PIRATES AMONG THE SECOND LIFE ISLANDS – WHY YOU SHOULD MONITOR THE MISUSE OF YOUR INTELLECTUAL PROPERTY IN ONLINE VIRTUAL WORLDS*

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Virtual online worlds such as Second Life – a world in which users can live, work and purchase virtual goods, services and real estate – have enjoyed a well-documented explosion in popularity. Their success, however, has not come without some degree of turbulence. Relying on the example of Second Life, this Article will address one of the primary sources of concern to arise in connection with these worlds: the dramatic escalation in trademark and copyright violations in the virtual world and its impact on real-world individuals or business entities. Given that users have the ability to design and create virtual property in-world, and that many rely on the commercialization of such property to maintain a real-world income, it has become financially advantageous for a significant minority of users to infringe on established real-world copyrights and trademarks in order to add value to their virtual world creations. This Article argues that it is crucial for intellectual property owners to challenge such behavior rather than dismiss it as harmless virtual fun, proposes methods of curtailing such infringement, and reviews the obstacles to be overcome by an owner seeking to enforce her rights.

I. THE RISE OF VIRTUAL WORLDS AND MMORPGS

Cynthia is a clothes designer. She owns and manages three stores, all of which are profitable. Her clientele is international, and has grown year-on-year since 2004. After work, Cynthia likes to attend poetry readings and folk music concerts, and hang out with her friends at the local coffee shop. But on any given day, she will do all this without leaving the confines of her apartment . . . Cynthia is fictitious, but her experience is common to many users of Second Life, a virtual world in which users can take part in many real life activities entirely online.¹

Virtual worlds such as Second Life are described collectively as massively multiplayer online role-playing games (“MMORPGs”).² Why “massively multiplayer”? Because at any one point, these worlds can be inhabited by tens of thousands (if not hundreds of thousands) of online users who fight, collaborate, chat and trade with one another.

Simple virtual worlds began in the 1970s and “evolved out of the text-based social environments of multi-user dungeons (also known as multi-user domains or dimensions) such as MUD1

These early text-based worlds allowed users to communicate, chat, and interact in simple ways by typing in set commands. The simplicity of these text-based worlds soon gave way to more complex, but still rudimentary, graphics-based worlds.

The video-gaming industry realized early on the potential of such worlds, and began relying on the multi-player virtual-world format for its games. The worlds in which early gamers evolved, however, were not persistent – once the game ended and the players logged off, all trace of their presence disappeared and the world returned to its initial state. It was only in the early 1990s that the social and persistent elements of the early text-based worlds and the gaming elements of the later worlds were truly united. Ultima Online, for example “linked the graphics of videogames to the social and role-playing culture of MUDs to the Internet[,] in what is considered to be the first persistent, massively-multiplayer commercial success.” When Ultima was introduced in 1998, it quickly drew subscriptions from approximately a quarter-million users. Its progeny, Lineage, attracted at least 4 million subscribers, most of them in Asia. The MMORPG boom had begun.

Worlds such as Ultima, along with more recent ones such as World of Warcraft, Lineage, and Ultima, remain purely stages for games. Players log on to engage in fantasy play, killing adversaries and striving to reach goals set out by the programmers. More recently, however, the industry has seen the resurgence of non-gameplay-associated worlds. These reality-based worlds – including Second Life, the Sims, and City of Heroes – do not include any storyline nor any goal for the participants. They merely set the

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4 Id. (“Text-based commands allowed a user to communicate actions to other users and thereby to act out fantasies and scenes across a distance like an on-line Dungeons and Dragons.”).
5 Id. (“In a MUD, the fantasy is described exclusively through words. Subsequently, other designers, such as Randall Farmer and Chip Morningstar, created graphical role-playing worlds like Habitat, the first multi-user domain with a graphical interface.”).
6 Id. at 7.
7 Id.
9 Noveck, supra note 3, at 7.
10 Id.
11 Id.
13 F. Gregory Lastowka & Dan Hunter, The Laws of the Virtual Worlds, 92 CAL. L. REV. 1, 5 (2004) (describing “the tropical beaches of Tiki (There.com’s There), the fantasy world of Norrath (Sony’s EverQuest), the interstellar expanses of the Milky Way (Electronic Art’s Earth & Beyond), and even a galaxy far, far away (Sony’s Star Wars Galaxies”).

stage for participants to engage in any activity they see fit; they function, essentially, as an alternative to the real world. These reality-based worlds often allow players to create and design their own houses, clothing and possessions in the virtual world. In this respect, they contrast starkly with the game-based worlds, in which most of the content is supplied by the games’ designers.\(^{14}\)

By giving users the power to design in-world content, virtual world administrators have allowed for far greater diversity in said content and ensured that the reality-based worlds are more independent from the designers than the game-based worlds.\(^{15}\) As long as bandwidth is provided, the worlds can keep on existing, evolving and expanding whether or not the designers are at the wheel. This has allowed users virtually unchecked ability to tailor their own experience online – an ability that they had largely lost in gaming worlds.\(^{16}\)

Second Life, launched in 2003 by Linden Lab, offers a particularly interesting example of a reality-based world.\(^{17}\) Like other such worlds, it allows users to interact freely and design and trade their environments, clothes and vehicles.\(^{18}\) Linden Lab enabled Second Life to distinguish itself from its peers, however, by granting its users intellectual property rights over all items and structures created by them.\(^{19}\) The company merely sells virtual real es-

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\(^{14}\) Noveck, supra note 3, at 9 (“In the latest generation of virtual worlds, such as The Sims, Second Life, City of Heroes, and There.com players can create more and more of their own content, fostering in-world creativity and productivity but also cutting down on development costs associated with building content.”).

\(^{15}\) Id. at 9-10.

\(^{16}\) Mayer-Schönberger & Crawley, supra note 8, at 1786 (“For all of their success, the commercially successful offerings in [the early] generation of graphical, commercial virtual worlds shared one significant limitation: like early text-based virtual spaces, all participants remained in the designer’s world, without a means to craft their own objects or augment their experiences. In this sense, they had not advanced to become three-dimensional analogues to the text-based LambdaMOO.”)

