

CONTENT CREATORS, VIRTUAL GOODS: WHO OWNS VIRTUAL PROPERTY?♦

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INTRODUCTION

In 2010, Jon Jacobs sold Club Neverdie, a virtual space station in a massive multiplayer online (“MMO”) gaming platform, *Entropia Universe*.¹ The \$635,000 purchase price made it the most valuable virtual good sold over the Internet to date.² In 2005, Jacobs bought the virtual space station for \$100,000 using a mortgage on his real-world house; he managed the virtual property for five years, turning Club Neverdie into one of the most popular, must-visit attractions in the game.³ Although few would consider spending such a significant sum on a single piece of virtual property, many consumers spend real currency on virtual goods and property every day.

In 2013, surveys conducted by the Entertainment Software Association found that fifty-eight percent of Americans play videos games, which amounted to consumer spending of over \$20 billion in 2012.⁴ As the number of people who gain access to computer devices and broadband Internet increases, the number of potential gamers correspondingly increases.⁵ In recent years, the online gaming phenomenon has exploded as games have become easily available on a variety of platforms including cellphones, tablets, personal computers, and dedicated game consoles.⁶ Compared to other online activities, Internet users are accessing online games more often than they are watching television shows or streaming music.⁷

Game developers have noted the tremendous growth and profit potential within the gaming industry as a whole.⁸ Additionally,

¹ Oliver Chiang, *Meet the Man Who Just Made a Half Million from the Sale of Virtual Property*, FORBES (Nov. 13, 2010, 7:20 PM), <http://www.forbes.com/sites/oliverchiang/2010/11/13/meet-the-man-who-just-made-a-cool-half-million-from-the-sale-of-virtual-property/>.

² *Id.*

³ *Id.*

⁴ See ENTMT SOFTWARE ASS'N, 2013 SALES, DEMOGRAPHIC AND USAGE DATA—ESSENTIAL FACTS ABOUT THE COMPUTER AND VIDEO GAME INDUSTRY 11 (2013), http://www.isfe.eu/sites/isfe.eu/files/attachments/esa_ef_2013.pdf.

⁵ Since a broadband Internet connection is often required to access online games, obtaining a broadband connection allows consumers to become potential gamers since it allows them to access games that they did not previously have. For example, “[The] initial set-up, updates, and some games and features [for Xbox One] require broadband Internet.” *Get More with Xbox One.*, XBOX, <http://www.xbox.com/en-US/xbox-one/get-the-facts> (last visited Feb. 21, 2016). Further, a report conducted by the Pew Research center found that “[b]roadband users are slightly more likely to play for longer periods of time than teens who reside in homes without broadband.” Amanda Lenhart et al., *Part 1.1: Who is Playing Games?*, PEW RESEARCH CTR. (Sept. 16, 2008), <http://www.pewinternet.org/2008/09/16/part-1-1-who-is-playing-games/>.

⁶ See ENTMT SOFTWARE ASS'N, *supra* note 4, at 4.

⁷ *How Mobile is Shaping Global Digital Behavior*, EMARKETER (June 24, 2013), <http://www.emarketer.com/Article/How-Mobile-Shaping-Global-Digital-Behavior/1009995>.

⁸ Dean Takahashi, *The DeanBeat: If You Blinked, You Don't Know How Big the Mobile Gaming Industry Has Become*, VENTUREBEAT (May 9, 2014, 8:00 AM), <http://venturebeat.com/2014/05/>

advances in computing power⁹ and broadband Internet¹⁰ have allowed game developers to create increasingly complex video games with immersive and elaborate virtual worlds. These complex video games allow players to create and customize in-game avatars and characters by purchasing virtual property (such as weapons, buildings, and vehicles) with real-world currency.¹¹ Recently, Robert Kotick, CEO of Activision Blizzard, Inc.,¹² revealed that his company spent approximately half a billion dollars on the development of the game *Destiny*,¹³ shattering the previous record of \$260 million set in 2013 by Take-Two Interactive's development of *Grand Theft Auto V*.¹⁴ Traditionally, game developers relied solely on subscription-based profit models or conventional retail sales of their games in order to recover their development costs. However, many game developers adopted aspects of the "freemium" business model¹⁵ and employed microtransactions as a way to increasingly harness market share and maintain profits by allowing gamers to purchase virtual goods and property with real-world currency.¹⁶

As game developers progressively move towards business practices that incorporate elements of the "freemium" business model, one principal question emerges: are there inherent ownership rights in

09/the-deanbeat-if-you-blinked-you-dont-know-how-big-the-mobile-gaming-industry-has-become/.

⁹ Historically, as computing power advances with each console generation, gamers are able to experience an increased magnitude of depth that was not possible with the previous console generation. See Kyle Orland, *Does the Power of Today's Consoles Keep Up with Historical Trends?*, ARS TECHNICA (Nov. 11, 2013, 10:00 AM), <http://arstechnica.com/gaming/2013/11/does-the-power-of-todays-consoles-keep-up-with-historical-trends/>.

¹⁰ Game developers often view limited broadband Internet speeds as an obstacle to developing better games. See Mike Hibberd, *Games Industry is "Fighting Broadband"*, TELECOMS.COM (Oct. 17, 2012, 2:56 PM), <http://telecoms.com/50996/games-industry-is-fighting-broadband/>.

¹¹ See discussion *infra* Part III.B.

¹² Activision Blizzard, Inc. is one of the world's largest game developers and is the producer of the *Call of Duty* and *World of Warcraft* games series. See *Our Company*, ACTIVISION BLIZZARD, <http://www.activisionblizzard.com/about-us> (last visited Feb. 21, 2016).

¹³ *Destiny* is a Massively Multiplayer Online First-Person Shooter video game developed by Bungie. See Andrew Webster, *'Destiny' is a Beautiful Mess*, VERGE (Sept. 15, 2014, 10:54 AM), <http://www.theverge.com/2014/9/15/6144523/destiny-review>. *Destiny* is the first game of its kind that merges elements of a fast paced first-person shooter with the immersive worlds usually associated with MMOs. *Id.* *Destiny* also allows players to fully customize their in-game character by modifying how the character looks and acts. *Id.*

¹⁴ Ronald Grover & Malathi Nayak, *Activision Plans \$500 Million Date with 'Destiny'*, REUTERS (May 6, 2014, 12:50 PM), <http://www.reuters.com/article/2014/05/06/us-activision-destiny-idUSBREA4501F20140506>.

¹⁵ Generally, the freemium business model is a revenue model commonly employed by Internet companies where the vast majority of consumers use the company's product for free and a minority pay for extra features. Pascal-Emmanuel Gobry, *Explainer: What is the Freemium Business Model?*, BUS. INSIDER (Apr. 8, 2011, 2:59 PM), <http://www.businessinsider.com/what-is-the-freemium-business-model-2011-4>.

¹⁶ *Technology Spotlight—Recognizing Revenue from Sales in a Virtual World*, DELOITTE (May 9, 2013), <http://www.iasplus.com/en-us/publications/us/industry-spotlight/tech/tech-spotlight-issue-4>.

virtual goods and property acquired by exchanging real world currency? Further, as game developers encourage consumers to design and create in-game virtual goods, does the consumer subsequently obtain an ownership right in these virtual goods?

This Note argues that the current regime governing virtual property,¹⁷ under Terms of Service (“ToS”) and End User Licensing Agreements (“EULAs”), is inadequate. Instead, the law should first identify virtual goods that warrant ownership rights and then extend copyright law to grant ownership protection to the end-user. Virtual goods are items of real value for which end-users should be assigned ownership rights. This Note explores whether consumers obtain ownership rights in virtual property that they purchase or create online.

Part I of this Note presents the historical background of the presence of virtual property within games. Part II explains the current contractual regime governing the ownership rights of virtual goods and highlights elements of unconscionability associated with enforcing EULAs and ToS agreements deployed by game developers. Part III discusses the need to replace the existing contractual regime and suggests that courts adopt a multifactor test to determine whether a piece of virtual property deserves consumer ownership rights. This section also proposes that copyright law should govern consumer ownership rights of virtual property in sufficiently user-contributed creative works as a stopgap solution in lieu of a separately developed virtual property right regime. Lastly, Part IV discusses the benefits and problems associated with adopting alternative regimes, such as a personal property regime, instead of a copyright regime.

I. INTANGIBLE GOODS, TANGIBLE VALUE

A. *What Is the “Freemium” Business Model and How Does It Relate to Virtual Goods?*

The term “freemium” is a hybrid of the words “free” and “premium” and is used to describe a business model in which a developer allows a large group of users to use his or her product at no cost (or for a small fee) but also sells a portion of the user base a premium or enhanced product at a cost.¹⁸ The sale of the premium product is the revenue-producing aspect of the business model and is generated through “microtransactions,”¹⁹ which are the sale of virtual

¹⁷ See discussion *infra* Part I.B.

¹⁸ *What is Freemium?*, FREEMIUM.ORG, <http://www.freemium.org/what-is-freemium-2/> (last visited Feb. 21, 2016).

¹⁹ The term “microtransactions” is commonly referred to as “in-app purchases” (or simply “IAP”) for mobile games where goods or services are purchased within the mobile application. Users will conduct in-app purchases to obtain special features, characters, or other types of virtual property. Forrest Stroud, *In-app Purchase*, WEBOPEDIA, <http://www.webopedia.com/TERM/I/in->

goods or services in exchange for real-world currency.²⁰ Use of the freemium business model plays an especially prominent role in the mobile segment of the gaming industry.²¹ In 2013, free applications with in-app purchases (microtransactions) generated seventy-nine percent of American app store revenues.²² Additionally, as of September 2014, game developer Supercell's *Clash of Clans* for iOS is the top grossing game in Apple's App Store with a daily revenue estimate of \$1.3 million.²³ Although *Clash of Clans* is free to download and play, the developer offers microtransactions where a player can pay for virtual goods: \$4.99 for a "pile of gems" or up to \$99.99 for a "chest of gems."²⁴ In more complex games, the initial purchase price is usually more expensive. For example, a copy of *Grand Theft Auto V* has an initial cost of \$60.²⁵ However, aspects of the freemium business model have been incorporated into *Grand Theft Auto V*: consumers can exchange \$99.99 (USD) for eight million Grand Theft Auto dollars (GTA\$)²⁶ in order to purchase airplanes, acquire mansions, and customize their avatar's clothing and sports cars.²⁷ As game developers exceedingly adopt the freemium business model not only in simple mobile-based games but also in intricate console-based games, consumers will continue to exchange their real world currency for virtual goods.²⁸

B. What Are Virtual Goods and Virtual Property?

Virtual goods are "nonphysical objects that enhance the gamer's playing experience or ability to make progress in the game" and may take the form of health, clothing, buildings, weapons, and vehicles.²⁹ The lifespan of virtual goods vary: some take the form of one-time use (consumable power-ups) while others confer a more permanent effect

app_purchase.html (last visited Feb. 21, 2016).

