

“STRANGER THAN FICTION”: TAXING VIRTUAL WORLDS

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Virtual worlds are increasing in commercial importance. As the economic value of computer-generated spaces soars, questions of how to apply our tax law to transactions within them will inevitably arise. In this Article, Professor Leandra Lederman argues for federal income tax treatment that reflects the differences between “game worlds” and “unscripted worlds,” arguing that the former should receive more favorable tax treatment than the latter. Specifically, she argues that transactions in game worlds such as World of Warcraft should not be taxed unless the player engages in a real-market sale or exchange. By contrast, in intentionally commodified virtual worlds such as Second Life, federal income tax law and policy counsel that in-world sales of virtual items be taxed regardless of whether the participant ever cashes out.

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INTRODUCTION

Space was once the “final frontier”; today, the newest worlds exist in cyberspace. These “virtual worlds” change, in real time, as computer-rendered characters, or “avatars,”¹ move through them. Many offer elaborate and detailed graphics and allow thousands of people worldwide to participate simultaneously, all interacting via the internet with each other and the environment. Some of these worlds, such as City of Heroes, Everquest, and World of Warcraft (WoW), are games that provide structured adventures involving quests, raids, and fights against opposing forces. Others, such as Second Life, The Sims Online, and There, are unscripted virtual environments that lack a set storyline. In Second Life, for example, the world’s owner, Linden Lab, provides the basic environment, but users create the vast majority of the world’s content.²

¹ “Representational proxies in these virtual spaces are known as ‘avatars,’ a word of Hindu religious origin.” F. Gregory Lastowka & Dan Hunter, *The Laws of the Virtual Worlds*, 92 CAL. L. REV. 1, 6 (2004) (citing Edward Castronova, *On Virtual Economies* 6 (CESifo, Working Paper No. 752, 2002), available at <http://papers.ssrn.com/abstract=338500>). “In 1985, F. Randall Farmer and Chip Morningstar developed Habitat, the first multi-user domain with a visual 2D interface, and they chose *avatar* as the term for the cartoons that users would drive around the virtual world.” Castronova, *supra*, at 6. The term was “later popularized by Neal Stephenson in his 1992 novel *Snow Crash*.” Lastowka & Hunter, *supra*, at 6 n.10.

² Cory Ondrejka, *Escaping the Gilded Cage: User Created Content and Building the Metaverse*, 49 N.Y.L. SCH. L. REV. 81, 87 (2004) (“Well over 99% of the objects in Second Life are user created . . .”).

The population of virtual worlds is vast, numbering in the millions.³ Virtual worlds, particularly unscripted worlds such as Second Life, provide a platform for all sorts of real world activity. Second Life has attracted substantial investment,⁴ and numerous real world companies are using it to promote their products.⁵ For example, in early 2007, Mazda debuted the Hakaze, a concept car, in Second Life, prior to its real world debut.⁶

People generally pay to participate in virtual worlds,⁷ and many are there solely for the social and entertainment value.⁸ However, even in the course of playing structured games, participants often receive items, such as armor, weapons, or virtual currency, that have value within the game. Some participants accept real money⁹ in return for transferring such an item in-world. As a result of such real-market trades, many items have ascertainable market values. Some of those values are quite high.¹⁰ For example, “[l]evel 60 *EverQuest*

³ See Andrew Jankowich, *EULaw: The Complex Web of Corporate Rule-Making in Virtual Worlds*, 8 TUL. J. TECH. & INTELL. PROP. 1, 4 (2006) (“Virtual worlds are becoming increasingly popular; by January 2005, the number of ‘active subscriptions’ to virtual worlds totaled more than 5,000,000, having grown from approximately 1,000,000 subscribers in January 2002.”). A single user can subscribe to more than one world, meaning these figures somewhat overestimate the total number of people actively participating in virtual worlds.

⁴ “The San Francisco company has garnered \$19 million in funding. Investors include Globespan Capital Partners, Amazon.com founder Jeff Bezos, Lotus founder Mitch Kapor, eBay founder Pierre Omidyar’s Omidyar Network and Catamount Ventures.” Patrick Cain, *Companies Are Finding Second Life*, INVESTOR’S BUS. DAILY (L.A.), Feb. 22, 2007, at A4.

⁵ One article reports:

IBM has now acquired 24 Second Life “islands.” That’s the most of anyone, but plenty of other big companies—and many smaller ones—have a presence in Second Life. They include General Motors, Toyota Motor, Dell, Cisco Systems, Sun Microsystems and Reuters Group. . . . Businesses are using the online world to advertise, test products and market ideas. They also might make some sales, mostly by linking Second Life visitors to their real world e-commerce Web sites.

Id.

⁶ Scarlett Qi, *Mazda Debut Falls Flat*, SLNN.COM, Feb. 15, 2007, <http://slnn.com/article/hakaze-scarlett>.

⁷ Most virtual worlds require users to pay a monthly subscription fee. Jankowich, *supra* note 3, at 54 (presenting results of survey that found that 83.33% of virtual worlds charge fee).

⁸ See Richard A. Bartle, *Virtual Worldliness: What the Imaginary Asks of the Real*, 49 N.Y.L. SCH. L. REV. 19, 30 (2004) (“Many people play virtual worlds as a way to explore their identity.”).

⁹ In this Article, the phrase “real money” refers to nonvirtual currency (such as the U.S. dollar), and the phrase “real-market trades” refers to transactions that involve real money or other real world consideration.

¹⁰ See, e.g., Julian Dibbell, *Dragon Slayers or Tax Evaders?*, LEGAL AFF., Feb. 2006, at 47, 47, available at http://www.legalaffairs.org/issues/January-February-2006/feature_dibbell_janfeb06.msp (“[O]n online marketplaces like eBay today, you will find a thriving,

characters reportedly have sold for as much as \$5,000 USD.”¹¹ Some people make a living playing the games, using their online personae to obtain virtual items that have real value and then selling them, typically via online auction sites.¹²

Although it seems intuitive that a person who auctions virtual property online for a living should be taxed on his or her earnings, or even that a player who occasionally sells a valuable item for real money should be taxed on the profits, what of a player who only accumulates items or virtual currency within a virtual world? Should someone whose avatar discovers or wins an item of value be taxed on the value of that item? And should a player who trades a virtual item in-game with another player (for another item or virtual currency) be taxed on any increase in value of the item relinquished?¹³

multimillion-dollar market in Golden Runic Hammers, Ethereal Mounts, and similarly exotic items[.] . . . many of them fetching prices in the hundreds, even thousands of dollars.”); *see also* Joshua A.T. Fairfield, *Virtual Property*, 85 B.U. L. REV. 1047, 1062 (2005) (reporting estimate of secondary market in virtual items of over \$880 million, including one virtual environment with greater net worth than Bulgaria and higher per capita GNP than India or China).

¹¹ *Virtual Economy*, in WIKIPEDIA, http://en.wikipedia.org/w/index.php?title=Virtual_economy%title=virtual_economy&oldid=134671383 (version from May 30, 2007). A study in early 2007 found “an overall average cost of \$259.52 per 1000 gold on the American servers” of World of Warcraft (WoW). *WoW Gold Price Research: A World of Warcraft Economic Study*, <http://www.gamerprice.com/wow-gold-study.html> (last visited Aug. 19, 2007).

¹² *See* JULIAN DIBBELL, *PLAY MONEY: OR, HOW I QUIT MY DAY JOB AND MADE MILLIONS TRADING VIRTUAL LOOT* 18–20 (2006) (describing workings of “gold farm” operated out of Mexico). Many of the workers are actually employed by others who do the selling and keep the profits. *See* Tim Johnson, *For Millions of Chinese, Playing Computer Games Is a Livelihood*, KNIGHT-RIDDER TRIB. BUS. NEWS (Wash., D.C.), July 19, 2006, at 1 (“Savvy entrepreneurs harness teams to play popular online games, gathering magic spells, battle hammers, armor and other virtual assets. They then provide the assets to brokers, who sell them to rich players in the United States and Europe wanting shortcuts to gaming success.”). “Gold farmers” are those who work to acquire these items for sale. *Farmer (gaming)*, in WIKIPEDIA, [http://en.wikipedia.org/wiki/Farmer_\(gaming\)](http://en.wikipedia.org/wiki/Farmer_(gaming)) (last visited Aug. 17, 2007) (“Farmer is a general term for an MMORPG [massive multiplayer online role-playing game] player who attempts to acquire (‘farm’) items of value within a game . . .”).

A WoW subscriber has filed a class action lawsuit against Internet Gaming Entertainment, Ltd. (IGE), alleging that “IGE’s gold farming activities not only substantially diminish the enjoyment and satisfaction consumers obtain by earning, through the expenditure of vast amounts of time and energy, virtual assets within *World of Warcraft*®, they also violate the express terms of agreements Subscribers enter into to participate in *World of Warcraft*®.” Complaint at 2, *Hernandez v. Internet Gaming Entm’t, Ltd.*, No. 03-3674 (S.D. Fla. May 31, 2007), 2007 WL 1799038.

¹³ The federal income tax law generally taxes a taxpayer selling or exchanging property on the difference between the fair market value of the property the taxpayer receives (plus any money received) and the basis of the property the taxpayer relinquishes. I.R.C. § 1001(a)–(c) (West 2006).

These are important questions given the tax revenues at stake. Although the Internal Revenue Service (IRS) has not yet attempted to tax transactions within virtual worlds, officials are aware of the issue.¹⁴ Moreover, given that the economies of some virtual worlds are comparable to those of some countries, there is pressure on the government to determine how to treat this industry.¹⁵ Congress's Joint Economic Committee has announced that it is studying the issue.¹⁶

Most people's intuition probably is that accumulation of assets within a virtual world, for purposes of a mere "game," should not be taxed so long as the assets are not cashed out for real funds.¹⁷ Yet, at least at first blush, analysis of federal income tax law suggests that transactions within virtual worlds may be taxable. Prizes and awards from contests (including games), as well as windfalls such as lottery winnings, are subject to federal income tax.¹⁸ The same is true of profits on barter transactions, even with respect to barter of personal use items.¹⁹ Is the common intuition therefore incorrect?

This Article analyzes how, and if, these transactions should be taxed.²⁰ Part I of the Article provides context, describing two types of virtual worlds: (1) massive multiplayer online role-playing games (MMORPGs) (referred to in this Article as "game worlds"), such as

¹⁴ Dibbell, *supra* note 10, at 49 (describing his discussions with Internal Revenue Service (IRS) on how to tax in-game trades, culminating in official remarking that issue is "so weird").

¹⁵ See Edward Castronova, *Virtual Worlds: A First-Hand Account of Market and Society on the Cyberian Frontier* 1 (CESifo, Working Paper No. 618, 2001), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=294828 ("The nominal hourly wage [of Norrath, the world in the game Everquest] is about USD 3.42 per hour, and the labors of the people produce a GNP per capita somewhere between that of Russia and Bulgaria."); see also Dustin Stamper, *Taxing Ones and Zeros: Can the IRS Ignore Virtual Economies?*, 114 *TAX NOTES* 149, 149 (2007) ("The rise in massive multiplayer online games may present the IRS with its thorniest pop culture tax issue since Mark McGwire was pelting million-dollar home-run balls at baseball fans—only with much broader consequences.").

¹⁶ 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>.

¹⁷ This argument is made in, for example, Bryan Camp, *The Play's the Thing: A Theory of Taxing Virtual Worlds*, 59 *HASTINGS L.J.* (forthcoming Nov. 2007), available at <http://ssrn.com/abstract=980693>.

¹⁸ I.R.C. §§ 61(a), 74 (West 2006).

¹⁹ See I.R.C. § 61(a)(3) (including "[g]ains derived from dealings in property" in gross income); I.R.C. § 1001(a)–(c) (West 2006) (providing for calculation and presumptive recognition of gain); see also Rev. Rul. 79-24, 1979-1 C.B. 60, 60–61 (holding, in part, that value of "rent-free use of an apartment" received in barter transaction is gross income).

²⁰ This Article addresses the federal income tax consequences to those virtual world participants who are U.S. citizens and residents of a variety of common transactions within scripted games and unscripted worlds. There are a variety of additional tax questions with respect to virtual worlds that are beyond the scope of this Article.

WoW, and (2) less structured virtual environments (referred to in this Article as “unscripted worlds”), such as Second Life.²¹ It also discusses why real-market trading in virtual items has developed.

Part II of the Article considers whether virtual items are participants’ property for purposes of the federal income tax, which affects both the taxation of “loot” items received in game worlds and the taxation of in-game exchanges with other participants. Property characterization for federal income tax purposes depends on the rights granted by applicable state law. Currently, it is uncertain what property rights participants in virtual worlds have in their items and avatars, in part because it is not clear whether courts will uphold provisions in agreements between game owners and players that purport to deny players rights in virtual property.

In Part III, the Article turns to the intriguing federal income tax questions that virtual worlds present, both as a matter of doctrine and policy. This Part discusses the taxation of both (1) virtual loot received in game worlds and (2) exchanges in both game worlds and unscripted worlds. It explains where these transactions fit within existing tax rules, as well as the results that tax policy concerns counsel.

The Article concludes that transactions in game worlds, such as WoW, should not be taxed unless the player engages in a real-market trade (a cash-out rule)—a result strongly suggested by tax policy. The Article further concludes that in intentionally commodified virtual worlds, such as Second Life, federal income tax law and policy counsel that in-world sales of virtual items be taxed regardless of whether the participant ever cashes out. This approach would protect most consumption in virtual worlds from “double taxation”²² while properly imposing tax on commerce.

I

VIRTUAL WORLDS

A. The Experience

People participate in virtual worlds through their avatars, which are visual representations of characters in those worlds. An avatar may look like a person, animal, mythical creature, or any other representation that the software allows. A virtual world’s “interface . . . simulates a first-person physical environment on [the user’s] computer screen; the environment is generally ruled by the natural laws of Earth

²¹ See Stamper, *supra* note 15, at 149 (“An online universe such as Second Life is unstructured. Its maker, Linden Lab, does not consider it a game at all.”).

²² See *infra* notes 201–02 and accompanying text.

and is characterized by scarcity of resources.”²³ Just as in the real world, life is persistent and interdependent. One article explains that, as “you sleep in real life, other people’s representations may be eating and dancing in your home in Blazing Falls; . . . virtual weddings will take place while you chat at the physical world water cooler; and new social structures will emerge while you have dinner.”²⁴

Many virtual worlds are not mere spaces to explore but rather are games complete with objectives and storylines fit for the setting. Professor Richard Bartle describes these kinds of worlds as providing “an experience amounting to a *hero’s journey*.”²⁵ That journey typically entails participating in quests and raids, confronting enemies, and gaining experience and accomplishment in the game.²⁶ For example, WoW, “the most popular [MMORPG] in the United States,”²⁷ describes itself as follows:

World of Warcraft is an online role-playing experience Players assume the roles of Warcraft heroes as they explore, adventure, and quest across a vast world. . . . Whether adventuring together or fighting against each other in epic battles, players will form friendships, forge alliances, and compete with enemies for power and glory.²⁸

A virtual world need not have such structured content, however.²⁹ A world’s creator can simply provide a virtual environment and basic avatars along with tools to create items, allowing partici-

²³ Castronova, *supra* note 15, at 6.

²⁴ Lastowka & Hunter, *supra* note 1, at 6; *see also* Castronova, *supra* note 15, at 6 (“[T]he program continues to run whether anyone is using it or not; it remembers the location of people and things, as well as the ownership of objects.”).

²⁵ Bartle, *supra* note 8, at 30.

²⁶ Julian Dibbell describes the experience, in part, as “engag[ing] in a quest. You take a character into a virtual world to hunt monsters, seek treasure, and enjoy the thrill of slowly rising from humble beginnings to imaginary wealth and stature.” Dibbell, *supra* note 10, at 47; *see also* Lastowka & Hunter, *supra* note 1, at 27 (“[T]he clear goal in each [game] is to become a more powerful avatar.”).

²⁷ Nicolas Ducheneaut et al., “Alone Together?” *Exploring the Social Dynamics of Massively Multiplayer Online Games*, 1 ASS’N FOR COMPUTER MACH. CONFERENCE ON HUMAN FACTORS IN COMPUTING SYS. 407, 407 (2006), available at <http://doi.acm.org/10.1145/1124772.1124834>.

²⁸ Introduction to World of Warcraft, <http://www.worldofwarcraft.com/info/beginners/index.html> (last visited Aug. 16, 2007). City of Heroes explains that it is “the online world that’s home to an entire universe of heroes, where you and thousands of other players take on the roles of super powered heroes—in a stunning, 3D graphical world.” City of Heroes Community City, Game Info: Game Synopsis, <http://www.cityofheroes.com/gameinfo/synopsis.html> (last visited Aug. 18, 2007).

²⁹ *See* Bartle, *supra* note 8, at 41 (“Virtual worlds are just about the only places where an average person today can undertake a hero’s journey, but even without this feature they can still qualify as virtual worlds (in the same way that a story without a plot can still be a story.”); Camp, *supra* note 17, at 3 (“[A]n unstructured game has few rules, no objectives, and no pre-set roles.”).

pants to undertake virtual activities such as attending a concert, shopping, building a house, or making and selling items useful in the world.³⁰ “In this [type of world], users create virtual lives by building houses, publishing newsletters, and creating alter-egos. They spend hours upon hours creating their existence.”³¹

Second Life, which has over 10 million “residents,”³² is an example of such an unscripted environment. Linden Lab, its creator, describes Second Life as “a 3-D virtual world entirely created by its Residents. . . . Because Residents retain the rights to their digital creations, they can buy, sell and trade with other Residents.”³³

B. Why Buy Items for Use In-World?

Virtual worlds are not all identically situated with respect to the role of real-market trading. Most game worlds, which have scripted content, ban such trade, preferring players to earn game items solely through in-game methods.³⁴ Other virtual worlds encourage such commerce. For example, the owners of Entropia Universe earn their revenues by selling virtual items to participants. Those items deteriorate regularly and the user must pay real currency to replenish them.³⁵ This Section discusses the motivations that participants in game worlds and unscripted virtual environments have for using real money to purchase virtual items.

