citibank, that if too many QQ coins were “manufactured,” it could possibly create inflation in the Chinese economy. *Id.*

¹⁷¹ *China Clamps Down on Teenage Internet Gaming*, CHINA DAILY, July 17, 2007, http://www.chinadaily.com.cn/china/2007-07/17/content_5438062.htm; *China Seeks to 'Limit Game Hours'*, BBC NEWS, Apr. 11, 2007, <http://news.bbc.co.uk/2/hi/technology/6544759.stm>.

¹⁷² *China Clamps Down on Teenage Internet Gaming*, *supra* note 171.

¹⁷³ *See* DIBBELL, *supra* note 157, at 11 (describing Blacksnow's business as selling “things that [did not,] strictly speaking, exist,” such as weapons, armor, and money in online games).

¹⁷⁴ *See id.* at 14 (discussing that the lawsuit was filed after Mythic caused eBay to shutdown auctions of products Blacksnow was selling because Mythic viewed Blacksnow's actions as violating Mythic's rights to its “exclusive property”); David Becker, *Game Exchange Dispute Goes to Court*, CNETNEWS, Feb. 7, 2002, http://www.news.com/Game-exchange-dispute-goes-to-court/2100-1040_3-832347.html.

¹⁷⁵ *See* DIBBELL, *supra* note 157, at 10–11, 14 (discussing Blacksnow's sales on eBay and referencing “metal ore” and “money” among other items sold).

with several Mexican employees.¹⁷⁶ Mythic contacted eBay and stated that Blacksnow was violating Mythics' intellectual property rights; eBay removed Black Snow's listings.¹⁷⁷ Blacksnow retaliated by filing a lawsuit in federal district court in California claiming "unfair business practices" and "interference with prospective economic advantage."¹⁷⁸ Blacksnow's lawyer stated the suit was the first of its time, and could prompt " 'a judicial declaration as far as the rights of online gamers to trade outside the game.' "¹⁷⁹ The case was eventually withdrawn, and the U.S. court missed a rare opportunity to present an American perspective on the true owners of virtual property.¹⁸⁰ The court's decision as to who owns virtual property would have been elucidating—especially because a gold farmer probably holds fewer rights to in-game virtual property than does the typical gamer.

Another United States case is *Hernandez v. IGE*.¹⁸¹ A gamer instituted a class action lawsuit against an overseas gold farming company which doubled as an online auction site.¹⁸² The gamer accused IGE of "knowingly interfering with and substantially impairing the intended use and enjoyment associated with consumer agreements between Blizzard Entertainment and subscribers to . . . World of Warcraft."¹⁸³ Hernandez also stated that IGE used cheap labor in undeveloped countries to acquire and then sell virtual property, leaving less virtual property for "real" gamers to acquire, devaluing virtual currency.¹⁸⁴

¹⁷⁶ *Id.* at 18–20.

¹⁷⁷ *See id.* at 15 (stating that eBay shut down Blacksnow's auctions). The game's EULA said "playing the Game for commercial, business, or income-seeking purposes is strictly prohibited." *Id.*

¹⁷⁸ *Id.* at 15–16.

¹⁷⁹ Becker, *supra* note 174.

¹⁸⁰ DIBBELL, *supra* note 157, at 28. The case disintegrated after the Federal Trade Commission fined Black Snow partner Richard Phim \$10,000 for selling computers online and then "forgetting" to deliver them; their lawyer withdrew the suit after several of Black Snow's partners dropped out of contact. *Id.*

¹⁸¹ This case settled in August 2008, and IGE agreed to refrain from gold farming activities for five years. *Hernandez v. IGE U.S.*, No. 07-CIV-21403 (S.D. Fla. Aug. 26, 2008) (joint stipulation with attached order), available at http://virtuallyblind.com/files/hernandez/hernandez_stipulation.pdf. IGE describes itself as "the leading MMORPG Services Company." IGE, <http://www.ige.com> (last visited May 11, 2009).

¹⁸² *See* Class Action Complaint at 1-2, *Hernandez v. IGE*, No. 07-CIV-21403 (S.D. Fla. May 30, 2007), available at <https://netfiles.uiuc.edu/dcwill/www/IGEComplaint.pdf> (providing facts about the defendant's "process of generating virtual assets and then selling them through eBay or other industry websites").

¹⁸³ *Id.* at 1.

¹⁸⁴ *Id.* at 1–2, 9–10.

The suit has aroused interest, as the court's decision may well establish American precedent on the legal status of virtual property. Jeffrey Steefel, executive producer of Turbine Inc., which makes the MMORPG *Lord of the Rings Online* stated, "The "secondary market" is a huge topic of conversation across the industry, and [we are] watching it really closely.'"¹⁸⁵ He also stated although his game does not tolerate secondary markets like IGE.com, the existence of secondary markets are a reality; further, he expects business models to change in the next two to five years to accommodate RMTs online.¹⁸⁶

C. Criminal Law and Virtual Property

No country has specifically addressed virtual property ownership through statutes. However, some countries have responded to virtual crimes through statutes, regulations, and case law. Albeit not dispositive on the issue of ownership, the legal treatment of virtual crimes may help clarify some of the confusion noted above.