²⁰ DELOITTE, *supra* note 16.

²¹ See Christel Schoger, *How the Most Successful Apps Monetize Globally*, DISTIMO (Feb. 2014), <http://www.lateledipenelope.it/public/54c9162c2ddfc.pdf>.

²² *Id.* at 4.

²³ *Clash of Clans*, THINK GAMING, <http://thinkgaming.com/app-sales-data/1/clash-of-clans/> (last visited Feb. 21, 2016).

²⁴ *Clash of Clans*, iTUNES PREVIEW, <https://itunes.apple.com/us/app/clash-of-clans/id529479190> (last visited Feb. 21, 2016).

²⁵ Claudia Lorenzo, *Why GTA V Costing \$60 on PS4/Xbox One Makes Absolute Perfect Sense*, TWINFINITE (Sept. 17, 2014), <http://www.twinfinitive.net/2014/09/17/gta-v-costing-60-ps4xbox-one-makes-sense/>.

²⁶ Akash KJ, *GTA 5: Megalodon Shark Cash Offers Players \$8 Million in GTA Online*, INT'L BUS. TIMES (Mar. 29, 2014, 11:29 AM), <http://www.ibtimes.co.uk/gta-5-megalodon-shark-cash-offers-players-8-million-gta-online-1442447>.

²⁷ Vinod Yalburgi, *GTA 5 Online: Top Tips to Spend Rockstar's \$500,000 Stimulus Package*, INT'L BUS. TIMES (Nov. 10, 2013, 10:03 AM), <http://www.ibtimes.co.uk/gta5-online-tips-spend-rockstar-500000-stimulus-520959>.

²⁸ Chris Cox, *The Rise of Freemium Gaming*, TECHTALK, 3d. ed. 2012, at 21.

²⁹ DELOITTE, *supra* note 16.

and last indefinitely in the game.³⁰ Generally, game developers create virtual goods, but some games allow users to create, customize, and improve virtual goods as Jacobs did to Club Neverdie in *Entropia Universe*.³¹ While virtual goods are intangible by definition and are the result of lines of code and graphic design, virtual goods can be purchased or sold using real currency or in-game currency.³²

In order to facilitate the sale and exchange of virtual goods, some game developers have developed virtual marketplaces with virtual economies. In other games, third parties have created virtual marketplaces where players can sell and trade virtual goods and services.³³ For example, Steam, the game developer for game titles *Counter-Strike* and *DotA 2*, created the “Steam Marketplace” to enable players to trade virtual goods or sell them for “Steam Wallet funds” within the Steam Marketplace.³⁴ In contrast, Blizzard Entertainment’s *World of Warcraft* has an official auction house, but numerous third parties created secondary auction houses where players can sell their virtual goods in exchange for real currency.³⁵

C. Why Do Gamers Spend So Much Money on Virtual Goods and Property?

Gamers spend large amounts of money on virtual goods for numerous and varying reasons. In *Clash of Clans*, gems function as an in-game virtual currency and can be used to upgrade weapons, bypass obstacles, unlock rare items, and obtain in-game resources.³⁶ Jeremy Liew, Director of Lightspeed Venture Partners, argues that gamers buy virtual goods for the same reasons they buy tangible goods in the real world: (1) to be able to do more; (2) to build relationships; and (3) to establish identity.³⁷ Liew first suggests that gamers spend real currency on virtual goods in order to overcome difficult levels and obtain a better

³⁰ *Id.*

³¹ *Entropia Platform*, MINDARK, <http://www.mindark.com/mindarks-offer/entropia-platform/> (last visited Feb. 21, 2016).

³² DELOITTE, *supra* note 16, at 2.

³³ Dean Takahashi, *SwapMob Raises \$1M for In-Game Virtual Goods Marketplace*, VENTUREBEAT (July 25, 2013, 5:00 AM), <http://venturebeat.com/2013/07/25/swapmob-raises-1m-for-in-game-virtual-goods-marketplace/>.

³⁴ See *Steam Community Market*, STEAM, <https://steamcommunity.com/market/> (last visited Feb. 21, 2016).

³⁵ See *Sell Your MMO Account*, GAMESUPPLY, <http://www.thegamesupply.net/trade/mmoaccounts/> (last visited Nov. 9, 2015); *PLAYERAUCTIONS*, <http://www.playerauctions.com/> (last visited Feb. 21, 2016); *Battle.net Shop*, BLIZZARD ENTM’T, <https://us.battle.net/shop/en/> (last visited Feb. 21, 2016).

³⁶ *Gems*, CLASH OF CLANS WIKIA, <http://clashofclans.wikia.com/wiki/Gems> (last visited Feb. 21, 2016).

³⁷ Jeremy Liew, *Why Do People Buy Virtual Goods?*, WALL ST. J. (Feb. 9, 2009, 12:01 AM), <http://online.wsj.com/articles/SB123395867963658435>.

score.³⁸ Additionally, gamers may spend real currency on virtual goods because they are impatient and do not want to spend time “farming resources.”³⁹ Next, Liew points out that virtual goods are used to forge friendships and build upon existing relationships; this is especially apparent when one gamer gifts a virtual good to another player.⁴⁰ Lastly, gamers purchase virtual goods in order to establish a sense of identity, uniqueness, and to “show-off” in virtual worlds, such as when a player drives a customized car in a video game.⁴¹

In sum, virtual goods are exchanged, sold, created, and modified by players for real currency and therefore possess real value.⁴² As game developers strive to adopt core principles of the freemium business model and continue to exchange virtual goods for real currency in microtransactions, the ownership status of virtual goods and services remains ambiguous and unsettled under the current contractual regime.

II. THE GAMING INDUSTRY’S RELIANCE ON THE CONTRACTUAL REGIME

As the exchange of virtual goods for real currency continues to grow, game developers continue to rely on contract law principles to regulate and control the transfer and ownership rights of virtual property in their virtual worlds.⁴³ Game developers have extensively relied on EULAs and ToS agreements as the foundation for their legal protections. At their core, EULAs and ToS agreements represent contractual agreements between the end-user and the developer that describe the respective rights and remedies that the end-user and developer possess.⁴⁴ However, there are some unconscionability arguments against the enforceability of EULAs and ToS agreements.

An unconscionable contract is one that is unenforceable because no reasonable person would agree to it.⁴⁵ Within the concept of contract unconscionability, two elements are present: (1) procedural

³⁸ *Id.*

³⁹ “Farming resources” is a term used by gamers to refer to the labor and time intensive process of repeatedly completing an in-game action in order to receive rewards, usually in the form of experience points or in-game currency. See *Farming*, TECHOPEDIA, <http://www.techopedia.com/definition/19278/farming> (last visited Feb. 21 2016).

⁴⁰ Liew, *supra* note 37.

⁴¹ *Id.*

⁴² See Nelson DaCunha, *Virtual Property, Real Concerns*, 4 AKRON INTELL. PROP. J. 35, 43–44 (2010) (since real money is being spent on virtual worlds, consumers need ownership protection).

⁴³ 24 MICHAEL D. SCOTT, SCOTT ON MULTIMEDIA LAW § 24.10 (rev. ed. 2014).

⁴⁴ Christopher J. Cifrino, *Virtual Property, Virtual Rights: Why Contract Law, Not Property Law, Must Be the Governing Paradigm in the Law of Virtual Worlds*, 55 B.C. L. REV. 235, 243 (2014).

⁴⁵ The official comment to Uniform Commercial Code Section 2-301, Unconscionable Contract or Term, states: “Courts have been particularly vigilant when the contract at issue is set forth in a standard form. The principle is one of prevention of oppression and unfair surprise and not of disturbance of allocation of risks because of superior bargaining power.” U.C.C. § 2-301 cmt. 1 (2012).

unconscionability; and (2) substantive unconscionability.⁴⁶ Procedural unconscionability refers to “procedural deficiencies in the contract formation process, such as deception or a refusal to bargain over contract terms . . . [and involves an inquiry as to] whether the imposed-upon party had meaningful choice about whether and how to enter into the transaction.”⁴⁷ The second element, substantive unconscionability, refers to “the substantive contract terms themselves and whether those terms are unreasonably favorable to the more powerful party, such as terms that impair the integrity of the bargaining process or otherwise contravene the public interest or public policy.”⁴⁸ Applying the elements of unconscionability to the characteristics of EULAs and ToS agreements employed by game developers, it becomes apparent that, at a minimum, the current contractual regime administering virtual goods neglects the rights of end-users.

A. *Procedural Unconscionability in EULAs and ToS Agreements*

Nearly universally, game developers require individual end-users to agree to their EULAs and ToS agreements before the end-user can participate in the video game. For example, Microsoft requires Xbox users to agree to their ToS agreement without modification; the ToS agreement states “[i]f you do not agree, you may not use the Services.”⁴⁹ These types of agreements are not unique to Microsoft and are also employed by other game developers such as Steam⁵⁰ and Blizzard.⁵¹ Known as “click-wrap agreements,” these agreements are “formed entirely in an online environment such as the Internet, which sets forth the rights and obligations between parties.”⁵² The term is

⁴⁶ 8 SAMUEL WILLISTON & RICHARD A. LORD, WILLISTON ON CONTRACTS § 18:10 (4th ed. 1990).

⁴⁷ *Id.*

⁴⁸ Further, substantive unconscionability refers to terms (usually of an adhesion or boilerplate nature) that attempt to alter in an impermissible manner fundamental duties otherwise imposed by the law, fine-print terms, or provisions that seek to negate the reasonable expectations of the nondrafting party, or unreasonably and unexpectedly harsh terms having to do with price or other central aspects of the transaction.

Id.

⁴⁹ *Xbox Live Terms of Use*, XBOX, <http://www.xbox.com/en-US/Legal/LiveTOU> (last visited Nov. 10, 2014) [hereinafter *Xbox User Agreement*]; see also *Terms & Conditions*, MINICLIP, <http://www.miniclip.com/terms> (last visited Nov. 9, 2015) [hereinafter *Miniclip Agreement*] (“Your use of the Miniclip SA’s Miniclip.com website and/or use of Miniclip SA games, software, applications, products or services signifies your acceptance of these Terms and Conditions and constitutes a legally binding acceptance of this agreement. If you do not agree to these conditions you are not allowed to access or use Miniclip SA’s websites, games.”).

