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**PROPERTY RIGHTS IN CYBERSPACE GAMES
AND OTHER NOVEL LEGAL ISSUES IN
VIRTUAL PROPERTY**

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ABSTRACT

A major challenge faced by the law as it struggles to keep up with advances in technology is the surprising rate at which it canters along, throwing up new varieties of disputes, new types of transactions and even new types of property. This note examines the concept of virtual property and the problems that may arise from it in the specific context of cyberspace games, as well as the ways in which such problems have been dealt with by the law in the past and how they may be better dealt with in the future. It also discusses the existing debate over the need for legal regulation of virtual property and endeavours to see if the provisions of Indian law are sufficient to deal with cases such as these.

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I. INTRODUCTION

In March 2005, Chinese newspapers reported that Qiu Chengwei, a 41-year-old player of the online game Legend of Mir III, called the police to report that a friend to whom he had loaned his Dragon Sabre (a videogame-generated, enchanted virtual sword) had sold the virtual sword to another gamer for real money. When the police refused to act on the complaint because “virtual property doesn’t count”, Qiu killed his friend.¹ The incident highlights a growing debate over the “virtual property” that gamers can accumulate in online video games, and how this new form of property should be treated under the law. This paper will discuss some of the novel legal issues that are raised by this unique species of property, and how those issues are beginning to be dealt with by major gaming companies, game players and legal systems.

II. ONLINE VIDEO GAMES: A BRIEF HISTORY

The world of video games once consisted primarily of freestanding video machines featuring the likes of Pac-Man, Space Invaders and Asteroids, and television-based (or “console”) games produced by such companies as Atari and Nintendo. Both types of games provided limited opportunities for interactive play between gamers. The world of video games, however, was transformed dramatically by the introduction of “massive multiplayer online role-playing games” (MMORPGs).

The predecessor to MMORPGs was the Multi-User Dungeon (MUD), which first appeared in the late 1970s.² Run on a bulletin board system (BBS), these games were text-based and the players created the characters, storylines and searches, which usually required them to fight monsters as the games progressed in order to become more powerful. As the Internet began to grow in the early 1990s, online games became

¹ Cao Li, *Death Sentence for Online Gamer*, CHINA DAILY, June 8, 2005, http://www.chinadaily.com.cn/english/doc/2005-06/08/content_449600.htm.

² The acronym MUD is also used to mean Multi-User Dimension or Multi-User Domain.

operational only through proprietary network providers such as Genie and CompuServe, because, at that time, commercial use of the Internet was restricted by the National Science Foundation Network (NSFNet), and organisations using the Internet were required to sign usage agreements with the agency to access the public Internet. These services offered the customer the ability to participate in a game for an hourly fee.³

As Internet restrictions were loosened, proprietary-based gaming became more Internet-based. In the early 1990s, the games still remained largely text-based, but by 1996, Meridian 59, which some claim to be the first MMORPG, was introduced. In 1997, Electronic Arts' Ultima Online hit the market, using a flat monthly subscription fee, as opposed to the hourly-pricing scheme that previously dominated the market for hardcore gamers, thereby opening the door for "massive" playing.

Today, these Internet-based video games allow thousands of players to interact simultaneously in multimedia, online virtual environments and this gaming format continues to grow in popularity worldwide. In South Korea,⁴ for example, it was estimated that in 2003, 1 in 4 teenagers "are hooked on multiplayer games"⁵ and that during that same year, the online game Lineage "[was] more popular than television" among its residents.⁶ According to one report, the worldwide market for online games will reach \$9.8 billion in 2009, representing a 410% increase over a revenue of \$1.9 billion in 2003.⁷

III. WHAT IS VIRTUAL PROPERTY?

Generally speaking, virtual property is defined as an asset collected within an MMORPG, such as money, weaponry, clothing, land, or other goods that have "value"

³ As early as 1984, Islands of Kesmai, the first-text based commercial MMORPG, created by Kelton Flinn and John Taylor, was offered through the CompuServe online service at a cost of \$12 per month, allowing players to use 1,200-baud modems to participate in the game. See Darren Gladstone, *Online Evolution Massive Multiplayer Games Continue to Grow, but Where are They Going? Part 1: Origin of the Species*, at <http://www.lup.com/do/feature?cId=3145358>.

⁴ Korea represents the country with the most MMORPG players, with markets expanding in other Asian countries, such as China and Taiwan. Markets also are expanding in North America and Europe.

⁵ See Soo-Jeong Lee, *Online Game Craze Sweeps South Korea*, MONTANA STANDARD, May 10, 2003, <http://www.mtstandard.com/articles/2003/05/10/featuresscience/hjjgjejbgiagdei.txt>.

⁶ F. Gregory Lastowka & Dan Hunter, *The Laws of the Virtual Worlds*, 92 CAL. L. REV. 1, 5 n.5 (2004) (citing the Lineage website at <http://www.lineage-us.com>).

⁷ Press Release, DFC Intelligence, DFC Intelligence Forecasts Significant Growth for Online Games (Aug. 3, 2004), at <http://www.dfcint.com/news/praug32004.html>.

inside the particular game's virtual world. Each of these items is used, traded or sold within the virtual world to increase the status and power of the gamer's avatar. Online avatars are human-like characters with unique, game-related appearances and attributes that move through the virtual world and can be saved and used over a period of time. The avatar is essential to the game because it is through him that the player exists in the virtual world and is able to accumulate virtual property.