The first case in the world which directly identified a property right in virtual property was the Red Moon case, decided in a Beijing court.¹⁸⁷ Twenty-four-year-old Li Hongchen sued the makers of the MMORPG Red Moon when hackers broke into his game account and stole some of his virtual property.¹⁸⁸ He asked the company to return the assets, but the makers of Red Moon refused to tell Li which user was currently in possession of his stolen assets.¹⁸⁹ Li then approached the local police, who were unable to resolve the situation.¹⁹⁰ At the time that Li had started playing Red Moon, players were not required to sign a EULA;¹⁹¹ he had since invested more than two years and the equivalent of \$1,200 in the game.¹⁹² For the first time in the world, a judge seemed to respect an individual's right to virtual property when he rejected the

¹⁸⁵ Rob Purchase, *LOTR Online Boss Talks Gold-Farming*, EUROGAMER, May 29, 2007, http://www.eurogamer.net/article.php?article_id=76995.

¹⁸⁶ *Id.*

¹⁸⁷ Jay Lyman, *Gamer Wins Lawsuit in Chinese Court over Stolen Virtual Winnings*, TECHNEWSWORLD, Dec. 19, 2003, <http://www.technewsworld.com/story/32441.html>.

¹⁸⁸ Li Hongchen, <http://www.chinacourt.org/public/detail.php?id=143455> (last visited May 11, 2009) (translation on file with author).

¹⁸⁹ *On-line Game Player Wins 1st Virtual Properties Dispute*, CHINA VIEW, Dec. 19, 2003, http://news.xinhuanet.com/english/2003-12/19/content_1240226.htm.

¹⁹⁰ *Id.*

¹⁹¹ Li Hongchen, *supra* note 188.

¹⁹² *Online Game Player Wins 1st Virtual Properties Dispute*, *supra* note 189.

company's argument that virtual property was just "piles of data" with no real value.¹⁹³ The judge also stated that because the company had an obligation to protect Li's in-game assets, the game's loopholes and lack of security obligated Red Moon to return to Li the stolen virtual property.¹⁹⁴ The judge used Chinese consumer regulation and contract law to decide the case, as China had no law protecting virtual property.¹⁹⁵

Additionally, several other court cases show that Chinese criminal and copyright law is applicable to virtual crime. Three men were charged in Shanghai's first case of a criminal copyright violation.¹⁹⁶ In March 2007, a Chinese judge sentenced a Shanda Interactive Entertainment programmer and two others to five years in prison for virtual embezzlement; the three men, one of whom was in charge of creating virtual assets for the Legend of Mir II, created extra virtual weapons without permission and sold them to players for over a quarter of a million dollars.¹⁹⁷ The three men argued that Chinese criminal law did not address the embezzlement of virtual property, but the court said that "virtual properties [are] worthy [of protection under Chinese law] when players contributed time and money to earn them."¹⁹⁸ Also, in 2006, the Guangzhou Intermediate People's Court affirmed the conviction of a gaming company employee for stealing players' accounts and passwords, resulting in a fine equal to \$617.¹⁹⁹ Five major online gaming companies, including Tencent,²⁰⁰ recently called for legislative as well as regulatory action against a ring of highly organized virtual property thieves.²⁰¹ The five companies have organized a lobbying group called Industrial Alliance to Fight

¹⁹³ Lyman, *supra* note 187.

¹⁹⁴ Li Hongchen, *supra* note 188; *Online Game Player Wins 1st Virtual Properties Dispute*, *supra* note 189.

¹⁹⁵ Li Hongchen, *supra* note 188.

¹⁹⁶ *Three Men Tried for Selling Copyrighted Online Game Weapons*, INTELL. PROP. PROTECTION P.R.C., Nov. 6, 2006, http://english.ipr.gov.cn/ipr/en/info/Article.jsp?a_no=14894&col_no=928&dir=200609.

¹⁹⁷ Fowler & Qin, *supra* note 100.

¹⁹⁸ Cao Li, *Three Jailed in Online Gaming Scam*, CHINA DAILY, Mar. 27, 2007, http://www.chinadaily.com.cn/cndy/2007-03/27/content_836887.htm.

¹⁹⁹ *More Attention Paid to Virtual Property Protection*, CHINA VIEW, Apr. 3, 2006, http://news.xinhuanet.com/english/2006-04/03/content_4377645.htm.

²⁰⁰ Tencent is an internet company in China and creator of the QQ coin. Fowler & Qin, *supra* note 100. For more information about the QQ coin, see *supra* note 170.

²⁰¹ Press Release, Tencent, Inc., *Fighting Internet Theft and Ensuring a Healthy Game Industry – A Joint Statement* (Jan. 8, 2007), http://www.ng-9.cn/en-us/at/pr/detail.shtml?id=at_2007_20070108.