⁵⁰ *Steam Subscriber Agreement*, STEAM, http://store.steampowered.com/subscriber_agreement/ (last updated June 2, 2015).

⁵¹ *Battle.net® End User License Agreement*, BLIZZARD ENTMT, http://us.blizzard.com/en-us/company/legal/wow_eula.html (last updated Feb. 28, 2015).

⁵² Francis M. Buono & Jonathan A. Friedman, *Maximizing the Enforceability of Click-Wrap Agreements*, 4 J. TECH. L. & POL’Y 3, *1 (1999).

derived from the action when a consumer uses his or her mouse to click an on-screen button (such as “I accept” or “I agree to the Terms of Service”) to signal to the game developer that the consumer accepts the provisions of the contract.⁵³ As a result of the EULAs and ToS agreement structure, users are left with a Hobson’s choice: the consumer can either accept the terms of the contract as-is or else be barred from playing the game or using the service.⁵⁴

Consumers who agree to a game developer’s EULA or ToS agreement are often relinquishing rights and remedies normally available to them, such as the right to sue the game developer in a court or to have a trial before a judge and jury.⁵⁵ On April 1, 2010, 7,500 consumers agreed to “surrender [their] immortal soul” in click-wrap agreements provided by GameStation, suggesting that many of the consumers agreed to the click-wrap agreement without even skimming the contents of the agreement.⁵⁶ Although GameStation harmlessly pranked its consumers on April Fools’ Day, the gaming firm also intended to stimulate questions regarding the validity of standard form contracts such as EULAs and ToS agreements.⁵⁷

In further support against enforcing EULAs and ToS agreements, it is unclear whether the average consumer understands, or has the time to understand, the terms used within a contractual agreement.⁵⁸ Although the terms and provisions are identifiable to a lawyer or judge, if a layperson chooses to read a game developer’s EULA or ToS agreement, would they understand it? One study conducted by Carnegie Mellon University researchers found that an average Internet user would require seventy-six workdays per year to read through all of the numerous EULAs and ToS agreements that he or she encounters.⁵⁹

⁵³ *Id.*

⁵⁴ See, e.g., *Xbox User Agreement*, *supra* note 49; *Miniclip Agreement*, *supra* note 49.

⁵⁵ See *Steam Subscriber Agreement*, *supra* note 50, at ¶ 12; *Battle.net® End User License Agreement*, *supra* note 51.

⁵⁶ GameStation, a British gaming firm, included an “immortal soul clause” in its ToS agreement where users agreed to “surrender your immortal soul, and any claim you may have on it, within 5 (five) working days of receiving written notification from gamesation.co.uk [sic].” *7,500 Online Shoppers Unknowingly Sold Their Souls*, FOX NEWS (Apr. 15, 2010), <http://www.foxnews.com/tech/2010/04/15/online-shoppers-unknowingly-sold-souls/>.

⁵⁷ Luckily for the 7,500 consumers, GameStation noted that it would not enforce the immortal soul clause and intended to “make a very real point: No one reads the online terms and conditions of shopping, and companies are free to insert whatever language they want into the documents.” *Id.*

⁵⁸ The readability of EULAs as they currently exist are questionable, but some studies have shown that merely making a contract seem comprehensible to the reader increases the likelihood that the contract will actually be read. See Justin A. Kwong, *Getting the Goods on Virtual Items: A Fresh Look at Transactions in Multi-User Online Environments*, 37 WM. MITCHELL L. REV. 1805, 1834 (2011).

⁵⁹ Keith Wagstaff, *You’d Need 76 Work Days to Read All Your Privacy Policies Each Year*, TIME (Mar. 6, 2012), <http://techland.time.com/2012/03/06/you-d-need-76-work-days-to-read-all-your-privacy-policies-each-year/>; see also Alexis C. Madrigal, *Reading the Privacy Policies You*

In order to play a single game, the game developer often requires the end-user to agree to numerous standard-form contracts that possess a high level of complexity and time to complete.⁶⁰ The presence of numerous and complex standard-form contracts further supports a pivot away from the existing contractual regime.⁶¹ For example, Steam is a distribution and social media platform for gamers, developed by the Valve Corporation.⁶² Steam is not a game but merely a platform to access games such as *Counter-Strike*, which is one of the most well known games it developed. In order to play *Counter-Strike*, a user must agree to the: (1) Valve Legal Info;⁶³ (2) Valve Video Policy;⁶⁴ (3) Steam's Subscriber Agreement;⁶⁵ (4) Steam Online Conduct;⁶⁶ (5) Steam's Privacy Policy Agreement;⁶⁷ and (6) Counter-Strike's Terms and Conditions.⁶⁸ All of these documents are associated with a single game but are not aggregated in one central location, further increasing the complexity that consumers must muddle through in order to understand their rights under the contractual regime. It follows that the enforceability of click-wrap agreements is subject to extensive litigation as its use continues to rise by Internet companies.⁶⁹

One of the most hotly contested topics with respect to EULAs and ToS agreements is the enforceability of arbitration provisions.⁷⁰ By

Encounter in a Year Would Take 76 Work Days, ATLANTIC (Mar. 1, 2012), <http://www.theatlantic.com/technology/archive/2012/03/reading-the-privacy-policies-you-encounter-in-a-year-would-take-76-work-days/253851/>.

⁶⁰ See Yannis Bakos, et al., *Does Anyone Read the Fine Print? Consumer Attention to Standard-Form Contracts*, 43 J. LEGAL STUD. 1, 2 (2014) ("For many buyers, too much time is required to read and give meaningful assent, and fine print can be too difficult to understand or may seem unimportant. The central economic question is whether the fact that a majority of buyers enter standard-form contracts with this imperfect information results in a market failure: if buyers do not factor contract terms into their purchase decisions, sellers lack incentives to provide anything more than the minimally required legal protections.").

⁶¹ Bakos, et al. found that "[e]ven under generous assumptions, it is difficult to envision the probability that EULAs are read (and understood) growing even to 1 percent." *Id.* at 32.

⁶² VALVE, <http://www.valvesoftware.com/> (last visited Feb. 21, 2016) ("Valve is the creator of Steam, the pioneering game platform that distributes and manages thousands of games directly to a community of more than 65 million players around the world.").

⁶³ *Legal Info*, VALVE, <http://www.valvesoftware.com/legal.html> (last visited Feb. 21, 2016).

⁶⁴ *Legal Info—Valve Video Policy*, VALVE, <http://www.valvesoftware.com/videopolicy.html> (last visited Feb. 21, 2016).

⁶⁵ *Steam Subscriber Agreement*, *supra* note 50.

⁶⁶ *Steam Online Conduct*, STEAM, http://store.steampowered.com/online_conduct/ (last visited Feb. 21, 2016).

⁶⁷ *Privacy Policy Agreement*, STEAM, http://store.steampowered.com/privacy_agreement/ (last updated Mar. 24, 2015).

⁶⁸ *Privacy Policy*, COUNTER-STRIKE: GLOBAL OFFENSIVE, <http://counterstrike-global-offensive.com/about/privacy-policy/> (last visited Nov. 20, 2014).

⁶⁹ William J. Condon, Jr., Comment, *Electronic Assent to Online Contracts: Do Courts Consistently Enforce Clickwrap Agreements?*, 16 REGENT U. L. REV. 433, 457 (2004) ("The use of clickwrap agreements will continue to proliferate in the expanding, global Internet economy.").

⁷⁰ See generally Michael Terasaki, *Do End User License Agreements Bind Normal People?*, 41 W. ST. U. L. REV. 467, 478–81 (2014) for a discussion of the high prevalence of arbitration clauses employed in EULAs.

employing arbitration clauses in their end-user contracts, game developers are restricting the ability of consumers to remedy their injuries through courts of law.⁷¹ For example, Steam's licensing agreement states in relevant part:

You and Valve agree to resolve all disputes and claims between us in individual binding arbitration. That includes, but is not limited to, any claims arising out of or relating to: (i) any aspect of the relationship between us; (ii) this agreement; or (iii) your use of Steam, your account or the content and services.⁷²

The agreement further bars a consumer from being a representative of a class action or even participating as a member of an affected class.⁷³

Courts have taken different approaches to deciding the validity of arbitration agreements in EULAs and ToS agreements. In *Hill v. Gateway 2000, Inc.*, the Seventh Circuit found that the ToS agreement in a product package—which stated that any disagreement regarding the sale should be referred to an arbitration proceeding unless the computer was returned within thirty days—was binding on a consumer who did not return the computer.⁷⁴ However, in *Specht v. Netscape Communications Corporation*, the Second Circuit affirmed the district court's decision to deny the Internet company's motion to compel arbitration because the click-wrap agreement appeared after the consumer had already downloaded the product.⁷⁵ Most recently, in *Bragg v. Linden Research, Inc.*, the District Court for the Eastern District of Pennsylvania held that a game developer's ToS agreement satisfied both elements of unconscionability and was therefore unenforceable because: (1) the arbitration clause was hidden within the "general provisions" of the ToS agreement; (2) the ToS agreement was required for participation; and (3) the consumers had no opportunities to negotiate the terms of the agreement.⁷⁶ As evident in the above cases, although game developers exceedingly rely on the contract regime to prevent any future litigation of their issues, EULAs and ToS agreements

⁷¹ *Id.*; see also Peter J. Quinn, *A Click Too Far: The Difficulty in Using Adhesive American Law License Agreements to Govern Global Virtual Worlds*, 27 WIS. INT'L L.J. 757, 771 (2010) (finding that arbitration agreements and class action prohibitions are absent in EULAs for European servers hosting games developed by Blizzard, compared to American servers hosting the same game).

⁷² *Steam Subscriber Agreement*, *supra* note 50, at ¶ 11.

⁷³ *Id.*

⁷⁴ See *Hill v. Gateway 2000, Inc.*, 105 F.3d 1147 (7th Cir. 1997).

⁷⁵ *Specht v. Netscape Commc'ns Corp.*, 150 F. Supp. 2d 585 (S.D.N.Y. 2001) *aff'd*, 306 F.3d 17 (2d Cir. 2002).