³⁰ See, e.g., Posting of Forseti Svarog to Slog: A Second Life Resident Blog, <http://secondslog.blogspot.com/2006/06/understanding-sl-two-takes.html> (June 12, 2006, 22:29) (“While many people use [Second Life] for entertainment, and while you can build games on top of the technology, Second Life is not in-and-of-itself a game. Most consumers use it as a place to socialize, play, experiment, doodle creatively, and shop.”).

³¹ Daniel C. Miller, Note, *Determining Ownership in Virtual Worlds: Copyright and License Agreements*, 22 REV. LITIG. 435, 436–37 (2003).

³² Second Life Frequently Asked Questions, <http://secondlife.com/whatis/faq.php> (last visited Oct. 18, 2007) (showing 10,076,969 total “residents”). Second Life participants are commonly referred to as “residents.” See Second Life Home Page, <http://secondlife.com/> (last visited Oct. 18, 2007) (“Second Life is a 3D online digital world imagined and created by its residents.”).

³³ Second Life, What Is Second Life?, <http://secondlife.com/whatis> (last visited Oct. 18, 2007).

³⁴ See *infra* notes 89–90 and accompanying text.

³⁵ See About Entropia Universe, http://www.mindark.com/about_PE_e.html (last visited Oct. 11, 2007) (“When these assets become worn and repair or replacement is required, the user pays more money.”). Entropia Universe is not truly a game world because it “is open-ended and there is no fixed objective.” Entropia Universe, http://uvvy.com/index.php/Entropia_Universe (last visited Aug. 20, 2007).

1. *Game Worlds*

Game worlds are typically about the experience of advancing and completing various objectives that comprise the “hero’s journey.”³⁶ Such a journey requires a character to obtain certain items, such as weapons and protective armor, in order to succeed and attain higher levels³⁷ as the content becomes progressively more challenging.³⁸ Low-value items can often be found by exploring the environment, but higher value “loot” is typically earned by killing a computer-generated character, such as a monster, which then drops its loot.³⁹ Given that the journey is supposed to be part of the game, it may seem counterintuitive to want to purchase an advanced character or a useful or rare item: Why buy items if part of the fun is earning them?

Players purchase items mainly because of the large time cost that earning them entails.⁴⁰ Acquiring powerful items and the experience necessary for advanced quests may require many hours of game play over many months.⁴¹ To advance a low-level avatar requires the completion of basic quests, as well as “grinding,”⁴² which most find much

³⁶ Bartle, *supra* note 8, at 30 n.29 (“In virtual worlds, the undertaking of a hero’s journey is, for many players, the ultimate source of the fun they derive from playing.”).

³⁷ A character’s level typically reflects its “experience points” earned in the game. *Experience Point*, in WIKIPEDIA, http://en.wikipedia.org/wiki/Level_up (last visited Aug. 20, 2007). As Professor Castronova explains, “[i]n most [virtual worlds], capital is given by a number called the ‘level,’ so that an avatar at level 6 who kills 100 kobolds is given an increase to level 7.” Castronova, *supra* note 15, at 14. In WoW, for example, characters start at level 1 and can achieve (at the time of this writing) a maximum level of 70. *World of Warcraft*, in WIKIPEDIA, http://en.wikipedia.org/wiki/World_of_Warcraft (last visited Aug. 20, 2007). Such level maxima may be adjusted as a game ages and more of its population reaches the previous cap.

³⁸ See Lastowka & Hunter, *supra* note 1, at 32 (“Visiting Norrath’s visually stunning astral ‘Planes of Power’ . . . is beyond the ability of most of the game’s avatars. The arduous processes involved in reaching and surviving in these environments effectively make them exclusive clubs for the high-level avatar jet set.”).

³⁹ This type of computer-generated character is referred to as a “MOB,” which is a contraction of “mobile object.” See *Mob (computer gaming)*, in WIKIPEDIA, [http://en.wikipedia.org/wiki/Mob_\(computer_gaming\)](http://en.wikipedia.org/wiki/Mob_(computer_gaming)) (last visited Aug. 20, 2007).

⁴⁰ See Ondrejka, *supra* note 2, at 97 (“[T]ime-constrained users can make the rational economic decision to use real world currency to advance their character It is debatable whether or not this is fun, but it certainly has the effect of allowing users to bypass the game designers’ wishes about game pacing, advancement, and progress.”).

⁴¹ See Castronova, *supra* note 15, at 14 (“[D]eveloping the avatar’s skills takes time; monsters must be killed, axes must be forged, quests must be completed. The result . . . can take hundreds of hours . . .”).

⁴² See Theodore J. Westbrook, Comment, *Owned: Finding a Place for Virtual World Property Rights*, 2006 MICH. ST. L. REV. 779, 792 (“MMORPG users may spend hundreds or even thousands of hours developing avatar attributes (usually through a time-consuming ‘leveling’ or ‘grinding’ process) . . .”).

This aspect of MMORPGs was spoofed on an episode of *South Park*. In order to reach a level high enough to compete with a particularly powerful WoW player, Cartman calculates that he and his friends will need to kill 65,340,285 computer-generated boars,

less interesting than the content available to high-level avatars. Many players invest the necessary time; others, who have little time for entertainment but money to spend—or who want to expedite advancement so as to be able to participate in raids with more accomplished friends⁴³—might prefer to purchase a needed item, a high-level avatar, or even another player's entire account containing avatars and items.⁴⁴ One article explains:

By analogy, consider the choice faced by an American in search of an Indonesian mask or South African Zulu basket. True, she could travel to those places, study the art of making masks and baskets, and after years of toil produce her heart's desire with her own hands. Most people would regard this as insanity. Why not just buy one on eBay?⁴⁵

As a result of this real world market for virtual items, some participants even buy such items as an investment.⁴⁶ Of course, one of the risks for all players is the possibility that the virtual world will cease to exist, eliminating all of that world's content.⁴⁷ Nonetheless,

“[w]hich should take us seven weeks five days thirteen hours and twenty minutes, giving ourselves three hours a night to sleep.” *South Park: Make Love, Not Warcraft* (Comedy Central television broadcast Oct. 4, 2006), available at <http://www.spscriptorium.com/Season10/E1008script.htm>.

⁴³ Professor Bartle lists “group-play reasons” and status inflation among his “four main reasons why people buy characters in virtual worlds.” Thus, players may make these purchases when “their friends are ahead to an extent that they could not easily catch up. They buy a character of an appropriate level so they can play with their friends again.” Bartle, *supra* note 8, at 39–40. He typifies the latter motivation as “the situation where a player wants access to high-level content without having to ‘waste time’ playing through the low-level content to get there.” *Id.* at 40 n.45.

⁴⁴ Game owners can make items, such as particularly valuable items, “bind” to the avatar that picks them up or uses them, making it impossible to trade the item. That moves trade to the level of the avatar. A typical way of acquiring an avatar is to acquire another player's account containing that avatar. See Stamper, *supra* note 15, at 150 (“[Most] internet sales now consist of the sale of whole accounts containing any avatars that have acquired valuable items.”).

⁴⁵ Lastowka & Hunter, *supra* note 1, at 38. When a virtual item is purchased, the buyer pays for the purchase using a mechanism such as PayPal, and the buyer and seller arrange to meet in the game, where the seller will transfer the item to the buyer. *Id.* eBay no longer allows auctions for virtual items, except for Second Life items. Daniel Terdiman, *eBay To Exempt ‘Second Life’ Listings from Virtual Items Ban*, CNET NEWS.COM, Jan. 29, 2007, http://www.news.com/8301-10784_3-6154277-7.html. However, alternative auction sites exist. For example, “PlayerAuctions, a site that grew as a result of eBay's ban on EverQuest items, boasts over 100,000 members.” Ondrejka, *supra* note 2, at 99.

⁴⁶ Bartle, *supra* note 8, at 39.

⁴⁷ See James Grimmelman, *Virtual Worlds as Comparative Law*, 49 N.Y.L. SCH. L. REV. 147, 175 (2004) (“As well-meaning as designers may be towards their game communities, as long as there are any designers, someone will have the power to pull the plug.”).

as evinced by their purchases of virtual items, players seem willing to gamble on the continued existence of virtual worlds.⁴⁸

2. *Unscripted Worlds*

Like game worlds, unscripted worlds offer participants an implicit or explicit choice to invest either time or money in equipping their avatars. Although worlds without set storylines typically do not provide participants with particular goals, they allow users to engage in online activities such as chatting with friends, attending a concert, or going to a nightclub. Acquisitions can include such things as virtual residences, virtual wardrobes, and virtual cars. Providing a rich realm and desirable trappings for one's avatar can both be fun and increase the participant's status within the virtual world.

Some worlds, such as Second Life, intentionally provide for commerce.⁴⁹ Second Life has garnered particular attention, in part because its Terms of Service Agreement expressly states that participants retain any intellectual property rights they may have in their creations.⁵⁰ Allowing participants to retain their intellectual property rights encourages creativity and entrepreneurial activity. Second Life also permits and facilitates exchanges of its currency, Linden dollars (Lindens), for U.S. dollars.⁵¹ Second Life is thus an intentionally commodified world.⁵²

⁴⁸ Cf. Jack M. Balkin, *Virtual Liberty: Freedom To Design and Freedom To Play in Virtual Worlds*, 90 VA. L. REV. 2043, 2071 (2004) ("If virtual items have real-world equivalent values . . . the game designer may be destroying a considerable amount of value by turning off the game, and the more value that is destroyed, the less likely the law will stand for it.").

⁴⁹ See Second Life, What Is Second Life?, <http://secondlife.com/whatis> (last visited Aug. 18, 2007) ("The Marketplace currently supports millions of US dollars in monthly transactions. This commerce is handled with the in-world unit-of-trade, the Linden dollar, which can be converted to US dollars at several thriving online Linden Dollar exchanges.").

⁵⁰ Second Life's Terms of Service Agreement (TOS) states, in part:

You retain copyright and other intellectual property rights with respect to Content you create in Second Life, to the extent that you have such rights under applicable law. However, you must make certain representations and warranties, and provide certain license rights, forbearances[,] and indemnification, to Linden Lab and to other users of Second Life.

Second Life, Terms of Service Agreement § 3.2, <http://secondlife.com/corporate/tos.php> (last visited Mar. 9, 2007). The TOS grants Linden Lab a "perpetual, irrevocable, non-exclusive right and license" in those creations. *Id.*

⁵¹ See *id.* § 1.5 ("Second Life offers an exchange, called LindeX, for the trading of Linden Dollars, which uses the terms 'buy' and 'sell' to indicate the transfer of license rights to use Linden Dollars. Use and regulation of LindeX is at Linden Lab's sole discretion.").

⁵² See Bartle, *supra* note 8, at 34 n.36 ("*Commodification* is a term used to describe the transformation of previously non-commercial relationships into commercial relationships. In virtual worlds, this is generally taken to refer to the treatment of virtual objects (or

II

THE STATUS OF VIRTUAL PROPERTY

Do virtual items constitute property? If so, who owns that property? These questions, as yet unresolved, are of critical importance for virtual worlds.⁵³ Most importantly for this Article, the answers to these questions affect the analysis of the tax consequences of in-world exchanges of goods. For example, the Internal Revenue Code (Code) provides that “[g]ains derived from dealings in property” constitute income.⁵⁴ Because federal income tax law generally looks to state law rights to determine what constitutes property,⁵⁵ this Part analyzes the issue of what rights courts might find that participants have in virtual property. Because there is already a rich literature on this topic, the discussion in this Part serves primarily to provide background information relevant to the tax issues discussed in Part III.

A. *What Is Virtual Property?*

Although virtual items are rendered only on screen, computer code enables them to resemble real chattels in their “rivalrousness, persistence, and interconnectivity.”⁵⁶ That is, “[i]f I hold a pen, I have it and you don’t. . . . If I put the pen down and leave the room, it is still there. . . . And finally, you can all interact with the pen”⁵⁷ Current technology allows virtual items to mimic these features.⁵⁸ For example, if my avatar holds a particular pair of boots, no one else’s

currency or characters) as objects of real world commerce.”); *see also* Jack M. Balkin, *Law and Liberty in Virtual Worlds*, 49 N.Y.L. SCH. L. REV. 63, 79–80 (2004) (discussing modification of virtual worlds).

⁵³ *See* Andrew E. Jankowich, *Property and Democracy in Virtual Worlds*, 11 B.U. J. SCI. & TECH. L. 173, 180 (2005) (“The question of property is an unsettled one in virtual worlds. . . . This virtual world property is extensive.”); Lastowka & Hunter, *supra* note 1, at 72 (“Property interests will be the initial arena for the development of virtual-world law.”).

⁵⁴ I.R.C. § 61(a)(3) (West 2006).

⁵⁵ *See* *United States v. Craft*, 535 U.S. 274, 278–79 (2002) (“State law determines only which sticks are in a person’s bundle. Whether those sticks qualify as ‘property’ for purposes of the federal tax lien statute is a question of federal law.”); *Morgan v. Comm’r*, 309 U.S. 78, 80 (1940) (“State law creates legal interests and rights. The federal revenue acts designate what interests or rights, so created, shall be taxed.”).

⁵⁶ *Fairfield*, *supra* note 10, at 1053; *see also* *Westbrook*, *supra* note 42, at 782 (“It is the *exclusive*, or ‘rivalrous,’ nature of virtual property that gives it its unique similarity to real world personal property.”).

⁵⁷ *Fairfield*, *supra* note 10, at 1054.

⁵⁸ Virtual property did not always have the persistence it does today. *See* *Bartle*, *supra* note 8, at 42 (“Early virtual worlds . . . would periodically reset—everything was returned to its starting position, leaving only the character records of the players untouched. This was for design reasons” (footnote omitted)). Players’ expectations reflected that reality: “[O]ne consequence was that players took it for granted that everything in the virtual world was transitory—the lord giveth and the lord taketh away.” *Id.*

avatar holds that copy.⁵⁹ If I leave the room, go offline, or even turn off my computer, the boots are still there. Moreover, others in the virtual world can see and interact with the boots.⁶⁰ Consequently, several scholars have called for treating virtual items that resemble real world property the same way real world property is treated.⁶¹

Intellectual property law already recognizes a distinction between an idea and its instantiation. For example, rights that I have in a copy of the movie *The Matrix* on DVD are distinct from the underlying copyright on the movie.⁶² Even though I can give away my DVD, donate it to charity, or even sell it, Warner Brothers retains the copyright on the movie.⁶³ Professor Joshua Fairfield has advanced a similar conceptual division for virtual items, distinguishing copies of a virtual item in the game world from the copyright on that item.⁶⁴

⁵⁹ Other avatars may have copies of the same boots, in much the same way that many people may have copies of the same pen.

⁶⁰ Game owners may choose to write the code to restrict my ability to transfer the boots to another avatar, however. See Stamper, *supra* note 15, at 150 (explaining that game owners have tried to thwart real-money trade by binding most valuable items to avatars).

⁶¹ See Fairfield, *supra* note 10, at 1048 (“Should computer code that is designed to act like real world property be regulated and protected like real world property? This article contends that it should.”); Lastowka & Hunter, *supra* note 1, at 72 (“[I]t seems clear that virtual assets can be characterized as property for the purposes of real world law.”); see also Charles Blazer, Note, *The Five Indicia of Virtual Property*, 5 PIERCE L. REV. 137, 161 (2006) (“The time has come to recognize virtual property in the courtroom, at least in disputes between users, in order to encourage secondary market trades and innovative business models.”); Westbrook, *supra* note 42, at 781 (“[A]n understanding of property theory suggests that property rights in virtual goods are bound to be recognized or created gradually as society increasingly depends on such rights.”).

Treating virtual items as property would not create a new form of property. As such, it would not violate the common law’s restriction on the creation of new forms of property rights. See Thomas W. Merrill & Henry E. Smith, *Optimal Standardization in the Law of Property: The Numerus Clausus Principle*, 110 YALE L.J. 1, 4 (2000) (“In the common law, the principle that property rights must conform to certain standardized forms has no name. In the civil law, which recognizes the doctrine explicitly, it is called the *numerus clausus*—the number is closed.”).

⁶² See Fairfield, *supra* note 10, at 1096 (“Ownership of a book is not ownership of the intellectual property of the novel that the author wrote.”).

⁶³ See John A. Rothchild, *The Incredible Shrinking First-Sale Rule: Are Software Resale Limits Lawful?*, 57 RUTGERS L. REV. 1, 2 (2004) (explaining that neither selling nor donating book he bought would violate publisher’s copyright). That is because, under copyright law, the possessor of a copy is entitled to transfer the copy even though that possessor does not own rights to make and distribute further copies. *Id.* at 11–12; see also 17 U.S.C. § 109(a) (2000) (“Notwithstanding the provisions of section 106(3), the owner of a particular copy or phonorecord lawfully made under this title, or any person authorized by such owner, is entitled, without the authority of the copyright owner, to sell or otherwise dispose of the possession of that copy or phonorecord.”).

