THE PURSUIT OF VIRTUAL LIFE, LIBERTY, AND HAPPINESS AND ITS ECONOMIC AND LEGAL RECOGNITION IN THE REAL WORLD

Jeff W. LeBlanc

I. INTRODUCTION .......................................... 256

II. WHAT IS VIRTUAL WORLD PROPERTY? ............... 262
   A. Private Regulation of Virtual Property Rights
      Through EULAs ....................................... 266

III. SHOULD INDIVIDUALS BE GRANTED VIRTUAL PROPERTY RIGHTS? .......................... 268
   A. The Problem with Fraud ........................................ 269
   B. The Existing Black Market .............................. 272
   C. Recognizing Virtual Property Rights May Be Good Business .......................... 273

IV. WHAT BASIS EXISTS FOR GRANTING VIRTUAL PROPERTY RIGHTS? .......................... 275
   A. United States Case Law: The “Company Town” Doctrine ...................................... 275
   B. Public Policy .......................................... 279
      1. Virtual Property Rights Are in the Best Interests of All ................................ 280
   C. Foreign Developments .................................. 281
      1. China ................................ ....... 282
      2. Australia ................................ ....... 284
      3. Taiwan ................................ ....... 284

V. A PROPOSAL FOR REFORM ............................... 285
   A. Legislation ................................ ....... 286
   B. Use of Existing Technology ............................ 289

VI. CONCLUSION ............................................ 290
THE PURSUIT OF VIRTUAL LIFE, LIBERTY, AND HAPPINESS AND ITS ECONOMIC AND LEGAL RECOGNITION IN THE REAL WORLD

Jeff W. LeBlanc*

“[M]assively multi-player online role-playing games (MMORPGs) have a gross economic impact equivalent to the GDP of the African nation of Namibia.”1

– BBC News

I. INTRODUCTION

Recent technological advances have created new issues and frontiers that merit legal study and analysis. As technology advances and imposes changes on society, laws must adapt to fulfill new societal requirements. Though new legal frontiers may occasionally require new developments in legal thinking, there are times when existing concepts and ideas can evolve to meet new challenges. One new frontier involves the creation of virtual worlds that are playable by millions of individuals through the Internet. Within these worlds, characters develop, socialize, interact, and collect “virtual property.”2 Virtual property is a non-tangible digital asset that meets many of the characteristics of more traditional forms of property.3 Virtual property possesses the characteristics of “rivalrousness, persistence, and interconnectivity.”4 However, there is no positive law in the United States that sets out the

* I received an Honours Bachelor of Arts with Distinction from the University of Toronto and my J.D. Summa Cum Laude from the University of La Verne. I am currently an associate at the law firm of Richard G. Anderson in Upland, California. Special thanks to my loving and beautiful wife Cassi for always supporting me.


3 See id. at 444 (explaining that “virtual property rights typically provide for the rights to use, to exclude others from using, and to alienate or transfer objects”).

rights and responsibilities that attach to virtual property. There are very few court decisions ruling on virtual property theft, sale, or fraud. There is no legislation regulating virtual property. Although some countries have taken affirmative action to protect virtual property in the modern technological economy, courts in the United States have answered with resounding silence thus far. Currently, virtual property rights are primarily defined by contractual agreements between software companies and consumers, and supplemented by the accumulated bodies of property or contract common law.

This article contends that the current legal system regarding virtual property inadequately protects the rights of individual users and consumers, and that virtual property rights should be granted to individuals who acquire virtual property in virtual worlds. This conclusion is supported by the Fourteenth Amendment to the United States Constitution, United States case law, foreign jurisprudence, and economic and social arguments.

Virtual property is digitally created wealth acquired within virtual worlds. Virtual worlds are artificially created constructs that are accessible through the Internet and designed to mimic or fantasize the real world. Virtual property is freely transferable within virtual worlds, and due to the forces of supply and demand, a market exists for virtual property in the real world. In the real world, the buying and

5 See id. at 1050 (stating that in the United States there is “no distinct protection for property rights in virtual property”).
7 See id. (speaking of Korea, China, and Taiwan).
8 See Horowitz, supra note 2, at 445 (“Virtual property rights in all of the most popular virtual worlds are delineated by [EULAs].”)
11 See Horowitz, supra note 2, at 444 (stating that virtual property rights include the right to alienate).
selling of most virtual property is prohibited by software companies’ End User License Agreements (EULAs). Individual software companies form part of a large video game industry and produce and create the virtual worlds within which MMORPGs are played. When EULAs eliminate the alienability of virtual property, real world transactions involving virtual property occur through black or grey markets. The current ad hoc system of privileges and responsibilities has been created as a result of each software company’s EULA. Most EULAs contain restrictions on virtual property alienability that impose artificial restraints on the legitimate transfer of wealth between the real and virtual worlds. This restraint deprives virtual world citizens of economic liberties and has resulted in increased incidents of virtual item trade fraud and a burgeoning black market. It is in the best interests of virtual world users, software companies, and society in general, to recognize limited property rights within virtual worlds by legislating and permitting virtual property transactions in the real world, while continuing to vest ownership rights in virtual property with the software company that creates the virtual world.

The rapid growth of the Internet in the 1990s resulted in an increase in business and social activities that took advantage of the Internet’s omnipresent ease of use and accessibility. The video game industry is an economic behemoth and is an excellent example of a business which has taken full advantage of the Internet’s growth. For example, in 2004 the United States video game industry generated revenues of $9.9 billion. Estimates from 2005 placed the global online gaming industry at $3.2 billion with approximately 113 million consumers. Initially, software companies created software and games that

---

12 Horowitz, supra note 2, at 445.
13 Games such as World of Warcraft, Second Life, EverQuest II, or Entropia, to name just a few. Wikipedia, supra note 10.
14 See, e.g., Horowitz, supra note 2, at 445-46 (discussing the EULAs of Blizzard Entertainment and NCsoft).
15 See e.g., Horowitz, supra note 2, at 445-46 (discussing the EULAs of Blizzard Entertainment).
could bring players from vastly different geographic regions to the same online “location” to play. Usually, players would connect to an online location, and then join other players for heads up play in such games as *Doom* or *Command and Conquer*.\(^{18}\) However, these simple online liaisons between one, two, or a handful of people who were generally acquainted in real life quickly developed into the creation of realms where hundreds, and eventually hundreds of thousands, of strangers could interact and play.

These virtual worlds quickly became more than mere places where gamers could gather, slay dragons, and collect shiny digital treasure. Modern virtual worlds boast populations that rival some countries. Blizzard’s *World of Warcraft* has a population of approximately 4,284,000 characters,\(^{19}\) albeit fragmented between many independent identical servers.\(^{20}\) Each server acts as an essentially identical version of the same world. The system is designed to prevent overburdening of any one server by requiring people to choose a server to populate with their characters, thus sharing the burden between servers. *Second Life* has more than 12,741,000 in its game world.\(^{21}\) *Entropia*, though somewhat smaller, nevertheless boasts a population of more than 500,000 from more than 220 countries on its virtual planet.\(^{22}\)

\(^{18}\) *Doom* is a registered trademark of Id Software. Wikipedia, Doom, http://en.wikipedia.org/wiki/Doom (last visited Nov. 15, 2007). *Command and Conquer* is a registered trademark of Westwood Studios. Wikipedia, Command & Conquer, http://en.wikipedia.org/wiki/Command_&_Conquer_(series) (last visited Nov. 15, 2007). Multiplayer *Doom* is a first-person shooter game in which two or more players seek to kill each other within a maze or building. Multiplayer *Command and Conquer* involved two to four players connecting and building armies, gathering resources, and combating each other on a terrain map.


\(^{20}\) When players join *World of Warcraft* they have the option of making characters on one of dozens of servers provided by Blizzard. In this manner, one particular server is not overburdened by users. Each server is identical in its characteristics. See World of Warcraft, Info: Realm Types, http://www.worldofwarcraft.com/info/basics/realmtypes.html (last visited Oct. 17, 2007).