⁷⁶ *Bragg v. Linden Research, Inc.*, 487 F. Supp. 2d 593, 607 (E.D. Pa. 2007).

themselves have become objects of litigation.⁷⁷

Procedural unconscionability “arises from inequities, improprieties, or unfairness in the bargaining process and formation of the contract”; these inadequacies suggest a lack of a real and voluntary meeting of the minds of the parties.⁷⁸ It is clear that the contractual regime employed by game developers in the form of EULAs and ToS agreements is susceptible to procedural unconscionability. Not only are consumers unable to adequately bargain with the game developers, but their rights to pursue remedies at law can be waived under the contractual regime, which may lead to little accountability for game developers to create a quality product with few glitches and errors.⁷⁹ Moreover, EULAs and ToS agreements are notorious for incorporating clauses that allow the game developer to amend the EULAs and ToS agreements at any time without notice to the user.⁸⁰ Nestled in Steam’s licensing agreement, a clause states, “Valve may amend this Agreement (including any Subscription Terms or Rules of Use) unilaterally at any time in its sole discretion.”⁸¹ Such a clause evidences the game developer’s superior contractual bargaining power over the consumers. While game developers can rely on broad provisions in their EULAs and ToS agreements, consumers are left with little rights or recourse.

B. *Substantive Unconscionability in EULAs and ToS Agreements*

Generally, substantive unconscionability involves unfairness in the terms of the contract itself and arises when a contract term is so one-sided that it has an overly harsh effect on one party.⁸² When determining substantive unconscionability, a court should consider the commercial reasonableness of the contract terms, the purpose and effect of the terms, the allocation of the risks between the parties, and public policy concerns.⁸³ Applying these standards to the characteristics of EULAs and ToS agreements clearly demonstrates that the enforceability of these contracts usually requires a case-by-case analysis.⁸⁴

Game developers are adamant about relying on the current contractual regime because it best serves their interests and deprives

⁷⁷ Condon, *supra* note 69, at 440.

⁷⁸ See *Dan Ryan Builders, Inc. v. Nelson*, 737 S.E.2d 550, 558 (W. Va. 2012).

⁷⁹ See Terasaki, *supra* note 70.

⁸⁰ Bobby Glushko, Note, *Tales of the (Virtual) City: Governing Property Disputes in Virtual Worlds*, 22 BERKELEY TECH. L.J. 507, 516 (2007) (finding that a game developer could “potentially change the terms of the contract every time the purchaser runs the program, with the only ‘assent’ required being the player’s continued use of the program.”).

⁸¹ *Steam Subscriber Agreement*, *supra* note 50, at ¶ 8.

⁸² See *Dan Ryan Builders*, 737 S.E.2d at 552.

⁸³ *Id.*

⁸⁴ Erez Reuveni, *On Virtual Worlds: Copyright and Contract Law at the Dawn of the Virtual Age*, 82 IND. L.J. 261, 290 (2007).

consumers of substantial rights.⁸⁵ Game developers view the EULAs and ToS agreements as the legal backbone needed to protect their profit interests and minimize risk to their business model.⁸⁶ Proponents of the contractual regime suggest that game developers must rely on EULAs and ToS agreements in order to “protect the integrity of the virtual world and guarantee a positive user experience” and that “[d]isruptive users could, for example, verbally harass other users or undermine the virtual-world economy, thereby driving away business.”⁸⁷ In sum, proponents of the contractual regime argue that EULAs and ToS agreements work to regulate social and behavioral norms in virtual worlds by employing them as gamer codes of conduct.⁸⁸ However, EULAs and ToS agreements unfairly shift the burden of regulating social and behavioral norms in games to individual consumers by coercing players to either follow game guidelines or else lose access to the game.⁸⁹ Do these concerns by game developers justify the enforcement of seemingly unconscionable contracts and deprivation of virtual property rights? Game developers could instead enforce social and behavioral norms, prevent cheating, and protect the integrity of the virtual world by developing more comprehensive software, creating positive incentive rewards, and formulating a network of trust among consumers who play the game.⁹⁰

Like many unilateral contracts of adhesion, EULAs and ToS agreements commonly give all property rights to the game developers

⁸⁵ See Glushko, *supra* note 80, at 517 (EULAs and ToS agreements potentially immunize developers from liability and allow developers great latitude in deciding whether or not to enforce the contract terms).

⁸⁶ Supporters of the contractual regime argue that contract law provides game developers with the necessary protection for a game to prosper through contract law’s flexibility. Cifrino, *supra* note 44, at 258. See also Andrew Jankowich, *EULAW: The Complex Web of Corporate Rule-Making in Virtual Worlds*, 8 TUL. J. TECH. & INTELL. PROP. 1, 11 (2006) (finding that EULAs and ToS agreements have become widespread because of the “relative ease and cost-effectiveness of writing a document of rules compared to the effort involved in creating a complex behavior-controlling code.”).

⁸⁷ Cifrino, *supra* note 44.

⁸⁸ See Alfred Fritzsche V, *Trespass to (Virtual) Chattels: Assessing Online Gamers’ Authority to Sell In-Game Assets Where Adhesive Contracts Prohibit Such Activity*, 8 U.C. DAVIS BUS. L.J. 235 (2007) (“MMORPG designers implement EULA contracts to control social norms and economic activity in MMORPGs. As such, EULAs serve important purposes in MMORPGs. Since MMORPGs are games that take place in a virtual world, designers have an interest in establishing the rules that govern the world. . . . EULA agreements protect, through contract principles, sociocultural norms that evade regulation through computer code.”) (footnotes omitted).

⁸⁹ Jankowich, *supra* note 86, at 46 (“The use of ambiguous and broad provisions in virtual worlds is a potent tool for proprietors because of their expansive power to terminate participant accounts. While this right is frequently tied to the violation of a EULAW provision, the expansive nature and broadness of EULAW provisions coupled with the provision that the proprietor is the final arbiter of violations makes these termination provisions virtually limitless.”).

⁹⁰ Shinobu, *A Better Way to Prevent Cheating for Online Games*, SHINOBU’S SECRETS, <http://zuttobenkyou.wordpress.com/2012/04/03/a-better-way-to-prevent-cheating-for-online-games/> (last updated Apr. 3, 2012).

and leave the individual gamer with little or no protection.⁹¹ For example, many EULAs and ToS agreements possess clauses that confer no ownership rights to gamers and allow the game developer to seize, restrict, or delete a gamer's virtual goods at any time without notice.⁹² EULAs and ToS agreements often only grant limited, terminable, and non-exclusive licenses to use the game developer's software for personal, non-commercial use.⁹³ The effect of granting terminable and non-exclusive licenses to consumers rather than issuing them property rights in the virtual property means that game developers can unilaterally terminate any progress and eliminate any cash investment a consumer has purchased in a game.

However, consumers reasonably believe that when they purchase a video game they subsequently own the game. In reality, consumers do not have any vested property interest in the game; all they have is a mere revocable license from the game developer to use the game.⁹⁴ For example, in 2014, game developer Electronic Arts, Inc. ("EA Games") decided to shut down servers for more than fifty games, which resulted in the termination of all progress consumers had achieved and barred their ability to play the game online.⁹⁵ The effect of issuing revocable licenses to consumers is simple: once the game developer finds that a game is no longer profitable or popular they can rightfully turn off all the online support for the game.⁹⁶

Even though consumers only have a revocable license in the games they purchase, game developers have increasingly encouraged players to invest in virtual property by buying items for their avatars through each game's respective marketplaces.⁹⁷ For instance, the Steam Marketplace showcases items sorted by game,⁹⁸ while *Second Life* actively encourages consumers to buy items for their avatars and to invest and develop virtual land⁹⁹ through the *Second Life*

⁹¹ See DaCunha, *supra* note 42, at 45–47.

⁹² Jankowich, *supra* note 86, at 45; see also *Steam Subscriber Agreement*, *supra* note 50, at ¶ 2(A).

⁹³ Kwong, *supra* note 58, at 1824.

⁹⁴ *Id.* at 1824–25.

⁹⁵ Some of the games that went offline included popular titles from the FIFA Soccer, Need for Speed, SimCity, and Star Wars franchises. Tom Philips, *50 EA Games Will Have Their Servers Shut Down*, EUROGAMER.NET (May 12, 2014), <http://www.eurogamer.net/articles/2014-05-12-50-ea-games-will-have-their-servers-shut-down>; see also Tom Philips, *GameSpy Servers to Shut Down Next Month*, EUROGAMER.NET (Apr. 22, 2014), <http://www.eurogamer.net/articles/2014-04-04-gamespy-servers-to-shut-down-next-month>.

⁹⁶ See Kwong, *supra* note 58, at 1824.

⁹⁷ Jack M. Balkin, *Virtual Liberty: Freedom to Design and Freedom to Play in Virtual Worlds*, 90 VA. L. REV. 2043, 2073 (2004) (describing how it is common practice for game developers to encourage consumers to sell and produce virtual goods as part of the developer's business model).

⁹⁸ See *Steam Community Market*, *supra* note 34.

⁹⁹ *Introducing Buying Land*, SECOND LIFE, <https://secondlife.com/land/> (last visited Feb. 21, 2016).

Marketplace.¹⁰⁰ Consumers who did not read or understand the game developer's EULAs and ToS agreements can mistakenly invest time and money into acquiring virtual goods that they do not truly own.¹⁰¹

Although the factors mentioned above indicate numerous problems regarding the enforceability of EULAs and ToS agreements, courts have generally upheld the enforceability of these contracts since *ProCD v. Zeidenberg*.¹⁰² Relatedly, in *Evans v. Linden Research, Inc.*,¹⁰³ a district court found the ToS agreement governing *Second Life* to be enforceable and valid.¹⁰⁴ However, as game developers continue to incorporate virtual goods into their business models, the EULAs and ToS agreements that govern the transactions will face increased scrutiny.¹⁰⁵ Despite the wide protection that has shielded game developers under the governing contractual regime, deficiencies in the contractual regime continue to surface.

C. Rising Dispute Under EULAs and ToS Agreements

In a foreign case, an end-user in the People's Republic of China, Li Hongchen, expended \$1,200 (USD) and continuously played the game Red Moon for over two years before his cache of virtual weapons was stolen by a third-party hacker.¹⁰⁶ Li first sought to recover his lost virtual goods by contacting Red Moon's developer, Beijing Arctic Ice Technology Development Company ("Arctic Ice"), but the game developer refused to return Li's virtual items or identify the hacker who stole his virtual items.¹⁰⁷ He then filed suit in the Beijing Chaoyang District People's Court, which subsequently held that Arctic Ice was negligent in securing its servers and databases, thereby causing Li to lose possession of his virtual items.¹⁰⁸ Arctic Ice argued that it was

¹⁰⁰ *Second Life Marketplace*, SECOND LIFE, <https://marketplace.secondlife.com/> (last visited Feb. 21, 2016).

¹⁰¹ John D. Sutter, *Can People Actually 'Own' Virtual Land?*, CNN (May 10, 2010, 10:45 AM), <http://www.cnn.com/2010/TECH/05/10/virtual.property.second.life/>.