\(^{17}\) Id. at 1787; see also What is Second Life?, supra note 1; Michal Lev-Ram, Linden Lab CEO Stepping Down, FORTUNE, Mar. 14, 2008, http://techlandblogs.fortune.cnn.com/2008/03/14/second-life-ceo-stepping-down/.

\(^{18}\) Mayer-Schönberger & Crawley, supra note 8, at 1787; see also Bobby Glushko, Note, Tales of the (Virtual) City: Governing Property Disputes In Virtual Worlds, 22 BERKELEY TECH. L.J. 507, 524 (2007) (“The virtual world of Second Life is primarily designed for player interaction, with no set quests to complete. Instead, players interact with each other, form relationships, and design and market products.”); Attila Berry, Lawyers Find Real Revenue in Virtual World, LEGAL TIMES, July 31, 2007, available at http://www.law.com/jsp/legaltechnology/pubArticleLT.jsp?id=11858207070295 (“Second Life is not a game, as its users are quick to point out. Unlike other multi-user online worlds like World of Warcraft, Second Life users don’t amass points or have goals they need to achieve to progress to the next level.”).

\(^{19}\) Press Release, Linden Lab, Second Life Residents To Own Digital Creations (Nov. 14, 2003), http://lindennlab.com/pressroom/releases/03_11_14 (“Unlike traditional online game environments where anything created in-world is owned by the service provider, Second Life has responded to its residents’ desire to own their work just as they would any other original creations. Under these terms they can create, and sell derivative works based on content they’ve made, or license the work to others.”); see also Steven J. Horowitz, Competing Lockean Claims to Virtual Property, 20 HARV. J.L. & TECH. 443, 448 (2007) (“Linden Lab’s Second Life is supposed to be different. Second Life purports to protect the
tate to users (in the form of what it calls “islands”). Any building the user designs on the property, any item of clothing created by the user, belongs to him or her. In adopting this tack, Linden Lab has changed the virtual world paradigm, and earned a bit of an edge over many of its competitors.

II. THE IMPORTANCE OF GOODS AND PROPERTY

A. A Developing Economy

Linden Lab’s standard-setting decision to grant content ownership to Second Life users has not only ensured its success (at least in the short term) as a virtual reality world, it has also led to the development of a robust virtual (or “in-world”) economy. Second Life has its own currency, the Linden Dollar (or “L$”), on which users rely to purchase virtual land in Second Life and pay for goods, services and real estate. The Linden Dollar is readily exchangeable for U.S. dollars at a rate that fluctuates with demand and that can be monitored on the Linden website—in fact, the exchange rate was approximately 275 Linden dollars to the U.S. dollar at the time of writing. This ability to exchange U.S. dollars into Linden dollars, and back again, has been one of the cornerstones of the development of private enterprise in Second Life.

virtual and intellectual property rights of its users.”); Noveck, supra note 3, at 14 (“Linden Lab, contrary to standard industry practice, decline[s to] tak[e] exclusive intellectual property rights in the digital works created by players in their world. If participants can have rights in their own works and exploit them, the argument is, they will be more likely to create and, by creating, to become more attached to the place that gives them the tools to build.”).

21 Horowitz, supra note 19, at 448 (“Linden Lab even sells virtual land directly to users, who can have their own island for $1,675 plus $295 per month.”).

As Linden Lab itself explains:
Under Linden Lab’s Terms of Service, Residents retain intellectual property rights in the original content they create in the Second Life world, including avatar characters, clothing, scripts, textures, objects and designs. The result is a vibrant marketplace of Second Life content. If you create it, you can sell it, trade it, and even give it away for free, subject of course to our Terms of Service. Second Life, IP Rights, http://secondlife.com/whatis/ip_rights.php (last visited June 30, 2008).

22 That is not to say that it is the most popular virtual world, that it has the most users, or even that it is the world most likely to remain a long-term platform. See MMOGCharts.com, supra note 12. Only time will tell.

23 See Berry, supra note 18 (“Second Life even has its own currency, the Linden Dollar, as well as its own currency exchange, where users can buy Lindens using American dollars and also change them back. Currently, the exchange rate is about 186 Lindens per American dollar.”). See also Anita Ramasastry, Could Second Life Be In Serious Trouble? The Risk of Real-Life Legal Consequences for Hosting Virtual Gambling, FINDLAW.COM, Apr. 11, 2007, http://writ.lp.findlaw.com/ramasastry/20070411.html (“The exchange rate fluctuates daily based on usage.”); XStreet SL, Second Life Currency Exchange, http://www.xexchange.com/modules.php?name=Currency (last visited June 16, 2008).


25 Chris Gourlay & Abul Taher, Virtual Jihad Hits Second Life Website, SUNDAY TIMES (U.K.), Aug. 5, 2007, at 4 (“Linden Lab said that about $1m (Pounds 490,000) a day was exchanged in Second Life.”).
The economy of Second Life, such as it is, is expanding at a dramatic pace. This growth is fuelled not only by the steady increase in the number of its users, but also by the continuous creation by such users of new objects, designs, and clothes, all of which belong to them and can be sold to others. Hundreds of millions of objects have already been inserted into the virtual world, and hundreds of thousands of such objects change hands every month in transactions facilitated by the Linden Dollar.\textsuperscript{26} As of early 2008, millions of U.S. dollars’ worth of Linden Dollars were exchanged on Second Life’s currency exchange every month.\textsuperscript{27} In fact, Linden Lab was compelled to develop a marketplace for Second Life goods and designs in an effort to avoid seeing its users sell their virtual wares on eBay.\textsuperscript{28}

Second Life and other virtual worlds now represent a virtual market of significant size,\textsuperscript{29} and one that is expected to grow further still.\textsuperscript{30} A world such as Second Life also offers its users a market with tremendous cross-border reach. Indeed, while American users account for a significant portion of all its users, Second Life participants hail from all over the world.\textsuperscript{31} As a result, Second Life

\textsuperscript{26} Mayer-Schönberger & Crawley, supra note 8, at 1787 ("According to Linden Lab’s Cory Ondrejka, users have inserted over 100 million such objects into the world [as of August 17, 2006]. Over 380,000 distinct objects changed hands in the month of July 2006 in ten million user-to-user transactions, which (given the exchange rate of \$300 Linden Dollars (L $) to one U.S. dollar) yielded an internal economy of \$10 million for that month."); Posting of Shankar Gupta to Mediapost’s Gaming Insider, http://blogs.mediapost.com/gaming_insider/?p=36 (Feb. 2, 2007) ("[O]nline auction house eBay banned the sale of virtual goods from massively multiplayer online games, but exempting Second Life property, meaning that islands, housing or fur suits . . . can continue to be sold on this, and other, secondary markets.").