Each user interacts with the virtual environment and other users through a customizable representative digital persona. This digital persona, called an “avatar,” receives commands from the user and can move, communicate, and act within the virtual world in accordance with the user’s wishes. Each person, through their avatar, is engaged in a vibrant social experience. MMORPGs are games of social strife and survival with each participant trying to maximize his station and advancement within the virtual world’s engineered social hierarchy. Virtual worlds are often governed by very Hobbesian notions of survival. Life in virtual worlds such as Entropia’s Calypso or World of Warcraft’s Azeroth is “solitary, poor, nasty, brutish, and short.” As a result, virtual citizens attempt to optimize the time that they have within a virtual world. Players, through their avatars, habitually seek out dangerous environments inhabited by dangerous creatures and non-player characters. More importantly, there is a flourishing free market economy complicated by scarcity. Relative scarcities and the free market therefore govern the price and availability of essential goods through the forces of supply and demand. The biggest danger many virtual citizens face is from another player competing for resources from another computer, controlling another avatar who is also seeking to maximize their opulence by the consumption of both public and private virtual

24 Avatar, SHORTER OXFORD ENGLISH DICTIONARY (Oxford University Press 2002). An incarnation or embodiment (of another person, an idea, etc.). In virtual worlds an avatar is the embodiment of the real world person. It is through the avatar that the individual interacts with other players and the virtual world itself.
25 See Chen, supra note 17, at 2-4 (discussing virtual community forming).
26 For instance, World of Warcraft players can earn various ranks and status symbols as well as gain access to new quests, items, and treasure through reputation systems. See generally World of Warcraft, WoW: Info: Basics: Reputations, http://www.worldofwarcraft.com/info/basics/reputation.html (last visited on Oct. 17, 2007).
28 Id. at 96.
goods. Life in many virtual worlds is a struggle to survive, characterized by numerous exchange transactions, and death is a common occurrence. However, in virtual worlds, the death of an avatar is only a temporary inconvenience.

Although some software companies grant property rights to the users of their virtual worlds, all virtual world users should be granted protection by the Fourteenth Amendment’s guarantee of life, liberty, and property. This protection must be balanced, however, against the important intellectual property and ultimate ownership rights of software companies, as well as the needs of society in general. This article contends that virtual worlds perform public functions, often functionally equivalent to public municipalities or parks, and are therefore a logical extension of the United States Supreme Court’s “company town” doctrine. Furthermore, as a matter of public policy, the social, economic, and innovative activities that transpire within virtual worlds strongly support protecting the property rights of the people participating within virtual demesnes.

This article serves as an exposition of some important and interesting issues that are of first impression in North America. Virtual property rights, society’s needs, and the rights of software companies collectively create complex issues of constitutional, economic, criminal, and social importance. Section I introduces the scope of the article and the arguments it makes. Section II offers a brief description of virtual property and its characteristics in virtual worlds. Section III argues that

30 For example, in World of Warcraft there is a very rare herb called the Black Lotus. In order to harvest the Black Lotus, one must be a very high level herbalist. Black Lotus can sell for very high prices, but grows infrequently, and only in areas that see a high degree of factional conflict. Players who can control and monopolize this resource can therefore profit greatly at other players’ expense. For background on herbalism, see WoW: Info: Professions: Herbalism, http://www.worldofwarcraft.com/info/professions/herbalism.html (last visited Oct. 17, 2007).
31 Most virtual worlds have some type of resurrection system whereby a character can be regenerated and returned to life, although there is occasionally a cost associated with this, depending on the virtual world.
32 See U.S. Const. amend. XIV (stating that the states shall not “deprive any person of life, liberty, or property, without due process of law”).
33 See Marsh v. Alabama, 326 U.S. 501, 509-10 (1946) (holding that privately owned towns that performed essentially public functions could not restrict the First Amendment rights of their citizens).
individuals should be granted property rights due to the problems inherent in the current contract based system of virtual property. Section IV explores the legal support for recognizing virtual property rights in the United States and other jurisdictions. Finally, Section V discusses a potential solution to the problem, which balances the rights of individual virtual property owners, software companies, and society as a whole.

II. WHAT IS VIRTUAL WORLD PROPERTY?

Virtual property, as a concept, is likely derived from pen and paper role-playing games. Pen and paper games such as Dungeons and Dragons had a player role-play a character, using dice and recorded statistics (hence the pen and paper) to determine the outcome of confrontations and events. Individual players would act out their character’s actions and speeches with each other, while fictional characters were controlled by a game master. In the late 1970s, the advent of simple computer networks allowed programmers to create limited text-based virtual worlds on the same premises as pen and paper games. Users responded to a scripted adventure by typing commands such as “turn left,” “pick up key,” or “open door,” while progressing along a fairly linear story line.

New technology presented new opportunities for gamers. The presence of easy to use, and easy to access networks, particularly the Internet, allowed increasing numbers of people to connect to each other for fun and socialization. In the 1990s, the MMORPG genre exploded with the financial success and popularity of 1997’s Ultima Online.

35 In a pen and paper game, such as Dungeons and Dragons, players would adventure and seek out treasure in the form of imaginary items, such as a magical sword or gold. Wikipedia, Dungeons & Dragons, http://en.wikipedia.org/wiki/Dungeons_&_Dragons (last visited Nov. 15, 2007).
36 See Wikipedia, supra note 35; cf. Bartle, supra note 34, at 72 (explaining the role of the referee).
37 See Bartle, supra note 34, at 4-5.
39 See id. (describing the creation of online games).
40 See id. (describing the developments in 1997).
LeBlanc

Ultima Online provided users with a graphical representation of their player characters, virtual treasure items, an immersive environment, and the ability to interact with thousands of other players. Each player had a customizable avatar through which the player could interact and affect the environment and other avatars within it.

MMORPGs are a rapidly expanding genre of video games that generates approximately one billion dollars in direct revenue annually. Revenue is expected to triple by 2009. The current market leader in virtual gaming is Blizzard Entertainment’s World of Warcraft. Since its launch in 2004, World of Warcraft has grown to dominate online gaming. There are currently over seven million characters level ten and up populating World of Warcraft. World of Warcraft is an MMORPG in which players complete quests, hunt monsters, and craft items in exchange for virtual property and status within the virtual community. Players, who live in the massive virtual world of Azeroth, compete with each other for scarce resources to improve their virtual character. World of Warcraft’s EULA and Terms of Use forbid the sale of virtual

---

42 See id. (describing the characters).
43 Online Gaming Revenues to Triple by 2009, Parks Associates, Dec. 14, 2005, http://www.parksassociates.com/press/press_releases/2005/gaming-1.html. This report depicts direct revenue from game sales and subscription fees as opposed to additional sources such as hardware or peripherals. Id.
44 Id.
48 Villarreal, supra note 45, at 4-5 (describing Azeroth).
property in the real world. However, real world transactions involving virtual property still occur among World of Warcraft users. For example, a player’s character may receive mail through the game’s postal system in which a company may offer to increase that avatar’s level or sell that person gold or items in exchange for real world payment.

Other games, such as Linden Lab’s Second Life, have begun to bridge the barrier between the virtual and real worlds by claiming that their world’s virtual wealth is convertible to real money. MindArk’s Entropia has virtual money, called Project Entropia Dollars, to United States dollars at a ten-to-one exchange rate. Players can even access virtual wealth through their ATM debit cards at certain banks. In Entropia, players explore a futuristic virtual planet and craft, hunt, and forage for things that can be sold and traded for Project Entropia Dollars. Both Entropia and Second Life recognize that virtual world transactions and wealth have real world implications, and grant limited property rights to users. In particular, they permit the exchange of virtual property for real money.

Beijing Arctic Ice Technology Development Co. Ltd.’s game Hongyue (Red Moon) pits virtual characters against each other in battle as players use real money, labor, and skill to acquire more potent weapons for use in combat. Red Moon is the game at the center of China’s new policy upholding virtual property rights and alienability.