¹⁰² *ProCD, Inc. v. Zeidenberg*, 86 F.3d 1447 (7th Cir. 1996) (holding that shrink-wrap licenses satisfy the assent requirements of contract law); *see also* Reuveni, *supra* note 84, at 290 ("EULAs are likely valid as a matter of contract law and enforceable against a virtual-world participant who assents to the EULA by clicking 'OK' upon loading the game.").

¹⁰³ *Evans v. Linden Research, Inc.*, 763 F. Supp. 2d 735 (E.D. Pa. 2011).

¹⁰⁴ *See id.* at 740 (holding that under California law, the forum selection clause in Second Life's "click-wrap" ToS agreement was neither unreasonable nor unconscionable. The court further found that even though elements of procedural unconscionability were present in Second Life's ToS agreement, the agreement was enforceable because the substantive terms of the agreement were reasonable.).

¹⁰⁵ *See* Kwong, *supra* note 58, at 1833–34.

¹⁰⁶ Jay Lyman, *Gamer Wins Lawsuit in Chinese Court Over Stolen Virtual Winnings*, TECH NEWS WORLD (Dec. 19, 2003, 10:05 AM), <http://www.technewsworld.com/story/32441.html>; *see also* *Online Gamer in China Wins Virtual Theft Suit*, CNN (Dec. 20, 2003, 1:51 PM), <http://www.cnn.com/2003/TECH/fun.games/12/19/china.gamer.reut/>.

¹⁰⁷ Glushko, *supra* note 80, at 518–20.

¹⁰⁸ *Id.*

immune from liability for Li's loss of virtual goods because Li had accepted the developer's EULA, but the court rejected this argument and recognized a property right in the virtual goods.¹⁰⁹

Li's case highlights a core problem that game developers face when they rely on EULAs and ToS agreements to protect themselves from liabilities incurred by third-party hackers.¹¹⁰ Although game developers wish to protect themselves from the actions of third-party actors, game developers have a continuing relationship with their consumers and, therefore, must work to ensure a stable environment for the consumer's virtual property.¹¹¹ The developer-consumer relationship is an ongoing contractual relationship, which incorporates some property protection for the consumer.¹¹² Accordingly, game developers have no real assurances that a court will invariably hold that EULAs and ToS agreements are universally enforceable, especially in consideration of unconscionability and public policy concerns.¹¹³

In *Bragg v. Linden Research, Inc.*,¹¹⁴ decided in 2007, the District Court for the Eastern District of Pennsylvania published the first United States decision relating to virtual property.¹¹⁵ The plaintiff, Marc Bragg, was an end-user of *Second Life*, a game created by defendant Linden Research, Inc. ("Linden").¹¹⁶ Linden is similar to other game developers in the sense that *Second Life* includes various development tools that end-users can employ to create and design virtual goods and structures.¹¹⁷ However, Linden is different from other game developers because it encourages its end-users to actively engage in market transactions by exchanging in-game virtual property for real currency.¹¹⁸ Most importantly, Linden differs from other game developers because it grants end-users intellectual property ownership rights over all virtual goods they create using *Second Life*'s development tools.¹¹⁹ Since Linden grants intellectual property rights to

¹⁰⁹ Lyman, *supra* note 106; *see also* ROSS A. DANNENBERG ET AL., COMPUTER GAMES AND VIRTUAL WORLDS: A NEW FRONTIER IN INTELLECTUAL PROPERTY LAW 62 (2010) ("A Chinese Court determined that the victim had a right to have his virtual property restored to him, essentially declaring that virtual world users have property rights in virtual worlds and the right to control their property as against the rest of the world.") (footnote omitted).

¹¹⁰ *See* Glushko, *supra* note 80, at 516–17.

¹¹¹ *Id.*

¹¹² *Id.*

¹¹³ Balkin, *supra* note 97, at 2071–72.

¹¹⁴ *Bragg v. Linden Research, Inc.*, 487 F. Supp. 2d 593 (E.D. Pa. 2007).

¹¹⁵ Dan E. Lawrence, Note, *It Really Is Just a Game: The Impracticability of Common Law Property Rights in Virtual Property*, 47 WASHBURN L.J. 505, 528 (2008).

¹¹⁶ *Id.* at 528–29.

¹¹⁷ *See id.*

¹¹⁸ *Id.*

¹¹⁹ *See* Ben Quarmby, *Pirates Among the Second Life Islands—Why You Should Monitor the Misuse of Your Intellectual Property in Online Virtual Worlds*, 26 CARDOZO ARTS & ENT. L.J. 667, 670–71 (2009) ("Any building the user designs on the property, any item of clothing created by the user, belongs to him or her.").

its end-users, the virtual goods in *Second Life* are closely analogous to the ownership rights associated with tangible goods.¹²⁰

Linden's grant of ownership rights to the end-user creates an interesting recognition of value in virtual goods. In *Bragg v. Linden Research, Inc.*, Marc Bragg argued that Linden improperly seized his virtual property and could not lawfully block access to *Second Life*.¹²¹ In addition to finding the arbitration clause in Linden's ToS agreement unenforceable,¹²² the district court found that since Linden granted its end-users intellectual property rights, it "grant[ed] its participants property rights in the virtual lands."¹²³ As such, the court found Bragg's virtual goods and property had real world value and, in doing so, established the need for end-users to protect their assets.¹²⁴

Consequently, the court's recognition of real world value assigned to virtual property means that holders of virtual property will incur an identifiable injury when they are deprived of it.¹²⁵ Although the *Bragg* holding is likely limited to its facts, the case clearly exhibits the law's growing acceptance and recognition of ownership rights for end-users.¹²⁶ At the very least, *Bragg* serves as a cautionary tale to game developers against the use of broad language within their EULAs and ToS agreements.¹²⁷ More specifically, "the *Bragg* Court's decision advises virtual world operators to reconsider using overly board language that enables operators to terminate [end-users] 'for any reason.'"¹²⁸

As evidenced by the limitations to consumer rights along with the challenges of inconsistent enforceability of EULAs and ToS agreements from the developer standpoint, the contractual regime is not the best solution to the unique characteristics of virtual goods and property. As game developers continue to imagine and create exponentially intricate and comprehensive virtual worlds, virtual goods will continue to be

¹²⁰ Lawrence, *supra* note 115, at 529.

¹²¹ *Bragg v. Linden Research, Inc.*, 487 F. Supp. 2d 593, 595–97 (E.D. Pa. 2007). Plaintiff, Marc Bragg, purchased numerous parcels of virtual land. On April 30, 2006, he acquired a parcel of virtual land know as "Taessot" for \$300 (USD). Defendant, Linden, notified Bragg that he had acquired the Taessot property through an exploit and subsequently deprived Bragg of all parcels of virtual land that he owned by blocking Bragg from accessing the game. "Ultimately at issue in this case are the novel questions of what rights and obligations grow out of the relationship between the owner and creator of a virtual world and its resident-customers. While the property and the world where it is found are 'virtual,' the dispute is real." *Id.* at 595.

¹²² As explained previously, the district court found that Linden's arbitration clause within the ToS agreement was unenforceable because of procedural and substantive unconscionability. *See id.* at 607.

¹²³ *Id.* at 606.

¹²⁴ *See* Lawrence, *supra* note 115, at 530.

¹²⁵ Lawrence argues that "[i]f virtual property has value in the eyes of the law, then virtual property holders can prove damages, an essential element of almost any claim." *Id.*

¹²⁶ *Id.*

¹²⁷ DANNENBERG, ET AL., *supra* note 109, at 40.

¹²⁸ *Id.* at 41.

bought, sold, gifted, and created.¹²⁹ First, game developers cannot continue to exclusively rely on the contractual regime; if game developers encourage consumers to treat virtual property like tangible property and allow real currency to be exchanged for virtual property, game developers should not be bewildered by the concept of applying property laws to virtual property.¹³⁰ Even though game developers invest millions of dollars and lots of time into creating virtual worlds, their success would not be possible without the demand and capital provided by consumers.¹³¹ A game developer simply cannot generate any revenue in its in-game marketplaces without the consumers who populate and exchange items within such marketplaces.¹³² Although the contractual regime covering virtual goods is versatile and broadly protects game developers, the growing ubiquity of virtual goods (especially end-user-created virtual goods) in virtual worlds demands a regime that securely shields game developers from overreaching liability and protects the real world value of consumer-held virtual property.

III. COPYRIGHT LAW AS A STOPGAP SOLUTION

A stable ownership regime would provide the much needed guarantees that consumers require before they can engage in virtual property transactions, which will correspondingly generate profits for game developers.¹³³ Ideally, congressionally legislated virtual property laws would ensure that end-users have sufficient protection for their virtual goods and property.¹³⁴ However, American legislation that details the rights of virtual goods will most likely advance at an unhurried pace due to the new and intricate concepts of virtual property.¹³⁵ Nonetheless, the American common law system can adopt

¹²⁹ Kwong, *supra* note 58, at 1833–34.

¹³⁰ Professor Balkin argues that game developers cannot have it both ways. If a game's business model encourages players to purchase and sell virtual goods, then players will expect these virtual items to have and retain value. However, if the game developer shuts down the game and thus causes players to lose their acquired virtual items, under most EULAs and ToS agreements, players have no compensation for the loss of their goods. Professor Balkin concludes that these two situations cannot be reconciled. Balkin, *supra* note 97, at 2071–73.

¹³¹ See Leah Shen, *Who Owns the Virtual Items?*, 2010 DUKE L. & TECH. REV. 11, *4 (2010).

¹³² *Id.*

¹³³ Shen states that “the lack of proper property regulations not only lowers the incentive to produce virtual items, it also lowers the incentive to create new virtual worlds.” *Id.* at *15. Accordingly, the lack of new virtual worlds would mean fewer games created and sold.

¹³⁴ Jeff W. LeBlanc, *The Pursuit of Virtual Life, Liberty, and Happiness and Its Economic and Legal Recognition in the Real World*, 9 FLA. COASTAL L. REV. 255, 286 (2008) (“The best system would be either an overarching federal legislative act recognizing limited virtual property rights, or a uniform code that recognizes virtual property alienability . . .”).