\textsuperscript{28} See Second Life Currency Exchange, supra note 23.

\textsuperscript{29} Lin, supra note 27, at 85; see also Mayer-Schönberger & Crawley, supra note 8, at 1788 (citing a 2001 estimate of the Everquest economy as having a GNP of \$135 million, then approximately equal to that of Russia). See also Glushko, supra note 18, at 507 ("Economists have estimated that the total gross domestic product of virtual worlds as a whole exceeded seven billion dollars this year alone, comparable to the gross domestic product of Estonia or Cote d’Ivoire.").

\textsuperscript{30} While Second Life is a particularly interesting example for the purposes of this Article, it is by no means the most popular or heavily frequented virtual world on the market. The game-based MMORPG World of Warcraft, for example, has rocketed to upwards of 10 million active subscribers since its introduction on the market in 2004. See MMOG-chart.com, supra note 12; Posting of Jeremy Reimer to ArsTechnica.com, http://arstechnica.com/news.ars/post/20060604-9664.html (June 1, 2006, 15:00 CST) ("The big surprise, however, was Blizzard’s World of Warcraft, released in 2004. It quickly surpassed all its rivals in subscriptions, passing the six million mark in February of this year. Now, according to the web site MMOGCHART.com, it has hit a new milestone by moving past the 50 percent mark of market share of massively multiplayer online games.").

provides fertile ground for entrepreneurs seeking to capitalize on virtual commerce.

B. Virtual World Entrepreneurship

Given the relative strength of the Second Life economy, it has become financially viable, and even perhaps prescient, for users to start full-time businesses online.32 In fact, a select number of users have already made judicious use of their time in Second Life to become highly successful in-world entrepreneurs.33 Their businesses are increasingly viable because large numbers of users are using Second Life as an alternative to real life, spending considerable amounts of time (and money) in-world.34 There is little doubt that this trend will continue, and perhaps accelerate. As one commentator explains:

Virtual worlds are the cyberspace we will “inhabit” within the next ten years. Our gateway to the Internet will look more and more like a videogame and less like a book. . . . Many of the 20-30 million regular participants in virtual worlds spend more time in these virtual societies than they do on the job or engaged in their own communities. Whereas here they do not vote, they do not bowl, they do not participate, and they do not follow politics, “there” they do.35

This cannot be dismissed as a mere flight of fancy. Already, the U.S. Congressional Joint Economic Committee has launched

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32 Bettina M. Chin, Note, Regulating Your Second Life: Defamation in Virtual Worlds, 72 BROOK. L. REV. 1303, 1305 (2007) (“Importantly, Second Life . . . runs on a synthetic economy in which ‘real-world’ money is converted to digital currency (Linden Dollars), which likewise can be converted [sic] back. Because users retain the rights to their digital creations, they can create, trade, sell, or purchase any creation with other users, which furthers the growth of this in-world economy.”); Cory Ondrejka, Escaping the Gilded Cage: User Created Content and Building the Metaverse, 49 N.Y.L. SCH. L. REV. 81, 94 (2005) (“The tremendous variety enabled by atomistic construction combined with a free market and widespread participation has allowed Second Life users to explore a wide range of in-world professions. Some have become entrepreneurs, opening stores, bars, and strip clubs, and searching out creators to provide goods and services for them.”). See also Alemi, supra note 27, ¶ 34 (relating to the experience of journalist Julian Dibbell, who in 2003 spent a year working as an Ultima Online virtual entrepreneur. Mr. Dibbell earned an average of $4,000 per month selling game items, currency and real estate on eBay. This income qualified him, in his own words, only as lower-middle class among virtual entrepreneurs.).

33 See Kathleen Craig, Second Life Land Deal Goes Sour, WIRED, May 18, 2006, http://www.wired.com/gaming/virtualworlds/news/2006/05/70009 (“A burgeoning trade in real estate, clothing, vehicles and other goods has led to a strong and growing in-game economy, supporting full-time businesses and real estate barons.”).

34 Lazarus, supra note 31 (noting that the average Second Life user spends forty hours per month in-world).

35 Noveck, supra note 3, at 2.
an inquiry into the possibility of taxing income derived from in-world transactions, much to the chagrin of in-world entrepreneurs.

But who are these virtual world business pioneers who are changing the face of virtual commerce? There is no simple answer to that question – Second Life businesspeople come in all stripes and colors. Clothing designers, for example, have found a vibrant market for their virtual goods as many seem keen to personalize (for a small fee) their avatar’s appearance. Second Life has also seen the rise of a class of real estate barons, users who have bought, developed and resold virtual “real estate” at great personal profit. At least one user, who operates under the avatar name of Circe Broom, “owns a club, a concert hall, an Egyptian-style stage and a park venue overlooking the ocean in the virtual world.” She employs real-world bands to perform in-world, pays artists a significant hourly salary, and allows them to use her stores as distribution centers for their music.

Perhaps even more interesting than the establishment by Second Life users of new businesses is the gradual in-world arrival of real-world businesses. The clothing company American Apparel, for example, bought an island for business purposes early on in Second Life, but ultimately pulled out of the world. Other giants of the real commercial world have also jumped on the bandwagon: Reebok, Nissan and IBM all have virtual stores in Second Life, and claim to be thriving. The entertainment industry too, has (predictably) been quick to set foot in Second Life. Artists such as Suzanne Vega and Jay-Z have performed in virtual concerts, and a number of movies have premiered in-world.