---

53 Id.
54 Id.
56 See id.
Entrepreneurial users have been converting virtual property wealth into real world wealth for years, often contrary to software companies’ EULAs or Terms of Use agreements. Players expend time, effort, and use personal skills such as intelligence, manual dexterity, and organization in order to earn virtual property. In this way, virtual gaming can resemble many real world activities whereby effort and time results in rewards. It is expected that players who have proven to be particularly adept at acquiring virtual wealth or property seek to exchange the virtual property they acquire for real property. In so doing, a player essentially transfers their skill, expertise, and time to another player, in exchange for the buying player’s real money. This natural human tendency to seek trade was noted over two hundred years ago by Adam Smith when he argued in The Wealth of Nations that “the propensity to truck, barter, and exchange one thing for another” existed in human nature.

These virtual and real world transactions are not unlike traditional work-for-hire transactions. An individual may seek advancement for his virtual world character by hiring another individual’s virtual character to work on his behalf. Workers with marketable skills have historically been free to reach agreements with other parties to profit from their skills. The difference between virtual exchanges and traditional work-for-hire exchanges is that virtual property exchanges involve worlds that have been digitally created and are controlled by private companies’ artificial rules. These companies require the

---

57 See, e.g., World of Warcraft, supra note 49 (The World of Warcraft Terms of Use Agreement expressly forbids the sale of virtual property items: “Ownership/Selling of the Account or Virtual Items. Blizzard does not recognize the transfer of Accounts. You may not purchase, sell, gift or trade any Account, or offer to purchase, sell, gift or trade any Account, and any such attempt shall be null and void Blizzard owns, has licensed, or otherwise has rights to all of the content that appears in the Program. You agree that you have no right or title in or to any such content, including the virtual goods or currency appearing or originating in the Game, or any other attributes associated with the Account or stored on the Service. Blizzard does not recognize any virtual property transfers executed outside of the Game or the purported sale, gift or trade in the ‘real world’ of anything related to the Game. Accordingly, you may not sell items for ‘real’ money or otherwise exchange items for value outside of the Game.”).

denizens of their worlds to agree to EULAs and Terms of Use agreements that often forfeit all, if not most, virtual property rights to the company.59

A. Private Regulation of Virtual Property Rights Through EULAs

Virtual property right law in North America is currently an ad hoc system of privileges and responsibilities determined and granted at the discretion of the software company that created the relevant virtual world.60 Privileges and responsibilities can often be denied or granted depending on the desires of the software company that created the virtual world in question and documents such as EULAs. There is currently no public legal regime that specifically governs virtual property disputes or virtual property rights in the United States.

Currently, property rights within virtual worlds are principally governed by EULAs and Terms of Use agreements provided by the software companies when the games are purchased. EULAs and Terms of Use agreements tend to be of two general varieties. The first type of EULA, or Term of Use agreement, includes those documents used by Blizzard in its World of Warcraft game, which completely prohibits any transfer or sale of virtual property.61 The second type of document includes the EULA used by MindArk to regulate its Entropia universe.62 MindArk grants property rights to virtual citizens, but reserves the right to amend the rules governing their acquisition at its discretion.63

The type of documentation provided by Blizzard, as represented by its EULA and Terms of Use, is the most restrictive variety. Blizzard

59 See, e.g., World of Warcraft, supra note 49 (showing Terms of Use Agreement).
62 See Entropia Universe End User License Agreement (EULA), supra note 60.
63 See id., (“As part of your interactions with the System, you may acquire, create, design, or modify Virtual Items, but you agree that you will not gain any ownership interest whatsoever in any Virtual Item, and you hereby assign to MindArk all of your rights, title and interest in any such Virtual Item.”).
expressly repudiates any user property rights to virtual items and virtual currency. In its Terms of Use, “Blizzard does not recognize any virtual property transfers executed outside of the Game or the purported sale, gift or trade in the ‘real world’ of anything related to the Game.”

Regardless of whatever time or labor individuals devote to activities within World of Warcraft, they have no recognized, real world rights to any of their virtual property.

MindArk’s Entropia EULA states that all ownership rights in avatars and virtual property, however modified, improved, or enhanced by an individual user through her avatar, remain with MindArk. However, in the next section, Entropia’s EULA purports to grant individuals the privilege “to carry out secure transactions with other Participants, in which buyers and sellers exchange Virtual Items, Virtual Funds, and Real-Life Items (the “Approved Transaction”).” MindArk further reserves the right to take any steps or measures that it deems necessary to prevent fraud, non-approved transactions, or abuse. Through its EULA, MindArk creates a rules regime that reserves ultimate ownership rights in itself. However, MindArk differs from Blizzard in that it grants the citizens of its virtual world the privilege to profit from virtual property exchanges with real money. MindArk’s approach certainly grants more property protection than Blizzard; however, it is important to note that MindArk grants users a privilege revocable at MindArk’s discretion, not an absolute right.

In particular, EULAs like Blizzard’s have been criticized as contracts of adhesion and an improper restraint on alienation. One of the principle foci of property law is to prevent unreasonable restraints on the alienation of property and thereby promote the most productive use for property. Unreasonable restraints on more traditional, tangible

---

64 World of Warcraft, supra note 49 (listing Clause 8 titled “Ownership/Selling of the Account or Virtual Items”).
65 Id.
66 See Entropia Universe End User License Agreement (EULA), supra note 60.
67 Id. at Clause 8.
68 Id.
69 See BBC NEWS, supra note 1 (where an individual paid U.S. $26,500 for a virtual island that the player was free to develop in the game “Entropia”).
70 See Fairfield, supra note 4, at 1083-84.
71 Id. at 1051-52.
property are generally unenforceable.\(^{72}\) “The common law has invalidated restraints on alienation of property from time out of mind.”\(^{73}\) Therefore, traditional property law provides a system that may be used to prevent the type of one-sided contractual agreements that are imposed by some software companies’ EULAs.\(^{74}\)

This is not to say that EULAs should be abolished, for they serve an important purpose as the contract of sale between the buyer and seller of virtual world software. EULAs serve as an important foundation for the rights and responsibilities that accrue with virtual property and software use. However, a company should not be permitted to draft a contract that is so one-sided that it removes all rights in virtual property that arguably belong to consumers. EULAs should be governed by a set of principals that recognize certain virtual property rights, much like the Uniform Commercial Code, which defines acceptable behavior in contracts for the sale of goods.\(^{75}\)

III. Should Individuals be Granted Virtual Property Rights?

The current ad hoc system of EULAs governing virtual property is rife with problems. Forbidding the alienation of virtual property has established a system whereby virtual property is valuable\(^{76}\) and transferable, but has also created an artificial restraint on the transference of wealth between real and virtual worlds. When people devote time and labor within virtual worlds, they want to be able to convert some of their virtual wealth to real world wealth.\(^{77}\) The ingenuity and desire of

\(^{72}\) Id. at 1052.


\(^{74}\) See Fairfield, supra note 4, at 1084 (“The function of property law is in large part to resist contractual limitations on property use . . . . Thus, property law provides a rationale and a mechanism for resisting the systematic expropriation of emergent online property forms by use of contract.”).

\(^{75}\) See infra Part VI.

\(^{76}\) CHEN, supra note 17, at 133.

\(^{77}\) See id. at 134 (explaining that players now are interested in profit and not just entertainment); see also Cory Ondrejka, Escaping the Gilded Cage: User Created Content and Building the Metaverse 28, http://lawyers.com/Cory_Escaping.pdf (arguing that “virtual wealth must be convertible to real wealth”).
players to profit from their time and labor\footnote{Chen, supra note 17, at 134.} is not surprising. People have a natural tendency to expect their effort and labor to be rewarded, even though such effort and labor is pleasurable in and of itself.\footnote{See id.} As Adam Smith observed two centuries ago, people have a natural propensity to “truck, barter, and exchange . . . .”\footnote{Smith, supra note 58, at 16.} This propensity also exists when groups of people interact within virtual worlds. There are people willing to buy virtual property items and there are people willing to sell virtual property items.\footnote{See generally, Jason A. Archinaco, Virtual Worlds, Real Damages: The Odd Case of American Hero, The Greatest Horse That May Have Lived, 11 Gaming L. Rev. 21, 25 (2007) (discussing the black market for virtual items).} However, due to the restraints on transactions involving real property and virtual property, people wishing to trade must do so outside of most legitimate systems and rely on black or grey markets.\footnote{See id. (discussing the black market).} As a result, these transactions occur in relatively unsafe and illegitimate environments, which results in elevated levels of fraud and abuse.