¹³⁵ See Alisa B. Steinberg, *For Sale—One Level 5 Barbarian for 94,800 Won: The International Effects of Virtual Property and the Legality of Its Ownership*, 37 GA. J. INT'L & COMP. L. 381, 418 (2009).

and apply existing principles of law to virtual goods to mitigate the deprivation of virtual property from end-users.¹³⁶ Pointedly, end-users who sufficiently contribute to new virtual creative works may be eligible for copyright protection.¹³⁷

A. Background of American Copyright Law: Copyrightable Virtual Property

The intellectual property regime exists to assign ownership rights to intangible items and, as such, is uniquely applicable to virtual goods. American copyright protection covers: “(1) literary works; (2) musical works, including any accompanying words; (3) dramatic works, including any accompanying music; (4) pantomimes and choreographic works; (5) pictorial, graphic, and sculptural works; (6) motion pictures and other audiovisual works; (7) sound recordings; and (8) architectural works.”¹³⁸ Additionally, following *Apple Computer, Inc. v. Formula International Inc.*, it is commonly accepted that copyright law applies to computer programs.¹³⁹ Particularly, copyright law can apply to virtual property worlds because the protectable categories include, “text (fiction and code), digital images, building designs, music, computer generated works, and multimedia/database[s].”¹⁴⁰ These protectable categories are all found within video games in the forms of story scripts (text as fiction), programmable computer code (text as code), pictures of virtual goods (digital images), arranging in-game structures (building designs), background soundtracks (music), creating avatars (computer generated works) and combinations of sound effects and images (multimedia/databases).¹⁴¹

The Copyright Clause of the United States Constitution exists to promote the progress of science and the formulation of artistic imagination by granting creators the exclusive rights to their work for a limited time.¹⁴² Once a creator’s work becomes protectable, the creator holds the exclusive right to distribute, copy, and display that work.¹⁴³ Additionally, the creator is permitted to create derivative works.¹⁴⁴ At

¹³⁶ See *id.* at 417–18.

¹³⁷ See Rachel Wenzel, Comment, *Ownership in Technology-Facilitated Works: Exploring the Relationship Between Programmers and Users Through Virtual Worlds*, 17 INTELL. PROP. L. BULL. 183, 186–87 (2013) (finding that the recent incorporation of development and creator tools within social games may allow end-users a copyright interest in their creative works).

¹³⁸ 17 U.S.C. § 102 (2015).

¹³⁹ *Apple Comput., Inc. v. Formula Int’l Inc.*, 725 F.2d 521 (9th Cir. 1984) (holding that computer programs controlling internal computer operations were entitled to copyright protection).

¹⁴⁰ ANGELA ADRIAN, LAW AND ORDER IN VIRTUAL WORLDS: EXPLORING AVATARS, THEIR OWNERSHIP AND RIGHTS 113 (2010).

¹⁴¹ *Id.* at 113–20.

¹⁴² U.S. CONST. art. I, §8, cl. 8.

¹⁴³ DANNENBERG ET AL., *supra* note 109, at 49.

¹⁴⁴ *Id.*

its core, copyright protection ensures the continuous production and innovation of creative works by conferring exclusive rights to creators for a limited period of time before the work passes on to the general public.¹⁴⁵ Despite the creator's initial exclusive benefit and protection, in *Fox Film Corporation v. Doyal*, the United States Supreme Court stated that "[t]he sole interest of the United States and the primary object in conferring the monopoly lie in the general benefits derived by the public from the labors of authors."¹⁴⁶ Accordingly, copyright law primarily focuses on conveying a public benefit, while reward to the creator is a secondary consideration.¹⁴⁷ Since the primary goal of copyright law is to create a public benefit, Congress has allowed exceptions, such as the fair use doctrine,¹⁴⁸ to a creator's exclusive right to enjoy the benefits of his or her creation.¹⁴⁹

B. Identifying Protectable Virtual Property

Intellectual property is similar to virtual property because both concepts involve property without tangible representation.¹⁵⁰ Although virtual property is expensive to create, once it is created, the cost of making additional copies is low.¹⁵¹ The cost of reproducing virtual property is low because "virtual items are merely streams of code that a game operator can inject into the virtual world at any time."¹⁵² Additionally, virtual goods created in a game through developer- and content-creator tools are similar to the concept of derivative works in intellectual property.¹⁵³ Despite intellectual property's similarities to virtual property, courts struggle to determine whether a single item of virtual property has value, even in the era after *Bragg v. Linden Research, Inc.*

1. The Indicia of Virtual Property

In order to determine whether a piece of virtual property has value and is therefore a likely candidate for copyright protection, courts should apply Charles Blazer's five-prong test, known as the "Five

¹⁴⁵ *Harper & Row Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 546 (1985) ("[This] limited grant is a means by which an important public purpose may be achieved. It is intended to motivate the creative activity of authors and inventors by the provision of a special reward, and to allow the public access to the products of their genius after the limited period of exclusive control has expired." (citing *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 429 (1984))).

¹⁴⁶ *Fox Film Corp. v. Doyal*, 286 U.S. 123, 127 (1932).

¹⁴⁷ *See United States v. Paramount Pictures*, 334 U.S. 131, 158 (1948).

¹⁴⁸ 17 U.S.C. § 107 (2015).

¹⁴⁹ *See Reuveni*, *supra* note 84, at 270–71.

¹⁵⁰ *See Shen*, *supra* note 131, at *15.

¹⁵¹ ADRIAN, *supra* note 140, at 109.

¹⁵² Shen, *supra* note 131, at *6.

¹⁵³ *Id.* at *20.

Indicia of Virtual Property.”¹⁵⁴ Initially, Professor Joshua A.T. Fairfield of Washington and Lee University School of Law, an internationally recognized digital property scholar, formulated the first three characteristics, which include: (1) rivalrousness; (2) persistence; and (3) interconnectivity.¹⁵⁵ Blazer later added: (4) secondary markets; and (5) value-added-by-users, to the analysis.¹⁵⁶

First, rivalrousness is the extent to which one end-user’s use of a single item of virtual property limits the ability of other end-users to do the same.¹⁵⁷ For instance, an end-user’s personal car, which other players do not have access to, would be considered rivalrous. Blazer finds that virtual property differs from intellectual property because “[l]imitations on the use of intellectual property arise not from [physical] rivalry, but from exclusionary rights enforceable at law.”¹⁵⁸

Second, persistence is the scope in which a piece of virtual property continues to exist, generally unchanged, even when the end-user is not actually using the virtual item at the time.¹⁵⁹ For example, if an end-user created a virtual building in a game that other users could visit while the creator is not playing, the virtual building would be considered persistent. Blazer notes that this prong should be given particular weight because “virtual property, although intangible, is persistent. A greater degree of persistence warrants a greater property interest.”¹⁶⁰

Next, interconnectivity is the measure by which a player can utilize the virtual property to create an effect on other users.¹⁶¹ Blazer stresses that, “easier access does not necessarily equate to greater interconnectivity. Rather, the legally protectable value of interconnectivity arises from a person’s ability to use property to create or experience an effect.”¹⁶² To illustrate, assume a player creates an in-game racetrack where players have a venue to compete with other players for the top score and socialize. This in-game racetrack would satisfy the elements of interconnectivity.

Fourth, the existence of secondary markets is the degree to which virtual property can be transferred to and from other players.¹⁶³ This prong of the analysis particularly emphasizes the economic importance of virtual goods, which are bought, sold, and traded like other types of

¹⁵⁴ Charles Blazer, Note, *The Five Indicia of Virtual Property*, 5 PIERCE L. REV. 137 (2006).

¹⁵⁵ Joshua A.T. Fairfield, *Virtual Property*, 85 B.U. L. REV. 1047, 1089–90 (2005).

¹⁵⁶ Blazer, *supra* note 154, at 139.

¹⁵⁷ *Id.* at 143.

¹⁵⁸ *Id.*

¹⁵⁹ *Id.* at 144.

¹⁶⁰ *Id.* (footnote omitted).

¹⁶¹ Blazer, *supra* note 154, at 145.

¹⁶² *Id.* (footnote omitted).

¹⁶³ *Id.* at 146–47.

property.¹⁶⁴ For instance, *World of Warcraft* accounts are commonly sold on Game Supply (a third-party vendor) for real currency.¹⁶⁵

Blazer's fifth and final prong, value-added-by-users, is the extent to which a gamer has contributed to the value of the property through customization and improvement of the virtual property.¹⁶⁶ For example, Blazer argues that many players of Massively Multiplayer Online Games (MMOGs), like *World of Warcraft*, would satisfy the value-added-by-users prong because "[t]he legal justification for protecting the players' property interest arises not from the hundreds of hours that they spend online but from the sense of ownership, security, utility, and value that encourages them to spend those hundreds of hours online."¹⁶⁷

Blazer's first four prongs (rivalrousness, persistence, interconnectivity, and secondary markets) are ideal for determining whether a virtual good has actual value in a copyright regime.¹⁶⁸ However, Blazer's fifth prong (value-added-by-users) should be eliminated from the analysis when determining whether a piece of virtual property is protectable by copyright law. The Value-added-by-users prong should be eliminated because it assumes the mere fact that an end-user who spends significant time obtaining virtual goods in a MMOG would be sufficient to grant a player property rights.¹⁶⁹ Additionally, Blazer's indicia of virtual property comprise only the first part of a copyright analysis and are used merely as an initial screening method in this proposed analysis. A copyright analysis, which determines whether a piece of virtual property has sufficient user-contributed creative work, renders Blazer's fifth prong moot.

2. Using the Indicia of Virtual Property to Identify Candidates for Copyright Protection

Using a modified, four-prong version of Blazer's and Fairfield's Indicia of Virtual Property, this Note proposes a method for identifying whether virtual goods are likely candidates for copyright protection. By way of illustration, the virtual goods used in the proposed method under

¹⁶⁴ *Id.*

¹⁶⁵ GAMESUPPLY, *supra* note 35.

¹⁶⁶ Blazer, *supra* note 154, at 147–48.

¹⁶⁷ *Id.* at 148–49 (footnote omitted).

¹⁶⁸ Professor Fairfield's three prongs (rivalry, persistence, and interconnectivity) are used to highlight the shared characteristics of tangible property and virtual property. Additionally, Blazer's secondary markets prong adds a supplemental consideration for courts to identify a significant economic interest in virtual property. *Id.* at 142.

¹⁶⁹ *Id.* at 148–49. Blazer's "value-added-by-users" prong should be disregarded for this analysis because it is akin to the "sweat of the brow" doctrine. The Supreme Court rejected the "sweat of the brow" doctrine because the "doctrine had numerous flaws, the most glaring being that it extended copyright protection in a compilation beyond selection and arrangement—the compiler's original contributions—to the facts themselves." *Feist Publ'ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 353 (1991).

the four-prong test are: (1) a weapon skin from *Counter-Strike: Global Offensive*;¹⁷⁰ (2) virtual land from *Second Life*;¹⁷¹ and (3) gems from *Clash of Clans*.¹⁷² The results are summarized in Figure 1, displayed below.