The nature of these assets and the manner in which they are acquired vary with the type of online game being played. For example, in the fantasy-based virtual world of Ultima Online, power and status are achieved by slaying monsters, which either drop valuable tools or relinquish experience points to the player's avatar. Conversely, in the real-world simulation game *There*, characters purchase homes, cars and other everyday items with the use of 'Therebucks', the game's currency. Thus, unlike arcade games of yore, such as Pac-Man or Donkey Kong, where players simply strived to achieve a 'high score', MMPORG players seek virtual assets, such as land, advanced weaponry, or status within the game.

IV. THE MARKET FOR VIRTUAL GOODS

There are benefits to possession of virtual goods by the gamers' avatars. A rare tool or object in the virtual world generates status and revenue within the virtual community. Gamers and entrepreneurs alike have established a marketplace for selling their goods in the real world and delivering them in the virtual world. In fact, game companies and economists estimate that in recent years over US \$100 million per year has been spent on virtual goods.⁸ Indeed, through the purchase and sale of virtual assets, a real-world profit can be made by some gamers.⁹

The value of virtual property is reflected in the amount of money that people will pay to acquire particular game assets, either within the game or via online auction sites.¹⁰ In autumn 2005, a Miami resident, using some of his in-game winnings, purchased a virtual space station for \$100,000 in the science-fiction-based game

⁸ Alex Pham, *Virtual Power Brokers*, L.A. TIMES, May 16, 2005, at A1.

⁹ Whether the Internal Revenue Service will act with respect to profits made in the virtual world remains unresolved. Under current US law, players who convert their virtual assets into real-world currencies are required to report their incomes to government authorities such as the IRS. Daniel Terdiman, *IRS Taxation of Online Game Virtual Assets Inevitable*, at http://news.com.com/IRS+taxation+of+online+game+virtual+assets+inevitable/2100-1043_3-6140298.html.

¹⁰ See, e.g., Daniel Terdiman, *\$50,000 for 'Second Life' Sex Business*, at http://news.com.com/2061-10797_3-6170860.html.

Project Entropia.¹¹ Project Entropia (now Entropia Universe), released by Swedish game developer MindArk, was the first major online game to allow for the exchange of real world money for virtual goods. The game has no subscription fee, but players must use real world money to purchase necessary or valuable items within the game. While playing the game, Entropia currency, known as PED (Project Entropia Dollars), can be earned through, among other things, the sale or trade of items, work performed, and virtual investments within the game. Project Entropia is one of the first games with a convertible in-game currency, where virtual cash can later be converted back to real world dollars or vice versa, since PED has a fixed exchange rate with the US dollar.

In an effort to accumulate assets, some individuals have resorted to technological means, using bots (i.e., automated computer scripts) to perform the same function, such as slaying a dragon over and over, while others have even recruited third parties for the sole purpose of playing to acquire game assets for later sale.¹² In fact, it was reported late last year that some wealthy online gamers who have less time to devote to the hobby even have outsourced playing to China, where it is estimated that over 100,000 young people, working in so-called 'game-playing factories', are paid to play MMORPG games daily on behalf of the principal gamer.¹³ In some games, the faster the player can advance in the game, the more virtual wealth he can accumulate, which can potentially be sold for real world dollars via online auction sites.¹⁴

Certain game publishers, however, have attempted to limit or prevent the sale of virtual goods. For example, Sony, the maker of the popular game EverQuest, took a more aggressive approach toward the trading and sale of virtual property. In addition to convincing the online auction house eBay not to list EverQuest items on its site, Sony also sued other auction sites that engaged in the trading of EverQuest virtual property.¹⁵ Still, despite these actions, Sony softened its position when it created a site called Station Exchange in the summer of 2005 to use real world money to buy and sell virtual property.¹⁶ Using an auction-type format, players are limited by a

¹¹ See CNN, *Virtual Property Yields \$100,000*, at <http://www.cnn.com/2005/TECH/biztech/11/10/virtual.real.estate.ap/index.html>.

¹² See Daniel Holevoet, *Role Playing Games Provoke Legal Concerns*, at <http://www.yaledailynews.com/articles/view/14983>.

¹³ See David Barboza, *Ogre to Slay? Outsource It to China*, N.Y. TIMES, Dec. 9, 2005, <http://www.nytimes.com/2005/12/09/technology/09gaming.html>.

¹⁴ See, e.g., Rob Hof, *Second Life's First Millionaire*, BUSINESSWEEK, Nov. 26, 2006, http://www.businessweek.com/the_thread/techbeat/archives/2006/11/second_lifes_fi.html.

¹⁵ See David Becker, *Real Cash for Virtual Goods: Racket or Way of Life?*, at http://news.com.com/Real+cash+for+virtual+goods/2100-1043_3-5566704.html?tag=item.