A. The Problem with Fraud

One of the most significant reasons to reform the current system is fraud. Although fraud can occur under a number of scenarios, virtual property transaction fraud usually “takes place under the following circumstances.”\footnote{Ian MacInnes et al., Virtual World Governance: Digital Item Trade and Its Consequences in Korea 16 (2004), available at http://web.si.umich.edu/prc/papers/2004/382/ppr%20Korea%2008%20TPRC%20%final%20revised.pdf (presented at Telecommunications Policy Research Conference).} First, there is generally contact with, and a resulting agreement between, individual A, who wants to sell virtual property, and individual B, who wants to buy virtual property.\footnote{Id. (presented at Telecommunications Policy Research Conference).} B may desire to purchase the virtual property for his own avatar’s use in order to increase his avatar’s power or standing within the virtual world community.\footnote{Id.} Alternatively, B may be interested in reselling the virtual property he purchased to yet another person for profit. Regardless of B’s motives for purchasing the virtual property, the transaction can be-
come troublesome for either A or B and fraud can occur in a number of situations. For instance, A may transfer the virtual property, and B may fail to completely pay for the transfer; A may transfer non-conforming virtual property after B has paid; or A may transfer altered, duplicated, hacked, or otherwise illegitimate virtual property.86

While virtual property fraud data is difficult to come by in the United States, some research from the Korean Cyber Terror Response Center (CTRC) may be illuminating for purposes of this discussion. Korea is one of the most Internet-connected countries in the world, with the majority of its citizens preferring virtual worlds to television.87 Such a high level of connectivity and virtual interaction has caused legal consequences for Korean society.88 According to the CTRC, an estimated seventy percent of teenage crime in Korea is in some way related to virtual property fraud, particularly virtual item trade fraud.89 Taiwanese statistics also support the contention that virtual property related crime is an increasing problem.90

Variances in culture and crime rates aside, Korean statistics and Taiwanese experiences clearly suggest that individuals with the required knowledge and opportunity to commit cyber fraud actually do commit cyber fraud, and that crime involving virtual property is a growing problem.91 Virtual item fraud has been increasing as networking technology and virtual worlds become more common and mainstream. The CTRC data claims that the number of Korean cyber fraud cases increased from 675 in 2000 to 10,187 in 2003.92 This demonstrates an astounding increase in the number of cyber fraud cases, and therefore, victims.

However, fraud analysis, detection, and prevention is unprepared to effectively deal with the problem due to the international na-

86 Id.
87 Fairfield, supra note 4, at 1061; see also MACINNES, supra note 83, at 8 (“Statistics from the National Internet Development Agency of Korea (NIDA) indicate that 68.8% of all Korean households have [I]nternet access at home.”).
88 See MACINNES, supra note 83, at 17 (discussing crime).
89 Id. at 17.
90 CHIN, supra note 17, at 133 (citing the National Police Administration of Taiwan).
91 See id. (stating that crimes include “theft, fraud, robbery, threat, sabotage and others”); see also, MACINNES, supra note 83, at 17 (showing the increase in crime).
92 MACINNES, supra note 83, at 17.
ture of some virtual property fraud. For example, individual A may live in the United States, but individual B may live on the other side of the world. What happens when A is from South Africa, B is from Russia, and the item is being sold to C in Korea? How can the crime be tracked? Within the virtual world, borders are moot and criminal acts can involve persons in numerous jurisdictions. While it is certainly true that jurisdictional issues may complicate matters, they do not excuse an absence of action within the United States, and application of certain standards upon those individuals and companies subject to United States jurisdiction. Jurisdictional problems could be mitigated through the use of a program that requires user membership and registration, either within the game, or without. Korea has found that legitimate virtual property transactions through a third party system such as eBay or ItemBay\(^{93}\) can significantly reduce virtual item transaction fraud.\(^{94}\) According to ItemBay, a company that specializes in virtual item transactions, reported that its “cyber crime rate is only 0.01% of its transactions.”\(^{95}\) ItemBay requires all of its members to register before any sale.\(^{96}\) Then, it requires authentication of all registrations.\(^{97}\) In Korea, ItemBay receives cooperation from the Korean government to ensure accurate authentication of its members’ identities.\(^{98}\) ItemBay in Korea has shown that effective security measures and government cooperation can drastically reduce fraud rates. Reduced fraud leads to less criminal activity, social cohesion in both the virtual and real worlds, and happier customers for software companies. However, the use of such external utilities must be balanced against notions of fairness and gamesmanship.

\(^{93}\) While a utility such as ItemBay may reduce virtual item transaction fraud, some players feel that the use of external companies that pay people to “farm,” or encourage “farming” of wealth, contradicts the spirit of gamesmanship. See Wikipedia, Farmer (Gaming), http://en.wikipedia.org/wiki/Farmer_(gaming) (last visited October 19, 2007). “Farming” is repetitively killing and hunting in an area for valuable items. See id.

\(^{94}\) MacInnes, supra note 83, at 16.

\(^{95}\) Id. at 16.

\(^{96}\) Id. at 17.

\(^{97}\) Id.

\(^{98}\) Id. at 18.
B. The Existing Black Market

Black markets often result from the constraint of an economic liberty without the removal of demand. 99 When the United States government forbade the sale of alcohol in the 1920s, a black market was immediately born to cater to those still wishing to buy and sell alcohol. 100 Some scholars have referred to the sale of virtual items as a “grey market” 101 as opposed to a black market. While a grey market generally operates when there is uncertainty about the law, this article contends that current EULAs would generally be enforceable in the courts, and since virtual world transactions are occurring in direct contradiction to the EULAs, the market is black instead of grey.

Terminology aside, the basic premise remains that virtual property sales are occurring outside of a safe regime and in the absence of positive law. Forbidding the sale of something with value does not mean that there will be no sale, it simply means that there will be less control of any sales that occur. In the face of restraint imposed by EULAs, a black market has resulted whereby individuals who desire to transfer their property do so without legal controls. This is problematic because black markets are more costly to operate than permissive free markets. 102 Furthermore, black markets lead to increased risk of fraud, lost tax revenue, abuse, and lack of control by either governmental agencies or software companies. 103 Black markets exist because of the

99 See BLACK’S LAW DICTIONARY 988 (8th ed. 2004) (defining “black market” as “[a]n illegal market for goods that are controlled or prohibited by the government . . . .”).

100 See Jendi B. Reiter, Citizens or Sinners?—The Economic and Political Inequity of “Sin Taxes” on Tobacco and Alcohol Products, 29 COLUM. J.L. & SOC. PROBS. 443, 447-48 (Spring 1996) (“Nationwide prohibition of alcohol similarly generated a criminal black market . . . .”) (citing TUN YAUN HU, THE LIQUOR TAX IN THE UNITED STATES, 1791-1947 51 (1950)).


103 See, e.g., Jamie J. Kayser, The New New-World: Virtual Property and the End User License Agreement, 27 LOY. L.A. ENT. L. REV. 59, 80 (2006-07) (discussing the problems of fraud that exist within black markets); Matthew J. Rita, Fishing for
desire for individuals to conduct real world transactions that involve virtual property.\textsuperscript{104} The virtual property black market is thriving, by some estimates generating up to one billion dollars in revenue per year.\textsuperscript{105} However, the difficulties and risks inherent in black market transactions risk increasing the discontent of regular visitors to virtual worlds. Virtual citizens may ask themselves: why must I go through all of the risk involved in selling virtual property illicitly, when there could be mechanisms in place to do so safely and easily? Recognition of limited property rights in the individual would legitimize virtual property transactions and allow such transactions to be safely regulated and controlled.