Internet Theft.²⁰² They state that internet theft has impacted both the game industry and gamers and that China's government should do more in order to fight this new type of crime.²⁰³

Moreover, Taiwan, Hong Kong, and South Korea have instituted criminal sanctions against hackers who steal gamers' virtual property.²⁰⁴ In 2003, the Taiwanese government changed internet crime laws to include the theft of virtual property under a section that prohibits the "damaging of electromagnetic records."²⁰⁵ With this amendment, the Taiwanese criminal code now prohibits "forced entry into computers without cause [and] the acquisition, deletion, or alteration of electromagnetic records," and is intended to have a significant effect on cyber-crime.²⁰⁶

The Hong Kong police have a Technology Crimes Division, and its website directly addresses online game theft and theft of virtual property: "As a result of advances in technology, stealing of information stored in computer[s] has become an increasingly popular method for criminals to make money, [from items] such as cash in your e-banking account, *on-line game tokens or points which you have attained when playing online games. . .*"²⁰⁷ The Hong Kong police advises internet users to keep their passwords safe and to refrain from downloading any auto-play plug-ins.²⁰⁸ The situation is similar in South Korea, where police report that there were 22,000 cybercrimes related to online gaming issues in the first half of 2003.²⁰⁹ Because of the rampant cyber-

²⁰² *Id.*

²⁰³ *Id.*

²⁰⁴ Zhang Tingting & Daragh Moller, *Legislation Proposed to Protect Virtual Property*, CHINA, Jan. 6, 2004, <http://www.china.org.cn/english/2004/Jan/85502.htm>.

²⁰⁵ See *Implementing Information Security to Protect Individuals' Privacy*, SCI. & TECH. L. CENTER, http://stlc.iii.org.tw/English/Article_2-01.html (last visited Feb. 24, 2009). This part of the Taiwanese criminal code is based in large part on the European Commission's 2001 Convention on Cyber-crime findings. *Id.* ChiChao Lu, WenYuan Jen & Weiping Chang, Shihchieh Chou, *Cybercrime & Cybercriminals: An Overview of the Taiwan Experience*, 1 J. COMPUTERS 11, 15 (2006), available at <http://www.academypublisher.com/jcp/vol01/no06/jcp01061118.pdf>.

²⁰⁶ REPUBLIC OF CHINA GOVERNMENT INFORMATION OFFICE, QUARTERLY REPORT ON TAIWAN'S INTELLECTUAL PROPERTY RIGHTS PROTECTION (Apr.–June 2003), http://www.gio.gov.tw/taiwan-website/5-gp/Ipr/ipr03_02.htm.

²⁰⁷ The Hong Kong Police, Introduction to Technology Crime and Prevention Tips, sec. 5, <http://www.police.gov.hk/hkp-home/english/tcd/intro.htm#GamesTheft> (last visited May 11, 2009) (emphasis added).

²⁰⁸ *Id.* secs. 1, 5.

²⁰⁹ Mark Ward, *Does Virtual Crime Need Real Justice?*, BBC NEWS, <http://news.bbc.co.uk/2/hi/technology/3138456.stm> (last visited May 11, 2009).

crime present in these countries, they have each developed procedures to address the theft of virtual property; however, they have not directly addressed the question of who initially owned the stolen virtual property.

One of the United States' only tools against virtual property hackers is the Computer Fraud and Abuse Act.²¹⁰ The Computer Fraud and Abuse Act criminally punishes a person who "knowingly and with intent to defraud, accesses a protected computer without authorization, or exceeds authorized access, and by means of such conduct furthers the intended fraud and obtains anything of value."²¹¹ The value of the item taken must exceed \$5,000.²¹² This \$5,000 requirement limits the effectiveness of the Act, and decreases the number of potential cases which could be brought under the Act.

D. The United States' Missed Opportunity

In 2006, the United States saw its second virtual property case.²¹³ Marc Bragg jointly sued Linden Lab and Phillip Rosedale, operators of Second Life, for wrongly confiscating his Second Life property.²¹⁴ Bragg, a real-life lawyer, joined Second Life in 2005 and created an avatar called Marc Woebegone.²¹⁵ Bragg claimed that he was induced to participate in Second Life because Linden Lab and Rosedale made statements promising that gamers would retain a property interest in the intellectual property they created in the game.²¹⁶ Prior to the suit, Second Life had issued several press releases over the period of a year.²¹⁷ Rosedale summarized the thrust of these statements:

²¹⁰ Computer Fraud and Abuse Act, 18 U.S.C. § 1030 (2002), amended by Pub. L. No. 110-326 (2008); see Sean F. Kane, *Virtual Worlds, Digital Economies and Synthetic Crimes*, 94 PRAC. LAW. 35, 46 (stating the "Computer Fraud and Abuse Act . . . could be used to grant some element of justice for a virtual crime or injury").

²¹¹ 18 U.S.C. § 1030(a)(4).