⁶⁴ See Fairfield, *supra* note 10, at 1096 (“[O]wnership of virtual property does not threaten the intellectual property interest held by the creator of the property. It protects

Under this approach, a game player's virtual property rights in an item held by his avatar—such as, say, a (hypothetical) Cloak of Sorcery—rest neither on the copyright that the world's owner may have in the Cloak nor on rights in physical assets such as the various computers that allow players to participate in the world.⁶⁵ Instead, Professor Fairfield's approach would give the player property rights in the copy of the Cloak of Sorcery that would be analogous to the rights that I have in my copy of *The Matrix*.⁶⁶ His theory would provide protection for someone whose virtual assets are misappropriated or destroyed by a hacker,⁶⁷ without eliminating the intellectual property rights of the game owners.⁶⁸

B. Property in Game Worlds: The Role of the EULA

Although the distinction between virtual property and intellectual property is logical, it is too soon to tell whether courts will recognize virtual property rights as such. Even if they do, it is uncertain who courts will determine owns virtual property. Many games contain agreements between virtual world owners and participants that purport to allocate all of the virtual property to the owners. This Section discusses the enforceability issues that such provisions raise in the context of game worlds, where they are likely to be especially restrictive.

the interests of the purchaser of the object. An owner of virtual property owns the same rights that the owner of a book does.”).

For a work to be subject to copyright, it must, among other things, “be ‘fixed’ or embodied in some material object, such as ink on paper (books) . . . orientations of dipoles on magnetic media (audio tapes, videotapes, floppy diskettes, flash memory), or pits and lands on optical media (CDs, CD-ROMs, DVDs).” Rothchild, *supra* note 63, at 8–9. The physical embodiment of a virtual sword, for example, is the code on a computer server. See Miller, *supra* note 31, at 448 (“[T]he fixation requirement would offer no hurdles here, because the code would be maintained in internal storage on the server.”). Each rendering of the sword is a copy of that code.

⁶⁵ See Fairfield, *supra* note 10, at 1078 (“[I]n my conception the power of an owner persists over the use of the virtual property regardless of the system or chattel currently connected to it. If I own a building in a virtual world, I own it regardless of the intellectual property inherent in the underlying code.”); see also Blazer, *supra* note 61, at 152 (“[B]y recognizing an interest in virtual property, service providers do not give up ownership and control of any computers storing the virtual property.”).

⁶⁶ See Fairfield, *supra* note 10, at 1096 (“[R]ecognition of virtual property rights does not mean the elimination of intellectual property. The owner of virtual property does not own the right to copy it.”).

⁶⁷ See *id.* at 1081 (“[C]laims of theft of virtual property cannot be properly resolved by laws designed to fortify chattel rights in individual computers. . . . Thus, without a theory of virtual property, owners of such property are left without an effective remedy.”).

⁶⁸ See *id.* at 1096 (“[R]ecognition of virtual property rights does not mean the elimination of intellectual property. . . . An owner of virtual property owns the same rights that the owner of a book does.”).

Game companies address the rights and obligations of themselves and players with an array of agreements, including End User License Agreements (EULAs) and Terms of Service Agreements (TOS).⁶⁹ These often state that the game owner does nothing more than license the use of the game to the player.⁷⁰ If that limitation is effective, the player may not own even a copy of a virtual item.⁷¹ Instead, the player would have the right to use the copy for the license period, subject to various restrictions provided in the license agreement.⁷² By analogy, if I were to rent a DVD of *The Matrix Reloaded* from a video store, I would not own it. As a result, I would face restrictions on the use I could make of it.

The use of “license” terminology in game agreements favors game owners. Licensing a copyrightable item, such as software or a DVD, attempts to remove hallmarks of ownership from the possessor,

⁶⁹ See Jankowich, *supra* note 3, at 5 (“[P]rivate systems of regulation governing virtual worlds . . . are typically contained in EULAs, terms of service[,] . . . rules of conduct, posting policies, and naming policies . . .”).

⁷⁰ For example, WoW’s EULA provides, in part:

Subject to your agreement to and continuing compliance with this License Agreement, Blizzard hereby grants, and you hereby accept, a limited, non-exclusive license to (a) install the Game Client on one or more computers owned by you or under your legitimate control, and (b) use the Game Client in conjunction with the Service for your non-commercial entertainment purposes only. All use of the Game Client is subject to this License Agreement and to the Terms of Use agreement, both of which you must accept before you can use your Account to play the Game.

World of Warcraft, End User License Agreement § 1 (last updated Feb. 2, 2007), <http://www.worldofwarcraft.com/legal/eula.html>.

⁷¹ See Balkin, *supra* note 48, at 2070 (“Platform owners . . . can write the EULA to state that no player should have any expectations of property rights in any virtual items or features of the game [and] that game owners may destroy, remove or modify virtual items at the platform owner’s sole discretion . . .”); Amy Kolz, *Real Virtuality*, AM. LAW., Dec. 2004, at 38, 38 (“Most game developers, such as Electronic Arts Inc. and NCsoft Corporation, insist that all tools and characters created in digital worlds belong exclusively to the company.”).

Treating these agreements as the primary source of parties’ rights and obligations raises the conceptual issue of how the rights and responsibilities of various players vis-à-vis one another are determined. See Thomas W. Merrill & Henry E. Smith, *The Property/Contract Interface*, 101 COLUM. L. REV. 773, 776–77 (2001) (“[C]ontract rights are in personam; that is, they bind only the parties to the contact [sic]. . . . Property rights, on the other hand, are in rem—they bind ‘the rest of the world.’”); see also Fairfield, *supra* note 10, at 1092 (“Contracts only allocate costs and benefits between the parties to the contract. Property law balances the benefits of personalized transactions against the search costs imposed on *third parties* seeking to purchase such resources.”).

⁷² This approach remains consistent with the distinction between intellectual property and a copy of the item that incorporates that intellectual property. See *supra* notes 62–64 and accompanying text.

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thereby limiting the possessor's right to transfer that item.⁷³ This poses a potential problem:

Shrinkwrap licenses commonly prohibit licensees from transferring or assigning their particular copy of the software. Such provisions conflict with the "first sale" doctrine in copyright law, which gives the owner of a particular copy of a copyrighted work the right to dispose of that copy without the permission of the copyright owner.⁷⁴

Yet, "[c]ourts, commentators, and the Copyright Office have . . . accepted the software publishers' argument that since they only license their software, and do not sell it, they retain ownership of the software"⁷⁵

It is nonetheless possible that courts will look beyond the license terminology used in EULAs. For example, a receipt from a parking garage that classified the arrangement as a license of a parking space, so as to limit liability for damage to the car, might nonetheless be treated by a court as a bailment, giving the car owner the benefit of a presumption that any damage was caused by the bailee's negligence.⁷⁶

Indeed, courts would have several factors on which to base rulings in favor of players. Players will likely argue that EULAs are not individually negotiated but rather provide boilerplate language to which players must consent in order to play.⁷⁷ Many are "click-wrap" agreements to which players assent by clicking on a button but which

⁷³ Rothchild, *supra* note 63, at 3–4 (discussing how designation of buyer as "licensee" is one device software companies use to prevent buyers from becoming owners of copies of product); Elizabeth I. Winston, *Why Sell What You Can License? Contracting Around Statutory Protection of Intellectual Property*, 14 GEO. MASON L. REV. 93, 103 (2006) ("If the chattel is licensed rather than sold, the first sale doctrine does not apply.").

⁷⁴ Mark A. Lemley, *Intellectual Property and Shrinkwrap Licenses*, 68 S. CAL. L. REV. 1239, 1268 (1995) (citing 17 U.S.C. § 109(a) (1988)). The "first sale" doctrine gives a copyright holder control over the first sale of a copy (such as a book or DVD) but not over subsequent sales of that copy. Rothchild, *supra* note 63, at 9.

⁷⁵ Rothchild, *supra* note 63, at 28.

⁷⁶ See Merrill & Smith, *supra* note 71, at 814 & n.129 (citing *Allen v. Hyatt Regency-Nashville Hotel*, 668 S.W.2d 286, 288–90 (Tenn. 1984) (classifying parking garage arrangement as bailment entitled to presumption of negligence, rather than as license); cf. *McGlynn v. Parking Auth. of Newark*, 432 A.2d 99, 102–05 (N.J. 1981) (considering standard of care and applying presumption of negligence rather than "outmoded" concept of bailment).

⁷⁷ See Jankowich, *supra* note 3, at 5, 7 (describing use of click-wrap agreements and prospective players' inability to negotiate with virtual world proprietors over governance systems). Game companies do get feedback about EULA provisions, however. See Julian Dibbell, OWNED! Intellectual Property in the Age of eBayers, Gold Farmers, and Other Enemies of the Virtual State (2003), available at <http://www.juliandibbell.com/texts/owned.html> ("[T]he EULA for a game like EverQuest . . . was effectively renegotiated on a daily basis.").

they may not necessarily have read.⁷⁸ EULAs also tend to be highly protective of game owners, to the detriment of players in their capacity as consumers.⁷⁹ In addition to purporting to limit players' property rights in virtual items and prohibiting real-market trade, EULAs may provide that the game owner retains all of the intellectual property rights in the content of the world, including players' avatars, in-world items, and even storylines and avatars' names.⁸⁰

However, EULAs and click-wrap agreements have become standard practices,⁸¹ and have been enforced in at least one case involving computer games.⁸² Game owners also have legitimate reasons for trying to retain control over their games. First, the principal way they retain players is by providing a good gaming experience, including

⁷⁸ Jankowich, *supra* note 3, at 5 (“Click-wrap agreements are a common contractual format in software whereby agreements appear on-screen and the participant must either agree or disagree to the terms before advancing to the next screen.”); Westbrook, *supra* note 42, at 803 (“Sony and Blizzard, the behemoths of the Western MMORPG scene, both require users to agree to a ‘click-wrap’ end-user license agreement . . .”).

⁷⁹ See Jankowich, *supra* note 3, at 9 (“The . . . contracts that govern virtual worlds are the products of owners and lawyers engaging in a centralized process of lawmaking through a form of nonnegotiated, infinitely modifiable, proprietor-friendly regulation that I call ‘EULaw.’”). This is not surprising given the fact that these are agreements between a world owner with a large amount at stake and multitudes of individual users, each with a much smaller amount at stake. See Lastowka & Hunter, *supra* note 1, at 50 (“Since the EULAs are written by the corporate owners, their terms inevitably grant all rights to the owner of the world.”); Miller, *supra* note 31, at 463 (“EULAs are written by corporate attorneys to protect corporate interests in corporate products; any alleged benefit to consumers is merely secondary to the protection of corporate concerns . . .”); cf. Merrill & Smith, *supra* note 71, at 804–05 (discussing how “a singular entity on the one side of the transaction” may exploit information asymmetries to detriment of large class of people on other side).

⁸⁰ Fairfield, *supra* note 10, at 1083–84. Even within highly scripted virtual worlds, such as WoW, a player may create a story, such as a legend surrounding his avatar, and feel entitled to exploit it. The game owner, by contrast, may wish to be able to use the game's content without infringing participants' copyrights, perhaps for promotional purposes, or to be able to reap the rewards of licensing the avatar to the makers of a television show. See Jankowich, *supra* note 53, at 217 (discussing hypothetical in which owner of world wishes to license popular, player-created character to television studio).

⁸¹ See Robert W. Gomulkiewicz & Mary L. Williamson, *A Brief Defense of Mass Market Software License Agreements*, 22 RUTGERS COMPUTER & TECH. L.J. 335, 342–44 (1996) (“The uniform terms of EULAs facilitate high-volume distribution without the cost of individually negotiating individual licenses. . . . Although EULAs are most likely ‘contracts of adhesion,’ they are neither unusual nor pernicious. . . . In reality, a negotiated contract is atypical in the mass market context” (footnotes omitted)).

⁸² See *Davidson & Assocs. v. Jung*, 422 F.3d 630 (8th Cir. 2005) (enforcing EULAs of computer games distributed by Blizzard Entertainment on CD-ROM that required users to click button labeled “I Agree” in order to install game against defendants who reverse-engineered Blizzard's service for multiplayer online use of games). *But cf.* *Bragg v. Linden Research, Inc.*, 487 F. Supp. 2d 593, 611 (E.D. Pa. 2007) (refusing to enforce arbitration clause in Second Life's TOS, finding it both substantively and procedurally unconscionable).

interesting content and an evolving world. Keeping a game captivating, especially for high-level players, requires the frequent addition of new content and modification of existing code. Otherwise, a “world would become stale, dated, dominated by exploits and its gameplay would become completely disjointed.”⁸³ Yet, new or altered content may threaten the value of in-game assets (whether earned in-game or purchased).

As a simple example, if a sword added to a game, say the Sword of Mischief, turns out to be more powerful than intended—thus making content that was supposed to be challenging quite easy—the game’s publisher may decide to reduce the Sword’s effectiveness.⁸⁴ In that situation, players who have acquired the Sword may resent its loss of power.⁸⁵ However, game designers would not be able to fix coding errors and keep their worlds interesting and challenging if such changes required the permission of all affected players.

Second, because it takes substantial time to develop new content, game designers also try to control the pace at which a player can progress through the game.⁸⁶ A player who experiences everything that one virtual world has to offer may move on to another. Many game companies make much of their revenues from monthly subscriptions, so it is in their interest to require new players to devote the months of “grinding” required to build a high-level avatar. In addition, a mea-

⁸³ Bartle, *supra* note 8, at 27. “In the realm of online games, an exploit is usually a software bug, hack or bot that contributes to the user’s prosperity in a manner not intended by the developers.” *Exploit (online gaming)*, in WIKIPEDIA, http://en.wikipedia.org/wiki/Exploit_%28online_gaming%29 (last visited Aug. 22, 2007); see also James Grimmelmann, *Virtual Power Politics* 7 (Apr. 19, 2005) (unpublished manuscript), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=707301 (“Calling something an ‘exploit’ is a way of saying that you want the software changed to prohibit it and that you think those who are taking advantage of it are cheating.”).

⁸⁴ See *Computer and High Tech Law Journal Symposium Rules & Borders—Regulating Digital Environments: February 11, 2005: Panel 3—Ownership in Online Worlds*, 21 SANTA CLARA COMPUTER & HIGH TECH. L.J. 807, 823 (2005) [hereinafter *Ownership in Online Worlds*] (discussing how game owners would want to diminish effect of overly powerful weapon); Westbrook, *supra* note 42, at 807 (arguing that developers should be free to diminish power of in-game objects when “doing so [is] required in order to maintain an ordered virtual environment”).

⁸⁵ See Westbrook, *supra* note 42, at 789 (“[N]erfing has lead [sic] to a number of disputes between users and developers in the past, particularly when a substantial sum of real money has been exchanged for a powerful weapon, only for the purchasing user to find that the developer has removed its most desirable characteristic.”).

⁸⁶ See Ondrejka, *supra* note 2, at 97 (“[D]evelopers have converged on two approaches to stretching developed content: shards and instantiated spaces. . . . [W]hile these techniques extend the life of content, the users continue to rapidly consume existing content and to demand more.”).

sured pace to the game supports the ethos of a hero's journey.⁸⁷ Moreover, if some players find shortcuts to higher achievement, other players may feel the level they achieved has been devalued, leaving them dissatisfied with the game and inclined to turn elsewhere.⁸⁸

It is thus generally preferable, from the game publisher's perspective, to require players to work through content to achieve status and for avatars' levels actually to reflect players' achievements in the game.⁸⁹ Accordingly, for games such as WoW, which are not designed to be commodified, game owners often attempt to prohibit real-market trade in virtual items because of the effect that such transactions have on the game.⁹⁰

In any event, the mere belief by game players that they have—or should have—property rights⁹¹ does not necessarily mean that they do,⁹² and the mere fact that they may act like property owners by, for example, selling certain items, does not necessarily mean that they

⁸⁷ Cf. Bartle, *supra* note 8, at 30–31 (“In those virtual worlds set up to guide players along their hero's journey, the notion of achievement is critical to success. Players must feel that that they are advancing, that the advancement is worthwhile, and that there is some definite goal that indicates they have ‘won.’”).

⁸⁸ See *id.* at 40 (discussing negative impact that market in valuable objects can have on other players' views of one's accomplishments); cf. Westbrook, *supra* note 42, at 788 (“[S]ome gamers (as well as developers) have argued that allowing avatars and items to be bought and sold is unfair in that it allows well-heeled but inexperienced players to bypass the time-consuming and sometimes repetitive game play that is normally required to achieve success and stature within the game.”).

⁸⁹ See Bartle, *supra* note 8, at 41 (“As a virtual world designer, I do not want my players to have their sense of achievement trashed . . . I therefore seek to prevent players from buying and selling in the real world characters and objects from my virtual world.”); Grimmelmann, *supra* note 83, at 5–6 (“[I]t seems as though the natural instinct of the game designer would be to pander But this instinct runs up against players' desire for challenge and scarcity. . . . Designers are stingy with players because players themselves, especially other players, demand overall stinginess.”).

⁹⁰ See Jankowich, *supra* note 3, at 39 (“56.25% of the virtual worlds surveyed prohibit[ed] sales of virtual property outside of their world.”); see also Bartle, *supra* note 8, at 36 (“The *accumulation* of out-of-context sales . . . does make a difference. Unchecked, eventually it tips the scales and the virtual world flips from being a hero's journey world to being a world with no hero's journey. The game conceit has gone.”). The “game conceit” is the players' “agree[ment] to abide temporarily by a set of rules which limits their behavior (i.e., restricts their freedom), in exchange for which they gain whatever benefits the game offers.” *Id.* at 23. Professor Bartle, who designed the first multiuser domain, *id.* at 20–22, lists the game conceit among the three “fundamental characteristics” of virtual worlds, *id.* at 34.