Virtual Item	Rivalrous	Persistence	Inter-connected	Secondary Markets	Likely Candidate for Copyright Protection?
Counter-Strike Weapon Skin	Yes	Yes	Yes	Yes	Yes
<i>Second Life</i> “Land Ownership”	Yes	Yes	Yes	Yes	Yes
Clash of Clans Gems	No	No	No	Limited	No

Figure 1

Counter-Strike’s weapon skins are likely to satisfy the rivalry prong of the four-prong analysis because Valve, the game developer, limits the availability of the weapon skin to purchase and download.¹⁷³ Additionally, the weapon skin is persistent because other users who have purchased the item can use it, even if the creator is not playing the game.¹⁷⁴ The weapon skin also satisfies the interconnectivity prong because other users can see in-game if and when the owner has the skin equipped.¹⁷⁵ Lastly, secondary markets are present on either an official

¹⁷⁰ The Steam Workshop allows end-users to utilize Steam’s development and content creator tools to create weapon skins, which are artistic designs to weapons. If an end-user’s submitted weapon skin is accepted for sale, Steam will allow the creator to earn royalties. See *The Steam Workshop for Counter-Strike: Global Offensive*, STEAM, <http://steamcommunity.com/workshop/about/?appid=730> (last visited Feb. 21, 2016).

¹⁷¹ Glushko, *supra* note 80, at 524. *Second Life* has a developed “real estate economy,” which allows users to buy, sell, develop, sub-divide, and transfer land to other users.

¹⁷² See generally *Clash of Clans*, *supra* note 23. As one of the top-grossing freemium games, *Clash of Clans* has developed significant penetration into the mobile gaming market. “Gems” are in-game currency used to purchase upgrades.

¹⁷³ See *StatTrak™ Huntsman Knife | Fade, Steam Community Market*, STEAM, <http://steamcommunity.com/market/listings/730/%E2%98%85%20StatTrak%E2%84%A2%20Huntsman%20Knife%20%7C%20Fade%20%28Factory%20New%29> (last visited Feb. 21, 2016) (as of the date of this Note, the price of the “Huntsman Knife” is around \$330 because of its limited quantity and high demand).

¹⁷⁴ See *Frequently Asked Questions: The Arms Deal Update*, COUNTER-STRIKE, <http://blog.counter-strike.net/armsdeal/faq.php> (last visited Feb. 21, 2016).

¹⁷⁵ See *Skins*, COUNTER-STRIKE WIKI, <http://counterstrike.wikia.com/wiki/Skins> (last visited Feb. 21, 2016).

Steam Marketplace¹⁷⁶ or on third-party forums such as Reddit.¹⁷⁷

Second Life easily satisfies the rivalrousness analysis because land is administered and sold in tracts, much like real property, and includes categories of land that only limited users can access (known as “private estates”).¹⁷⁸ Additionally, the land is persistent and interconnected because other users can visit and enjoy a user’s *Second Life* land even if that user is not currently playing the game.¹⁷⁹ Lastly, *Second Life* actively encourages in-game land to be resold and transferred among players, which has spawned the creation of various *Second Life* land-buying guides¹⁸⁰ and “real estate agents.”¹⁸¹

In contrast, *Clash of Clans*, a freemium based game, fails to meet the rivalrousness prong because the game’s “gems” are only available to the player who either acquired the gems from the game or purchased them from the developer’s store.¹⁸² Thus, Player A’s accumulation of gems does not affect Player B’s ability to obtain gems. Next, this game also fails to adequately meet the persistence prong because gems exist in the game merely for the benefit for the possessing player: when the player is not playing the game, the virtual item does not exist in the game for other players.¹⁸³ The gems also lack interconnectedness because possession of gems by one player does not have an effect on other players (besides creating feelings of jealousy).¹⁸⁴ Lastly, *Clash of Clans* fails to sufficiently satisfy the secondary market prong because although there are existing third-party account and gem vendors,¹⁸⁵ the

¹⁷⁶ *Steam Community Market, Showing Results for: Counter-Strike: Global Offensive*, STEAM, http://steamcommunity.com/market/search?appid=730#p1_price_desc (last visited Feb. 21, 2016).

¹⁷⁷ *Global Offensive Trade*, REDDIT, <http://www.reddit.com/r/GlobalOffensiveTrade/> (last visited Feb. 21, 2016) (Reddit hosts a third-party discussion forum where interested *Counter-Strike* players can coordinate weapon skin exchanges and sales).

¹⁷⁸ See *Land*, SECOND LIFE WIKI, <http://wiki.secondlife.com/wiki/Land> (last visited Feb. 21, 2016); see also *Mainland Pricing and Fees*, SECOND LIFE, <https://secondlife.com/land/pricing.php> (last visited Nov. 10, 2015).

¹⁷⁹ See *Buy Land: Frequently Asked Questions*, SECOND LIFE, <https://secondlife.com/land/faq/> (last visited Feb. 21, 2016) (even if a user does not buy land, a user can explore the land and other parts of the Second Life world).

¹⁸⁰ See *Land Buying FAQ*, SECOND LIFE WIKI, http://wiki.secondlife.com/wiki/Land_Buying_FAQ (last visited Feb. 21, 2016); *Welcome to Second Life Auction Block*, SECOND LIFE, <http://usd.auctions.secondlife.com/> (last visited Feb. 21, 2016).

¹⁸¹ See, e.g., *Lionheart Virtual Estate*, LIONHEART VIRTUAL REAL ESTATE, <http://www.lionheartsl.com/> (last visited Feb. 21, 2016).

¹⁸² Rauta, *Beware of Scammers: Third Parties Claiming to Sell Clash of Clans Accounts or Gems*, SUPERCELL (Jan. 22, 2013), <http://forum.supercell.net/showthread.php/13018-Beware-of-scammers-Third-parties-claiming-to-sell-Clash-of-Clans-accounts-or-Gems>.

¹⁸³ See CLASH OF CLANS WIKIA, *supra* note 36.

¹⁸⁴ See *id.*

¹⁸⁵ See *Clash of Clans Accounts—Buy Sell Trade*, PLAYER UP, <http://www.playerup.com/accounts/clashofclansaccounts/> (last visited Feb. 21, 2016) (as of the date of this writing, 754 Clash of Clans accounts, with gems, were available for trade or sale for up to \$1700 per account).

game developer specifically prohibits the use of third-party vendors.¹⁸⁶

Engaging in this evaluation can assist courts in determining whether to apply copyright protection to virtual goods. Weighing the four indicia of virtual property (rivalrousness, persistence, interconnectivity, and secondary markets) against each other, it is clear that a weapon skin from *Counter-Strike* and a tract of “land” from *Second Life* possess significant value and therefore qualify as candidates for copyright protection. However, a cache of *Clash of Clans* gems does not qualify as potentially protectable virtual property. Even if the presence of secondary markets for *Clash of Clans* accounts and gems were weighed in its favor, this prong alone cannot balance against the absence of the other three remaining indicia of virtual property.

C. Applying Copyright Law to Virtual Property

Having identified examples of virtual property that are likely candidates for copyright protection, the analysis turns to whether virtual goods possessing significant indicia should actually be afforded copyright protection. It is important to note that today’s immersive, free-roam games differ significantly from the constrained, linear story progressions of traditional games, and therefore the application of copyright principles to virtual property is mature.¹⁸⁷ Today, many game developers are integrating content development tools that allow end-users to incorporate their own creative content by designing, crafting, and publishing virtual goods.¹⁸⁸ These content development tools have significantly changed how an end-user contributes to the a game’s creative process because “[t]he programmer takes on the role of platform builder and gives the user tools and space in which to add his or her creative input.”¹⁸⁹ Accordingly, the recent incorporation of content development tools in games may provide end-users with protectable copyright interests in their creative virtual goods.

¹⁸⁶ *Can I Buy Gems Outside the Game?*, SUPERCELL <http://supercell.helpshift.com/a/clash-of-clans/?p=web&f=can-i-buy-gems-outside-the-game&s=resources-gems-payments> (last updated July 19, 2015) (“If you are in need of more gems to finish upgrades or buy items in Clash of Clans, the only authorised [sic] way to buy gems is through the in-game shop which runs via iTunes and Google Play.”).

¹⁸⁷ Wenzel, *supra* note 137, at 185–86 (finding that the game developer/end-user relationship has changed due partly to creator development tools within games).

¹⁸⁸ See Ben Kendrick, ‘Grand Theft Auto 5’ Online Content Creator Coming This Fall; Beach Bum Pack in November, GAME RANT, <http://gamerant.com/grand-theft-auto-5-online-content-creator-release-date-fall/> (last visited Feb. 21, 2016) (games such as *Grand Theft Auto V* and *LittleBigPlanet* have successfully employed content development tools for users to expand the game’s virtual world); see also Emanuel Maiberg, *Valve Loves Content Creators, Paid Out \$400k in the First Week of 2014*, PC GAMER (Jan. 16, 2014), <http://www.pcgamer.com/valve-loves-content-creators-paid-out-400k-in-the-first-week-of-2014/>.

¹⁸⁹ Wenzel, *supra* note 137, at 186.

1. End-User Creative Works as Works Made for Hire

Some have mistakenly argued that the creations of end-users might qualify for copyright protection as works made for hire. Works made for hire are defined under section 201(b) of the Copyright Act, as where “the employer or other person for whom the work was prepared is considered the author for purposes of this title, and, unless the parties have expressly agreed otherwise in a written instrument signed by them, owns all of the rights comprised in the copyright.”¹⁹⁰ In other words, a work made for hire can be divided into two categories: (1) an employee-created work, where the creative work is prepared by an employee while in the course of her employment; or (2) a commissioned work, where independent contractors can retain rights to their creative works if an express written agreement has been made.¹⁹¹

Undoubtedly, end-users cannot expect to gain protectable interest rights as works made for hire because users are not typically employed by the game developer. Additionally, those who create works within the scope of their employment usually confer all of their ownership rights to their employers.¹⁹² For instance, if a designer instructs an employee to create a new logo for a client, the legal author would be the designer, not the employee.¹⁹³ Similarly, it is unlikely that an end-user’s work would be considered a commissioned work eligible for copyright protection because of the written agreement requirement found in section 201(b).¹⁹⁴

2. End-Users as Original Creative Authors

Virtual goods easily satisfy the originality requirement of copyright law. The originality requirement of section 102(a) of the Copyright Act vests protection to “original works of authorship.”¹⁹⁵ Following the originality requirement, copyright law considers a creative work as “the product of a single, guiding author, and that the product of this singular author remains static once fixed.”¹⁹⁶ This means that copyright protection does not extend to end-users who creatively contribute and modify the developers’ original works.¹⁹⁷ For example, in *Midway Manufacturing Co. v. Arctic International, Inc.*,¹⁹⁸ the Seventh Circuit found that, “even though the player had some control

¹⁹⁰ 17 U.S.C. § 201(b) (2015).