²¹² *Id.*

²¹³ See *supra* notes 173–80 for discussion of Blacksnow Interactive et al. v. Mythic Entertainment Inc., No. SA CV02-112 GLT (ANx) (C.D. Cal. 2002), the first virtual property case in the United States.

²¹⁴ *Bragg v. Linden Research, Inc.*, 487 F. Supp. 2d 593, 595, 597 (E.D. Pa. 2007).

²¹⁵ *Id.* at 596–97. See also Kathleen Craig, *Second Life Land Deal Goes Sour*, WIRED, May 18, 2006, <http://www.wired.com/gaming/virtualworlds/news/2006/05/70909> (stating that Bragg is known in Second Life as "Marc Woebegone").

²¹⁶ *Bragg*, 487 F. Supp. 2d at 595–96. The creators of Second Life seemed to have considered players' freedom to contract—that is, they can accept an EULA or choose to not play the game—and marketed Second Life as a place where gamers would have the right to own property.

²¹⁷ *Id.* at 596 & n.6 (noting that Linden Lab and Rosedale repeated this idea in numerous

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. The preservation of users’ property rights is a necessary step toward the emergence of genuinely real online worlds.²¹⁸

Bragg began to invest in virtual land and sell virtual fireworks.²¹⁹ Bragg then used “hacker-like method[s]” to obtain a piece of land in a virtual auction in Second Life.²²⁰ By exploiting a loophole within Second Life’s auction software,²²¹ Bragg was able to win virtual land that normally costs a minimum \$1,000 at the cost of \$300.²²² In response, Linden Lab froze Bragg’s account, which included virtual real estate property and virtual nightclubs.²²³ Bragg brought suit in Pennsylvania under ten different causes of action; among other claims, he asserted violations of the Pennsylvania Unfair Trade Practices and Consumer Protection Law, fraud, conversion, intentional interference with contractual relations, breach of contract, unjust enrichment, and tortious breach of the covenant of good faith and fair dealing.²²⁴

The case was decided after the judge denied the defendant’s motion to compel arbitration.²²⁵ On May 30, 2007, the judge held that the arbitration clause located in the terms of service, which Bragg had agreed to in a click-

pieces of media, newspaper articles, and press releases).

²¹⁸ Press Release, Linden Lab, Linden Lab Preserves Real World Intellectual Property Rights of Users of its Second Life Online Service (Nov. 14, 2003), http://lindenlab.com/pressroom/releases/03_11_14. Rosedale states in a cover story for *Inc. Magazine* that “[w]hat you have in Second Life is real and it is yours. It [does not] belong to us You can make money.” Michael Fitzgerald, *How I Did It: Philip Rosedale*, CEO, Linden Lab, INC. MAGAZINE, Feb. 2007, available at http://lindenlab.com/pressroom/releases/03_11_14.

²¹⁹ *Bragg*, 487 F. Supp. 2d at 596.

²²⁰ See Craig, *supra* note 215 (discussing Linden Lab’s “online auction pages that allowed [Bragg] to buy land . . . [and] . . . the hacker-like method he used to exploit the auction system”).

²²¹ See *id.* (referring to possible “problems with the [auction] system” as well as Bragg’s “hacker-like method”).

²²² *Id.*

²²³ *Id.*

²²⁴ *Bragg*, 487 F. Supp. 2d at 597 n.8.

²²⁵ *Id.* at 595.

wrap agreement,²²⁶ was unconscionable and unenforceable.²²⁷ The court considered it unfair that Linden Lab could seize and freeze a participant's account without first going through an arbitration procedure: "[T]he TOS expressly allow[s] [Linden Lab], at its 'sole discretion' and based on mere 'suspicion,' to unilaterally freeze a participant's account, refuse access to the virtual and real currency contained within that account, and then confiscate the participant's virtual property and real estate."²²⁸

This case had the potential to establish an American view on virtual property rights and perhaps shed light on the question of gamers' rights to virtual property. This case would have allowed the courts to make a strong statement for the existence of virtual property as legally protected property. Unfortunately, instead of proceeding with the lawsuit, Marc Bragg and the defendants settled.²²⁹ Bragg's account and avatar were reinstated and the details of the settlement were kept confidential.²³⁰ Raph Koster commented, that the settlement "means that the industry has once again managed to dodge legal questions regarding ownership of 'virtual property.'" ²³¹

V. POTENTIAL SOLUTIONS TO THE PROBLEMS WITH VIRTUAL PROPERTY

A. Adverse Possession as a Tool to Establish a Claim to Virtual Property

In America and other common law systems, the application of adverse possession to virtual property might provide a basis for gamers' ownership claims.²³² In most American states, adverse possession requires the fulfillment of several elements: continuous possession that is open, exclusive, and hostile

²²⁶ See *id.* at 603 (stating that "[b]efore a person is permitted to participate in Second Life, she must accept the Terms of Service of Second Life (the 'TOS') by clicking a button indicating acceptance of the TOS").