56 Glushko, supra note 18, at 507.
57 June Arney, Making a Living in Virtual World: Big Firms and Startups Seek Profit in Simulated Businesses, BALT. SUN, Oct. 25, 2007, at 1D.
58 Id.
59 Id.; see also Berry, supra note 18. Interestingly enough, it appears that American Apparel’s retreat from Second Life may have been prompted by virtual terrorist actions organized by the Second Life Liberation Army (“SLLA”), an association of avatars “seek[ing] political rights and universal suffrage from the dictator Linden Lab.” Alemi, supra note 27, ¶ 63. In an effort to gain recognition for its “struggle,” it took to shooting the avatars of potential customers seeking to enter American Apparel’s Second Life store. Id. Many suspect that the negative publicity associated with the incident, and the surprising backlash against the company in the Second Life community, prompted American Apparel to end its virtual world experiment. Id.
61 Chin, supra note 32, at 1315. Never ones to shy away from publicity and the media, savvy politicians have already made their first forays into Second Life. Mark Warner, former Governor of Virginia and candidate for the 2008 Democratic Presidential Primary, was the first politician to harness the communicative power of Second Life by agreeing to be interviewed by a full-time Second Life reporter in a Second Life auditorium. Id.; see also Jason S. Zack, Comment, The Ultimate Company Town: Wading in the Digital Marsh of Second Life, 10 U. PA. J. CONST. L. 225, 230 (2007).
Confounding their image of stodgy bastions of traditionalism, even law firms are seen dipping their feet in the water.\textsuperscript{42} The Washington, D.C. firm of Greenberg & Lieberman, for example, shares the world with the Spanish firm of Cuatrecasas,\textsuperscript{43} and representatives for those firms report the receipt of business through their Second Life branch. Given the very low overhead of maintaining a virtual office, these are likely to be very profitable, if they are not so already.\textsuperscript{44}

But the invasion of virtual worlds by real-world concerns is not limited to in-world establishment of corporate groups: Second Life has also seen the arrival of government entities and government agencies. The Canada Post, for example, recently opened an island on which users can purchase a variety of real-life brand store items, which are then automatically mailed (using Canada Post) to their real life address.\textsuperscript{45} Similarly, Second Life now hosts embassies from the Maldives, Sweden and Estonia.\textsuperscript{46} Other countries are sure to follow.

While Second Life has come to be understood as a novel platform for commerce, some corporate users are now finding other uses for the world. Sun Microsystems, Toyota, Nissan and

\textsuperscript{42} Arney, supra note 37 (describing the Second Life outpost of intellectual property boutique Greenberg & Lieberman); see also Berry, supra note 18 (“And while Second Life might initially seem like make-believe or child’s play, the firm is filing real trademark applications, landing real clients and making real money through the virtual world. By [the firm’s] reckoning, the firm has pulled in nearly $20,000 in revenue from its Second Life office in the past year.”).

\textsuperscript{43} Claire Ruckin, Spanish Leader in Surprise Second Life Launch, LEGALWEEK.COM, Oct. 9, 2007, http://legalweek.com/Articles/1051050/Spanish+leader+in+surprise+Second+Life+launch.html (“Independent firm Cuatrecasas has marked a new phase in its expansion beyond its Spanish heartlands after launching a new office in Second Life, the virtual world boasting more than a million users globally.”).

\textsuperscript{44} On a related note, the year 2007 also saw the opening of the Second Life Bar Association. Berry, supra note 18 (“Duranske, an intellectual property lawyer . . . started the Second Life Bar Association in December 2006 and is its current president. The group is developing a system of attorney verification so that clients know if their in-world attorney is qualified to practice. And it recently held elections.”); but see Posting of Carolyn Elefant to Law.com, http://legalblogwatch.typepad.com/legal_blog_watch/2007/03/get_a_life_second.html (Mar. 9, 2007, 13:45 EST) (“[A]t least one bar association hotline has indicated that Second Life is sufficiently ‘gamelike’ to stay below the bar’s radar.”).


Sony BMG Music Entertainment rely on Second Life to obtain feedback on advertising schemes.\(^7\) Microsoft, Hewlett-Packard, and Verizon have started conducting job interviews in Second Life.\(^8\) Others still use it as a forum to train employees in communications and customer relations,\(^9\) or even to expose potential customers, at little expense, to a new product. Evian, for example, has peppered Second Life with virtual vending machines that distribute virtual – and free – bottles of Evian, along with a message extolling the virtues of the water.\(^50\) Moreover, entrepreneurs have come to realize that virtual-world economies such as that of Second Life may end up creating jobs in the real world. Many of them, particularly in China, rely on a cheap, computer-literate local workforce to design goods in reality-based worlds or to acquire objects or skills of value in gaming worlds, and sell those goods or skills on eBay to users with more money than time on their hands to earn them the old-fashioned way – through virtual sweat and blood (a practice quickly dubbed “point-and-click farming” or “gold farming”).\(^51\)

In sum, Second Life – like other similarly situated worlds – has a developing economy of significant scale, a user population in the hundreds of thousands that is still in a growth phase, and a lively market trading activity. Predictably, it now hosts some degree of illegal activity.\(^52\)

## III. Civil and Criminal Illegality in Second Life

Second Life and other virtual worlds have proven to be of great interest to legal scholars.\(^53\) The majority of the relevant lit-