¹⁶ Rob Walker, *The Buying Game*, N.Y. TIMES, Oct. 16, 2005, <http://www.nytimes.com/2005/10/16/magazine/16consumed.html?>

“sanity cap” of \$2,000 on the sale of any item, with the company overseeing the exchange.¹⁷

Similarly, advanced characters for Ultima Online can be purchased by players through the Electronic Arts official website for the game, but the company’s end user license agreement (EULA) does not encourage the sale and purchase of virtual property through external or online auction sites.¹⁸

V. REGULATING THE INTANGIBLE —AND SOME INTELLECTUAL PROPERTY ISSUES

Although property rights are generally thought of in terms of tangible items with physical characteristics, regulating intangibles is not an unfamiliar concept. The concepts upon which video games are built require the regulation of intangible intellectual property rights (e.g., copyrights in the visual components and trademarks in the game characters of video games). In fact, the law deems the owners of certain types of intellectual property to hold exclusive ownership rights for only a limited period of time. Owners of intangible rights are able to, among other things, sell, license, or transfer their property, but in some situations are required to allow public use at the conclusion of the term. For example, a patent-holder for a new video game controller would have no right to stop somebody from making or using similar controllers at the expiration of the patent term. Some have suggested that the same should occur for virtual property, though for shorter periods than traditional intellectual property.¹⁹

As subscriptions to many virtual worlds are time-limited and contingent upon payment, the case may be made that virtual property rights should be given to players for similar restricted periods. Within the virtual world context, the contention is that the player cannot claim property interests in the entire world, but might legitimately claim interests in each small entity of the virtual world where his labour composes

¹⁷ *Id.*

¹⁸ See Electronic Arts, *EA Online Privacy Policy and Terms of Service*, at <http://www.ea.com/global/legal/tos.jsp>. Section 3 (Online Credit) of the TOS reads, in pertinent part, “. . . Electronic Arts does not recognise or condone any outside service that may be used for the exchange of points, assets or attributes that you may accumulate as a result of participating in the Service or playing your EA game. This includes the exchange of points or EA Elite cards on services including eBay™ or Yahoo!™ Auctions. We don’t assume any responsibility for, and won’t support, such transactions.”

¹⁹ See generally Lastowka & Hunter, *supra* note 6.

the greatest part of the value of that entity.²⁰ Therefore, some may reason that an extension of time-limited property rights for these items may not only enhance the individual's play for the current time, but also enhance the overall virtual world upon the item's public release at the end of the term.

Individual players of MMORPGs often feel that the time and money spent to acquire virtual property is substantial enough to warrant legal protection for these items. Some gamers maintain that playing the games comprising these virtual worlds can involve at least as much effort as real world work, with many players spending a substantial amount of real world money to improve their avatars in the virtual world. These gamers believe that the real world markets for virtual items shows that these goods possess value and deserve protection under the law.

Many players see virtual property in terms of functionality, both in the virtual world and in the real world. In the virtual world, each item has a purpose and function within the video game and can be traded for another item to be used for a different purpose. In addition to company-created exchange sites, players have established real world trading blocks through websites and online auctions such as eBay, as well as virtual world trading blocks at various locations within the game where items may be traded and delivered to the player's avatar inside the virtual world.

In one popular game, World of Warcraft, there was US \$682,000 in sales of the game's gold in October and November of 2005 on eBay, despite eBay's efforts to curtail such sales.²¹ In fact, in December 2005, the makers of World of Warcraft shut down 18,000 gamer accounts that were using illegal software to cheat at the game by acquiring the game's gold and other assets using the software and then selling them on third-party auction sites.²² Blizzard Entertainment, the maker of the game, maintains a notice on its website, www.worldofwarcraft.com, that the company will "continue to actively monitor all World of Warcraft realms in order to protect the service and its players from the negative effects of cheating" and that the sale of the game's items "can result in the permanent removal of the involved accounts from World of Warcraft."²³

Those opposed to the extension of legal rights to virtual property owners express concern over possible liabilities. For example, some gaming companies worry that

²⁰ *Id.* at 63.

²¹ See Red Herring, *Blizzard Shuts Down Cheaters*, at <http://redherring.com/Article.aspx?a=15004&hed=Blizzard+Shuts+Down+Cheaters>.

²² *Id.*

²³ This notice was put up on December 21, 2005. Jane Pinckard, *Over 18,000 Accounts Cancelled in World of Warcraft*, at <http://www.1up.com/do/newsStory?cId=3146573>.

they could be held liable for economic losses suffered by players when the company chooses to discontinue the game. Moreover, they fear that if players are given legal interest in virtual property, their profits will be depleted by an influx of demands for restoration of property or compensation for permanent losses. In addition, extending property rights to virtual items creates further incentives for system hacking and game manipulations. When hackers or pirates enter the virtual world to plunder virtual property and then sell it in the real world, they often prevent dedicated players from being able to acquire or keep these assets through play alone. These acts potentially could make the virtual economy unstable and wipe out virtual fortunes, which might leave game companies responsible for compensating their players.

Some game developers view ownership of virtual property as rights arising from the underlying computer code or data that produces the desired output which is seen as an object on the video screen when the game is played. Therefore, according to this formalist view, the display of a picture (e.g., a magical sword) without the underlying software-based attributes has no real value worthy of protection.

To date, there are no regulatory rules or statutory laws in the United States that directly or explicitly govern virtual property. Instead, a common method to address legal issues that may arise in online gaming is through the use of computer code and contracts.²⁴ Through the code used to design and run the online game, the maker may unilaterally control what takes place in the game (e.g., changing the virtual landscape, enhancing or limiting the powers of the players, and regulating who can participate).²⁵ Still, it remains an open question whether gamers should have any due process or property rights with respect to the disposition or removal of their virtual holdings.