⁹¹ See Lastowka & Hunter, *supra* note 1, at 37 (“Participants in virtual worlds clearly see their creations as property.”).

⁹² See *id.* at 50 (“The Blacksnow Interactive case was the first dispute over virtual property to make it to the real-world court system, but it is unlikely to be the last. Disagreements between the corporate-wizards and the player-avatars are seemingly inevitable.” (footnote omitted)). The Blacksnow litigation was dropped after the plaintiffs failed to pay their lawyers. DIBBELL, *supra* note 12, at 28.

are. A bailee, such as a museum borrowing and displaying a painting, may appear to be the owner.⁹³ The museum could try to exploit that perception by attempting to sell the painting, but that would not make it the rightful owner, nor would it make the sale legitimate.⁹⁴

Yet, where a single party with more information drafts an agreement and presents it to numerous parties, each with much less at stake, and in circumstances in which bargaining over the terms is not a realistic option, courts may be inclined to protect the group with less at stake.⁹⁵ In particular, courts may deem provisions in these types of agreements to be unenforceable if they overly favor the drafter.⁹⁶ Professor Fairfield has argued that a provision claiming that the game's publisher owns all of the game's virtual property is oppressive.⁹⁷ It remains to be seen whether courts will agree.⁹⁸

C. *Property in Second Life and Other Unscripted Worlds*

Generally, publishers of unscripted worlds have less desire for restrictions on virtual property than publishers of game worlds do because unscripted worlds do not hinge on a hero's journey. As Professor Bartle has argued, “[w]hat is acceptable in a virtual world for which the designers have opted out of supporting the hero's

⁹³ See Merrill & Smith, *supra* note 71, at 818 (“[I]t is not implausible that in many cases—for example where a museum allows a gallery to exhibit a painting of which the museum is merely a bailee—there is a problem of ostensible ownership.”).

⁹⁴ See *id.* at 812 (“One concern is that bailees may take advantage of this confusion [regarding ownership] to convert the bailor's property.”).

⁹⁵ See *id.* at 806–07 (arguing that courts are likely to employ “protection strategy,” such as using default rules as equalizer, when stakes are low for each of numerous parties on one side of relationship).

⁹⁶ See Gomulkiewicz & Williamson, *supra* note 81, at 345 (“[M]ost users are better served by relying on . . . the contract principle that agreements should be construed against the drafter”); see also Balkin, *supra* note 48, at 2070 (“[A]greements [governing virtual worlds] may not be enforceable in all cases, especially if courts—and, more importantly, legislatures—think that people are being taken advantage of and believe that important property interests are at stake.”). Recently, a federal district court refused to enforce the arbitration clause in Second Life's TOS because it found the TOS to be a contract of adhesion, the arbitration provision “buried,” and “the TOS . . . substantively unconscionable.” *Bragg v. Linden Research, Inc.*, 487 F. Supp. 2d 593, 606–07 (E.D. Pa. 2007).

⁹⁷ See Fairfield, *supra* note 10, at 1083 (“These provisions surpass the usual abuses of contracts of adhesion. By means of contract, virtual environment holders currently parlay their (legitimate) claim to the intellectual property in an environment into an illegitimate claim to all of the virtual property possessed by or developed by the inhabitants of the environment.”).

⁹⁸ See Bartle, *supra* note 8, at 41–42 (“Sellers may seek to strike down ‘oppressive’ restrictions embodied in EULAs and administrative practices. Perhaps they will be successful?” (footnote omitted)). The effect that resolution of this issue may have on tax liability is discussed in Part III *infra*.

journey is not necessarily acceptable in one for which they have not.”⁹⁹

More specifically, in unscripted worlds, owners do not need the level of control required to regulate a character’s advancement in a structured story or to maintain balance in a game. Accordingly, while permitting real-money purchases of items in game worlds may threaten the game conceit,¹⁰⁰ doing so in an unscripted world does not. It is precisely because such worlds lack the structure and storyline of game worlds that real world trade can enhance the experience. Thus, unscripted worlds may actually seek to foster real-market trade.

Second Life is an example of such a world, and it offers a particularly interesting case study because it does not claim any intellectual property rights in its participants’ creations.¹⁰¹ In fact, the world’s mechanics allow a participant who creates an item and transfers it to another participant to decide whether to permit or prohibit that participant from copying or transferring the item.¹⁰² However, Second Life takes a different approach to the items it provides in the virtual environment, such as land and Lindens, the world’s currency. The TOS provides participants with permission to use the “‘textures’ and/or ‘environmental content’ that are both (a) created or owned by Linden Lab and (b) displayed by Linden Lab in-world.”¹⁰³ The TOS also provides for limited rights in Lindens, granting users “a limited license right governed solely under the terms of this Agreement”¹⁰⁴ The TOS does not address land specifically; its legal status is currently unclear.¹⁰⁵

⁹⁹ Bartle, *supra* note 8, at 41.

¹⁰⁰ See *supra* note 90 and accompanying text.

¹⁰¹ See *supra* note 50 and accompanying text.

¹⁰² See Second Life, Knowledge Base, Content Creation, Permissions, <http://support.secondlife.com/ics/support/default.asp?deptID=4417&task=knowledge&questionID=4087> (last visited Oct. 6, 2007) (instructing Second Life residents on how to set permissions on object).

¹⁰³ Second Life, Terms of Service Agreement, *supra* note 50, § 3.4. A portion of the Second Life TOS was overturned by the United States District Court for the Eastern District of Pennsylvania, which found that “the arbitration clause is procedurally and substantively unconscionable” and not susceptible to “bluelining” “to remove an element that renders it substantively unconscionable.” *Bragg v. Linden Research, Inc.*, 487 F. Supp. 2d 593, 611–12 (E.D. Pa. 2007).

¹⁰⁴ Second Life, Terms of Service Agreement, *supra* note 50, § 1.4.

¹⁰⁵ The status of land is the subject of a pending lawsuit. See *Bragg*, 487 F. Supp. 2d at 613 (denying both motion to dismiss for lack of jurisdiction and motion to compel arbitration). One of Mr. Bragg’s allegations is that Second Life advertised that participants would have ownership rights in land they purchased. *Id.* at 596 & n.6. In a memorandum and order denying the motion of Linden Research, Inc., to compel arbitration, the court stated that “[a]lthough it is not the only virtual world on the Internet, Second Life was the first

Thus, the Second Life TOS implicitly attempts to create different types of property, expressly recognizing substantial rights only in residents' own creations. However, unlike game worlds, which typically restrict real-market trade, Second Life does not ban sales of virtual items for real money.¹⁰⁶ In fact, Second Life offers an in-world exchange, the LindeX, to facilitate the exchange of Lindens into U.S. dollars and vice versa.

The question of whether Second Life's TOS will be interpreted to mean that participants do not have property rights in virtual items is important for determining the tax consequences of exchanges within Second Life because, as is the case for game worlds, the federal income tax questions turn partly on whether participants are transacting in property. These tax issues are discussed in the next Part.

III

DO VIRTUAL WORLDS GIVE RISE TO REAL TAX LIABILITIES?

The thriving market in virtual world items means that readily calculable values, in U.S. dollars, exist for myriad virtual items. Many virtual world participants never sell a single item. Still, a tax problem may arise, even for them, because "all the wands and gold pieces that are not traded, but remain forever within the 'fantasy' world, also have economic value."¹⁰⁷ If virtual items constitute property for federal income tax purposes, their receipt may be income,¹⁰⁸ and their disposition, even in an in-world trade, may be taxable.¹⁰⁹ To make the tax issues concrete, consider two fictional taxpayers, one who plays WoW¹¹⁰ and another who is a Second Life "resident."¹¹¹

and only virtual world to specifically grant its participants property rights in virtual land." *Id.* at 606.

¹⁰⁶ Thus, regardless of whether participants have a time-limited use right, Second Life's provision of a license would not violate the Copyright Act's "first-sale" rule. *See supra* text accompanying notes 72–75.

¹⁰⁷ Edward Castronova, *A Cost-Benefit Analysis of Real-Money Trade in the Products of Synthetic Economies*, 8 INFO 51, 52 (2006).

¹⁰⁸ *See* I.R.C. § 61(a) (West 2006) (including in income many receipts); I.R.C. § 74 (West 2006) (including in income prizes and awards).

¹⁰⁹ *See* I.R.C. § 61(a)(3) (including in income gains from dealings in property); I.R.C. § 1001 (West 2006) (providing for calculation of gain or loss on disposition of property).

¹¹⁰ WoW is used as the example of a MMORPG because of its dominance among subscription-based MMORPGs. *See* Seth Schiesel, *An Online Game, Made in America, Seizes the Globe*, N.Y. TIMES, Sept. 5, 2006, at A1 ("World of Warcraft . . . [has] almost seven million paying subscribers . . . Almost every other subscription online game . . . measures its customers in hundreds of thousands or even just tens of thousands.").

¹¹¹ Second Life is used as an example of an unscripted world because of its prominence and because it allows participants to retain intellectual property rights in their creations.

Ava is an information technology professional who spends about twenty hours each week playing WoW, for which she pays a license fee of \$15 per month. She plays purely for entertainment, socializing online with gamer friends. She never purchases or sells WoW items, avatars, or accounts for real money. Over the past six months, she has participated in numerous “raids,” receiving items worth a total of \$1000. Moreover, she has traded—for in-game items or virtual currency (gold)—items that she has found or “looted.” The traded items have an aggregate value of \$500. Should Ava report as income on her federal income tax return: (1) the computer-generated items she has received from her raids, (2) her profits from selling items in-game for gold, and (3) her profits from in-game trades of virtual items for other virtual items?

Ben is a dentist who spends about ten hours each week in Second Life, where he has his “second home,” a virtual house. Ben pays \$10 per month for his account.¹¹² Ben’s avatar has an array of furniture and a nice wardrobe. Ben makes some of the clothing for his avatar, including T-shirts that he sells to other participants’ avatars in exchange for Lindens. It costs him nothing but time to make copies of the T-shirts and he has received Lindens worth \$500 from those sales this year, although he has not converted them to U.S. dollars. Should Ben report the value of the Lindens as income?

The question of whether and when these two taxpayers should be taxed is not easy to answer. Each taxpayer has received something of value. Should it matter that the items are only “virtual”—that they have no corporeal existence? Moreover, should there be a distinction for tax purposes between the receipt of Lindens, which can be exchanged for U.S. dollars, and the receipt of virtual items or currency in a structured game like WoW, where real-money trades are prohibited but nonetheless occur? To answer these questions, this Part discusses the tax law applicable to receipts of items and exchanges, in the context of longstanding doctrine and its application to in-world transactions. In the last Section, this Part also considers a policy analysis of the tax issues presented by virtual worlds and the changes to tax law suggested by policy considerations.

¹¹² With his premium account, Ben also receives 300 Lindens each week. If Lindens are not property, they are part of the service Ben purchases with his monthly fee, just as drops are if they are not property. *See infra* text accompanying note 114. If Lindens are property, they should constitute a partial return of his \$10 and thus not be taxable.

A. *The Taxation of “Loot Drops”*

The taxation of loot that is obtained upon defeat of an enemy is a problem that game worlds present that unscripted worlds generally do not. At a high level, there are two ways of conceptualizing “loot drops”¹¹³ for tax purposes: Either they are a type of property or they are not. If they are not property, they should not constitute income but rather should be considered part of the game service provided to players in return for their monthly fee.¹¹⁴ The user fee allows use of all of the items available to the player in the game, including copies that are not generated until a certain event happens—such as the defeat of a monster, who drops previously nonexistent loot. Moreover, if the legal system ultimately treats players as receiving mere limited licenses to use those copies, as opposed to ownership of them,¹¹⁵ then the same analysis should apply.

Further analysis is required, however, if drops constitute property owned by players.¹¹⁶ Receipts of property are often taxable. Section 61 of the Code defines gross income quite broadly, to include “all income from whatever source derived”¹¹⁷ Treasury regulations further specify that “[t]reasure trove, to the extent of its value in United States currency, constitutes gross income for the taxable year in which it is reduced to undisputed possession.”¹¹⁸ A leading case teaches that “accessions to wealth, clearly realized, and over which the taxpayers have complete dominion” are included in gross income.¹¹⁹ In addition, “prizes and awards” are included in gross income by a separate section, Code section 74.¹²⁰ The remainder of this Section considers the tax consequences if drops do in fact constitute property.

¹¹³ See *Babylon*, Item Drop, http://www.babylon.com/definition/Item_drop/English (last visited Aug. 21, 2007) (“[A] drop is a tangible object in the game world that the enemy possesses and ‘drops’ when it is defeated.”).

¹¹⁴ Other services provided for by the fee include access to the virtual environment and an avatar (usually, one compiled or customized by the player). See Beth Simone Noveck, *Trademark Law and the Social Construction of Trust: Creating the Legal Framework for Online Identity*, 83 WASH. U. L.Q. 1733, 1743 (2005) (“Players [in Everquest] can only create characters using copyrighted software provided by the company.”).

¹¹⁵ See *supra* Part II.B.

¹¹⁶ Cf. *Fairfield*, *supra* note 10, at 1083–84 (arguing for recognition of virtual property).

¹¹⁷ I.R.C. § 61(a) (West 2006). The federal income tax is imposed on a base of “taxable income.” See, e.g., I.R.C. § 1 (West 2007) (listing tax rates imposed on individuals’ taxable income); I.R.C. § 11 (West 2006) (listing tax rates imposed on corporations’ taxable income). Taxable income includes items of “gross income” and is reduced by deductions. I.R.C. § 63(a) (West 2006).

¹¹⁸ Treas. Reg. § 1.61-14(a) (as amended in 1993).

¹¹⁹ *Comm’r v. Glenshaw Glass Co.*, 348 U.S. 426, 431 (1955).

¹²⁰ I.R.C. § 74(a) (West 2006).

1. *What Drops Are Not*

a. Imputed Income

Although most receipts constitute gross income, there are several exceptions to income taxation in the Code, as well as certain well-established, noncodified exclusions. One possible basis for exclusion of loot drops is that they might be “imputed income.”¹²¹ Professor Joseph Dodge has described imputed income as follows:

The principal meanings, which overlap somewhat, appear to be: (1) the flow of satisfactions obtained by a taxpayer (which would include not only the value of satisfactions derived from owning and spending but also the value of leisure, sleep, a happy marriage, etc.), and (2) the market-price equivalents of non-market *economic* activity (such as the value of self-grown crops and the rental value of self-owned assets, and possibly the value of self-performed services).¹²²

Thus, under the imputed income doctrine, no federal income tax is levied on, for example, the rental value of owner-occupied housing.

Bryan Camp has argued that the imputed income doctrine applies to loot drops because virtual world participants’ “activities are not normal market transactions but represent self-provided services or, at most, enjoyment of self-owned property. The service provided is play and the property is a right to play, a chose-in-action, a thing.”¹²³ However, this does not provide the best conceptual fit. Imputed income is a relatively narrow category. Professor Dodge explains that: “[W]indfall accessions to wealth [are not] ‘imputed income’ as that term is usually used, i.e., in the sense of income from self-provided services or self-owned personal-use assets. Indeed, imputed income, whether meaning a ‘flow of satisfactions’ or as ‘hypothetical market income’ is distinct from material wealth.”¹²⁴ Drops, unlike typical imputed income, require the efforts of a third party (the game publisher) in order for the taxpayer to receive them. Moreover, assuming that drops constitute players’ property, they increase

¹²¹ Camp, *supra* note 17, at 61. Professor Joseph Bankman previously suggested that the imputed income doctrine applies to virtual world transactions. Daniel Terdiman, *Are Virtual Assets Taxable?*, CNET NEWS.COM, Jan. 17, 2006, http://news.com.com/Are+virtual+assets+taxable/2100-1043_3-6027212.html (“[T]he IRS . . . shouldn’t go after folks until they sell the assets The common sense reason for this is that the ‘assets’ represent enjoyment value—what we call imputed income.” (quoting Joseph Bankman)).

¹²² Joseph M. Dodge, *Accessions to Wealth, Realization of Gross Income, and Dominion and Control: Applying the “Claim of Right Doctrine” to Found Objects, Including Record-Setting Baseballs*, 4 FLA. TAX REV. 685, 691–92 (2000) (footnotes omitted).

¹²³ Camp, *supra* note 17, at 61.

¹²⁴ Dodge, *supra* note 122, at 705 (footnote omitted).

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players' wealth. For these reasons, they do not fit well under the rubric of imputed income.¹²⁵

b. Record-Setting Baseballs

If drops are players' property, they may appear to be prizes, akin to lottery winnings, or "found" items, like a twenty dollar bill on the sidewalk. Lottery winnings,¹²⁶ game show prizes,¹²⁷ and even old currency found in a piano purchased at auction¹²⁸ are all taxable. Yet it is well known that some of the baseball fans who caught record-breaking home run balls in 1998—some of which had values of \$1 million or more¹²⁹—were not taxed.

Initially, when queried by a sportswriter,¹³⁰ an IRS spokesman referred to the possibility that a gift tax could apply if a fan who caught a ball promptly returned it.¹³¹ However, "[o]nce the IRS' position was made clear, public and congressional outcry came quickly"¹³² Charles Rossotti, then-Commissioner of the IRS, made a hasty retreat, announcing that neither income tax nor gift tax

¹²⁵ This Article thus disagrees with Professor Camp's argument that "using the concept of imputed income is the best way to frame the issue of taxing . . . the loot drop in WoW . . . because [players'] activities are not normal market transactions but represent self-provided services or, at most, enjoyment of self-owned property." Camp, *supra* note 17, at 61.