²²⁷ *Id.* at 612. The court also refused to blueline the arbitration provision. *Id.* (describing bluelining as "remov[ing] an element that renders [an arbitration agreement] substantively unconscionable").

²²⁸ See *id.* at 611 (discussing these reasons in the conclusion to the decision).

²²⁹ Posting of Marty Linden to Official Second Life Blog, <http://blog.secondlife.com/2007/10/04/resolution-of-lawsuit> (Oct. 4, 2007, 15:38 EST).

²³⁰ See *id.* (reporting that Bragg's "Marc Woebegone" account was restored).

²³¹ Raph Koster's Website, Linden Lab Settles Bragg Lawsuit, Oct. 4, 2007, <http://www.raphkoster.com/2007/10/04/linden-lab-settles-bragg-lawsuit>.

²³² The author assumes, for the sake of argument, that virtual property *is* property, equivalent to personal property or chattel.

for the duration of a certain statute of limitations.²³³ Assuming that game creators would claim they are the “owner” of a piece of virtual property, gamers could probably claim that they have adversely possessed the item. The elements for adverse possession of personal property or chattel are the same as for real property,²³⁴ although the elements may be fulfilled differently than with real property.²³⁵ For personal property, a gamer’s possession and use of an account, avatar, or land openly in a game is probably open enough to qualify. The gamer’s possession and use of a virtual item is as actual as can happen for a virtual item, as “virtual” items will never “physically” be in possession of anyone. A gamer’s uninterrupted and continuous possession of a virtual item during the duration of the term required by an adverse possession statute could be proven by an account statement or account summary.

The final criteria necessary to satisfy adverse possession is the fulfillment of the element of hostility.²³⁶ Hostility presents a complication for a gamer who has agreed to a game’s EULA. When an EULA exists which specifically extinguishes virtual property ownership rights in a gamer, the game creators could claim the EULA acts as a contract that the gamer has agreed to that merely grants her rights to use virtual property within the game. Game creators would likely utilize the adverse possession defense of permissive possession, the defense that gamers’ possession of the account, land, or avatar is adverse not by their mere possession of the items, as the game is designed around gamers’ possession and usage of items in the virtual world. However, should the gamer use the item in opposition to the understood usage (as when the gamer sells it), her possession at that point may become adverse.

²³³ 3 AM. JUR. 2D § 10 (1986); *see, e.g.*, O.C.G.A. § 44-5-161 (1991) (listing the elements of adverse possession for real property in Georgia).

²³⁴ 3 AM. JUR. 2D *Adverse Possession* § 12 (1986); *Isham v. Cudlip*, 33 Ill. App. 2d 254, 268, 179 N.E.2d 25, 32 (Ill. App. 1962).

²³⁵ Some American states use the discovery rule or the demand and refusal rule instead of adverse possession for chattels. *See, e.g.*, *O’Keeffe v. Snyder*, 416 A.2d 862, 872 (N.J. 1980) (adopting a discovery rule); *Yeager v. Wallace*, 57 Pa. 365 (1868) (requiring demand and refusal before a claim of trover can be made). The demand and refusal rule states that the applicable statute of limitations will not begin to run until the true owner makes a demand for the property’s return and the person in possession of the chattel refuses to return it. *See O’Keeffe*, 416 A.2d at 868 (explaining New York’s application of this rule). The discovery rule states that the statute of limitations runs when the true owner “first knew, or reasonably should have known through the exercise of due diligence, of the cause of action, including the identity of the possessor. . . .” *See id.* at 870 (adopting this version of the discovery rule in the context of a painting replevin claim).

²³⁶ *See supra* note 233 and accompanying text.

Would adverse possession begin once the gamer's intent was to *possess* the item and exhibited acts of control, or would it begin only when the gamer acted contrary to the rules of the game creator and the game creator did not respond? Under traditional American law, possession of land which was initially permissive can become hostile.²³⁷ The claimant must clearly and unequivocally declare his hostility either by "actual notice of the hostile claim, or acts or declarations of hostility so manifest and notorious that actual notice will be presumed in order to change a permissive possession into one which is hostile."²³⁸

In a virtual property scenario, any action that is contrary to the EULA, such as when a gamer sells, *buys*, or even merely *lists* her account, virtual weapons, land, or gold online in anticipation of a sale could constitute an act of hostility.²³⁹ Irony is inherent in the idea of the gamer's possession of an item becoming adverse only once she has sold the item because once the item is sold, the gamer probably has no more rights to it. However, a property owner may be able to tack his period of possession to that of the preceding owner, as long as there is privity between the two;²⁴⁰ this could enable an adverse possession claimant to satisfy the required possession period.