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\(^7\) Chin, supra note 32, at 1314-15.
\(^8\) Zack, supra note 41, at 231.
\(^9\) Arney, supra note 37 (“IBM owns more than 30 islands in Second Life where it holds meetings and training, does real-time collaboration and operates a 24-hour business center staffed by avatars, a spokesperson said.”).
\(^50\) Evian Tests the Water in Second Life, PROMO MAG., Oct. 4, 2007, http://promomagazine.com/news/evian_tests_waters_second_life_100407/ (“Residents who pass one of these machines will see a pop-up message offering them the chance to give their skin a ‘second life’ with a bottle of Evian.”).
\(^51\) Mayer-Schönberger & Crawley, supra note 8, at 1789 (“Companies in countries with cheap labor, like China, have begun teaching computer-literate workers to build new avatars, earn virtual money, and engage in specific projects to acquire rare and high-priced treasures, all of which then are sold on auction sites.”); see also Itembay, http://www.itembay.ca (last visited Nov. 20, 2008). In a fascinating development, “gold farmers” in South Korea have now begun to organize to “more effectively protest anti-gold-farming legislation.” Kyle Orland, Korean Gold Farmers Organize, JOYSTIQ.COM, Jan. 23, 2007, http://www.joystiq.com/2007/01/23/korean-gold-farmers-organize/.
\(^52\) Second Life knows few international boundaries. For the purposes of this Article, however, the author will refer to activity that is illegal in the United States.
\(^53\) See Andrew E. Jankowich, Property and Democracy in Virtual Worlds, 11 B.U. J. SCI. & TECH. L. 173, 175-76 (2005) (explaining that scholars are fascinated with the implications of Second Life and other virtual worlds because “these places provide a fascinating and unique laboratory for research on human society . . . [and because] virtual worlds may soon become one of the foremost important forums for human interaction, on a level with telephones.”).
erature, however, dwells on the impact of such virtual worlds on traditional concepts of property. This Article will focus instead on a topic that may be of greater practical concern to real-world individuals or business entities – the rise in virtual world illegal behavior, and in particular, in (largely unChecked) violations of real-world trademarks and copyrights.

It is of no great surprise that a virtual world that strove to offer its users a realistic alternative to the real world would soon see the rise of some degree of illegal activity, with victims often forced to turn to real-world resources to obtain relief. Such a development is, in fact, quite common to virtual worlds. In 2003, for example, Chinese courts were presented with a complaint filed by a young user of the Red Moon virtual world who had gathered – at great personal expense – an array of virtual weapons sufficient to render him effectively invincible in the virtual world. Unbeknownst to that user, however, a hacker broke into his account and stole his weapons. The Red Moon administrator having refused to provide him with the identity of the thief, the user turned to the courts. In one of the first decisions of its kind, the court in *Li Hongchen v. Beijing Arctic Ice Technology Development Co.* ruled that the user was entitled to compensation from the administrator in the form of the return of the stolen weapons.

Similar incidents involving Second Life are not unheard of in the United States, although U.S. courts and enforcement agencies may not be as prepared to respond. As one author notes,

Carissa Hill, a resident of Lawrence, Kansas, called the local police in early 2006 because her avatar had been swindled by an online scam artist that had stolen another online character’s identity in the game. However, Hill did not lose her real world money. Rather, she was cheated out of in-game Linden Dollars. Evidently upset, Hill called the local real world police for she did not know where else to turn. However, the police could not help; they did not know what to do or how to handle the matter.

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56 Fairfield, supra note 55, at 1084; Kayser, supra note 54, at 66-67.

57 Fairfield, supra note 55, at 1084; Kayser, supra note 54, at 66-67.

The universe of online illegal activity is not limited to theft. Experts warn that unless drastic preventive measures are taken soon, the lax oversight and international reach of virtual worlds will lead them to become a hotbed of money laundering and a preferred venue for cross-border financial misdeeds. Some of this nascent “virtual illegality” has led to governmental responses. U.S. law enforcement agencies have, for example, noted the dramatic growth in virtual world casinos aimed at side-stepping local anti-gambling laws, and have taken regulatory action to combat that development. While the United States does not ban gambling outright, it “prohibits U.S. gamblers from using their banks and credit cards to deposit or withdraw money from Internet gambling sites, and prohibits Internet gambling sites from accepting money from U.S. financial institutions.” Linden Lab, acutely aware of the problem, has had to modify its terms of use to ban in-world gambling.

More prevalent than in-world theft and illegal gambling, however, and of primary interest to copyright and trademark owners, are virtual world intellectual property abuses.

A. Trademark Violations

That Second Life is a haven for trademark infringement is


“The legitimate benefits of virtual communities will prove enormous, but people need to be aware that this cutting-edge technology has a darker side. Money laundering is the obvious risk. There will be a migration of fraudsters into these sites when they see all of the opportunities.”

The report describes Second Life as “a parallel universe with almost no external rule of law, no enforced banking regulations or compliance, no policing and no governmental oversight”.[sic]

It adds: “Commerce, relationships and criminal activity in virtual online communities are hidden. But the money is real and, in the case of fraud, tax evasion or theft, so is the loss.”

60 See Ramasastry, supra note 25 (“At the end of 2006, Congress passed the Unlawful Internet Gambling Enforcement Act (UIGEA). The statute forbids banks and other entities from processing payments for Internet gambling transactions. It also tasks the Treasury Department and Federal Reserve with issuing regulations to guide financial institutions in identifying and blocking such transactions.”) Ramasastry further notes that the legislation may not be the final solution. Indeed, while “some online casinos are shutting down their U.S. operations . . . Americans can now turn instead to virtual casinos to fulfill their urge to wager.” Id.


62 In fact, the Second Life administrators have gone so far as to invite gambling enforcement officials to inspect sites on Second Life – prompting quite an outcry among its users. Adam Reuters, FBI Probes Second Life Gambling, REUTERS.COM, Apr. 3, 2007, http://secondlife.reuters.com/stories/2007/04/03/fbi-probes-second-life-gambling/ (“The FBI has visited casinos in Second Life at the invitation of Linden Lab, but federal law enforcement officials have not yet taken an official stance on virtual gambling.”).
indisputable. As one commentator has put it, “misappropriation of major corporations’ trademarks in Second Life is so ubiquitous, so safe, and so immensely profitable, that it has become a wholly transparent part of Second Life’s bustling commercial landscape.”63 At the time of writing, Second Life stores could be found selling virtual Gucci watches and dresses, Nike apparel, and Louis Vuitton purses, to name but a few examples.64 None of these stores were licensed to sell these branded virtual goods.