\textbf{C. Recognizing Virtual Property Rights May Be Good Business}

Virtual property sales are big business. Edward Castranova, an economist who has studied virtual world economies for years, estimated that in 2006, the real world value of virtual item sales was already somewhere between one hundred million and one billion U.S. dollars (2006).\textsuperscript{106} Software companies can harness this black market through the use of existing auction-house technologies within virtual worlds. Secure and safe systems already exist whereby players can place their avatar’s virtual property up for auction for sale to the highest bidder, or to any individual who is willing to pay a higher “buy-out” price. A small transaction fee is charged to the seller in virtual dollars. Utilization of this system for use with real currency (or virtual currency exchangeable at a market rate) could stabilize or remove the black market and generate additional revenue for software companies. Exchange rates can be capped to control the system, like \textit{Entropia}’s exchange rate, which is set at ten Project Entropia Dollars to one U.S. dollar.\textsuperscript{107}

\textit{Dollars: The IRS Changes Course in Classifying Fishermen for Employment Tax Purposes}, 77 C\textsc{ornell} L. R\textsc{ev.} 393, 426 (Jan. 1992) (noting the loss of tax revenue that results from black markets).

\textsuperscript{104} See generally Edward Castranova, \textit{Synthetic Worlds: The Business and Culture of Online Games} 149-51 (2005) (noting the high volume of sales of virtual goods in the real world); Fairfield, \textit{supra} note 4, at 1063 (“People sell virtual objects on eBay for real world money every day.”) (citing Castranova, \textit{supra} note 101).

\textsuperscript{105} Archinaco, \textit{supra} note 81, at 25.

\textsuperscript{106} See \textit{id.}; see also Castranova, \textit{supra} note 104, at 13.

Alternatively, some companies may prefer to let exchange rates fluctuate and be determined by market forces, relying upon supply and demand to establish a suitable rate of exchange. Such exchanges are also monitored to prevent item and transactional fraud, with the software program acting as an efficient middle-man for the exchange.

The case of Sony Online Entertainment (Sony) and its *EverQuest II* MMORPG is illustrative of the benefits that a software company can receive when virtual item trade is permitted and controlled.108 Sony launched an auction site specifically for the sale of virtual property and avatars for its *EverQuest II* video game.109 Sony’s auction site generated $1.87 million in gross sales during the first year of its operation on only some of Sony’s gaming servers.110 One seller alone earned $37,000 from the sale of 351 virtual property items.111 Sony permitted the exchange rate between virtual and real currencies to be determined by the forces of supply and demand.112 In its first year of operation, the exchange rate for *EverQuest II* was $7.35 U.S. for one piece of game platinum.113 Sony created a safe market to meet its users’ expectations, and thereby increased its profitability as well.

When a company such as Sony can generate $1.87 million in sales during the inaugural year of operating an item auction system on only some servers, for only one game, the potential value and size of the virtual property trade industry is evident. Rather than having such transactions conducted in the black market alleyways of the Internet, effective control of a safe marketplace can be utilized and taxed by governments for additional revenues. Increased tax revenues benefit society as a whole. Transactions involving virtual property would be conducted in a more open, safe, and predictable manner. Additionally, legal alienability of virtual property would result in fewer externalities.


109 Id.

110 Id.

111 Id.

112 Id.

113 Id.
(such as fraud) and more controllable transaction costs (eliminating cost premiums and risk in a black market). Lastly, software companies could hardly complain about taxation because the revenue being taxed would not exist but for the creation of the same controls that permit taxation.

IV. WHAT BASIS EXISTS FOR GRANTING VIRTUAL PROPERTY RIGHTS?

There are three principal bases that this paper relies upon as support for the recognition of limited virtual property rights. The first basis is United States case law and constitutional law, in particular the line of cases starting with *Marsh v. Alabama*.114 The second basis is a strong public policy argument. Finally, this article examines legal developments and virtual property regimes in a selection of foreign jurisdictions as the third basis.

A. United States Case Law: The “Company Town” Doctrine

In the 1946 decision of *Marsh v. Alabama*, the Supreme Court held that privately owned towns that performed essentially public functions could not restrict the First Amendment rights of their citizens.115 The Court has since refused to extend the public function, “company town” doctrine to shopping malls.116 However, twenty years after *Marsh*, Justice Douglas’ majority opinion in *Evans v. Newton*117 relied upon the public function principle of *Marsh*’s “company town” in holding that a privately run park was subject to the controls of the Fourteenth Amendment.118 The park in *Evans* was established in trust for the City of Macon to be used by whites only.119 The City of Macon, Georgia was named as trustee of the park, and initially operated the park on a segregated basis in accordance with the trust.120 However, the

---

115 See id. at 509-10.
116 See Hudgens v. Nat’l Labor Relations Bd., 424 U.S. 507, 520-21 (1976) (holding that First Amendment rights were not to be extended to protesters in a private shopping mall).
118 Id. at 302.
119 Id. at 297.
120 Id.
City of Macon decided that it could not operate a park, which was essentially public in nature, on a segregated basis; and therefore permitted both black and white individuals to use the park.\textsuperscript{121} In the ensuing lawsuit, the managers of the park sued to remove the City of Macon as a trustee and enforce the racial segregation of the park.\textsuperscript{122} The City of Macon subsequently resigned as trustee, but the Supreme Court, pursuant to Justice Douglas’ majority opinion, held that the park, despite its private ownership, nevertheless served an inherently public function, and operation of the park was constrained by the Fourteenth Amendment prohibition against discrimination.\textsuperscript{123}

Furthermore, the Court relied upon the 1963 decision of Watson \textit{v. Memphis} in stating that “[m]ass recreation through the use of parks is plainly in the public domain.”\textsuperscript{124} This is particularly portentous language considering the evolution of mass recreation in the fifty years since \textit{Evans} and \textit{Watson}.

The Fourteenth Amendment requires that no “State deprive any person of life, liberty, or property, without due process of law . . . .”\textsuperscript{125} In applying the Fourteenth Amendment, the most important word is “State.” The Fourteenth Amendment only applies when a state deprives a citizen of a fundamental right, or when a private actor is fulfilling an essentially public function.\textsuperscript{126} This article contends that the doctrine in Marsh, which was clarified in Evans, applies to virtual worlds. Virtual worlds are modern “company towns” and serve as vast recreational parks enjoyed by people all over the United States. Because virtual worlds are private demesnes that perform an essentially public function, the Fourteenth Amendment must apply to them pursuant to Evans and Watson.\textsuperscript{127} Application of the Fourteenth Amendment must not be

\begin{itemize}
  \item \textsuperscript{121} Id.
  \item \textsuperscript{122} Id. at 297-98.
  \item \textsuperscript{123} Id. at 301-02.
  \item \textsuperscript{124} Id. at 302 (citing Watson \textit{v. Memphis}, 373 U.S. 526 (1963)).
  \item \textsuperscript{125} See U.S. CONST. amend. XIV.
  \item \textsuperscript{126} See Marsh \textit{v. Alabama}, 326 U.S. 501, 508-09 (1946) (finding that the corporation maintaining the park cannot violate the First and the Fourteenth Amendment); see also Evans, 382 U.S. at 299 (stating that “when private individuals or groups are endowed by the State with powers or functions governmental in nature, they become agencies or instrumentalities of the State and subject to its constitutional limitations”).
  \item \textsuperscript{127} Id.
\end{itemize}
piecemeal. The entire Fourteenth Amendment must apply, including the prohibition against deprivations of property or property rights.

The world of *Marsh, Watson,* and *Evans* was a very different place than the world of today.\textsuperscript{128} Technology makes things possible today that were unimaginable, or at the very least science fiction, in the 1960s. The manner in which people interact and socialize has been revolutionized through the Internet and virtual world software. At one time, people would socialize and interact in the communal areas of towns and in public parks devoted to the relaxation and pleasure of local citizens. However, with the advent of advanced virtual networking technology of the type used in games such as *World of Warcraft* or *Entropia,* many people choose to interact and socialize with other people in virtual towns and virtual parks through the use of avatars, often across vast geographical distances. Individuals who may have felt out of place or awkward in a real life social setting, such as a park, interact in virtual parks and towns through their avatars.