¹²⁶ See I.R.C. § 61(a) (West 2006) (defining gross income as "all income from whatever source derived"); Edward J. McCaffery, *Why People Play Lotteries and Why It Matters*, 1994 Wis. L. REV. 71, 107 n.88 ("Lottery winnings are also subject to at least federal income taxes . . .").

¹²⁷ See Jennifer M. Nasner, *The Unexpected Tax Consequences of "Extreme Makeover: Home Edition"*, 40 GONZ. L. REV. 481, 482 (2004/05) (noting that "prizes and awards, such as game show winnings and lottery prizes," commonly bear federal income tax).

¹²⁸ *Cesarini v. United States*, 428 F.2d 812 (6th Cir. 1970) (per curiam).

¹²⁹ See Darren Heil, *The Tax Implications of Catching Mark McGwire's 62nd Home Run Ball*, 52 TAX LAW. 871, 871 n.3 (1999) ("[Mark] McGwire's 70th home run ball was recently sold for over \$3,000,000. His 62nd was estimated before it was caught to be worth at least \$1,000,000." (citing Ronald Blum, *Comic Book Creator Has McGwire Ball*, AP ONLINE, Feb. 9, 1999, available at LexisNexis Academic, Associated Press Online collection; A.J. Cook, *Before McGwire Clubbed His 62nd, IRS Dealt Its Image Even Bigger Blow*, COM. APPEAL (Memphis), Sept. 21, 1998, at B3)).

¹³⁰ Heil, *supra* note 129, at 871.

¹³¹ The events unfolded as follows:

As reported by MSNBC, on Mon., Sept. 7, after [Mark] McGwire had tied Roger Maris's home run record at 61, IRS spokesman Steven Pyrek said that a baseball is owned by major league baseball until it leaves the field, after which time it is owned by the fan who comes up with it. Even if the fan were to return the ball, "the giver is responsible for paying any applicable tax on any large gift," Pyrek reportedly said.

IRS Drops the Ball?, 17 TAX MGMT. WEEKLY REP. 1296, 1296 (1998).

¹³² *Id.*

would apply to a fan who caught and promptly returned a baseball.¹³³ A special bill to the same effect was introduced in Congress,¹³⁴ though it was never enacted.¹³⁵ Representative Bill Thomas, who introduced the bill, stated:

[R]ather than take the IRS at its latest word, I feel it necessary to introduce this modest measure as a reminder that Congress is keeping its eye on the IRS. As we head down the baseball season homestretch, this issue serves to illustrate why we need to tear the IRS out by its roots with real tax reform. Baseball fans and all Americans should be free of abusive and absurd IRS intrusions into their daily lives.¹³⁶

Unfortunately, the treatment of record-setting baseballs provides no help for loot drops. Drops are not true windfalls, as discussed below.¹³⁷ Moreover, the absence of tax on certain record-setting baseballs reflects an administrative decision by the IRS in the face of public outcry—and that decision was limited to the context in which the fan promptly returned the baseball in question. It provides no help with respect to the receipt of virtual items.¹³⁸

2. *The Proper Tax Category for Drops*

Loot drops, which appear when players defeat monsters, require substantial investments of time and effort on the part of players; thus, they are not true windfalls. Professor Dodge has argued convincingly

¹³³ Press Release, Internal Revenue Serv., IR-98-56 (Sept. 8, 1998), available at www.irs.gov/pub/irs-news/ir-98-56.pdf.

¹³⁴ See H.R. 4522, 105th Cong. (1998); *IRS Drops the Ball?*, *supra* note 131, at 1296 (“Rep. Bill Thomas (R-Calif.) Sept. 9 introduced a bill (H.R. 4522) specifying that a baseball fan who catches a home run ball and immediately returns it to the hitter would not be subject to gift taxes.”). During 1998, the Senate Finance Committee, chaired by William Roth, was conducting hearings portraying the IRS as rampant with out-of-control agents. Leandra Lederman, *Tax Compliance and the Reformed IRS*, 51 U. KAN. L. REV. 971, 979 & n.46 (2003).

¹³⁵ “After its introduction, the bill disappeared into the abyss of Congressional committees, never to be seen again.” Jennifer A. Cunningham, Note, *Are Frequent Flyer Benefits Really Benefits?: An Analysis of the Frequent Flyer Tax Debate and a New Theory of Taxability for Frequent Flyer Benefits*, 47 CLEV. ST. L. REV. 281, 297 (1999).

¹³⁶ *IRS Drops the Ball?*, *supra* note 131, at 1296.

¹³⁷ See *infra* Part III.A.2.

¹³⁸ Similarly, the IRS’s treatment of frequent flier miles earned on business trips and used for personal travel provides no help. Frequent flier miles, which are not taxed, are a personal benefit earned during business activity and are difficult to value. Camp, *supra* note 17, at 27. Moreover, as with home run baseballs, the lack of taxation of miles is the result of a nonprecedential administrative decision made in response to public outcry that ensued after the IRS initially suggested that their receipt might be taxable. See Dominic L. Daher, *The Proposed Federal Taxation of Frequent Flyer Miles Received From Employers: Good Tax Policy But Bad Politics*, 16 AKRON TAX J. 1, 14–15 (2001) (noting that “[a]mid a swift and severe public outcry” IRS changed its position only four days after its pronouncement on status of frequent flier miles for employer reimbursement plans).

that there is a distinction between found items—windfalls—and what he calls “taken” items—those that require more effort to obtain.¹³⁹ He also argues that “[t]here is no meaningful distinction between ‘taken’ and ‘self-created’ objects,” explaining that “[a] ‘self-created’ item is property produced by the taxpayer’s own personal efforts, as opposed to the labor of others or with significant capital investment”¹⁴⁰ With respect to the taxation of taken and self-created property, he concludes that “[b]oth categories of self-obtained property are excluded from income when acquired, but the rationale for exclusion might differ somewhat as between self-obtained business inventory and self-obtained personal-use items.”¹⁴¹

Professor Dodge persuasively argues that self-created business-use property, such as the art of a professional artist, and “taken” business-use property, such as fish caught by a professional fisherman—both of which are inventory—do not constitute gross income until disposed of because they reflect mere investment.¹⁴² He points out that even the taxation of services performed for compensation hinges on the compensation: “Looking at the venture as a whole, the actual obtaining of the inventory, by whatever techniques, is not an

¹³⁹ Dodge, *supra* note 122, at 696. He explains:

[F]ound objects (in tax talk) are thought of as acquired at random and without special effort . . . , as “windfalls.” Objects (including those that can be sold in more or less their natural state, such as gold, gems, treasure, oil, fish, and game) that are sought after and obtained as the result of a venture, activity, or enterprise (that requires planning, financing, and implementation) are not usually referred to as “found.” For want of a better term, I will use the word “taken” to refer to in-kind property appropriated as the result of a commercial venture or personal hobby, so as to connote the “active” posture of the taxpayer relative to the “passive” posture of a taxpayer appropriating a windfall found object.

Id.

¹⁴⁰ *Id.*

Locke’s theory . . . grants property where the “labour makes the far greatest part of the value of [the asset].” . . . Within the virtual-world context, one could conclude that the player cannot claim property interests in the entire world but might legitimately claim [property rights] in some smaller part—the virtual castle, sword, or breastplate—in which his or her labor makes up the greatest part of the value.

Lastowka & Hunter, *supra* note 1, at 47 (quoting JOHN LOCKE, TREATISE OF CIVIL GOVERNMENT AND A LETTER CONCERNING TOLERATION 28 (Charles L. Sherman ed., Appleton-Century-Crofts 1937) (1869)).

¹⁴¹ Dodge, *supra* note 122, at 696. Professors Lawrence Zelenak and Martin McMahon agree that self-created property is not taxed until disposition. See Lawrence A. Zelenak & Martin J. McMahon, Jr., *Taxing Baseballs and Other Found Property*, 84 TAX NOTES 1299, 1305 (1999) (“The exclusion of self-created property applies not only when the taxpayer consumes the property, but also when the taxpayer simply holds the property—as with a work of art, patent, or copyright.”). My writing of this Article, for example, as valuable as it may be, does not give me gross income.

¹⁴² Dodge, *supra* note 122, at 697.

'end' but rather a 'means' (or opportunity) to earn a profit. The sale of the inventory, not the obtaining of it, is the realization event."¹⁴³

With respect to personal-use property, Professor Dodge notes that crops a taxpayer grows and consumes are not taxed.¹⁴⁴ He adds:

Similar considerations apply to "taken" personal-use property. Here the analogy to imputed income from self-provided services is less compelling, but there is still investment of capital and labor by the taxpayer. That such property is obtained by an investment that is below the property's fair market value is no reason to tax the gain prior to realization.¹⁴⁵

Virtual items received in drops resemble the "taken" property that Professor Dodge discusses: They require substantial effort on the part of the taxpayer, but are not self-created items because they depend on the substantial prior efforts of the game's designers. As discussed above, taken items are taxed not on receipt but instead on disposition, regardless of whether they are personal-use items or are treated as business inventory.

Consequently, Ava, the WoW player, should have no gross income from the drops she receives. The same reasoning means that someone who plays an online game as a source of income has no gross income on receipt of the drops, either. That person, however, will usually cash out quickly in order to have the liquidity to purchase real world items. Both the players who sell their loot occasionally and the income-seeking players, who typically will sell shortly after receipt, will be taxed upon sale.¹⁴⁶ The "player" who is actually working online will thus not escape the imposition of tax upon his or her livelihood, while the casual seller will owe tax only on actual sales. Ava, who never sells virtual items for real money, will not be taxed on her fun, at least with regard to the drops she receives.

3. *Basis in Drops*

If a game player disposes of an item received in a drop, particularly in a manner that is taxable, such as by selling it in the real market,¹⁴⁷ the player will need to know his or her basis in the item.¹⁴⁸

¹⁴³ *Id.*

¹⁴⁴ *Id.* at 703.

¹⁴⁵ *Id.*; *see also id.* at 704 ("In conclusion, there are reasonable arguments for the position that, in a realization system, self-created (and taken) objects should not be treated as giving rise to gross income until sale, etc. That is certainly the rule of positive law.")

¹⁴⁶ *Id.*; *see also* I.R.C. § 61(a)(3) (West 2006) (defining gross income to include "[g]ains derived from dealings in property").

¹⁴⁷ Sales in the real market are taxable. I.R.C. §§ 61(a)(3), 1001(a)-(c) (West 2006).

¹⁴⁸ Basis typically tracks investment in property. The Internal Revenue Code (Code) provides: "The basis of property shall be the cost of such property, except as otherwise

Assuming that a player has no gross income on receipt of a drop, there is no taxed amount to increase any basis¹⁴⁹ that he or she would have in a dropped item. A player thus must have either a zero basis in loot drops or a nonzero basis that reflects an allocable portion of the user fees the player paid to participate in the virtual world. However, the monthly fee most accurately reflects a right to the use of the world for that month. Fees paid monthly are not the types of expenses that normally must be capitalized (giving rise to basis) in the first instance,¹⁵⁰ because they relate to such a short period.¹⁵¹ Moreover, a license fee is not normally allocable to property obtained with that license. By analogy, a taxpayer with a fishing license could not allocate part of the cost of the license to the fish that he or she caught; the license and fish are separate assets.¹⁵² Thus, assuming that players are not taxed on the receipt of drops, it is more reasonable to treat players as having a zero basis in them.

provided in this subchapter and subchapters C (relating to corporate distributions and adjustments), K (relating to partners and partnerships), and P (relating to capital gains and losses)” I.R.C. § 1012 (West 2006).

¹⁴⁹ If an item is taken into income, the taxed amount constitutes (or increases) basis. This is known as “tax cost basis.” See Charles T. Terry, *Capital Equipment Expensing: Incremental Tax Reform for a Transition Realization-Based Income Tax*, 7 FLA. TAX REV. 215, 227 (2006) (“[I]f a taxpayer receives equipment worth \$100,000 as compensation for services provided to his or her employer, the fair market value of the equipment becomes the taxpayer’s cost basis in the equipment.”).

¹⁵⁰ Expenses that are normally deductible must nonetheless be capitalized or included in inventory costs in some contexts. See I.R.C. § 263A(a)(1) (West 2006) (providing that certain direct and indirect costs must be included in inventory costs or capitalized). However, § 263A only applies to “[r]eal or tangible personal property produced by the taxpayer,” I.R.C. § 263A(b)(1), and would not apply to virtual items, which are intangible. Section 263A also does not apply “to any property produced by the taxpayer for use by the taxpayer other than in a trade or business or an activity conducted for profit.” I.R.C. § 263A(c)(1).

¹⁵¹ Cf. I.R.C. § 263 (West 2006) (requiring, in general, capitalization only for expenditures resulting in permanent, not short-term, improvement of property); see also Ethan Yale, *When Are Capitalization Exceptions Justified?*, 57 TAX L. REV. 549, 549 (2004) (“It is a widely accepted general principle that a taxpayer should capitalize an expenditure that produces a benefit lasting beyond the current tax period.”). Although Treasury regulations provide for a general rule of capitalization of amounts paid to acquire or create intangible assets, Treas. Reg. § 1.263(a)-4(a) (2004), an exception is provided for:

[A]mounts paid to create (or to facilitate the creation of) any right or benefit . . . that does not extend beyond the earlier of—

(i) 12 months after the first date on which the taxpayer realizes the right or benefit; or

(ii) [t]he end of the taxable year following the taxable year in which the payment is made.

Id. § 1.263(a)-4(f)(1). Thus, license fees should not give rise to basis in a player’s account.

¹⁵² See FISHING INFORMATION NEWSLETTER (IRS), June 2002, at 2–5, available at http://www.irs.gov/pub/irs-utl/28fin_jun02.pdf (describing tax treatment of fishing permits).

Allocating a portion of the monthly license fee to the drops received would also make it difficult to determine a taxpayer's basis in individual virtual items sold, as the number of items acquired could change even during the course of a single day. It would require constant, to-the-moment revaluation that is not practicable either for taxpayers or the IRS. Treating untaxed virtual property items obtained in drops as having zero basis thus facilitates taxation of taxable dispositions of loot.¹⁵³

B. Exchanges

1. Taxation of Real World Exchanges

In general, in an exchange, a taxpayer is taxed on the difference between the value of property received and the taxpayer's basis in the property relinquished.¹⁵⁴ For example, if Clyde trades a painting currently worth \$1000, in which he has a \$200 basis, for a desk also worth \$1000, Clyde has realized a gain of \$800 (\$1000 minus \$200)¹⁵⁵ and will need to include all \$800 of gain in his income for federal income tax purposes.¹⁵⁶

The reason that Clyde is taxed on \$800 is because “[g]ains derived from dealings in property” constitute gross income.¹⁵⁷ The Code further provides that the gain realized on the disposition of property is the amount by which the “amount realized” exceeds the property's basis,¹⁵⁸ and that the amount realized is “the sum of any money received plus the fair market value of the property (other than money) received.”¹⁵⁹ A gain realized need not be recognized as income for tax purposes, but the Code provides that it is recognized unless a statutory exception applies.¹⁶⁰

Limited classes of exchanges benefit from nonrecognition. One well-known example is the like-kind exchange. In general, if “like-kind” items, such as two parcels of land, are exchanged, a taxpayer

¹⁵³ This approach would also eliminate any issue about whether virtual items that are destroyed or stolen can be the subject of a casualty or theft loss deduction. See I.R.C. § 165(a)–(c) (West 2006) (authorizing casualty and theft loss deductions for individuals, capped at adjusted basis).

¹⁵⁴ I.R.C. § 1001(a) (West 2006).

¹⁵⁵ See I.R.C. § 1001(a)–(b) (amount realized is \$1000 in “property (other than money) received” minus \$200 adjusted basis).

¹⁵⁶ See I.R.C. § 1001(c) (“Except as otherwise provided in this subtitle, the entire amount of the gain or loss, determined under this section, on the sale or exchange of property shall be recognized.”).

¹⁵⁷ I.R.C. § 61(a)(3) (West 2006).

¹⁵⁸ I.R.C. § 1001(a).

¹⁵⁹ I.R.C. § 1001(b).

¹⁶⁰ I.R.C. § 1001(c).

who holds for business or investment purposes both the item relinquished and the item received benefits from nonrecognition of any realized gain, except up to the amount of any non-like-kind property received.¹⁶¹ However, there is no such protection for property put to personal use, such as property used for entertainment or recreation.

The fact that the like-kind exchange provision exists does not mean that a non-like-kind trade is necessarily taxed absent the applicability of some other nonrecognition provision. Rather, *realization* is a threshold issue; in order for recognition (or nonrecognition) to occur, there must first be a realization event.¹⁶² What constitutes a realization event? A Treasury regulation states that: “Except as otherwise provided in subtitle A of the Code, the gain or loss realized from the conversion of property into cash, or from the exchange of property for other property differing materially either in kind or in extent, is treated as income or as loss sustained.”¹⁶³ Thus, for example, an exchange of damaged stock certificates for replacement certificates would not constitute a realization event because the property exchanged is not materially different from the property received.

The Supreme Court has upheld this regulation.¹⁶⁴ In *Cottage Savings Ass’n v. Commissioner*,¹⁶⁵ the Court, applying its prior case law, held that “[u]nder [its] interpretation of § 1001(a), an exchange of property gives rise to a realization event so long as the exchanged properties are ‘materially different’—that is, so long as they embody *legally distinct entitlements*.”¹⁶⁶ In that case, the Court found that a taxpayer’s interests in a group of mortgage loans did “embody legally distinct entitlements”¹⁶⁷ from the interests in mortgage loans that the taxpayer received in exchange “[b]ecause the participation interests exchanged by Cottage Savings . . . derived from loans that were made to different obligors and secured by different homes”¹⁶⁸ The holding allowed Cottage Savings to recognize a loss for tax purposes even though the exchange was tax motivated.