From a contractual point of view, the game makers' End User License Agreement (EULA) and/or Terms of Service (TOS) augment their ability to regulate the game, defining the respective rights and responsibilities of the parties. Most, if not all contracts, will provide rules to be followed during play and the consequences of failing to follow these rules. Nonetheless, it has been argued by certain commentators that current legal rules (such as TOSs and EULAs) may not be enforceable in all cases if valuable property interests are at issue.²⁶ By way of example, if the maker of an online game were to decide to unilaterally terminate the game for business or other reasons, those players that may have accumulated real world wealth in their virtual property

²⁴ See generally Jack M. Balkin, *Virtual Liberty: Freedom to Design and Freedom to Play in Virtual Worlds*, 90 VA. L. REV. 2043 (2004).

²⁵ *Id.* at 2049-2051.

²⁶ *E.g., id.* at 2071-72.

might be left without a remedy under certain terms of the maker's TOS or EULA provisions, unless a court, using traditional contract and equitable principles, were to decide otherwise. It is important to note, however, that these agreements may differ from game-maker to game-maker with respect to the rights granted, including intellectual property rights, to users in the virtual property that they amass or create.²⁷

With online games becoming increasingly popular, particular issues concerning intellectual property matters have begun to emerge, with some resulting in litigation. In one of the first cases concerning IP issues, Marvel Entertainment Inc. sued NCSoft Corp., the publisher of the online game "City of Heroes." At the heart of the case was whether players, using a content creation engine in the game, could create avatars that resembled famous Marvel comic characters such as Spider-Man and The Fantastic Four, without implicating the plaintiff's copyright and trademark rights.²⁸ The case was ultimately settled in December 2005, with its terms undisclosed.²⁹

However, numerous unanswered questions remain regarding a game maker's exposure to copyright and trademark liability. For example, could a software company be secondarily liable for infringement by merely providing software tools that enable a user to create an avatar that mimics another entity's trademark or copyrighted work? With respect to trademark law, the sale of virtual goods in virtual worlds may constitute "use in commerce" under the Lanham Act. In another trademark context, what rights and control, if any, do real property owners have over how their property is depicted?

²⁷ For example, in autumn 2003, Linden Lab, the creator of the online world Second Life, modified its TOS to allow subscribers to retain full intellectual property in content that they create. On the other hand, some game-makers, such as Blizzard Entertainment, take a different approach towards ownership. In its online game World of Warcraft, the company for example, retains ownership in the game and its virtual property. Press Release, Linden Lab, Second Life Residents to Own Digital Creations (Nov. 14, 2003), http://lindenlab.com/press/releases/03_11_14; compare Linden Lab, *Second Life Terms of Service*, at <http://secondlife.com/corporate/tos.php>, with Blizzard Entertainment, *World of Warcraft End User License Agreement*, at <http://www.worldofwarcraft.com/legal/eula.html>. (Compare clause 5.3 of the Second Life TOS with clause 3A of the World of Warcraft EULA).

²⁸ Daniel Terdiman, *Faux Hulks Can Keep Fighting Evil Online*, at http://news.com.com/Faux+Hulks+can+keep+fighting+evil+online/2100-1043_3-5995628.html?tag=nefd.pop.

²⁹ According to a statement jointly released by the parties, the settlement "allows them all to continue to develop and sell exciting and innovative products, but does not reduce the players' ability to express their creativity in making and playing original and exciting characters." Press Release, Marvel Entertainment et al., Marvel Entertainment, Inc., NCsoft Corporation, NC Interactive, Inc., Cryptic Studios, Inc. Settle All Litigation (Dec. 15, 2005), <http://www.gamespot.com/pc/rpg/cityofheroes/news.html?sid=6141254>.

Can the unauthorised creation of trademark goods give rise to possible dilution claims against gamers?³⁰

Although copyright and trademark issues may be raised in virtual worlds, alleged trademark violations seemingly pose other legal issues than their copyright counterparts, particularly since the Digital Millennium Copyright Act (DMCA) safe harbour provisions do not apply to Lanham Act violations. Furthermore, it is still unclear whether the immunity provisions of the Communications Decency Act (CDA) would protect game-makers from trademark violations by gamers in virtual worlds.³¹

For many online gamers, advancement in the virtual world may be important not only for entertainment purposes, but also for monetary gain, given the existence of the sale of virtual goods in online auctions and the ability within some games to exchange virtual assets for real world cash. Consequently, software developers have introduced “cheating” applications that allow gamers to bypass a game’s internal controls and advance more rapidly without the usual required time and effort, thereby raising novel issues related to copyright and contract law.

Besides copyright and trademark infringement, issues regarding right of publicity have also been the subject of litigation. In a state appellate court decision, a California court ruled against a celebrity plaintiff who commenced an action alleging state common law and statutory right of publicity and privacy claims, as well as trademark violations, against a video game maker whose character resembled the celebrity.³² Videogames, which garner a degree of protection under the First Amendment,³³ have the potential to create a tension between creative expression and a celebrity’s right of publicity. Generally speaking, the right of publicity involves the unauthorised use of the plaintiff’s identity to the defendant’s advantage by appropriating the plaintiff’s name, voice, or likeness. In affirming the trial court’s dismissal of the plaintiff’s right

³⁰ Alan Sipress, *Where Real Money Meets Virtual Reality, The Jury Is Still Out*, WASH. POST, Dec. 26, 2006, <http://www.washingtonpost.com/wp-dyn/content/article/2006/12/25/AR2006122500635.html>.