Additionally, the failure of EULAs to address the status of third parties provides an opening for third parties who are not within the game to use adverse possession. The EULA is a contract between the gamer and the game creator, and thus does not bind third parties, such as online sites that resell virtual property or gold farmers.²⁴¹ Arguably, the items have no "use" until they are loaded in the appropriate game and its platform, which requires that the person loading the item agree to an EULA. But if the intent of the buyer is to act as a buyer and reseller of the items, then they will never have to enter the game or agree to the EULA.²⁴² Therefore, these third parties may be able

²³⁷ 68 AM. JUR. PROOF OF FACTS 3D *Permissive Possession or Use of Land*, § 7 (1988).

²³⁸ *Id.*; see, e.g., *Wallace v. Snider*, 204 S.W.3d 299, 304 (Mo. Ct. App. 2006) (stating that if use is permissive at inception it is made adverse only by "a distinct and positive assertion of a right hostile to the owner").

²³⁹ See, e.g., *EVE Online*, Terms of Service, para. 10, <http://www.eve-online.com/pnp/terms.asp> (stating that users "may not market, sell, advertise, promote, solicit or otherwise arrange for the exchange or transfer of items in the game or other game services unless it is for in-game sales of in-game services or items").

²⁴⁰ See *Howard v. Kunto*, 477 P.2d 210, 214 (Wash. Ct. App. 1970) (holding that "a purchaser may tack the adverse use of its predecessor in interest" if they are in privity).

²⁴¹ See *DIBBELL*, *supra* note 157, at 44, 46 (describing an individual who speculates in virtual property, buying it online to resell it later).

²⁴² Some gamers or online transfer websites may even want to raise a bona fide purchaser

to own and resell items without recourse if a court would accept an adverse possession argument.

In countries other than the United States, especially those under civil law, adverse possession may not be codified into law. The usage of adverse possession to claim virtual property will then depend on whether the country recognizes the theory. Hong Kong follows a common law system developed from English common law and uses the theory of adverse possession.²⁴³ South Korea, a civil law system,²⁴⁴ also recognizes the adverse possession of land.²⁴⁵ Some civil law countries draw distinctions between good and bad faith possessors of land, increasing the statute of limitations necessary to acquire the land for the latter.²⁴⁶ With minor deviations, it is possible that adverse possession could be used in other countries to lay a foundation for the ownership of virtual property.

One American case which potentially hinders a gamer's usage of adverse possession to gain legal recognition of their ownership of virtual property is *MDY Industries v. Blizzard Entertainment*.²⁴⁷ Blizzard Entertainment, the maker of World of Warcraft (WoW), claimed that MDY was guilty of

(BFP) defense, stating that although a seller generally cannot convey a better title than he has, if the seller has voidable title, he can transfer good title to a BFP. *Kotis v. Nowlin Jewelry, Inc.*, 844 S.W.2d 920, 923 (Tex. Ct. App. 1992) (explaining that a transferor with voidable title can transfer good title to a good faith purchaser and that “[t]he test for good faith is the actual belief of the party and not the reasonableness of that belief”); see U.C.C. § 2-403 (2003) (explaining a good faith purchase and transfer of good title). However, a BFP defense would likely be difficult to prove, as most people who engage in online gaming will arguably have a suspicion that virtual property sellers may not have full ownership.

²⁴³ Albert H.Y. Chen, *Constitutional Adjudication in Post-1997 Hong Kong*, 15 PAC. RIM L. & POL’Y J. 627, 627 (2006); see Charles Harpum, *Adverse Possession and Statements Against Interest*, 28 HONG KONG L.J. 329, 332 (1998) (discussing Hong Kong’s “follow[ing] a line of modern English cases which placed the law of adverse position on sound doctrinal footing”).

²⁴⁴ Jeong-Yoo Kim, *Good-Faith Error and Intentional Trespassing in Adverse Possession*, 24 INT’L REV. L. & ECON. 1, 3 (2004).

²⁴⁵ *Id.*; Sang Yong Kim, *Amendment Works of the Korean Civil Code (Property Law)* 6, available at http://www.irp.uni-trier.de/pdf/03_Kim.pdf.

²⁴⁶ Boudewijn Bouckaert & Ben W.F. Depoorter, *Adverse Possession – Title Systems*, in ENCYCLOPEDIA OF LAW AND ECONOMICS 18, 19–25 (Boudewijn Bouckaert & Gerrit De Geest eds., 1999), <http://encyclo.findlaw.com/1200book.pdf> (discussing adverse possession in civil law countries like Germany and France).