In reaching its decision, the Court commented on previous cases involving corporate reorganizations that had taken place prior to the

¹⁶¹ I.R.C. § 1031(a)(1), (b) (West 2006).

¹⁶² See I.R.C. § 1001(a) (“The gain from the sale or other disposition of property shall be the excess of the amount *realized* therefrom over the adjusted basis provided in section 1011 for determining gain” (emphasis added)).

¹⁶³ Treas. Reg. § 1.1001-1(a) (as amended in 1996).

¹⁶⁴ See *Cottage Sav. Ass’n v. Comm’r*, 499 U.S. 554, 561 (1991) (“We conclude that Treasury Regulations § 1.1001-1 is a reasonable interpretation of § 1001(a).”).

¹⁶⁵ *Cottage Sav. Ass’n*, 499 U.S. 554.

¹⁶⁶ *Id.* at 566 (emphasis added).

¹⁶⁷ *Id.*

¹⁶⁸ *Id.*

enactment of provisions allowing for nonrecognition of certain reorganizations.¹⁶⁹ In those cases, the Court had held that a realization event had occurred when a taxpayer exchanged stock in a corporation incorporated in one state for stock in a successor corporation incorporated in another state, but that no realization had occurred where a taxpayer exchanged appreciated stock in a corporation incorporated in Ohio for stock in a successor corporation also incorporated in Ohio.¹⁷⁰ In discussing the holdings of those cases, the *Cottage Savings* majority made clear that a change in the state of incorporation gave rise to a realization because “a company incorporated in one State has ‘different rights and powers’ from one incorporated in a different State”¹⁷¹ and thus differs in its legal entitlements.¹⁷²

Thus, for the Supreme Court, entitlements conferred by law are critical in determining whether exchanged properties are materially different. Where legal entitlements in the two properties differ, the disposition constitutes a realization event and is taxable unless a non-recognition provision applies.

2. *Taxation of Game World Trades*

a. Realization in Game Worlds Under a Virtual Property Paradigm

Does an in-world exchange of virtual items in a game world constitute a realization? Assuming that players own the virtual property held by their avatars, there is a strong argument that an exchange of the virtual Sword of Mischief for the virtual Cloak of Sorcery, for example, is a realization event, just as an exchange of a real sword for a real cloak would be. The intangible nature of the Sword of Mischief and the Cloak of Sorcery would not pose a problem; intangible property rights, such as lengthy leaseholds and copyrights, are recognized

¹⁶⁹ *Id.* at 562–65.

¹⁷⁰ *See id.* at 565 (“[S]eparate groups of stock . . . are materially different if they are issued by different corporations . . . or if they confer ‘differen[t] rights and powers’ in the same corporation” (second alteration in original)).

¹⁷¹ *Id.* at 564 (quoting *United States v. Phellis*, 257 U.S. 156, 169–73 (1921)).

¹⁷² *Id.* at 565.

as property for federal income tax purposes,¹⁷³ and an exchange of two intangibles can likewise constitute a realization event.¹⁷⁴

Thus, if Ava is treated as owning the virtual Sword of Mischief held by her avatar, her exchange of that sword for the virtual Cloak of Sorcery, which she will subsequently own, does give her a legally distinct entitlement—just as an exchange of a real sword for a real cloak would. Accordingly, under a virtual property regime, *Cottage Savings* would be of little help to a gamer hoping to avoid tax on in-game trades.¹⁷⁵

b. Realization in Game Worlds Under a License Paradigm

The analysis changes if courts determine that the right held by a gamer like Ava is in fact only a license to use the items in the game world.¹⁷⁶ A license paradigm would give her and other similarly situated players a strong argument that their in-game trades are not taxable. As an analogy, consider an exchange of a bookcase for a printer. Assume that each item is worth \$300. Ordinarily, a taxpayer exchanging the bookcase for the printer would have a \$300 amount realized. However, the analysis is different if the taxpayer does not own the bookcase and will not own the printer. Assume that the taxpayer is an employee, who, under the terms of an employment agreement, is entitled to use various office equipment owned by his employer.¹⁷⁷ If the employee arranges with a fellow employee to trade the bookcase in his office for a printer in the other employee's office, that is quite different from trading properties *owned* by those employees. The taxpayer has not really disposed of any asset, much

¹⁷³ Cf. Treas. Reg. § 1.263(a)-4(b)(3) (2004) (“[S]eparate and distinct intangible asset means a property interest of ascertainable and measurable value in money’s worth that is subject to protection under applicable . . . law and the possession and control of which is intrinsically capable of being sold, transferred or pledged . . . separate and apart from a trade or business.”); *id.* § 1.1031(a)-1(c) (as amended in 1991) (“Examples of exchanges of property of a ‘like kind.’ No gain or loss is recognized if . . . a taxpayer who is not a dealer in real estate . . . exchanges a leasehold of a fee with 30 years or more to run for real estate . . .”). See generally *id.* § 1.263(a)-4 (providing general principle of capitalization of costs of acquiring intangible assets).

¹⁷⁴ See *id.* § 1.1031(a)-2(c) (as amended in 2005) (“An exchange of intangible personal property of nondepreciable personal property qualifies for nonrecognition of gain or loss under section 1031 only if the exchanged properties are of a like kind.”).

¹⁷⁵ In that case, Congress should enact an exclusion for exchanges within game worlds such as WoW. See *infra* Part III.C.2.a.

¹⁷⁶ The governing agreements of many game worlds, such as WoW, provide that players have a mere license to use the game and do not own the items in it. See *supra* note 70 and accompanying text.

¹⁷⁷ This use right constitutes a license. Cf. Thomas W. Merrill, *Property and the Right to Exclude*, 77 NEB. L. REV. 730, 745 (1998) (“Because it is only a license, my right to use the office at the law school can be terminated by the university at any time.”).

less received title to a different one. Instead, what has occurred is a relocation of certain items owned by the employer within the domain controlled by the employer.

It is not the business nature of the setting in this example that drives the analysis. If vacationers on a cruise trade the use of deck chairs of different styles, the analysis is the same. The reallocation of deck chairs by the vacationers is not a disposition of an interest in one deck chair and the acquisition of an interest in another. Rather, each vacationer has a right to use *any* of the chairs in the public areas of the cruise ship. Redistributing possession among those with the usage rights is not a disposition of property, even if some vacationers who sleep late pay cash to others who rise early and claim all the chairs of the most popular type. Although the cash received by the early birds is gross income,¹⁷⁸ the exchange of the use of one chair for the use of another is not a realization event.

For a disposition to constitute a realization for federal income tax purposes, it must be a disposition of “property.”¹⁷⁹ A license may not necessarily constitute property,¹⁸⁰ and even if it does, under *Cottage Savings*, an exchange of properties is treated as a realization event only if the properties exchanged reflect “legally distinct entitlements.”¹⁸¹ There is at least an argument that a vacationer entitled to use any deck chair on the cruise ship does not change legal entitlements when he or she exchanges possession of one chair for possession of another. The same is true for the employee granted the use of a suite of office furniture.

¹⁷⁸ See I.R.C. § 61(a) (West 2006) (“Except as otherwise provided in this subtitle, gross income means all income from whatever source derived . . .”).

¹⁷⁹ See I.R.C. § 1001(a) (West 2006) (referring to “[t]he gain from the sale or other disposition of property”).

¹⁸⁰ See Merrill, *supra* note 177, at 730 (arguing that there is no property without right to exclude); *id.* at 744 (“A use-right that does not rise to the dignity of a property right is called a license.”). However, other scholars explain:

The bundle of rights conception has spawned various formulations of property incidents. The most minimal formulation, and possibly most widely accepted, enumerates the rights to use, exclude, and transfer as the constitutive elements of property. The most expansive one, compiled by Honoré, lists eleven incidents as the contents of property, yet omits the right to exclude, which is considered by many as “one of the most essential sticks in the bundle of rights that are commonly characterized as property” or even its “sine qua non.”

Abraham Bell & Gideon Parchomovsky, *A Theory of Property*, 90 CORNELL L. REV. 531, 587 (2005) (footnotes omitted) (quoting *Kaiser Aetna v. United States*, 444 U.S. 164, 176 (1979); Merrill, *supra* note 177, at 730).

Federal income tax law looks to state law rights to determine whether something constitutes “property” for federal income tax purposes. See *supra* note 55 and accompanying text.

¹⁸¹ *Cottage Sav. Ass’n v. Comm’r*, 499 U.S. 554, 566 (1991).

The same analysis, then, should apply to Ava and other players of online games, as long as they have a mere license to use the items within the game world.¹⁸² If Ava either trades her Sword of Mischief for a Cloak of Sorcery held by another avatar (or sells it for the game's currency), that should not constitute a realization event for her, assuming that the license provisions of the applicable agreements are upheld.

3. *Taxation of Trades in Second Life*

Second Life is designed to allow commerce. Of course, sales of real world property or services within Second Life are taxable under current law, just as they would be if they happened elsewhere (such as via eBay).¹⁸³ The difficult question is how to tax transactions that do not traverse the boundaries of Second Life.

An important feature of Second Life is that it allows users to retain intellectual property rights in their creations.¹⁸⁴ A Second Life resident is thus entitled not only to transfer the original creation, but to make and sell copies of it as well, as can the publisher of a novel. For example, Ben, the Second Life resident discussed above, makes T-shirts for avatars to wear and sells copies of them in exchange for Lindens. Second Life thus empowers the reaping of profits in a way that game worlds typically do not.

¹⁸² A license is a right of use that does not include the right to exclude. Professor Thomas Merrill explains:

[W]hat is the defining difference between use-rights in the form of licenses and use-rights that are considered nonpossessory property rights? The difference is that the holder of a nonpossessory property right can exclude others (including but not limited to the grantor) from interfering with the exercise of the use-right, whereas the holder of a license lacks such a right. In other words, the feature that makes nonpossessory property rights property is the right to exclude others, and the right to exclude cannot be derived from the right to use.

Merrill, *supra* note 177, at 744.

¹⁸³ See generally I.R.C. § 61(a) (including in gross income all income from any source unless otherwise provided in Subtitle A of Code).

¹⁸⁴ See *supra* note 50 and accompanying text. By contrast, Entropia Universe, which, like Second Life, is a commodified, unscripted world, provides in its EULA:

Virtual items will often have names similar or identical to corresponding physical categories Despite the similar names, all virtual items are part of the System and MindArk retains all rights, title, and interest in all parts including, but not limited to Avatars and Virtual Items; these retained rights include, without limitation, patent, copyright, trademark, trade secret and other proprietary rights throughout the world.

Entropia Universe, End User License Agreement § 7, <https://account.entropiauniverse.com/pe/en/rich/5185.html> (follow "EULA agreement" hyperlink) (last visited Oct. 15, 2007).

Nonetheless, the property rights of Second Life residents are not well defined. Second Life's TOS does not directly address the property rights, if any, that participants have in the copies of their creations. However, the TOS does say that, notwithstanding the intellectual property rights they have in their own creations, participants do not "own any data Linden Lab stores on Linden Lab servers (including without limitation any data representing or embodying any or all of [their] Content)."¹⁸⁵ Accordingly, assuming the TOS is upheld, Ben may not own a copy of a T-shirt he created (even if he owns the underlying intellectual property), as the copy is represented by computer code on Linden Lab's servers.

The Second Life TOS also explicitly grants residents a mere license to use copies of others' creations; it provides that "by submitting your Content to any area of the Service, you automatically grant . . . to Linden Lab *and to all other users of the Service* a non-exclusive, worldwide, fully paid-up, transferable, irrevocable, royalty-free and perpetual License . . . to use your Content for all purposes within the Service."¹⁸⁶ If a court finds that Ben has no property rights either in copies of a T-shirt he creates or in a copy of a pair of jeans created by another resident, a trade of one for the other should not be a taxable event. Instead, such a swap would resemble the exchange of the Sword of Mischief for the Cloak of Sorcery in a game world under a legal regime in which EULA provisions that grant players mere licenses are upheld.¹⁸⁷ If, on the other hand, Second Life residents actually have ownership rights in copies of Second Life items, these trades will fall within section 1001 of the Code and, absent an exclusion, will be taxable.¹⁸⁸

Sales of copies of creations for Lindens present distinct issues. In the scenario in which such copies constitute property, an exchange for Lindens appears to give rise to legally distinct entitlements under *Cottage Savings*¹⁸⁹ and thus to taxation. The TOS is restrictive regarding Lindens; it grants participants "a limited license right governed solely under the terms of this Agreement"¹⁹⁰ and specifies that users "agree that Linden Lab has the absolute right to manage, regulate, control,

¹⁸⁵ Second Life, Terms of Service Agreement, *supra* note 50, § 3.3.

¹⁸⁶ *Id.* § 3.2 (emphasis added).

¹⁸⁷ *See supra* Part III.B.2.b.

¹⁸⁸ In that case, Congress should enact a nonrecognition provision. A trade of a copy of a virtual T-shirt for a copy of a virtual pair of jeans suggests consumption rather than commerce, just as trades within game worlds do. *See infra* Part III.C.2.

¹⁸⁹ *Cottage Sav. Ass'n v. Comm'r*, 499 U.S. 554, 566 (1991).

¹⁹⁰ Second Life, Terms of Service Agreement, *supra* note 50, § 1.4; *cf.* Joseph M. Dodge, *Zarin v. Commissioner: Musings About Debt Cancellations and "Consumption" in an Income Tax Base*, 45 TAX L. REV. 677, 678 (1990) ("Although Zarin [a casino gambler]

modify and/or eliminate such Currency as it sees fit in its sole discretion”¹⁹¹ A license to use property may not constitute property for federal income tax purposes.¹⁹² However, even if a use right in Lindens does not constitute property, the disposition of an item that *does* constitute property, for which Lindens are received in return, should constitute a realization event¹⁹³—just as an exchange of property for services would.¹⁹⁴

Accordingly, if Ben sells a copy of a T-shirt for Lindens, then—assuming that the copy of the T-shirt constitutes property—it appears Ben has downgraded his legal entitlements to a more limited right of use, giving rise to a realization event. As such, any gain would be includible in income¹⁹⁵—even though Ben did not obtain cash in the transaction.¹⁹⁶ In fact, the same tax result would obtain even if Second Life residents were granted ownership rights in Lindens. In that case, the exchange would resemble traditional barter: the exchange of ownership of one chattel for ownership of another. In other words, the exchange would still give rise to distinct legal entitlements.

If copies of creations are *not* players’ property but are treated as merely held by players, their exchange for Lindens, provided under a limited license, may not be taxable. Although it may be the case that participants have even more limited rights in Lindens than in copies of

acquired tangible property, the chips, the chips were not property in the relevant tax sense because they were only a ‘local’ medium of exchange, like currency or banknotes.”).

¹⁹¹ Second Life, Terms of Service Agreement, *supra* note 50, § 1.4.

¹⁹² See *supra* note 180 and accompanying text.

¹⁹³ Nonetheless, the transfer of the Lindens should not be taxed. See *infra* Part III.C.2.b.

¹⁹⁴ Cf. Gregg D. Polsky, *A Correct Analysis of the Tax Treatment of Contingent Attorney’s Fee Arrangements: Enough with the Fruits and the Trees*, 37 GA. L. REV. 57, 110 n.246 (2002) (“[A] transfer of property in exchange for services constitutes a realization event.”).

¹⁹⁵ Ben might not actually end up being taxed, however, if his Second Life expenditures exceed his Second Life income. See *infra* text accompanying note 232. Any taxable gain will be capital in nature unless it falls within an exception in I.R.C. § 1221(a). For example, if the participant runs a business in Second Life and the items sold are inventory, they will not constitute capital assets. See I.R.C. § 1221(a)(1) (West 2006) (excluding inventory from definition of capital asset). Whether or not a loss on a transaction in Second Life (such as the sale of a T-shirt for Lindens) is deductible will depend, in the first instance, on whether the user is participating in Second Life as a profit-seeking activity or merely for entertainment. See I.R.C. § 165(a), (c) (West 2006) (stating that individuals’ losses, other than casualty losses, generally are only deductible if incurred in transactions undertaken for profit); I.R.C. § 183(b) (West 2006) (authorizing certain deductions from activity not engaged in for profit).

¹⁹⁶ Cf. Rev. Rul. 80-52, 1980-1 C.B. 100, 101 (providing that cash-method members of barter club had income from services in “the taxable year in which the credit units are credited to their accounts”).

their own creations, a transfer of a copy does not fall within Code section 1001 if it does not constitute property, which would mean that *Cottage Savings* would not apply.

To summarize, transactions amounting to mere reallocations of possession of items in which all participants have use rights do not constitute realization events, and thus are not taxable. If Second Life residents are ultimately treated as owning (rather than merely licensing) these items, lawmakers should consider exempting these noncurrency exchanges from income recognition, as discussed further below. By contrast, an analysis of federal income tax law suggests that sales of items for Lindens will be taxable unless courts treat participants as having property rights neither in their own creations nor in Lindens. Yet even in that case, the sale of items for Lindens should be taxed as a matter of policy, as discussed in the next Section.¹⁹⁷

C. Policy Issues in the Taxation of Virtual Worlds

The tax policy concerns usually considered in evaluating the appropriateness of a tax or provision are equity, efficiency, and administrability.¹⁹⁸ That is, in general, a tax system or tax provision should be equitable, result in minimal deadweight loss, and be possible for the government to implement and enforce.¹⁹⁹

Equity includes both the notion of horizontal equity (taxing similarly situated taxpayers similarly) and vertical equity (taxing those with more income more than those with less income).²⁰⁰ The income tax generally calls for inclusion in income of profits from personal, business, and investment activities, and that should remain the case whether the profit arises online or offline. Similarly, the principle of horizontal equity suggests that an activity that would not bear federal

¹⁹⁷ Note that a Second Life resident who spends more on Second Life than he or she earns in Second Life likely will owe no federal income tax on the sales because the expenditures will be deductible from the income earned in Second Life. See *infra* text accompanying note 232.