³¹ *Gucci v. Hall* may suggest that the CDA does not offer such protection given its holding that CDA immunity was limited by virtue of the language of 47 USC. § 230(e)(2), which interstates: “Nothing in this section shall be construed to limit or expand any law pertaining to intellectual property.” According to the court, “. . . Section 230 does not automatically immunize ISPs from all intellectual property infringement claims. To find otherwise would render the immunities created by the DMCA from copyright infringement actions superfluous.” *Gucci America, Inc. v. Hall & Associates*, 135 F. Supp. 2d 409, 416 (S.D.N.Y. 2001).

³² *Kirby v. Sega of America, Inc.* 144 Cal. App. 4th 47 (2nd App. Dist. 2006).

³³ *Interactive Digital Software Ass’n v. St. Louis County*, 329 F.3d 954, 957 (8th Cir. 2003).

of publicity claims in the context of online gaming, the appellate court wrestled with the balance between a celebrity's right to control the commercial exploitation of his or her likeness or identity and the First Amendment right of free expression, which can be an affirmative defence to an allegation of misappropriation of one's likeness.³⁴ The appellate court determined that the video game character was indeed "transformative" and therefore protected under the First Amendment.³⁵ As for the Lanham Act violation, the court found that given the many dissimilarities between the video game character and the plaintiff, any public confusion arising from a mistaken assumption is easily outweighed by the public interest in free artistic expression, so as to preclude application of the Lanham Act.³⁶

VI. LEGAL DEVELOPMENTS INVOLVING VIRTUAL THEFT

Most game players expect that their virtual assets will be protected within the game environment against theft or destruction. Generally speaking, virtual theft involves the hacking or subverting of the online game system by another, causing a player to lose any or all of his virtual assets. Virtual mugging, a form of virtual theft, usually occurs through the use of software bots, which assault other characters in an online game and steal their assets.

In what was probably the first reported case of its kind, *Li Hongchen v. Beijing Arctic Ice Technology Development Co.*,³⁷ a Chinese appellate court, affirming a lower court decision, ruled that the defendant was required to restore the plaintiff's virtual property to him after it had been stolen by a third party through hacking of the plaintiff's account. Li claimed that he had accumulated a virtual arsenal composed of weapons after spending tens of thousands of yuan and playing for thousands of hours, and that the company failed to protect his property. The lower court had determined that the defendant should restore the weapons at a cost of 1,140 yuan (about US \$138)

³⁴ See *Comedy III Productions, Inc. v. Gary Saderup, Inc.*, 25 Cal. 4th 387, 404, 406-07 (2001) (noting that the First Amendment can be raised as an affirmative defence to an allegation of appropriation if the defendant's work "adds something new, with a further purpose or different character, altering the first with new expression, meaning, or message. . ."). As the court commented, in other words, the new work must contain significant "transformative elements".

³⁵ *Kirby v. Sega of America, Inc.* 144 Cal. App. 4th 47, 61-62 (2nd App. Dist. 2006).

³⁶ *Id.* at 62.

³⁷ Full opinion available at <http://www.chinacourt.org/public/detail.php?id=143455> (Chinese language website), cited in Joshua A.T. Fairfield, *Virtual Property*, 85 B.U. L. REV. 1047, 1084 n.188 (2005).

and pay most of Li's court costs.³⁸ The case is noteworthy because although the court used principles of contract law in reaching its decision, its reasons for doing so were to "protect a distinct property right – the right of the owner to control the property as against the world, not merely as against the party who committed a wrongful action (here, the third party)."³⁹

Despite the lack of judicial decisions on virtual crime, its commission is not confined to isolated or sporadic incidents. In South Korea, an astounding 22,000 claims of virtual property theft were reported to police in 2004.⁴⁰ In another matter, a Chinese exchange student in Japan was arrested on suspicion of using software bots to commit a virtual mugging in the game Lineage and selling the stolen items for real money on an auction website.⁴¹

At the legislative level, a number of countries have responded to virtual theft by enacting or considering laws addressing virtual property crimes. Legislatures in South Korea and Taiwan have enacted laws that make infringement upon virtual property a crime. The South Korean law instructs that online virtual property holds value independent of the game's parent company/creator. The lawmakers reached the conclusion that there is no fundamental difference between virtual property and money deposited in the bank. Alternatively, Taiwan decided that virtual property qualifies as electromagnetic records and should be considered movable property in cases of fraud and theft. Under Taiwanese law, the looting of virtual property can carry a maximum sentence of up to three years imprisonment.⁴² In late December 2003, a group of 19 lawyers in China submitted a proposal to the Law Committee of the National People's Congress seeking a law to protect virtual property.⁴³ These lawyers suggest that virtual property legislation is essential to protect the development of the online video game industry. To date, no legislation has been passed.

³⁸ See Reuters, *Online Gamer in China Wins Virtual Theft Suit*, at <http://edition.cnn.com/2003/TECH/fun.games/12/19/china.gamer.reut/>.