Some corporations, however, have started to fight back. The manufacturer of high-end office chairs Herman Miller, for example, noted the sale of “counterfeit” Herman Miller chairs online and took action. Instead of immediately challenging all infringers, it established a presence in Second Life and allowed customers who had purchased a counterfeit chair to exchange it for a Herman-Miller-approved design for free.65 Others have chosen another tactic. Indeed,

[s]ome well known brand names such as Nike and Levi have embraced the concept of licensing the use of their trademarks to virtual world hosts, and have viewed virtual world licensing of their trademarks as an easy way to make money without the costs of supplying a tangible product. In order to pay the licensing fees to trademark owners, a virtual world host will charge the computer user real dollars via a real credit card to purchase the plat to dress the user’s avatar in virtual Nike or Levi outfits.66

Unfortunately, these brands form a very distinct minority. The vast majority of real world trademark owners are either unaware of the infringement or unprepared to fight it.

The often repercussion-less trademark infringement that one witnesses in Second Life is not the sole concern of large real-world companies; it also has an impact on small in-world trademark owners. Paradoxically, it is these smaller owners selling items under their own brands that are most likely to know of the abuse of their property but least able to confront it. Few have the means to initiate litigation proceedings to protect their designs, and most

64 All of these stores were found on June 30, 2008 using the SL Browser, an unofficial search engine for Second Life, accessible at http://www.slbrowser.com. See also Posting of Duranske, supra note 63 (describing shopping malls selling all sorts of unlicensed brand-name goods, and estimating that 3-5% of the goods for sale in-world carry unlicensed trademarks).
66 Gillies, supra note 61, at 132.
are just forced out of business. With no strict and reliable in-world enforcement of trademark laws, and with an ever-growing demand for branded goods, the business of trademark infringement is becoming increasingly lucrative for the infringer and harmful to the trademark owner.

B. Copyright Infringement

Copyright infringement, too, is rampant in Second Life. Just like trademark infringement, it has affected both large real-world corporations and smaller in-world content designers, but has hit the smaller players particularly hard. Indeed, the business model of many Second Life enterprises is based on the sanctity of the designs that business owners sell in-world. Take the protection

There are some early signs, however, that in-world entrepreneurs are prepared to start standing up for their rights. Indeed,

[s]ix major Second Life content creators have filed a lawsuit in the Eastern District of New York claiming copyright and trademark infringement against Second Life user Thomas Simon of New York, who allegedly exploited a flaw in the Second Life software to duplicate thousands of copies of the creators' products.

Simon allegedly sold copies of the creators' products to other Second Life users as Second Life avatar 'Rase Kenzo.'

The allegedly infringing items represent nearly every type of product for sale in Second Life including avatar clothing, skins and shapes, scripted objects, furniture, and more. All of the products allegedly duplicated appear to be covered by plaintiffs' copyrights and trademarks.


See infra, Part V.

See Posting of Benjamin Duranske to VirtuallyBlind, http://virtuallyblind.com/2007/06/21/expensive-luxury-knockoffs-raise-trademark-stakes/, (June 21, 2007) (describing the practice of in-world designer Elexor Matador of "selling twenty-five knockoff Cartier Himalia jewelry [sic] sets as limited editions for L$10,000 each (just under U.S. $40.00)" and noting that "[i]f the sets all sell, the designer stands to make a little under U.S. $1000.").

See Chin, supra note 32, at 1321-22, explaining that:

[O]ver the last few months of 2006, a huge uprising occurred within the Second Life community over a new rogue program, nicknamed the CopyBot. This program enables users to quickly replicate in-world objects and characters, and thereby potentially erode the value of a resident's virtual property...
away from the design, and the virtual wares are stripped of much of their value.\textsuperscript{71} As for large real-world corporations, every time parts of a protected book are commercialized in-world without notice to a publisher, every time a movie is illegally shown by a virtual world movie theater operator, every time a song is played in-world for commercial purposes without the payment of royalties,\textsuperscript{72} these corporations are harmed.\textsuperscript{73}

IV. THE NEED TO MONITOR INTELLECTUAL PROPERTY VIOLATIONS

Only a very small minority of real-world intellectual property owners appears aware of these ubiquitous abuses and inclined to take action to limit the damage to their brand or property. Proponents of inaction set forth a panoply of arguments to justify their “laissez-faire” approach. None are valid.

A. Whether the Number of Users and the Scale of the In-World Economy Justifies Devoting Resources to Fighting Virtual Intellectual Property Violations

One of the most obvious arguments for inaction is that the number of users involved, and the number of recorded violations of intellectual property, are simply too small to warrant a concerted regulatory effort. Why monitor an entire virtual world to


At the time of writing, even a cursory search of Second Life yielded multiple pirate DVD and CD stores, movie theaters, nightclubs and radio stations, few, if any, of which are likely to abide by real-world copyright law.

Incidentally, a related problem arises out of the ability of each Second Life user to design his or her “appearance.” Strolling around the streets of some Second Life islands, one might come across avatars of every shape and color, dressed in every imaginable type of attire. These avatar “appearances” – often the result of considerable designing efforts – are considered to be just another item for sale in Second Life. \textit{See, e.g.}, Posting of Benjamin Duranske to VirtuallyBlind, \url{http://virtuallyblind.com/2007/09/21/aimee-weber-trademark/} (Sept. 21, 2007).

Many in-world entrepreneurs in fact specialize in the design and sale of particular “appearances” to other users lacking the time or skill to design appearances themselves. Some go so far as to design avatar outfits and appearances that mimic public figures such as pop stars and athletes. But in doing so, many run the risk of being held liable for a violation of the right to publicity, which generally provides that “[o]ne who appropriates to his own use or benefit the name or likeness of another is subject to liability to the other for invasion of his privacy.” \textit{Restatement (Second) of Torts} § 652C (2008). \textit{See also, e.g.}, CAL. CIV. CODE § 3344(a) (2008); FLA. STAT. ANN. § 540.08 (2007); C.B.C. Distrib. & Mktg. v. Major League Baseball Advanced, L.P., 505 F.3d 818, 822 (8th Cir. 2007); Barfield, supra note 54, at 675.