²⁴⁷ See generally *MDY Indus. v. Blizzard Entm’t*, No. CV-06-2555-PHX-DGC, 2008 WL 2757357, at *3 (D.AZ. July 14, 2008) (order granting partial summary judgment) (holding on motions in a dispute between a software owner and a game operator that “users of [the game] are licensees who are permitted to copy the copyrighted [material] only in conformance with the EULA” which sets limits).

copyright infringement, violations of the Digital Millennium Copyright Act, trademark infringement, and unjust enrichment, among other claims.²⁴⁸ MDY had operated a software program called WowGlider, which was a “robot” or “bot” program that once installed on a gamer’s computer, played WoW automatically for its owner while its owner was away from his computer, allowing the gamer to acquire more virtual assets and advance more quickly through the game than he might have otherwise been able to.²⁴⁹ The U.S. District Court of Arizona held MDY had violated copyright law.²⁵⁰ when the gamer started the game, the game client software was copied from the hard drive of the player’s personal computer to the computer’s random access memory (RAM), which constituted sufficient “copying” to violate the Copyright Act.²⁵¹ The court decided that if the gamer was not authorized by the copyright holder or by a license (as granted in the EULA) to copy, they were infringing on the copyright holder’s rights, as the terms of use and the EULA of WoW specifically prohibited the use of bots.²⁵²

The *MDY Industries* court held that when a license is limited in scope, and the licensee acts outside that scope, the licensor can bring a claim for copyright infringement.²⁵³ Although no party raised the issue of adverse possession in *MDY Industries*, one could argue that the case forecloses the possibility of a valid adverse possession claim by holding that actions outside the scope of a gamer’s license—the adverse use, sale, or possession of the property—would be considered a violation of the EULA and terms of use rather than hostile possession, a necessary element of adverse possession.

However, *MDY Industries* does not bar a gamer’s claim to virtual property by adverse possession. *MDY Industries* examined a goal-based game rather than a game based around player interaction, in which a gamer could have an even greater claim to virtual property, as the EULAs of those games more clearly delineate some rights for the gamer.²⁵⁴ Also, *MDY Industries* alleviates the injustice imposed upon gamers by game designers. For the duration of any particular game, many game designers, in the EULA, have formally prohibited gamers’ engagement in RMTs but, in practice, permitted RMTs. Due in part to this practice of allowing gamers to earn real-life money, the game designers

²⁴⁸ *Id.* at *1–2.

²⁴⁹ *Id.*

²⁵⁰ *Id.* at *10.

²⁵¹ *Id.* at *6.

²⁵² *Id.* at *6–7.

²⁵³ *Id.* at *10.

²⁵⁴ See *supra* notes 62–63 and accompanying text.

have enjoyed increased popularity and increased subscriptions. In many cases, the game designers may delay commencing—if it ever does commence—a suit on whatever claims it has; in such a circumstance, gamers could argue that the game designer inequitably and implicitly condones gamers into prohibited activities, such as RMTs.²⁵⁵ In addition, the strength of a gamer's claims to virtual property under any of the basic property theories, such as the utilitarian, labor, and personality theories is not diminished by the *MDY Indus.* case.²⁵⁶

B. *Civil Law Countries v. Common Law Countries*

What is the best method for dealing with property in virtual worlds? Is it better for states to create and enforce legislation? In common law countries, should the common law as modified through judicial decisions prevail, using the idea of adverse possession where appropriate? Is it best to let each game company provide their own terms through EULAs? Several countries recognize a gamer's right to not have virtual property stolen, but no country except China has recognized a right to restitution of a gamer's virtual property. Which country practices the best method of dealing with virtual property issues?

Problems are pervasive whether a judicial solution or a legislative solution is used. Lawmaking bodies in each country may not have the expertise to understand the issue and have the potential to be swayed by lobbyists.²⁵⁷ Poor drafting may result in laws that could become outdated in a matter of weeks. Standardization from game to game and from country to country is important but impracticable, as both game designers and countries have little incentive to make interpretation easier for gamers. In addition, some critics claim that the reason virtual worlds do so well is that they have very little internal regulation; they are virtual free markets, as the "barriers to entry and to commerce are so low, it is hard to imagine a more ideal business environment

²⁵⁵ Depending on the particular factual situation, a gamer who sold virtual property in RMTs could possibly assert a statute of limitations defense or the defense of laches. Laches is an equitable defense, operating as estoppel against the assertion of a right when any delay becomes inequitable. 31 WILLISTON ON CONTRACTS § 79:11 (4th ed. 2008). There are two elements of laches, namely "(1) an unreasonable delay by one party in asserting its right or remedy; and (2) prejudice to the other party as a result of the delay." *Id.*

²⁵⁶ See *supra* notes 72–87 and accompanying text.

²⁵⁷ This problem is inherent in the creation of any technical law. Here, larger gaming companies may have the advantage, as they are more likely able to organize and lobby because they have more resources and more at stake than do individual gamers.

for entrepreneurs.”²⁵⁸ Therefore, in general, regulation through national standardization may not be the most desirable solution for virtual property issues.

Moreover, differences between civil and common law systems add another layer to the complexities of virtual property. The principle difference between civil and common law systems is that in the latter, judge-made law and *stare decisis* are given more importance.²⁵⁹ Common law countries like Singapore, Hong Kong, Australia and the United States therefore allow their courts to consider the specifics of each new case in conjunctions with case precedent.²⁶⁰ A common law system might provide a better framework as it is more malleable to each new situation (some might even say judges are too partial to outside influences). Common law systems pay more attention to jurisprudence, and judges mold and shape the law rather than simply interpret it.²⁶¹ The common law systems allow for both “gradual development and timely response to the changing requirements of society.”²⁶²

Virtual property is a new topic and legislatures may be unwilling to legislate on it until they more fully understand it. Therefore, common law countries that apply legal reasoning from past decisions to this new area might be able to act more quickly than would a system that does not allow judges to shape the law. Civil law countries like China, Taiwan, South Korea, and Japan might therefore have a more difficult time addressing virtual property issues through statutes, primarily because it is such a new and untested area.