³⁹ Fairfield, *supra* note 37, at 1085; see also Will Knight, *Gamer Wins Back Virtual Booty in Court Battle*, NEWSIDENTIST.COM, (Dec. 23, 2003), <http://www.newscientist.com/article.ns?id=dn4510>.

⁴⁰ Mark Ward, *Does Virtual Crime Need Real Justice?*, BBC News, at <http://news.bbc.co.uk/1/hi/technology/3138456.stm>.

⁴¹ Will Knight, *Computer Characters Mugged in Virtual Crime Spree*, <http://www.newscientist.com/article.ns?id=dn7865>.

⁴² Zhang Tingting & Daragh Moller, *Legislation Proposed to Protect Virtual Property*, at <http://www.china.org.cn/english/2004/Jan/85502.htm>.

⁴³ Li Jianguo, *Virtually Mine*, 47(12) BEIJING REV. (Mar. 25, 2004), <http://www.bjreview.com.cn/200412/Forum.htm>.

Security issues can extend beyond the theft of virtual assets, with the game itself being targeted. In May, for example, it was reported that Linden Lab, the maker of the popular game *Second Life*, suffered a series of denial-of-service attacks.⁴⁴ In August, Microsoft Corp. warned both online gamers and developers of the growing threat of cyber crimes committed in online gaming, noting that online gaming assets were being sold on the black market alongside credit card accounts and other items such as fraudulent passports.⁴⁵ Moreover, cyber thieves have begun using malware in the form of Trojan horses sent through e-mail or peer-to-peer platforms that surreptitiously install on users' computers to facilitate the theft of login and password information for online video games with an eye toward selling these virtual assets on Internet auction sites.⁴⁶

VII. SOME POTENTIAL JURISDICTIONAL AND CHOICE OF LAW CONCERNS

As the idea of granting online gamers property rights over virtual property progresses, additional legal issues are likely to surface. Courts may be faced with jurisdictional questions never before posed.⁴⁷ For instance, with gamers from across the globe engaging simultaneously in virtual worlds, should there be a theft within this virtual world involving players from different countries, the legal systems of at least two nations (e.g., the home countries of the victim and the thief) might then

⁴⁴ Daniel Terdiman, '*Second Life*' Fending Off Denial-of-Service Attacks, at http://news.com.com/2100-1043_3-6067003.html. Essentially, a denial-of-service attack involves the use of a computer or group of computers for the purpose of causing damage or service outage to a company's network by flooding the network and inhibiting or shutting down a company's genuine network or e-commerce traffic.

⁴⁵ Reuters, *Microsoft Warns Game Developers Of Security Risk*, at http://news.zdnet.com/2100-1009_22-6105609.html.

⁴⁶ See, e.g., Gregg Keizer, *Trojan Snags World Of Warcraft Passwords To Cash Out Accounts*, at http://www.techweb.com/headlines_week/showArticle.jhtml?articleId=187002726.

⁴⁷ Given the lack of judicial precedent, a US court confronted with jurisdictional questions involving virtual property disputes might look to the developing case law involving other Internet-related jurisdiction matters. Indeed, the international nature of Internet commerce has raised issues with respect to United States subject matter and personal jurisdiction and extraterritorial service of process. See, e.g., *McBee v. Delica Co., Ltd.*, 417 F.3d 107 (1st Cir. 2005), in which the appeals court ruled that a US court has subject matter jurisdiction in a trademark dispute involving a foreign defendant only if the activities of which the plaintiff complains "have a substantial effect" on US commerce. The court ruled that the US resident plaintiff failed to show the requisite effect on US commerce merely from the availability of the website and its appearance on Internet search engines, and there was no showing that the availability of the website either resulted in sales of infringing goods into the United States or caused consumer confusion.

grapple with jurisdictional as well as conflict of law issues. In such a situation, a court might have to decide if any prior agreement as to jurisdiction and governing law for virtual world infractions and disputes (e.g., those made through a EULA or TOS) is valid or, in the absence of any such agreement, which country's law would apply. Depending on the nature of the dispute, the facts of the particular case, and the parties involved (which can include players and/or the game maker), the jurisdictional and choice of law issues may prove even more challenging for a court.

To avoid forum and choice of law disputes, many EULAs and TOS now contain arbitration clauses, which has resulted in little precedent regarding disputed issues between players and game makers. In addition, arbitration clauses also make it easier for players to raise issues and for gamers to respond to them in a cost-effective manner. Some gamers have even begun to lobby game-makers to include virtual arbitration processes in their TOS.

VIII. CAN VIRTUAL PROPERTY BE BROUGHT WITHIN THE CURRENT INDIAN LEGAL REGIME?

Nothing in the Indian Contract Act, 1872, precludes the recognition of virtual property transactions. A "contract" is defined as any set of promises which form consideration for each other and "consideration" simply means to do or abstain from doing something at the desire of the other party to the contract.⁴⁸ Under common law, however, consideration has been interpreted to necessarily be real and have some value in the eyes of the law.⁴⁹ Since the transactions involving virtual property that we have discussed are carried out using money, it seems possible to squeeze them into the existing contract law framework. The next question, however, is whether virtual property will fit into the *specific* regulatory framework dealing with property in India, which is governed by the Sale of Goods Act, 1930 (dealing with sale of movable goods) and the Transfer of Property Act, 1882 (dealing with other forms of property).