Linden Lab is aware of this troubling practice and has already contacted the users behind Body Doubles, a company specializing in the sale of such celebrity appearances. Posting of Benjamin Duranske to VirtuallyBlind, \url{http://virtuallyblind.com/2007/03/03/celebrity-lookalike-avatars-and-the-right-of-publicity/} (Mar. 3, 2007). As of June 30, 2008, however, Body Doubles appeared to still be in business.
prevent the sale of less than a dozen virtual Ferraris to a handful of tech-savvy teenagers?

That might have been a valid question ten, or even five, years ago. But already, user numbers cited in the early scholarship are outdated. As of July 2007, Linden Lab reported a total of eight million Second Life users. Even taking into account the fact that a large number of these user accounts can be deemed inactive, and that some users open multiple accounts, Linden Lab can expect 15,000 to 30,000 users online at any one time. Large numbers of users are therefore likely to be exposed to violations of your intellectual property.

Some will no doubt argue that an in-world population of 30,000 concurrent users does not justify full-time monitoring by an intellectual property owner. But that misses the point. Second Life may or may not be one of the worlds that eventually establish themselves as the dominant platforms for virtual commerce. Any world that does gain preeminence, however, can expect huge user numbers (World of Warcraft, for example, dominates the game-based genre and boasts up to ten million active users). Such a world will have to contend with the same intellectual property abuses that one now finds in Second Life. Even if Second Life’s current numbers are deemed by owners to be insufficient to warrant an anti-infringement effort, it is only a matter of time before a virtual world does meet the owners’ threshold. Owners would do well to have devised intellectual property enforcement and moni-

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74 Mayer-Schönberger & Crawley, supra note 8, at 1781 (“Subscriptions to virtual worlds are skyrocketing; recent estimates indicate that total worldwide subscriptions to the thirty-two major virtual worlds may be as high as 9.4 million people, following an exponential growth curve since the genre’s beginnings in 1997.”). Interestingly, one commentator notes that “these subscribers are spending an average of 22.71 hours per week in these worlds, with over 11% spending a full workweek (30-40 hours) developing their online characters, and 8-10% spending more than 40 hours per week (8.4% of males and 10.4% of females).” Id. (citing The Daedalus Project, Hours of Play Per Week, http://nickyee.com/daedalus/archives/000758.php (last visited June 26, 2008)). The number of U.S. participants in MMORPGS (including Second Life) is set to grow further still, as the United States lags far behind the world leaders when it comes to mass participation in virtual worlds. Fairfield, supra note 55, at 1088. In fact, the South Korean numbers are staggering. As explained by Mr. Fairfield,

South Korea is commonly described as the world’s “most wired society,” with the greatest per-capita adoption of broadband connections. The South Korean population is 48 million. As of February 1, 2004, 30 million users had accessed the Lineage virtual environments. Over two million users access Lineage regularly. Over forty-one percent of South Korean teenagers spend significant amounts of time in virtual worlds.

Id. at 1087-88; Lastowka & Hunter, supra note 13, at 5 (“In South Korea, the game Lineage is currently more popular than television, with some four million registered participants.”).

75 Lin, supra note 27, at 84.

76 Id.; see also What is Second Life?, supra note 1; but see Posting of Shaun Rolph to The Register (Feb. 20 2007, 17:49 GMT), available at http://www.theregister.co.uk/2007/02/20/second_life_analysis/ (calling into question Second Life’s user numbers).

77 See MMOGChart.com, supra note 12.
toring policies long before then. Second Life, along with other similar worlds, is the perfect venue to develop and hone such policies.

The significant exposure intellectual property violators could garner online is only one of the factors that should motivate owners to keep an eye on virtual worlds. Another is the harm to intellectual property revenues and to the property itself that failure to monitor these worlds could entail. While copyright owners need not fear the loss of their copyright, they can, and do, face a loss of earnings when virtual world infringers commercialize products relying on said copyright or when they transmit or display said copyrighted material without paying licensing fees or royalties. Trademark owners, on the other hand, run the additional risk of seeing their marks deemed “abandoned as generic” if the marks can be used without challenge in Second Life. Xerox, for example, has gone to great lengths to ensure that its trademark is protected by aggressively pursuing any generic use of its name in the real world, and advertising heavily to support the mark. Failure to extend such supervision to virtual worlds, when a misused mark can garner exposure to hundreds of thousands of users, would be puzzling. Finally, a trademark owner who ignores a blatant virtual world violation of its mark for too long – through apathy or lack of monitoring – also runs the very real risk of seeing any subsequent trademark actions against infringers in virtual worlds and else-

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78 Indeed, abandonment does not appear to be much of an issue for copyright owners, as “abandonment... requires ‘(1) an intent by the copyright holder to surrender rights in the work; and (2) an overt act evidencing that intent,’” and because “failure to pursue third-party infringers has regularly been rejected as a defense to copyright infringement or as an indication of abandonment.” Capitol Records, Inc. v. Naxos of Am., Inc., 372 F.3d 471, 483-84 (2d Cir. 2004); see also Micro Star v. Formgen Inc., 154 F.3d 1107, 1114 (9th Cir. 1998) (“It is well settled that rights gained under the Copyright Act may be abandoned. But abandonment of a right must be manifested by some overt act indicating an intention to abandon that right.”).

79 Abandonment is a defense to a claim of trademark infringement. See 15 U.S.C. § 1115(b)(2) (2006). “The Lanham Act provides for two ways that a trademark may be abandoned, namely, through (1) nonuse, or (2) the mark becoming generic.” Grocery Outlet Inc. v. Albertson’s Inc., 497 F.3d 949, 951 (9th Cir. 2007) (citing 15 U.S.C. § 1127 (2006)).

80 The Xerox website, for example, explains that:

Xerox is a famous trademark and trade name. Xerox as a trademark is properly used only as a brand name to identify the company’s products and services. The Xerox trademark should always be used as a proper adjective followed by the generic name of the product: e.g., Xerox printer. The Xerox trademark should never be used as a verb. The trade name Xerox is an abbreviation for the company’s full legal name: Xerox Corporation.

where subject to the defense of laches. 81 All of these factors must lead to the conclusion that owners have a very strong incentive to get involved in protecting their intellectual property online.