Where a slow moving stream may serve as a tranquil place to relax and fish in the real world, a person’s avatar can replicate the same experience in a virtual world. A character can select a lure and fishing pole, and try his luck catching the local piscine inhabitants. Where a sea-side escarpment in San Diego may provide a breathtaking view of the sun setting over the Pacific Ocean, a player’s avatar can sit with friends and await the beautiful computer generated sunsets over *World of Warcraft*’s Forbidding Sea from the untamed shores of Azshara. *World of Warcraft* is on a day-night cycle just like the real world.\textsuperscript{129}

Software companies have created parks accessed by users for mass recreation within the scope of *Watson.* At least in the United States, the Supreme Court’s decisions in *Watson, Marsh,* and *Evans* could serve as the basis for extension of life, liberty, and property to virtual worlds. These precedents could be used to support future court decisions or legislative actions such as the case after Mr. Li Hongchen’s

\textsuperscript{128} *Marsh, Watson,* and *Evans* were decided in 1946, 1963, and 1966 respectively.
Chinese court decision. The application of United States constitutional law principles as a basis for virtual property rights would of course only benefit virtual world citizens within the jurisdiction of the United States.

Modern virtual worlds fulfill many of the traditional roles of more established parks or towns. Individuals can connect to a virtual world from any location in the world and interact with other individuals who may be physically situated thousands of miles away. Virtual worlds have populations that may exceed many of the states, provinces, or countries where individual users are located. For instance, according to the 1960 decennial census, the entire population of Macon County, Georgia was only 69,764 people around the time that Evans was decided. This is dwarfed by the populations of modern virtual worlds such as World of Warcraft or Entropia. The masses occupy-


133 See, e.g., Entropia Universe, supra note 131; US Quick Server Stats, supra note 19.
ing virtual worlds should not be denied the rights and protections of the Fourteenth Amendment that smaller communities in the real world have been permitted under similar circumstances. Technology has changed. Times have changed. The law must adapt and change with the technology and the times. In the age of digital frontiers, pioneers on those digital frontiers should be granted some of the basic fundamental rights to life, liberty, and property that the Fourteenth Amendment allows.

B. Public Policy

The notion that labor produces wealth and that individuals should be rewarded with the fruits of their labor has deep roots in western intellectual thought. In his Treatises of 1690, John Locke discussed his theory of the property value of labor. Locke stated that the “labor of his body and the work of his hands, we may say, are properly his.” Locke, though, was a naturalist. He opposed the imposition of man-made law over natural law. However, Locke’s position is supportive of the concept that labor is property. The concept that labor is property has roots in western intellectual thought. In addition, if we uphold and enforce a subverted natural law pursuant to man-made laws, is that not in fact preferred to the subversion? The answer should be yes.

In the Eighteenth century, Adam Smith stated that “[l]abour . . . is the real measure of the exchangeable value of all commodities.” Each person is endowed with unique skills, abilities, and attributes. Each person may devote their particular endowment to any purpose they desire. If profit or the acquisition of property is to be derived from an individual’s labor, then that individual should be entitled to the fruits of

---

134 Fairfield, supra note 4, at 1072 (stating that “Demsetz demonstrates that as technologies change, new rights emerge”) (citing HAROLD DEMSETZ, OWNERSHIP, CONTROL, AND THE FIRM: THE ORGANIZATION OF ECONOMIC ACTIVITY 177 (Blackwell Publishers 1990) (1987)).

135 See SMITH, supra note 58, at 30 (“Labour was the first price, the original purchase-money that was paid for all things.”); see, e.g., JOHN LOCKE, THE SECOND TREATISE OF CIVIL GOVERNMENT (Thomas P. Peardon ed., Bobs-Merril, 1952) (1690) (“The labor of his body and the work of his hands, we may say, are properly his.”).

136 LOCKE, supra note 135.

137 Id. at 17.

138 Id.

139 SMITH, supra note 58, at 30.
his labor. Labor has a value of its own and is a form of property in and of itself.140

Virtual world citizens pay for the privilege of having an avatar within the virtual world. Games such as World of Warcraft require a monthly subscription fee,141 whereas others such as Entropia permit free access, but then require users to spend money for their avatars to acquire essential virtual property items or skills as an investment.142 Concepts of equity and compensation strongly support a system wherein a person is rewarded for the value added by their personal labor, skill, and time. Labor as property and as leading to the acquisition of property has been recognized for centuries.143

1. Virtual Property Rights Are in the Best Interests of All

Even though not all market participants may be rational; rational market participants are required for a market to operate at maximum efficiency.144 A rational market participant is one who seeks to maximize his own gain, or in the words of Adam Smith, opulence.145 A black market does not maximize the gain of market participants.146

140 See id.; see also Locke, supra note 135, at 17.
141 See Chen, supra note 17, at 3 (discussing the main business models that software companies use for online games, and in particular, the charges for the initial software license with or without charges for network connections).
142 World of Warcraft costs $14.99 per month, with discounts for buying in larger blocks of months. See Blizzard Entertainment, Blizzard Support: Purchase a Retail Copy, http://us.blizzard.com/support/article.xml?articleId=20479&categoryId=2320&parentCategoryId=2317&pageNumber=1 (last visited Nov. 18, 2007). Entropia is free to download and use, but the purchase of virtual property requires payment. Entropia Universe, supra note 131.
143 See Smith, supra note 58, at 30; see also Locke, supra note 135 or 91, at 17.
144 See Stephen A. Mathis & Janet Koscianski, Microeconomic Theory: An Integrated Approach 47, 323-25 (Prentice Hall, 2002) (stating that “a rational consumer uses all prevailing information available to choose among various goods and services with the explicit goal of maximizing her utility” and listing the features of “a perfectly competitive market”) (emphasis in original).
145 See Smith, supra note 58, at 11 (speaking of universal opulence).
146 The illicit nature of black markets inherently reduces the availability and accuracy of market information. Therefore, market participants make decisions based on incomplete or inaccurate information. Such decisions are less efficient then fully informed decisions and therefore reduce the benefit to the participant.
Software companies lose out on potential commissions. Additionally, virtual world citizens will become frustrated if they wish to buy or sell virtual property but are unable to do so.

Alternately, when a virtual world citizen risks making a transaction on the black market, they will likely become frustrated if they are the victim of virtual item fraud or inflated black market prices. Frustration is not likely to be mitigated by any notion of the virtual world citizen assuming risks inherent to the black market. Many virtual world users consider virtual property to be theirs. Virtual world users consider virtual property to be their own property and more than likely believe that unfair EULAs, as contracts of adhesion, force them to seek the black market in order to sell what they see as theirs. Should virtual world users become frustrated enough, they may cease contributing to virtual worlds. Membership cancellation may result, which costs not only the user, but also the software company. It is in the interest of the software company to keep customers happy, and thereby maintain their revenue stream.

Virtual world users gain stability, predictability, and economic freedom if virtual property transactions are properly regulated and controlled. Without controlled transactions, society in general suffers from a reduction in potential tax revenue and an increase in criminal activity in the form of virtual property fraud. Allowing controlled virtual property transactions enables software companies to satisfy user desire to transact in virtual property, reduces fraud within their virtual worlds, and garners additional revenues from virtual property transactions. Therefore, it is rational for both virtual world users and software companies to permit controlled virtual property transactions.

C. Foreign Developments

In the United States, virtual property rights are governed by the law of contracts and privately enforceable EULAs. However, some countries have begun to provide virtual property rights despite EULAs.

---

147 MACINNES, supra note 83, at 5.

(last visited Nov. 15, 2007) (discussing the consequences of underground economy).