¹⁹⁸ See, e.g., Cheryl D. Block, *Pathologies at the Intersection of the Budget and Tax Legislative Processes*, 43 B.C. L. REV. 863, 865 (2002) (stating that equity, efficiency, and simplicity are traditional tax policy objectives); Samuel A. Donaldson, *The Easy Case Against Tax Simplification*, 22 VA. TAX REV. 645, 732 (2003) (“[T]he three traditional criteria for evaluating a tax [are] equity, efficiency, and simplicity . . .”).

¹⁹⁹ See Milka Casanegra de Jantscher, *Administering the VAT*, in VALUE ADDED TAXATION IN DEVELOPING COUNTRIES 171, 179 (Malcolm Gillis et al. eds., 1990) (“[T]ax administration is tax policy.”).

²⁰⁰ See Rebecca S. Rudnick, *Who Should Pay the Corporate Tax in a Flat Tax World?*, 39 CASE W. RES. L. REV. 965, 1200 (1989) (“The first, horizontal equity, requires the equal treatment of equals. The second, vertical equity, calls for the unequal treatment of unequals.” (footnotes omitted)).

income tax if engaged in offline should not bear federal income tax if undertaken online.

As a general matter, it is inappropriate under an income tax to impose a tax directly on consumption because, given that the funds spent on that consumption were not deductible,²⁰¹ taxing the consumption value would effectively tax the activity twice.²⁰² Because this is true for activity engaged in offline, online consumption should be treated the same way to avoid violating the principle of horizontal equity. Thus, in general, online activity generating a profit should bear taxation, while that which generates mere entertainment value should not.

Finally, although administrability may be thought a less lofty goal than efficiency and equity, a system that cannot be enforced is not workable (and may be inequitable and inefficient).²⁰³ Certain core aspects of our tax system rest on foundations of administrability; for example, the Supreme Court has stated that “the concept of realization is ‘founded on administrative convenience.’”²⁰⁴

1. Drops

A policy analysis of the taxation of loot drops suggests that they should not be taxed on receipt. With respect to equity, if federal income tax *were* imposed on drops, it would likely be regressive in its impact—that is, a violation of vertical equity. People who devote more time to a game generally will receive more drops and thus owe more tax if drops are taxed. Those who spend more time in-game are, by and large, likely those with more leisure time—given the demographics of game players, particularly students, the underemployed, and people between jobs—many of whom will thus have lower incomes than those with less time to spend in-game.²⁰⁵

²⁰¹ See I.R.C. § 262(a) (West 2006) (disallowing deduction for personal expenses); see also Dodge, *supra* note 190, at 680 n.18 (“[T]he consumption from a consumer durable is fully taxed *ex ante* when the asset is purchased since the purchase price is not deductible.”).

²⁰² See Dodge, *supra* note 190, at 680 n.18 (“Even under the income tax, consumption generally is taxed once, although investment income may be taxed twice.”).

²⁰³ See Leandra Lederman, *Statutory Speed Bumps: The Roles Third Parties Play in Tax Compliance*, 60 STAN. L. REV. (forthcoming Dec. 2007), available at <http://ssrn.com/abstract=979602> (“[Although a] simple or easily administered tax may even seem like a luxury[,] . . . administrability of a tax is key to its effectiveness . . .”); see also Camp, *supra* note 17, at 22–25 (discussing aspects of tax administration).

²⁰⁴ *Cottage Sav. Ass’n v. Comm’r*, 499 U.S. 554, 559 (1991) (quoting *Helvering v. Horst*, 311 U.S. 112, 116 (1940)).

²⁰⁵ The Daedalus Project: The Psychology of MMORPGs, Occupational Status, Marital Status, and Children, <http://www.nickyee.com/daedalus/archives/000550.php> (last visited Aug. 18, 2007) (“Overall, 50% of MMORPG players are working, 22% are full-time

A tax on the receipt of virtual loot would also face administrability issues because it would be difficult to enforce. Virtual loot is not very liquid, not least because of prohibitions on its sale. A player selling loot risks losing his or her game account—and thus all remaining loot. Moreover, a rare item that might have great value if sold separately may not be separately tradeable; it may “bind” to the avatar.²⁰⁶ That makes valuation difficult and also precludes selling simply that item to pay a tax that accrued on its acquisition. It would also be difficult for players to track and value every drop, particularly because drops entail receipts, not dispositions. Moreover, taxpayers would likely perceive as oppressive the imposition of income tax on an entertainment activity not resulting in the receipt of actual cash, particularly with respect to games that prohibit real-market trades.²⁰⁷

The illiquidity and compliance difficulties, combined with the inequity and resentment taxpayers likely would perceive in taxation of in-world transactions, would threaten the voluntary tax system. Taxpayers would also have little incentive to invest the time needed to comply, considering the low odds of audit²⁰⁸ and the difficulty that the IRS would have in countering their defense of minimal in-game income. The reaction to taxation would likely be particularly strong if courts did not invalidate the EULA provisions that prohibit sales of virtual items, because such a tax would encourage real-market transactions.

students, 12% are working and/or going to school part-time, 10% are unemployed, 3% are home-makers, while 1% are retired.”) The median age of gamers is twenty-six, and approximately twenty-five percent of gamers are teenagers. The Daedalus Gateway: The Psychology of MMORPGs, Player Demographics, http://www.nickyee.com/daedalus/gateway_demographics.html (last visited Aug. 15, 2007).

Although the average amount of time players spend per week in virtual worlds is just under twenty-two hours, *see* The Daedalus Project: The Psychology of MMORPGs, Hours of Play Per Week, <http://www.nickyee.com/daedalus/archives/000758.php> (last visited Aug. 15, 2007), “over 11% spend[] a full workweek (30–40 hours) developing their online characters, and 8–10% spend[] more than 40 hours per week,” Viktor Mayer-Schönberger & John Crowley, *Napster’s Second Life?: The Regulatory Challenges of Virtual Worlds*, 100 *Nw. U. L. REV.* 1775, 1782 (2006).

²⁰⁶ *See supra* note 44.

²⁰⁷ Gamers tend to vociferously oppose the prospect of taxation in this context. *See, e.g.*, Posting of detnos to CNET NEWS.COM, Talk Back, *IRS Taxation of Online Game Virtual Assets Inevitable*, http://news.com.com/5208-1043_3-0.html?forumID=1&threadID=23256&messageID=283667&start=-1 (June 27, 2007, 17:13 PDT) (objecting to taxation of items acquired in WoW that, in poster’s mind, are “fictitious”).

²⁰⁸ *See* James S. Eustice, *Abusive Corporate Tax Shelters: Old “Brine” in New Bottles*, 55 *TAX L. REV.* 135, 161 (2002) (“The Service’s shockingly low audit coverage makes the audit lottery an irresistible attraction; it is not even a lottery, but rather a virtually sure thing.” (footnote omitted)).

Enforcement of such a law would therefore be difficult unless the IRS imposed reporting requirements on game owners.²⁰⁹ Currently, there are no such requirements.²¹⁰ There is a movement, though, to require information reporting on Internet auctions by expanding the definition of a “broker” for information-reporting purposes to include Internet auction sites.²¹¹

Although the games run on computer servers, tracking transactions for information-reporting purposes would require coding beyond that needed for game purposes. Game owners are likely to resist having to produce information reports, particularly because of the difficulty that tracking drops and trades would pose:

“That would be an apocalypse for developers,” said Matt Mihaly, CEO of Iron Realms, which publishes such online games as “Imperian” and “Lusternia.” “I think it would make running (massively multiplayer online games like “EverQuest” or WoW) an unprofitable business to be in, except for the biggest publishers. We’d spend all of our time tracking deals between players. I don’t know how we’d deal with the fact that we’re creating wealth every time a monster makes a drop, or there’s a reward.”²¹²

²⁰⁹ Amounts subject to information reporting experience much higher compliance than amounts not reported to the IRS. See Charles P. Rettig, *Nonfilers Beware: Who’s that Knocking at Your Door?*, J. TAX PRAC. & PROC., Oct.–Nov. 2006, at 15, 15–16 (“Amounts subject to third party information reporting, but not to withholding . . . have a . . . net misreporting percentage of 4.5 percent. . . . Amounts not subject to withholding or information reporting . . . [have] a much higher net misreporting percentage of 53.9 percent.”).

²¹⁰ See INFO. REPORTING PROGRAM ADVISORY COMM., SMALL BUSINESS/SELF-EMPLOYED SUBGROUP REPORT 1–2 (2006) (recommending use of information reporting by auction sites such as eBay), available at http://www.irs.gov/pub/irs-utl/2006_irpac_public_meeting.pdf; cf. I.R.C. § 6045(a) (West 2006) (“Every person doing business as a broker shall, when required by the Secretary, make a return . . . showing the name and address of each customer, with such details regarding gross proceeds and such other information as the Secretary may by forms or regulations require with respect to such business.”); I.R.C. § 6045(c)(1) (defining “broker” to include “(A) a dealer, (B) a barter exchange, and (C) any other person who (for a consideration) regularly acts as a middleman with respect to property or services”).

²¹¹ See Dustin Stamper, *IRS Wants Legislation To Require Auction Web Sites To Collect TINs*, 113 TAX NOTES 725, 725 (2006) (“‘We know that currently there are no information reporting requirements for this industry,’ [Kevin] Brown [Commissioner of the IRS Small Business/Self-Employed Division] said. ‘We also agree that legislative changes are needed to broaden the scope of section 6045 to include information reporting for online auction brokers.’”); cf. DEP’T OF THE TREASURY, GENERAL EXPLANATIONS OF THE ADMINISTRATION’S FISCAL YEAR 2008 REVENUE PROPOSALS 65 (2007), available at <http://www.treas.gov/offices/tax-policy/library/bluebk07.pdf> (proposing information-reporting requirement for brokers of tangible personal property applicable to “customer[s] for whom the broker has handled 100 or more separate transactions generating at least \$5,000 in gross proceeds in a year”).

²¹² Terdiman, *supra* note 121.

By contrast, taxing real-market sales of dropped items solves the liquidity and valuation problems, creates no appearance of inequity, and would be easier to track—both because of the smaller volume of such transactions and because sales involve a flow of funds. Policy analysis thus supports the analysis of tax doctrine above.²¹³

2. Exchanges

a. Trades in Game Worlds

With respect to exchanges within game worlds, policy analysis suggests the same results as for drops—application of a cash-out principle.²¹⁴ As is the case for drops, taxing game-world exchanges would be regressive and thus would violate the principle of vertical equity. That is because people who spend more time playing a game more typically will engage in more in-world trades. As a result, players with the most leisure time (many of whom, such as students, have less income than those who have less leisure time) would tend to be taxed the most.²¹⁵

In addition, those with comparatively low basis in their virtual property would owe more tax on exchanges of virtual property and sales for virtual currency. People who purchase property for cash would tend to have higher bases in their items, particularly if trades were taxed but drops were not, because if drops were not taxed, there would be no “tax cost basis” aspect to them.²¹⁶ Higher-income players, who are likely to invest more real money in their game play, would owe comparatively less tax on their in-game exchanges.²¹⁷ Furthermore, as with drops, it would be difficult for players to track and

²¹³ See *supra* Part III.A.2.

²¹⁴ See *supra* Part III.C.1.

²¹⁵ See *supra* note 205 and accompanying text.

²¹⁶ See *supra* note 149 and accompanying text.

²¹⁷ Sony's study of the first year of Station Exchange noted that “[t]he average active Station Exchange buyer is 32 years old. This is much older than the average age of [EverQuest II] players overall, which is 25 years old.” NOAH ROBISCHON, SONY ONLINE ENTERTAINMENT STATION EXCHANGE: YEAR ONE 7 (2007), available at <http://www.gamasutra.com/features/20070207/SOE%20Station%20Exchange%20White%20Paper%201.19.doc>. It further found that “34-year-olds spent the most money on virtual goods,” *id.*, and “33- to 37-year-olds dominate in total dollar spending,” *id.*, but, with respect to selling, although the 33–37 age group is very active, “22-year-olds lead with \$45,000 in total sales this year,” *id.* at 8. The paper hypothesizes that a “likely reason” for these findings is that “18- to 22-year-olds have more free time to spend playing the game, and thus gathering virtual goods to resell. Older players, on the other hand, have less time to devote to the game but more disposable income to use for buying the virtual goods they need in order to advance.” *Id.*

value every in-game trade, and players would likely resent taxation of in-game exchanges that are part of the game's entertainment value.²¹⁸

Because the recognition of virtual property rights for players would put them at risk of being taxed on purely in-game swaps, lawmakers should consider creating a nonrecognition rule for such exchanges. To be sure, the general rule taxing barter transactions is an important backstop to the tax system.²¹⁹ Barter in the context of a game such as WoW, however, is not a substitute form of commerce. It is consumption-oriented, rather than profit-oriented. As discussed above, from a policy perspective, it is not appropriate under an income tax to impose a tax directly on consumption.²²⁰ A cash-out rule has the convenient feature of allowing ready identification of profit-motivated transactions in games that are designed with player entertainment, not player profit, in mind.

A cash-out rule also accords with administrability concerns. As explained above, the government's ability to administer the tax system underlies the realization doctrine.²²¹ The doctrine addresses the important problems of valuation and liquidity that taxpayers would routinely face in the absence of such a requirement.²²² In fact, both taxpayers and the government would face valuation issues under an accretion-based tax,²²³ and "[t]he realization requirement also helps prevent taxpayers from being required to sell assets in order to raise funds to pay tax."²²⁴

With respect to game worlds, liquidity issues would arise if purely in-game transactions were taxed, as discussed above.²²⁵ In addition,

²¹⁸ See *supra* text accompanying note 207.

²¹⁹ See Edward A. Zelinsky, *For Realization: Income Taxation, Sectoral Accretionism, and the Virtue of Attainable Virtues*, 19 *CARDOZO L. REV.* 861, 873 (1997) ("[R]ealization must be defined to include property exchanges in order to deprive barter of any tax advantage and thus channel taxpayers back into cash transactions.").

²²⁰ See *supra* text accompanying notes 201–02.

²²¹ See *supra* text accompanying note 204.

²²² The realization doctrine does not perfectly resolve the problems of valuation and liquidity, however. Daniel N. Shaviro, *An Efficiency Analysis of Realization and Recognition Rules Under the Federal Income Tax*, 48 *TAX L. REV.* 1, 12–13 (1992).

²²³ See *Cottage Sav. Ass'n v. Comm'r*, 499 U.S. 554, 559 (1991) ("Under an appreciation-based system of taxation, taxpayers and the Commissioner would have to undertake the 'cumbersome, abrasive, and unpredictable administrative task' of valuing assets on an annual basis to determine whether the assets had appreciated or depreciated in value." (citation omitted)); see also David M. Hasen, *A Realization-Based Approach to the Taxation of Financial Instruments*, 57 *TAX L. REV.* 397, 399 (2004) ("Some have pushed for an accretion-based tax system or approximation to it under which economic gains and losses are reckoned annually without regard to disposition . . .").

²²⁴ Deborah L. Paul, *Another Uneasy Compromise: The Treatment of Hedging in a Realization Income Tax*, 3 *FLA. TAX REV.* 1, 40 (1996).

²²⁵ See *supra* text accompanying note 206.

although many virtual items have readily ascertainable values,²²⁶ others that trade less frequently or reflect the value of a bundled set of items—such as avatars sold with their equipment—may not. Values also fluctuate, sometimes significantly, and, unlike publicly traded stocks, there are no published daily values of virtual assets, except some virtual currencies. Historical auction results, unlike stock prices, may not always be readily available. Furthermore, the values involved, unlike stock in many closely held companies, for example, usually would not justify the expense of an expert appraisal. Moreover, failing to treat an in-game trade as a realization event does not eliminate forever the possibility of taxation. Rather, it postpones taxation until the participant cashes out. Thus, virtual worlds do not present a “now or never” problem.

The values underlying the realization requirement thus support the notion that in-world trades should not be considered to be realizations. However, the fact that “[t]he realization requirement produces several social costs”²²⁷ should also be considered. Professor Deborah Paul has identified these costs as: (1) the lock-in effect that results from a disincentive to sell appreciated property, (2) inefficiencies resulting from the use of “hedges”²²⁸ as a way to avoid the effects of lock-in, (3) the favoritism of capital over labor—and thus of relatively wealthy taxpayers, and (4) reduced voluntary compliance if taxpayers perceive the nontaxation of unrealized appreciation on capital as unfair.²²⁹

The costs of the realization requirement that Professor Paul identifies are likely to be minimal with respect to virtual property in game worlds. In most games, taxpayers are not entitled to sell virtual items, so there is already a disincentive to sell them. If real-market sales or exchanges constitute realization events but in-game trades do not, the disincentive to sell game assets for cash will be compounded. That result both is in line with the preferences established by game owners in their agreements with players and would have the benefit of not taxing those participating purely for entertainment value. It is also extremely unlikely that players would use hedges to reduce any lock-in effects in virtual property.

²²⁶ See Lastowka & Hunter, *supra* note 1, at 38 (“[O]ne can now establish reliable U.S. dollar prices for various virtual-world properties. . . . In *The Sims Online*, the most popular asset for sale on eBay is currency; one million simoleons will set you back about \$180.” (footnotes omitted)).