Under the Transfer of Property Act, 1882, transfer of property is defined as an act by which a living person conveys property to one or more other living persons.⁵⁰ Property of any kind can be transferred unless such transfer is prohibited by any law.⁵¹ The concept of an "actionable claim" is recognised under this Act. It has been

⁴⁸ INDIAN CONTRACT ACT, sections 2(d) & 2(e).

⁴⁹ See WILLIAM REYNELL ANSON, ANSON'S LAW OF CONTRACT 98 (Jack Beatson ed., 28th ed. 2002) (noting that consideration must have some value in the eyes of the law).

⁵⁰ TRANSFER OF PROPERTY ACT, section 5.

⁵¹ *Id.* at section 6.

defined to mean a claim to any debt which the Civil Courts recognise as affording grounds for relief. This debt may be existing, accruing, conditional or contingent.⁵² Transfer of an actionable claim is permitted under this Act.⁵³ This definition is wide enough to incorporate within its ambit virtual property as well. Thus, if A sells any virtual property within an MMORPG to B for consideration, he has a right to sue B for recovery of the amount due as consideration as that would clearly fall within the ambit of an “actionable claim” under the Transfer of Property Act.

The Sale of Goods Act, 1930 defines “goods” as every kind of actionable property other than actionable claims and money.⁵⁴ The Supreme Court in *Tata Consultancy Services v. State of Andhra Pradesh*⁵⁵ held that software programs are goods and elaborated: “[A] transaction sale of computer software is clearly a sale of ‘goods’ within the meaning of the term as defined in the said Act. The term ‘all materials, articles and commodities’ includes both tangible and intangible/incorporeal property which is capable of abstraction, consumption and use and which can be transmitted, transferred, delivered, stored, possessed etc. The software programmes have all these attributes.” This decision by the Supreme Court paves the way for recognition of sale of virtual property as ‘goods’ within the purview of the Sale of Goods Act, 1930.

Under Section 22 of the Indian Penal Code, ‘movable property’ would include corporeal property of every description except for land and things attached to earth or permanently fastened to anything that is attached to the earth. The definition of ‘moveable property’ is inclusive and not exhaustive, and the conception of property in the context of criminal law was elaborately discussed by the Supreme Court in *Dalmia v. Delhi Administration*.⁵⁶ Discussing whether breach of trust could be committed in respect of funds of a company, the Court held:

We are of the opinion that there is no good reason to restrict the meaning of the word ‘property’ to moveable property only when it is used without any qualifications in Section 405 or in other Sections of the Code. Whether the offence defined in a particular section of the Indian Penal Code be committed in respect of any particular kind of property will depend not on the interpretation of the word property but on the fact whether that particular kind of property can be subject to acts covered within that Section.

⁵² *Id.* at section 3.

⁵³ *Id.* at section 130.

⁵⁴ *SALE OF GOODS ACT, section 2(7).*

⁵⁵ *Tata Consultancy Services v. State of Andhra Pradesh*, A.I.R. 2005 S.C. 371.

⁵⁶ *Dalmia v. Delhi Administration*, A.I.R. 1962 S.C. 1821.

Given the liberal interpretation preferred by the Apex Court in this case, it is not inconceivable that various offences mentioned in Chapter XVII of the Code may be interpreted so as to criminalise misdemeanours relating to virtual property as well. Thus theft, breach of trust, cheating etc. can all be applied to virtual property as well. Take “breach of trust” for example. Section 405 defines it as dishonest misappropriation of property by one who is entrusted with it. Thus, Qiu Chengwei might possibly have been able to successfully initiate proceedings against his friend within the criminal law framework as there is dishonest misappropriation of (virtual) property by someone to whom it had been loaned. However, given the absence of any jurisprudence on the point in India and the probable unfamiliarity of Indian law enforcement officials with the possible legal ramifications of virtual property disputes, Qiu might well have received the same response in India as he did in China.

IX. ALTERNATIVE/ADDITIONAL REGULATIONS

As MMORPG continues to gain popularity, legal scholars and commentators in the United States have begun to weigh in on the current state of applicable law and the possibility or even the need for alternative and/or additional legal regulation. Some have suggested that as virtual worlds develop, virtual world norms, which would affect virtual property, develop along with them. In some games, such as *The Sims 2*, a virtual community exists where players can post their own blogs, participate in podcasting, post to bulletin boards and engage in live chats. Accordingly, virtual world norms would be handled in the virtual world, free of real world interference and be treated as jurisdictions separate from our own with their own distinctive community norms, laws, and rights.⁵⁷

Other commentators, however, suggest a different approach, contending that the virtual items bought and sold in the real world warrant legal protection. In fact, one commentator has stated that “the single most important development that will lead to legal regulation of virtual spaces is the accelerating real-world commodification of virtual worlds.”⁵⁸ Accordingly, it has been argued that current legal rules (e.g., TOS

⁵⁷ See Lastowka & Hunter, *supra* note 6, at 72-73 (quoting David Johnson and David Post’s statement: “If the sysops and users who collectively inhabit and control a particular area of the Net want to establish special rules to govern conduct there, and if that rule set does not fundamentally impinge upon the vital interest of others who never visit this new space, then the law of sovereigns in the physical world should defer to this new form of self-government.”).