149 See Horowitz, supra note 2, at 445 (discussing EULAs).
Chinese courts were among the first in the world to offer virtual property rights to individuals, and enforce such rights against software companies.\textsuperscript{150} Korean lawmakers are seeking to regulate virtual property transactions.\textsuperscript{151} Taiwan recognizes virtual property as property covered by law.\textsuperscript{152} Australian officials have commented on the taxability of virtual income and property.\textsuperscript{153}

1. China

With over 26.33 million Internet users\textsuperscript{154} and a population of over 1.3 billion people,\textsuperscript{155} Chinese action in regard to virtual property could act as a catalyst to spur growth in countries more averse to change. In 2003, Beijing’s Chaoyang District People’s Court ruled in favor of gamer Li Hongchen against software company Beijing Arctic Ice Technology Development Co. Ltd. in his virtual property suit.\textsuperscript{156} Mr. Li had been playing \textit{Red Moon} for approximately two years when another player stole his avatar’s weapons and treasure as a result of a programming loophole negligently created by the game developer, Beijing Arctic Ice.\textsuperscript{157} When Chinese police failed to do anything, Mr. Li filed suit against Beijing Arctic Ice to recover the real world value\textsuperscript{158} of the virtual property that had been stolen in the virtual world.\textsuperscript{159} Beijing Arctic Ice did not recognize any user property rights within its game.\textsuperscript{160} Mr. Li explained his case to the press that he “exchanged the equipment

\textsuperscript{150} See On-line Game Player Wins Virtual Properties Dispute, supra note 55.
\textsuperscript{151} See MacINNES, supra note 83, at 1.
\textsuperscript{152} See CHEN, supra note 17, at IV (discussing online gaming crime).
\textsuperscript{153} See Video Game Law Blog, Australian Tax Office Will Tax Income from Virtual Transactions, http://www.daledietrich.com/gaming/ (Oct. 31, 2006, 15:26 EST) (stating that “if a virtual transaction has real world implications—if it can be attributed a monetary value—it attracts the attention of the Tax Office”).
\textsuperscript{154} Fairfield, supra note 4, at 1061.
\textsuperscript{156} On-line Game Player Wins Virtual Properties Dispute, supra note 55; Online Gamer in China Wins Virtual Theft Suit, supra note 130 (Full text of opinion is available in Mandarin Chinese at http://www.chinacourt.org/public/detail.php?id=143455 (last visited Oct. 19, 2007)).
\textsuperscript{157} Online Gamer in China Wins Virtual Theft Suit, supra note 130.
\textsuperscript{158} Id. In Mr. Li’s case, he was awarded 10,000 yuan, or approximately $1,200. Id.
\textsuperscript{159} Id.
\textsuperscript{160} Id.
with my labor, time, wisdom and money, and of course they are my belongings.” In Mr. Li’s case, the Beijing court agreed that Mr. Li should be recompensed for his stolen virtual property. This holding implicitly recognizes that through the application of Mr. Li’s labor, he had certain rights in his virtual property within Red Moon.

The Beijing court’s ruling would make Adam Smith proud. It represents one of the first cases of its kind in the world. It is ironic that Communist China was the first country to implicitly recognize virtual property rights.

In 2004, two Chinese teenagers were prosecuted and sentenced “for the theft of virtual property.” At about the same time, police in the central Chinese city of Chengdu actively investigated virtual property theft. Actions of Chinese police, courts, and prosecutors have continued to recognize virtual property rights in China. In addition, “the Deputy Director-General of the Audio, Visual, Electronic, and Internet Publishing Department under the General Administration of Press and Publication” has publicly stated that he believes that virtual property should be protected in China by positive statutory enactment.

By contrast, United States law has remained silent on the issue, although both commentary and scholarly work is beginning to address the issue of virtual property rights. China recognizes rights to virtual property as part of its attempt to foster a domestic economy that focuses on the Internet and high technology.

---

161 On-line Game Player Wins Virtual Properties Dispute, supra note 55 (quoting Li Hongchen).

162 Id.


167 Id. at 1085.
thousands of jobs relating to virtual property sales, and revenue from online subscriptions is expected to grow to over eight hundred million U.S. dollars by 2008. As a result of these efforts, the United States is currently lagging behind China in the field of virtual property rights.

2. Australia

Australia has not taken legislative action in regard to virtual property rights and Australian courts have been silent on the issue as a result. However, a spokesperson from the Australian Tax Office has commented that “[t]he real world value of a transaction may form part of your taxable income, even if it is in Linden dollars . . . .” Linden dollars are the virtual currency of Second Life. If a virtual transaction should have real world financial implications, the Australian Tax Office appears to have considered treating such transactions as real world income. If such transactions are taxable, then Australia’s Tax Office’s comment seems to also imply that virtual property is actual property, and certain rights may apply.

3. Taiwan

Taiwan is a leading jurisdiction in regard to the recognition of virtual property rights. In 2007, Taiwan had a population of less than twenty-three million people, some two million of whom play online video games. Taiwanese legislation recognizes the alienability and

---

168 Id. (citing Chinese Technological Creation Initiative, http://www.jiaoyiba.com (last visited Feb. 26, 2005)).
169 Id. (citing Lianfeng Wu & Jun-Fwu Chin, China Online Gaming Market Sizing and Forecast, INT’L DATA GROUP (2004), http://www.idc.com/getdoc.jsp?containerId =AP322103L). The Chinese market was estimated to be approximately $159.7 million in 2003 and is forecasted to grow to $822.9 million by 2008. Id.
170 Video Game Law Blog, supra note 153.
172 See Fairfield, supra note 4, at 1050 (stating that “China, Taiwan, and Korea have already made significant steps toward protecting ownership interests in virtual property”).
174 CHEN, supra note 17, at 1 (providing an estimate from 2003).
lawful existence of virtual property.\textsuperscript{175} On November 23, 2001, a Taiwanese Ministry of Justice Regulation expressly stated that virtual property is alienable and transferable, and is protected by Taiwanese law.\textsuperscript{176} The Taiwanese Ministry of Justice explained:

The account and valuables of online games are stored as electromagnetic records in the game server. The owner of the [ ] account is entitled to control the account and valuables’ electromagnetic record, to freely sell or transfer it. Although the above accounts and valuables are virtual, they are valuable property in the real world. The players can auction or transfer them online. The accounts and valuables are the same as the property in the real world. Therefore, there is no reason not to take the accounts and valuables of online games to be the subject to be protected by the larceny or fraud in criminal law.\textsuperscript{177}

Prosecutions for virtual property theft and virtual property fraud have been upheld, and are routine law enforcement tools in Taiwan.\textsuperscript{178} Taiwan has a functioning and workable system that creates enforceable virtual property rights through positive legislative enactments. If the United States creates a system recognizing virtual property rights, it could learn from Taiwan’s experience.

V. A PROPOSAL FOR REFORM

Players in virtual worlds should have limited rights in the virtual property that they acquire. In particular, United States laws should recognize the alienability of virtual property. The manner in which virtual property is acquired is comparable to how property is traditionally acquired in the real world. Within certain bounds, laws should permit entrepreneurship, innovation, and work to be rewarded, even when that work takes place within virtual worlds. However, companies that make

\textsuperscript{175} Fairfield, supra note 4, at 1086 (citing Articles 358 and 359, Taiwan Criminal Code (2001)).

\textsuperscript{176} Id.

\textsuperscript{177} Id. (citing Taiwan Ministry of Justice Official Notation No. 039030 (90)) (omission in the original).

\textsuperscript{178} See id. at 1087.
these virtual worlds should be protected and permitted to profit if the real world oversees and controls virtual world economies. A well run system of virtual item sales, software company commissions, and government taxation of income resulting from transactions involving virtual property would be in the best interest of all. Additionally, EULAs should remain the backbone of legal rights between virtual world users and software companies. However, EULAs should be controlled or limited in the same way that the Uniform Commercial Code governs warranties, or housing legislation covers leases: by giving software companies control within boundaries.

A. Legislation

The current ad hoc system governed by a multitude of EULAs is neither effective nor efficient, and does not address the very real desire of people to engage in legitimate commerce. It is essential that an effective, overarching program provide uniform recognition of limited virtual property rights. A purely ad hoc system leads to numerous inconsistencies between jurisdictions, particularly when virtual citizens of the same world are real citizens of different states. 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, but still recognizes EULAs as the lynchpin of legal rights between virtual world users and software companies.

Ownership rights and intellectual property rights should continue to vest in the software company that created the virtual world. However, virtual citizens should have many of the same rights and privileges that lessors enjoy in rental agreements involving real property. Most MMORPGs have either no virtual property right recognition in conjunction with monthly subscription fees,\textsuperscript{179} or no virtual property alienability within a pay-as-you-go system.\textsuperscript{180} Virtual world users should be granted rights to alienate their virtual property and transfer it within the virtual world as long as the virtual world continues to exist. If the virtual world ceases to exist, then the market for the virtual property, and therefore, the value of the virtual property, would be zero.