Waiting to see which tactics will work best is also advised. Each state has had a unique approach to other aspects of virtual worlds—such as gold farming, virtual crime, virtual taxation—and will likely find a different method to address virtual property as well. Singapore’s Principal Senior State Council Charles Lim Aeng Cheng states that Singapore is creating an Advisory Council on the Impact of New Media on Society to study virtual world’s effect on

²⁵⁸ Bennett & Beith, *supra* note 48 (referring to Second Life). In addition, a skeptic could argue that many of the problems identified above, such as gold mining, are the direct result of the lack of regulation in MMORPGs. The authors’ comment would have less applicability to a goal-based MMORPG, as presumably a gamer’s desire for enjoyment is his primary motivation.

²⁵⁹ See Margaret Fordham, *Comparative Legal Traditions – Introducing the Common Law to Civil Lawyers in Asia*, 1 *ASIAN J. COMP. L* 1, 1 (2006) (stating “common law systems are based on judge-made law, which is developed on a case by case basis”).

²⁶⁰ *Id.*; Chen, *supra* note 243, at 627; Wayne R. Barnes, *Contemplating a Civil Law Paradigm for a Future International Commercial Code*, 65 *LA. L. REV.* 677, 684 (2005).

²⁶¹ Fordham, *supra* note 259, at 3.

²⁶² *Id.*

Singapore because the country does not want to rush into unneeded lawmaking.²⁶³ He says there is no definite regulatory policy in Singapore and the state should avoid regulating what they do not understand, as there is no point creating laws which cannot be enforced.²⁶⁴

Other countries should follow the lead of Singapore, which acknowledges that the application of law in virtual worlds will be different than in the real world. As the legal status of virtual property is an emerging question, there may not be support for an international agreement on the topic. As shown, very few states have decided to legislate on the issue, and there have been no international disputes rising to a level that involved state actors. Although the numbers of persons affected by MMORPGs and virtual property struggles are growing, it may well take some time to generate state interest in the issue, much less gather and maintain support for an international declaration.

The best way to address the issue of virtual property for now will be judicially. Until more is understood about the possible implications of statutorily declaring an owner of virtual property, taxing it, or outlawing gold farming, courts can adequately address issues on a case-by-case basis. Therefore, common law systems provide a better framework to approach the issue. The Red Moon case demonstrates this suggestion: although China had not yet legislated on the issue of virtual property, the court applied previously existing principles to decide the case appropriately, thereby creating a sort of precedent. However, because China is a civil law country, other Chinese courts do not need to give this precedent any weight in future decisions, thereby leaving the issue unresolved in China. For the reasons discussed above, it will likely be easier for common law countries, rather than civil law countries, to address virtual property issues through judicial interpretation, rather than legislation.

VI. CONCLUSION

Whether virtual property is actually owned by gamers or by game creators is an issue that will need to be decided by each individual country. The best approach for the issue will most likely be a gradual creation of case law and jurisprudence, rather than the drafting of laws which could possibly be over-broad or under-inclusive. Therefore, a common law system will probably

²⁶³ PODCAST: REGULATING VIRTUAL WORLDS, *supra* note 111 (Charles Lim Aeng Cheng discussing legal issues related to virtual worlds at a conference).

²⁶⁴ *Id.*

provide a better avenue to address virtual property issues than a civil system of law. The history and phenomenon of virtual property shows that common law systems can adapt traditional property theories like adverse possession to new situations. Civil law countries will need to engage in careful analysis and study before legislating.

In most countries it is only a matter of time until politicians and judges extend legislation that addresses gold farming, virtual taxation, and virtual crime into the virtual property arena; although a judicial solution would be more desirable, legislators' and judges' approaches to these issues will gradually force them to designate a true owner of virtual property. An onslaught of legislation and cases in countries such as China, South Korea, Taiwan, Hong Kong, Singapore, and the United States is not yet apparent but is almost certain to come. The approach that these countries take will affect fifteen million players and one billion dollars in transactions.²⁶⁵ Let us hope that each country's decision to award property rights is well-thought out and deliberate when made.

²⁶⁵ Michael Connelly, *Business is Good for Online Video Games and Virtual Worlds*, STREETDIRECTORY, http://www.streetdirectory.com/travel_guide/103724/gaming/business_is_good_for_online_video_games_and_virtual_worlds.html (last visited May 11, 2009) (stating that "over 15 million people worldwide are now playing [MMORPGs]" and that "[i]n 2006 this particular genre of video games grossed over 1 billion dollars").