⁵⁸ See Balkin, *supra* note 24, at 2046-47 (noting that “virtual worlds are full of items that either are or will be protected by intellectual property laws”).

and EULAs) may not be enforceable in all cases if valuable property interests are at issue.⁵⁹ By way of example, if the maker of an online game were to decide to unilaterally terminate the game for business or other reasons, those players that may have accumulated real world wealth in their virtual property, might be left without a remedy under certain terms of the maker's TOS or EULA provisions, unless a court, using traditional contract and equitable principles, were to decide otherwise.

In 2002, BlackSnow Interactive, the founders of a specialty barter and auction site, CamelotExchange, sued Mythic Entertainment, the creator of the virtual world game "Dark Age of Camelot", for unfair business practices. Taking a different position from others against the sale of virtual goods on online auction sites, Mythic Entertainment initiated the shutdown of several BlackSnow auctions, after Mythic discovered that BlackSnow employed workers who played the video game around the clock to acquire virtual items to be later sold on its website. BlackSnow then filed suit in the US Court for the Central District of California, claiming that the actions constituted an interference with "prospective economic advantage" and unfair business practice.⁶⁰ Although the case was ultimately dismissed before trial, it is possible that virtual property claims will resurface in the near future.

About a year prior to the BlackSnow lawsuit, a group of plaintiffs in South Korea filed an action against NCsoft, the maker of the game Lineage, alleging that they had lost "Giran Castle," a piece of virtual property within the game, as a result of a program or server error. Like the BlackSnow litigation, the matter did not proceed to trial, but was settled between the parties.

X. AN OPEN-SOURCE ALTERNATIVE?

Open-source software can be broadly defined as any software of which the source code is made available by its owner to the public under a "public license", so that the source code can be read, modified and redistributed by users, subject to certain conditions.⁶¹ The open-source approach is the conceptual and practical opposite of the idea of software as a "closed" proprietary project, distributed in the form of object code only, with the source code form held by the owner as a trade secret.

⁵⁹ *Id.* at 2071.

⁶⁰ See David Becker, *Game Exchange Dispute Goes to Court*, at http://news.com.com/2102-1040_3-832347.html.

⁶¹ One of the most frequently encountered open source licenses is the GNU General Public License, which is promulgated by the Free Software Foundation and commonly referred to as the "GPL." The GPL has spawned an official variant, the GNU Lesser General Public License (LGPL), which is also offered by the Free Software Foundation, and written to address some of the concerns raised by the "viral" provisions of the GPL.

The application of open source to a virtual world would remove control of the online game from the hands of a corporate game maker by allowing the evolution of the game to be accomplished through the contributions of individuals, many of whom might be the players themselves or those simply interested in the creation of the games. In such a scenario, the players would be required to sign public license agreements, thereby removing any proprietary interest that they may have in the game or its virtual property. By creating a world where liked-minded players, with no proprietary interest in the game or its property participate, some commentators contend that many of the legal issues surrounding virtual property would essentially be eliminated.⁶²

Currently, open-source virtual games are in their early stages of development, with only a handful of groups exploring this possibility. Among these platforms are the Open Source Metaverse Project (OSMP), the Croquet Project, and the Multi-User Pedagogy for Enhancing Traditional Study (MUPPETS).⁶³

XI. CONCLUSION

With the explosion of online gaming over the past several years, a host of novel legal issues involving virtual property that range from general and intellectual property rights to the theft of virtual assets have begun to emerge. As virtual worlds continue to proliferate, these issues will continue to be addressed by courts and legislatures, forcing both the legal and gaming communities to decide how the delicate balance between property rights and play should be achieved. While potential alternatives, such as the evolution of open-source games, may potentially go some distance to resolve the problem, the question of whether or not legislative “support” (or “interference”, depending on how you look at it) is required in this sphere still remains unresolved. Without a clear resolution to this debate, the possibility of legislative action in countries such as the United States, much less a uniform understanding of how to deal with such transactions at federal or international levels, continues to look rather bleak.

Perhaps the main obstacle to a discussion of the way in which such issues may be resolved in India is the absence of actual test cases, although the incidents reported in other Asian countries indicate that India is unlikely to escape such problems on its

⁶² See Andrew E. Jankowich, *Property and Democracy in Virtual Worlds*, 11 B.U. J. SCI. & TECH. L. 173, 189-192 (Summer 2005) (discussing creative endeavours in open-source, non-commercial virtual worlds).

⁶³ See Daniel Terdiman, *Gamers Eye Open Virtual Worlds*, WWW.WIRED.COM at <http://www.wired.com/news/print/0,1294,65865,00.html>.

own shores. At present, using the existing Transfer of Property Act and the Sale of Goods Act to argue that virtual property is “property” is probably the best option for a plaintiff attempting to demonstrate that virtual property deserves the same protection as any other property and that virtual property transactions accordingly deserve the same treatment as other property transactions. However, an uninformed or partly-informed court may easily throw out such a case without understanding its ramifications, and even the most well-informed of Indian courts may consider it a stretch to consider virtual property transactions on par with other property transactions when this was clearly not the legislative intent of India’s nineteenth-century and early-twentieth-century statutes on the point. Thus, what seems to be needed is a debate in India on this point so that, if laws are required to support virtual property transactions, they can be discussed and enacted well in advance of any “test case”, rather than leaving potential plaintiffs with the unenviable task of wrestling with the existing legal framework – although, one hopes, not with the results that followed for Qiu Chengwei.