¹⁹¹ DANNENBERG, ET AL., *supra* note 109, at 75.

¹⁹² *Id.*

¹⁹³ *Id.*

¹⁹⁴ *See* 17 U.S.C. § 201(b) (2015).

¹⁹⁵ 17 U.S.C. § 102(a) (2015).

¹⁹⁶ Erez Reuveni, *Authorship in the Age of the Conducer*, 54 J. COPYRIGHT SOC’Y U.S.A. 285, 306 (2007) (citations omitted).

¹⁹⁷ *Id.* at 306–07.

¹⁹⁸ *Midway Mfg. Co. v. Arctic Int’l, Inc.*, 704 F.2d 1009 (7th Cir. 1983).

over what was displayed on the game's screen . . . , he had no protectable rights in the sequence of game images and sounds that resulted from his activity during play."¹⁹⁹ In deciding the case, the Seventh Circuit reasoned that the player did not have a protectable copyright because:

[A player] cannot create any sequence he wants out of the images stored on the game's circuit boards. The most he can do is choose one of the limited number of sequences the game allows him to choose. He is unlike a writer or a painter because the video game in effect writes the sentences and paints the painting for him; he merely chooses one of the sentences stored in its memory, one of the paintings stored in its collection.²⁰⁰

However, the Seventh Circuit decided *Midway Manufacturing Co.* in 1983, when video game development was still in its infancy.

The Seventh Circuit's *Midway Manufacturing Co.* decision may no longer apply given the evolution of video game development. Video games are no longer as primitive and one-dimensional as they once were. Games now incorporate features where a player can not only roam a virtual world freely but also contribute to the game's virtual world through content creator tools.²⁰¹ For illustration, *Grand Theft Auto V* allows its players to "craft, publish, rate and play custom-made Deathmatch and Race Jobs,"²⁰² while *Second Life* allows end-users to "build and sell whatever you can imagine."²⁰³ End-users who utilize content creator tools to design, craft, and build virtual goods would satisfy the originality requirement in section 102 of the Copyright Act.²⁰⁴ As a result, end-users can assert that they are no longer merely spectators in a one-dimensional storyline but rather are creating independent virtual goods by employing the content-creator tools given to them by game developers.²⁰⁵

IV. EVALUATING ALTERNATIVE APPROACHES TO PROTECTING VIRTUAL PROPERTY

A. *The "Personal" Problem with the Personal Property Regime*

While at first glance the personal property regime offers both game

¹⁹⁹ DANNENBERG ET AL., *supra* note 109, at 60–61 (citation omitted).

²⁰⁰ *Midway Mfg. Co.*, 704 F.2d at 1012.

²⁰¹ Wenzel, *supra* note 137, at 185–86.

²⁰² Kendrick, *supra* note 188.

²⁰³ *Second Life—The Internet's Largest User-Created 3D World*, LINDEN LAB, <http://www.lindenlab.com/products/second-life> (last visited Feb. 21, 2016).

²⁰⁴ Wenzel, *supra* note 137, at 189.

²⁰⁵ DANNENBERG ET AL., *supra* note 109, at 60–61.

developers and consumers adequate property protection for virtual goods, the personal property regime is lacking for various reasons. In the past, some courts have treated virtual property similar to tangible property in the context of criminal activity involving theft or trespass to chattels.²⁰⁶ However, the problem in treating virtual property like personal property is that the personal property regime does not clarify who actually owns the property.²⁰⁷ Although it is easy to determine the value of virtual property by its respective supply and demand, the law is unclear on who is able to buy, sell, or transfer the property.²⁰⁸ For example, even in the absence of a EULA or ToS agreement, if ownership disputes were to arise under a regime governed by personal property rights, game developers would simply argue that they have the superior property right because they created and coded the virtual world and gaming platform.²⁰⁹ In contrast, consumers would argue that they have superior property rights in the virtual property because they expended time, effort, or money to obtain the virtual item.²¹⁰

Another problem with applying the personal property regime to intangible property is its inherently intangible nature and ease of replication. Virtual property is nothing more than lines of code, which can be replicated and duplicated infinitely at little or no cost.²¹¹ John Locke wrote:

The labour of his body, and the work of his hands, we may say, are properly his. Whatsoever then he removes out of the state that nature hath provided, and left it in, he hath mixed his labour with, and joined to it something that is his own, and thereby makes it his property.²¹²

In other words, under the Lockean Labor Theory of property rights, an individual obtains property rights in an object by investing labor into it.²¹³ Applying Locke's theory to the concept of virtual property is simple: since users spend their time, energy, and labor in

²⁰⁶ Erica Buist, *Should Thieves in World of Warcraft Be Sent to Real Prisons?*, GUARDIAN (July 24, 2014, 9:13 AM), <http://www.theguardian.com/technology/shortcuts/2014/jul/24/thieves-world-warcraft-real-prisons-tory-mike-weatherley> ("Two Dutch teens were . . . found guilty of forcing a younger player to log into his RuneScape account and hand over an amulet and a mask, the digital-age version of stealing another kid's lunch money. The Dutch court ruled: 'These virtual goods are goods [under Dutch law], so this is theft.'").

²⁰⁷ Shen, *supra* note 131.

²⁰⁸ *Id.*

²⁰⁹ *Id.*

²¹⁰ *Id.*

²¹¹ Glushko, *supra* note 80, at 512.

²¹² JOHN LOCKE, SECOND TREATISE OF CIVIL GOVERNMENT 18–29 (C. B. Macpherson ed., Hackett Publ'g Co. 1980) (1690).

²¹³ *Locke's Political Philosophy*, STANFORD ENCYC. OF PHILOSOPHY, <http://plato.stanford.edu/entries/locke-political/> (last updated July 29, 2010).

virtual worlds to acquire virtual items, they should be able to rightfully gain property rights.²¹⁴ However, virtual property does not exist in nature and is not exclusively “labored” by the consumer because the game developer plays a large role in the creation of the virtual property.²¹⁵ Hence, the application of the Lockean Labor Theory to virtual property does not resolve issues of ownership between the game developer and the consumer.

Lastly, many authors have argued for legislatures and courts to grant personal property rights for consumers of virtual property as a way to balance against unfair EULAs and ToS agreements.²¹⁶ These calls for the adoption of personal property rights to be applied to virtual goods have failed to take into account the chilling effect it would have on the development of virtual worlds and virtual property.²¹⁷ A chilling effect would occur because game developers are responsible for maintaining a stable virtual environment and ensuring virtual property is not lost even though bugs are present and can be exploited by hackers.²¹⁸ Stringent enforcement of personal property rights in favor of consumers would unfairly balance the virtual property landscape in favor of the end-user by assigning all liability to game developers who are responsible for maintaining a stable and secure virtual world.²¹⁹ Although a personal property regime would provide the most robust form of property protection for end-users, the differences between virtual and tangible property are too great to be reconciled.

B. *Self-Initiated Industry Changes*

Despite the fact that a self-initiated industry response from game developers would mitigate many potential disputes in virtual property, it is unlikely to occur. Although *Bragg v. Linden Research, Inc.* forced many game developers to reconsider the language they employed in their contracts, few game developers have surrendered their broad and self-protective contractual language.²²⁰ Game developers simply enjoy many aspects of the EULAs and ToS agreements that shield them from liability. They do not want to abandon the contractual regime because they benefit from:

- (1) the explicit assignments of the right to use, the right to exclude, and the right to transfer;
- (2) the powers reserved by the provider to alter those arrangements and to strip participants of their virtual

²¹⁴ Cifrino, *supra* note 44, at 247.

²¹⁵ *Id.* at 252.

²¹⁶ Kwong, *supra* note 58, at 1834.

²¹⁷ *Id.*

²¹⁸ *Id.*

²¹⁹ *Id.*

²²⁰ DANNENBERG, ET AL., *supra* note 109, at 41–42.

items; and (3) the remedies granted to participants when they feel their rights under the contract have been violated.²²¹

Unfortunately for end-users, a self-initiated industry change is merely a virtual reality.

C. Legislative Change

As mentioned previously,²²² legislative action that recognizes an independent form of virtual property rights and protection would ensure that end-users are conferred adequate protection.²²³ For example, LeBlanc suggests that the ideal legislative scheme would recognize “limited virtual property rights, or a uniform code that recognizes virtual property alienability, but still recognizes EULAs as the lynchpin of legal rights between virtual world users and software companies.”²²⁴ Under LeBlanc’s proposed legislative scheme, ownership rights would still vest in the game developer, but consumers would acquire property rights akin to tenants in a rental agreement.²²⁵ Although legislatures might be able to extend consumer protection laws to cover end-users in virtual worlds, it will most likely take years before Congress, regulatory agencies, or state legislatures are adequately informed on virtual property issues in order to take concerted action.²²⁶

CONCLUSION

For the time being, consumers will increasingly continue to purchase and commit time to playing games. Today, more than half of all Americans use videos games as a form of entertainment and relaxation. However, some consumers use virtual worlds as an avenue for social interaction and as a platform for monetary investment. As the demand for entertainment in the form of video games rises, game developers will strive to meet the market demand by creating progressively intricate virtual worlds with gratifying cinematic storylines.

In the past, radio broadcast and television created questions about the applicability of law to intangible mediums and, now, the rise of technology has again outgrown the applicability of current law. Although EULAs and ToS agreements were once adequate to protect an end-user’s property interest, the growth in value of virtual goods has

²²¹ David P. Sheldon, Comment, *Claiming Ownership, But Getting Owned: Contractual Limitations on Asserting Property Interests in Virtual Goods*, 54 UCLA L. REV. 751, 764 (2007).

²²² See *supra* Part III.

²²³ LeBlanc, *supra* note 134.

²²⁴ *Id.* at 286.

²²⁵ *Id.*

²²⁶ DANNENBERG, ET AL., *supra* note 109, at 44.

exceeded the limits of contract law. Previously, the deprivation of virtual property rights was marginally acceptable due to their relatively low value. Contrastingly, today's virtual property has grown—and will continue to grow—to retain enormous value. There is no straightforward solution to the ownership problems that the emergence of virtual property has created. Legislative action would ideally grant end-users a protectable property right by creating a separate virtual property regime, but the existence of valuable virtual goods is still in its infancy. For the time being, the judicial branch can appropriately balance the shortfalls of the contractual regime by extending copyright protection to qualifying virtual property. As new issues in virtual property ownership continue to materialize, a new field of law emerges—society has advanced to the next stage.

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