\textsuperscript{179} See discussion on World of Warcraft, supra notes 13-15.
\textsuperscript{180} See discussion on Entropia, supra notes 13-15.
In principle, the user’s alienability right would operate in much the same way as a rental sublease involving real property. If A sublets an apartment to B (like a transfer of virtual property), both A and B know that the sublease, and therefore, the value of the transaction, only exists as long as the apartment building exists. Should the landowner wish to redevelop the land, he may do so, although he is bound by any existing contractual obligations such as active leases (or active subscriptions). Similarly, virtual world users must assume this risk when they participate within a virtual world. After all, the virtual property is only valuable as long as the virtual world exists and the virtual world user has a valid subscription.

Still, software companies, like landowners, must not be permitted to arbitrarily close a virtual world. They must be bound by any outstanding subscriptions or service period agreements, though they may provide notice and then close the virtual world at the termination of such periods. Should virtual world citizens choose not to participate within the virtual world and cancel their subscriptions, then all virtual property possessed by their avatars should revert in entirety to the software company. Should individuals choose, they may conduct a “going out of business” type sale to liquidate any remaining virtual property to other virtual world users.

Both the individual user and the software company must be protected. A software company should not relinquish any of the intellectual property or ownership rights, but should recognize a type of rental relationship between itself and its virtual world citizens that recognizes the alienability of virtual property. Virtual world users “rent” virtual property they acquire for as long as they participate in the virtual world through subscriptions or other fees. Therefore, a user who invests time and labor in a virtual world benefits only as long as the virtual world exists or as long as he continues to pay the necessary fees. This is similar to an apartment renter who may devote time and labor to painting her apartment. The renter accepts that while the improvement may enhance her ability to sub-let and give her pleasure, she cannot take the paintjob with her when she leaves the apartment.
A similar system recognizing virtual property alienation has been shown to work effectively in Taiwan and China.\textsuperscript{181} Some critics of virtual property rights recognition argue that virtual property alienability would lead to greater liability for software companies and dramatically increase the risk of software companies simply closing down.\textsuperscript{182} However, the existing evidence completely contradicts this hypothesis. A quick look at those jurisdictions that do recognize virtual property alienability shows that these arguments are unsupported by any evidence or experience. According to a paper published by the National Research Council Canada, “[t]he online gaming in Asia can be called the most successful software industry.”\textsuperscript{183} If the regulation of virtual worlds and recognition of virtual property alienability hurts the software industry, it would have already occurred in Asia, which leads the world in the recognition of virtual property rights.\textsuperscript{184} Virtual world and online gaming use continues to grow around the world, particularly in Taiwan, China, and South Korea, where virtual property already has legal recognition and is fully alienable.\textsuperscript{185} Protection of the individual and recognition of their rights does not endanger software companies.

Any system of legislative control should be coupled with the ability of software companies to safely control and benefit from virtual item transactions. To this end, the EULA remains critically important. Any legislative recognition of rights must be narrowly tailored to recognize only the limited alienability interest necessary to protect the individual user and permit transactions involving real and virtual property. For instance, a potential statute could recognize “[t]he right of the individual users of virtual worlds to freely transfer virtual property within the same world, exclusively with other users of the same virtual world, through the use of real or virtual currency.” Alternately, a statute could simply recognize a Fourteenth Amendment right to property and liberty within virtual worlds by forbidding overly restrictive restraints on the transferability of property within a virtual world.

\textsuperscript{181} See Fairfield, \textit{supra} note 4, at 1084-87.

\textsuperscript{182} See id. at 1097-98.

\textsuperscript{183} CHEN, \textit{supra} note 17, at 1.

\textsuperscript{184} See Fairfield, \textit{supra} note 4, at 1050; CHEN, \textit{supra} note 17, at 1.

\textsuperscript{185} See id. at 1086 (discussing Taiwan).
B. Use of Existing Technology

Technology that currently exists and is in regular use could benefit and protect software companies, virtual citizens, and society as a whole.

Many MMORPGs such as *World of Warcraft* and *Entropia* have built-in auction house systems whereby virtual property can be auctioned across the virtual world and either bid on by fellow virtual citizens or purchased at special “buy-out” prices. In exchange for this service, the auction house charges a small fee, not unlike an auction house such as Sotheby’s in the real world. It would be relatively simple to apply the same commission formula and auction house mechanism to real money transactions or virtual money for real money transactions.

Alternatively, it would be simple to either dictate an exchange rate for virtual currency, such as in *Entropia*, or allow market forces to determine an exchange rate as is the case with Sony’s *EverQuest II*. In this way, software companies like MindArk and Blizzard would receive additional income from each virtual property transaction. This wealth exchange system could operate in substantially the same manner as a currency exchange booth at an airport. The software company could garnish the transaction within the auction house system if the system allows direct real cash transactions. Alternatively, if the virtual world has an exchange rate to allow the withdrawal of wealth from the virtual world, the company could garnish transactions that buy or sell virtual currency with real money. Additionally, such transactions could be taxed, thereby increasing government revenue at the expense of no one but black marketers.

These transactions could easily be administered through each software company’s current virtual world payment systems. Subscribers to virtual world games generally pay subscriptions through the use

---


187 For example, *World of Warcraft*’s auction system takes a percentage of the value of a virtual property item had that item been sold to one of the game’s non-player merchants.
of a credit card, with money deducted from the credit card account periodically. It should be relatively simple to move funds in the other direction as well.

As envisioned, the system would work like this: User A has a sword that he wishes to sell. He puts that sword into the video game’s auction house system for 100 gold pieces. User B wants a shiny new sword for her avatar. B searches the auction house for swords, and decides that she wants to buy A’s sword. B then opts to “buy-out” A’s sword for 100 gold pieces (or its equivalent in U.S. dollars based upon the current exchange rate). Should B choose to pay in virtual gold, then the transaction is a standard virtual property exchange of the type currently in existence. However, if B cannot afford 100 virtual gold coins, but decides that she still wants the sword, she can elect to buy 100 gold coins with her credit card at the prevailing exchange rate. If she buys the gold coins, then the software company should be entitled to a fair commission for the service, similar to the commission charged by the in-game auction house. Ultimately, A is happy with his 100 gold pieces (which he could always choose to cash out as well), B is merrily swinging her new sword, the software company earns an easy commission, and society gains a small amount of tax income. The only loser is the black market.

VI. CONCLUSION

Recognition of limited property rights under the Fourteenth Amendment would be in accordance with Supreme Court precedent and is strongly supported by public policy. Using the experiences of pioneering countries such as China, Taiwan, and Korea, the United States could help foster stronger domestic technology-based commerce through recognizing limited virtual property rights.

Using mainstream technologies, software companies have created virtual public parks that individuals around the world use for mass recreation, social interaction, escape, and networking. Individuals in these virtual worlds labor to amass virtual wealth and property for which there exists a market to buy and sell such virtual property in the real world. Individuals within virtual worlds should be granted the right to alienate virtual property acquired through application of their skill
and labor. However, recognizing this right must be balanced against the legitimate needs of software companies to control and govern the virtual worlds that they have created. Software companies must be protected against breaches of their intellectual property rights and virtual property must not be permitted to be extracted from a virtual world. A system that utilizes a market driven exchange rate whereby the software company can earn a commission for each real money transaction would allow virtual world users to engage in trades, eliminate the black market, reduce fraud, garner societal benefits, and protect software company rights. This type of system has proven effective in other countries such as Taiwan and China. It is in the best interest of society to recognize limited virtual property rights. It is also supported by case law and public policy.

In a field as new as virtual property law, there are a multitude of potential issues. There must be adequate balancing of individual rights, software company rights, and societal needs. As society and technology develop, so must the law. What was unimaginable in Justice Jackson’s era must be reconciled with existing legal principles and precedent. The Fourteenth Amendment guarantees basic rights to life, liberty, and property. However, it does not provide guidance as to the spatial scope of such protections. This scope must be provided by modern jurists and legislators who can more effectively deal with some of the new technologies, societies, and norms that prior generations could only imagine.

\footnote{U.S. \textsc{const.} amend. XIV, \$ 1.}