²²⁷ Paul, *supra* note 224, at 40.

²²⁸ See *id.* at 3 (“A taxpayer may hedge an asset by obtaining a derivative financial instrument whose value varies inversely with the value of the asset.”).

²²⁹ *Id.* at 40–41.

A rule that in-game trades, unlike real-market sales or exchanges of virtual items, do not constitute realization events would favor capital over labor with respect to real-market transactions (because profits would be lower on assets purchased for cash or other real consideration). However, it would do so far less than a law that taxed transactions occurring within the game. Taxing in-world transactions would impose a disproportionately high burden on those investing relatively high amounts of time but not money in the game. Taxing only real-market transactions would eliminate taxation on an enormous number of transactions involving labor, as it would only tax those that involve the receipt of real world items, such as cash.

Finally, with respect to voluntary compliance, taxpayers are more likely to regard as unfair the taxation of purely in-game transactions than the imposition of a rule that treats only real-market transactions as realizations. In fact, imposing tax on in-game transactions is likely to be largely unenforceable, absent information reporting.²³⁰ Given the number of participants and transactions, it would raise serious voluntary compliance issues. The policies underlying the realization doctrine thus support the notion that a cash-out principle should apply for exchanges in game worlds, including exchanges for virtual currency.

b. Trades in Second Life

As the discussion above reveals, unscripted worlds like Second Life differ fundamentally from game worlds. That doctrinal analysis suggests that, if Second Life's TOS is upheld, certain in-kind swaps should not be taxed, but sales for Lindens should be. These results accord with tax policy because they would not tax entertainment but would tax commerce.

Trades of copies of items, such as Ben's trade of a virtual T-shirt for a virtual pair of jeans, are likely to be focused on improving the user's experience, not on profit, because there is little profit margin to be gained in obtaining a single copy of an item in what typically is an arm's-length exchange. These item swaps that do not involve Lindens therefore should not be taxed. Such transactions pose little threat to the tax system, and taxing them would pose serious issues of administrability.

If courts determine that participants have ownership rights in virtual items in which the TOS purports not to grant property rights, that would create a tax issue even for those who participate in Second Life purely for entertainment, unfortunately. Thus, if virtual items become

²³⁰ Information reporting poses administrative difficulties and is likely to be resisted by game owners. See *supra* text accompanying note 212.

virtual property owned by virtual world participants, lawmakers should consider providing nonrecognition for these types of swaps, as well as for trades within game worlds.

In contrast with the hypothetical exchange of a copy of a virtual T-shirt for a copy of a virtual pair of jeans, trades for Lindens may or may not be profit-oriented. A participant who regards Second Life as a game may use Lindens as a medium of exchange,²³¹ selling some items and buying others, so as to better equip his or her avatar. Another participant, though, may create a business in Second Life, selling copies of items for Lindens in an effort to earn money.

From a policy perspective, the right result is not to tax mere entertainment but to tax profit. Making sales for Lindens taxable does that because only net profit is subject to federal income tax. A Second Life resident who spends a lot, building up a rich realm online, while also selling copies of creations that partially subsidize those expenditures, will owe no federal income tax on the sales because the Code allows a taxpayer to deduct expenditures in a hobby up to the amount of income from that hobby.²³² The net result, for example, if, in a particular year, Ben, the dentist, spent \$800 on purchasing Second Life items for his avatar, and also earned \$500 from in-world sales of copies of his virtual T-shirts, would be that he would have no gross income from his Second Life sales.

Of course, it would be possible to treat Second Life like a game world, not taxing until cash-out transactions in which Lindens are received. Some might argue that a cash-out rule in Second Life would best distinguish the profiteers from the players, much as a cash-out rule does for game worlds. There are two problems with that approach. First, as a doctrinal matter, profits are taxable even on non-business activities, such as hobbies.²³³ Second, unlike most game worlds, Second Life is intentionally designed to provide a platform for commerce. The permissible and easy exchange of Lindens for dollars makes Lindens much more liquid than game-world currencies.²³⁴ That liquidity gives rise to tax avoidance opportunities.

²³¹ Cf. Dodge, *supra* note 190, at 678 (referring to “‘local’ medium of exchange” in context of casino chips).

²³² I.R.C. § 183(b) (West 2006).

²³³ See I.R.C. § 61(a) (West 2006) (defining “gross income” extremely broadly); I.R.C. § 61(a)(3) (including in gross income gains from dealings in property, without regard to nature of those gains).

²³⁴ Because Second Life encourages commerce by its users, it has an incentive to strive to maintain the stability and liquidity of its currency. Cf. Jonathan R. Macey & Geoffrey P. Miller, *Toward an Interest-Group Theory of Delaware Corporate Law*, 65 TEX. L. REV. 469, 488 (1987) (“The best argument for how Delaware has been able to retain its dominance [in the competition for corporate charters] is that it offers a reliable promise—one

For example, a taxpayer could accept Lindens in return for services or sales of real world items.²³⁵ Those transactions would clearly be taxable; there is no argument that a real world item a taxpayer owns provides the same legal entitlements as Lindens. However, it would be hard to enforce payment of taxes on those transactions if sales of virtual items for Lindens were untaxed, because it would be hard for the government to detect which Linden transfers are for real world items and which are for virtual ones.

The scope of the enforcement problem would likely grow precipitously if the government declared an intent not to tax the exchange of virtual items for Lindens. Second Life has already attracted significant investment.²³⁶ The prospect of tax-free commerce would likely accelerate that trend and give businesses an incentive to accept Lindens as a form of electronic payment, particularly given the likely misunderstanding about which sales for Lindens were truly tax-exempt.

As small businesses open or add Lindens to the forms of payment they accept, the likely confusion about the ambit of the tax exemption would result in some unintentional noncompliance, particularly by small businesses without a professional tax advisor. For example, a company might sell website-design services online and believe that by accepting Lindens for something other than a tangible product, its income would not be taxable, despite the fact that federal income tax law taxes income from services regardless of the form of payment.²³⁷ A company that sells within Second Life a product deliverable online,

that cannot be matched by its competitors—that its corporation law will remain highly attractive to managers in the future.”). For a discussion of Second Life’s management of the LindeX, see Grace Wong, *How Real Money Works in Second Life*, CNNMONEY.COM, Dec. 8, 2006, http://money.cnn.com/2006/12/08/technology/sl_index/index.htm.

²³⁵ VTOR (Virtual to Reality), a site for advertising for real and virtual goods, accepts and prefers Linden dollars (Lindens). VTOR, <http://www.vtoreality.com/advertising> (last visited Aug. 10, 2007). Federated Media (FM), an advertising company, also accepts Lindens. New World Notes (Mar. 31, 2006), http://nwn.blogs.com/nwn/2006/03/meeting_lovisa.html (“After explaining to the FM staff how easy it is to convert L\$ to US\$ and then transfer that to their Paypal account, they gamely assented to take Linden Dollars in lieu of currency.”). The online store Second Life Boutique had a section devoted to “real life products.” Stephen Totilo, *Finally, You Can Buy Something Real with Play Money*, MTV, Jan. 19, 2006, <http://www.mtv.com/news/articles/1521239/20060119/index.jhtml>. In addition, Dynamedia Marketing and Pizza.Net reportedly partnered to allow customers to order real world pizza in Second Life using Lindens. Press Release, Dynamedia Mktg., *Pizza Enters the Virtual World of Second Life* (Apr. 21, 2007), available at <http://www.fastpitchnetworking.com/pressrelease.cfm?PRID=8734>.

²³⁶ See *supra* note 4 and accompanying text.

²³⁷ See Treas. Reg. § 1.61-1(a) (1960) (“Gross income includes income realized in any form, whether in money, property, or services. Income may be realized, therefore, in the form of services, meals, accommodations, stock, or other property, as well as in cash.”); see also Kerry Lynn Macintosh, *How to Encourage Global Electronic Commerce: The Case for*

such as software or music downloads, might similarly be mistaken about tax liability.

If sales of virtual items for Lindens were untaxed, the enforcement difficulties would also give rise to opportunities for intentional tax evasion. A taxpayer could, for example, set up a virtual shopping cart in Second Life that appears to sell copies of a virtual item, with information circulated outside of Second Life, perhaps by e-mail or on a website, specifying what each virtual item represents in the real world—the real item or service promised. Of course, such a scheme carries with it transaction costs, but the evaded taxes, especially on high-priced items, might justify such costs for the seller. Moreover, the seller, by failing to pay the income tax due on such a transaction, could reduce the price of the product by a portion of the taxes avoided, thus undercutting compliant businesses. Accordingly, failure to tax this sector of the economy would likely result in an excessive allocation of resources to it.²³⁸

The development of barter clubs in the 1970s provides an excellent analogy to the likely development of Second Life under a regime in which sales for Lindens are not taxed. Although isolated barter transactions between two individuals present a small enforcement issue for the tax system, if the tax law is not enforced in this regard, wide-scale barter exchanges that facilitate tax evasion can flourish.

Barter clubs typically use a form of credits as a medium of exchange,²³⁹ allowing virtually any product or service to be traded for any other without the use of cash²⁴⁰ through the use of what is essentially a local currency. At one time, these large-scale exchange organizations posed a problem for tax enforcement:

The barter exchanges of 20 and 30 years ago boasted that they provided a way for business people to avoid taxes. This aroused IRS

Private Currencies on the Internet, 11 HARV. J.L. & TECH. 733, 790 n.215 (1998) (noting that use of internet currencies does not preclude taxation under existing laws).

²³⁸ See Leandra Lederman, *The Interplay Between Norms and Enforcement in Tax Compliance*, 64 OHIO ST. L.J. 1453, 1506 (2003) (“[S]ectors of the economy that provide a greater opportunity for tax evasion may draw more investment than they would in the absence of a tax system, potentially resulting in an inefficient allocation of resources.”).

²³⁹ See Rev. Rul. 80-52, 1980-1 C.B. 100 (describing use of “credit units” by barter club); Robert I. Keller, *The Taxation of Barter Transactions*, 67 MINN. L. REV. 441, 480 (1982) (describing use of “trade units” by barter clubs).

²⁴⁰ See, e.g., *Baker v. Comm’r*, 88 T.C. 1282, 1286 (1987) (describing barter club’s accounting for, among other things, attaché cases, computer paper, janitorial services, Muzak services, silver bars, ski tickets, tires, and veterinary services); *id.* at 1287 (“The operations manual petitioner received from Exchange Enterprises, Inc.[.] . . . suggests that no more than two accountants, one architect, one artist, three auto body repair shops, two bakeries, five electricians, three florists, and one insurance agent be allowed to join the same barter exchange.”).

interest, years of pitched battle, and finally legislation subjecting barter exchanges to stringent reporting requirements. Since 1982, U.S. tax law has required barter exchanges to file reports on their transactions with customers under section 6045 and to institute backup withholding procedures for their customers under section 3406.²⁴¹

The use of information reporting holds promise to foster compliance on taxable transactions within unscripted worlds like Second Life. Like game companies,²⁴² and even eBay,²⁴³ Linden Lab may resist efforts to impose such reporting. However, unlike game worlds, Second Life does not involve loot drops, which may be hard to value. Information reporting could require Linden Lab to track the Lindens users receive from other participants and to report annual receipts of any participant that aggregate in excess of a reporting threshold, such as \$600, using the LindeX for valuation.

One argument against such a reporting requirement is that it might deter entrepreneurial activity in the form of start-up unscripted virtual worlds. A possible response would be to include in an information-reporting law an exception for unscripted worlds under a certain size, in terms of income or value. Tax evaders might be drawn to the world lacking information reporting, but that would fuel growth that should bring the world above the reporting threshold, allowing the problem to correct itself. Of course, start-up companies, anticipating this, would be well advised to design into the software the ability to track transactions for information-reporting purposes, rather than having to retrofit it later.

A conceptual problem that taxing sales for Lindens raises is how to treat acquisitions that use Lindens as consideration. If an exchange of an item copy for Lindens is barter, then the person transferring the Lindens would seem to face taxation as well. Yet, spending of Lindens resembles a purchase, which is not the occasion for taxation

²⁴¹ Burgess J.W. Raby & William L. Raby, *Barter Transactions and the Tax Collector*, 77 TAX NOTES 949, 949 (1997).

For some of the Congressional and IRS response to the rise of barter clubs, see Tax Equity and Fiscal Responsibility Act of 1982, Pub. L. No. 97-248, § 311(b), 96 Stat. 324, 600 (codified as amended at I.R.C. § 6045 (West 2006)); Rev. Rul. 83-163, 1983-2 C.B. 26; Rev. Rul. 80-52, 1980-1 C.B. 100; Rev. Rul. 79-24, 1979-1 C.B. 60. The government not only instituted information reporting, but also began enforcement projects that included the issuance of “John Doe” summonses to barter exchanges to find out the names of clubs’ members. See Keller, *supra* note 239, at 487–88 (“The Service has generally been successful in enforcing its John Doe summonses against the Trade Exchanges.”).

²⁴² See *supra* text accompanying note 212.

²⁴³ See Declan McCullagh & Anne Broache, *Selling Stuff Online? Here Comes the IRS*, CNET NEWS.COM, Apr. 13, 2007, http://news.com.com/Selling+Stuff+online+Here+comes+the+IRS/2100-1028_3-6176041.html (describing opposition of eBay and similar sites).

under the federal income tax. Moreover, those using Second Life for entertainment purposes have little choice but to spend Lindens if they wish to acquire additional virtual items.

Professor Robert Keller argued that “trade units” in large national barter clubs should be treated “as a medium of exchange. Under this approach, the goods and services acquired would be conclusively assumed to be equal in value to that of the trade units used to acquire them. Good deals and bad deals would simply be ignored.”²⁴⁴ Professor Keller made that argument in the context of barter clubs with trade units that do not fluctuate in value. He explained that for clubs with fluctuating units, gain or loss would be recognized on the units’ use, and argued that “[f]or administrative simplicity, taxpayers should determine gain or loss on the disposition of a trade unit under a last-in-first-out (LIFO) method of identifying the units disposed of.”²⁴⁵

Professor Keller’s approach to barter clubs with credit units that do not fluctuate in value makes sense for Second Life. Although taxing the disposition of Lindens would more accurately reflect a taxpayer’s economic profit, it would be at a cost of additional complexity and substantial required recordkeeping. Unlike the barter club members Professor Keller discussed, which were businesses,²⁴⁶ at this point, most Second Life residents are individuals. Moreover, these rules would spare those using Second Life purely for entertainment from potentially onerous tax compliance burdens. Taxing dispositions of Lindens would impose an unnecessary drain on Second Life as an entertainment vehicle while at the same time being difficult to enforce—and no doubt extremely unpopular.

CONCLUSION

Should in-game receipts and profits from virtual trades be taxed? Many people would likely respond that they should not be. In fact, the Chairman of the Joint Economic Committee, Representative Jim Saxton, has gone on record with that view.²⁴⁷ Virtual economies and transactions within virtual worlds are not all the same, however. There is a strong case from a policy perspective for not taxing in-game receipts and trades within game worlds, including sales within those games for virtual currency. Game worlds typically focus on con-

²⁴⁴ Keller, *supra* note 239, at 500–01 (footnotes omitted).

²⁴⁵ *Id.* at 506.

²⁴⁶ *Id.* at 502–03.

²⁴⁷ Saxton Says Taxing Online Communities Would Be a “Mistake,” TAX NOTES TODAY, Oct. 17, 2006, available at <http://www.lexis.com> (commercial electronic database requiring registration) (enter “2006 TNT 201-21” in “Get by Citation”).

quering challenges, not on commerce. The real world value that exists for in-game items as a result of trading by some players (often in a gray market because such trade is banned by the game owner) should not transform game-world successes into gross income. Doing so would raise serious concerns of equity and administrability.

By contrast, unscripted worlds that are designed to support commerce, such as *Second Life*, raise different issues. *Second Life* encourages its participants to make creations and sell copies of them and facilitates those activities both by allowing participants to retain their intellectual property rights in their creations and by facilitating the conversion of *Second Life*'s currency, Lindens, into U.S. dollars. Although *Second Life* has aspects that are game-like, and those should not be taxed, it is also a platform, similar to eBay, that facilitates transactions online. Failing to tax sales for Lindens would likely give rise to the twenty-first century's equivalent of barter clubs, fostering both unintentional noncompliance and conscious evasion. It would also attract overinvestment in that sector of the economy.

The *Second Life* transactions that this Article argues should be taxed do not raise the difficult valuation issues that game worlds do for two reasons. First, *Second Life* lacks "drops" of virtual items that a player may receive but never sell. Second, the *LindeX* tracks the exchange rate of Lindens on a particular day, making the valuation of Lindens (the currency received in a sale) fairly straightforward. In addition, because *Second Life* permits the exchange of Lindens for U.S. dollars, *Second Life* participants do not face the same liquidity problems that game-world participants do. Taxpayers can exchange Lindens for cash via the *LindeX* easily and with the blessing of *Second Life*'s owner, Linden Lab.

It is not entirely clear that current tax law reaches all of the results that this Article advocates, because it is not clear whether virtual items are participants' property. Although recognition of property rights for players would not change the tax result for loot drops (which should be excludible under either paradigm), it would affect the results for exchanges of virtual items. If players are merely entitled to use virtual items within a game, an exchange of those items should not constitute a realization event. However, if players win the virtual property battle with game owners, then exempting from taxation both barter in game worlds and similar trades in worlds like *Second Life* (that is, trades for virtual items other than currency) may require legislation. Laws along these lines, which neither tax mere entertainment value nor open the door to tax evasion through virtual

world transactions, will foster game-play without allowing commerce to escape taxation simply because it is conducted in a particular venue online.