B. Whether It Is Costly or Difficult to Monitor Abuse

But is it really worth it? Does the amount of money an owner might lose to infringement justify the expense that owner will incur to monitor these worlds and enforce her rights? The answer is yes – for a number of reasons.

The daily monitoring of multiple virtual worlds is a task that can be accomplished by one employee, so long as adequate search tools are provided by the in-world administrators. Second Life’s search tool, for example, allows users to search all islands for particular names, brands or items. 82 Given that the companies at issue would monitor a small subset of activities – infringement of a particular copyright or trademark – the task should be even easier. Virtual monitoring of the kind proposed here would not be new to virtual worlds nor to the business world. It is quite common for virtual world platforms to be monitored by a handful of “wizards” associated with the world administrator. 83 As for the business world, many companies already monitor their online profile by regularly checking online discussion forums and blogs. 84 Extend-

81 Any trademark infringement action is subject to the defenses set out in 15 U.S.C. § 1115, which provides “[t]hat equitable principles, including laches, estoppel, and acquiescence, are applicable.” 15 U.S.C. § 1115(b)(9); see also Citibank, N.A. v. Citibanc Group, Inc., 724 F.2d 1540, 1546 (11th Cir. 1984). “Laches will apply where (1) plaintiff had knowledge of defendant’s use of its marks, (2) plaintiff inexcusably delayed in taking action with respect to defendant’s use, and (3) defendant suffered prejudice as a result.” Black Diamond Sportswear, Inc. v. Black Diamond Equip., Ltd., No. 06-3508, 2007 U.S. App. LEXIS 23515, at *3 (2d Cir. Oct. 5, 2007) (citing Saratoga Vichy Spring Co., Inc. v. Lehman, 625 F.2d 1037, 1040 (2d Cir. 1980)). The timing of the suit becomes all-important. Courts “examine when a plaintiff ‘knew or should have known’ of the infringing activity to determine whether the plaintiff unreasonably delayed in bringing suit.” Miller v. Glenn Miller Prods., Inc., 454 F.3d 975, 980 (9th Cir. 2008). Second Life has been online since 2003. Second Life, What is Second Life?, http://secondlife.com/whatis/ (last visited Nov. 20, 2008). Many infringers have been in business for years, even though Second Life has entered the public consciousness thanks to relentless media publicity. As a result, laches must be considered an ever greater concern for trademark owners.

82 The Second Life search tool is far from foolproof, however, which has led third parties to devise more efficient methods of combing through Second Life for particular items. Colin Stewart, Second Life Search Engine Gets Expert Help, ORANGE COUNTY REG., Mar. 12, 2008, available at http://www.ocregister.com/money/browser-life-incubator-1997827-second-virtual; see also SL Browser, supra note 64.

83 See, e.g., Lastowka & Hunter, supra note 15, at 54 (explaining that the administrators/monitors of virtual worlds are often referred to as “wizards” by the world users, and adding that “[w]hile the wizards of MUDs are usually the owners and programmers of the MUD server and their circle of friends, the wizards of contemporary virtual worlds are usually multinational corporations such as Microsoft, Sony, and Electronic Arts.”).

ing that surveillance to virtual worlds is a small step, and one that makes sense financially. As one author explains, even if one percent of Second Life transactions involve trademark infringement, the sums involved should give intellectual property owners sufficient motivation to intervene.\footnote{Rubina Reuters, Protecting Real Brand Names in a Virtual World, REUTERS.COM, May 29, 2007, http://secondlife.reuters.com/stories/2007/05/29/protecting-real-brand-names-in-a-virtual-world/ (estimating that at least one percent of Second Life transactions involve trademark infringement); see also Fairfield, supra note 55, at 1062 (“The projected U.S. revenue from sales of virtual objects in real-world currency is approximately $100 million dollars, and over $1.5 billion worth of transactions occurs yearly through in-environment trades. The secondary market in virtual items was recently estimated at over $880 million dollars, and is expanding quickly.”); see also Posting of Duranske, supra note 63 (estimating that 3-5% of the goods for sale in-world carry unlicensed trademarks).}

C. But It’s Just a Game . . .

Don’t say that! Please! That is the worst, most stupid thing anyone could say! Cause it quite clearly isn’t “only a game.” I mean if it was do you honestly think I’d care this much?\footnote{FEVER PITCH (Channel Four Films 1997) (quoted at http://www.imdb.com/title/tt0119114/quotes).}

Finally, corporations and other owners of intellectual property might be inclined to underestimate the threat of intellectual property abuse in online worlds, reasoning that such worlds are in fact nothing but games, not virtual markets in which their brands can be harmed and their rights abused. This fails to appreciate the importance that such worlds will have in the near future – not as game-platforms, but as substitute realities and borderless business arenas – and the extent to which users (and thus, consumers) immerse themselves in the experience of the virtual worlds and conduct their lives in much the same manner as they would in the real-world.\footnote{Of course, a few exceptions exist. A veteran Second Life user – a music enthusiast in the real world – might be prepared to pay a significant sum for an in-world live performance by the New York Philharmonic Orchestra, but not see the advantage of buying a counterfeit virtual Gucci bag, even though he may have purchased a real life (and still counterfeit) version of that bag. The ability to enjoy the musical performance remotely presents an obvious advantage to anyone lacking the means to attend the performance in person. The appeal of obtaining a virtual counterfeit Gucci bag, on the other hand, may only be clear to a small subsection of the user population.}

Already, one “online research firm predicts that eighty percent of active Internet users and Fortune 500 companies will have an online avatar by 2011, either in Second Life or in some other virtual world.”\footnote{Lin, supra note 27, at 84 (citing Chris Nuttall, It Was Science Fiction - Now It’s Just Normal, FIN. TIMES, May 9, 2007, at 2).} A company entertaining the thought of establishing a foothold in Second Life at a later time might be tempted to monitor the world for infringement until it is ready to begin its in-world presence. For example, if Ferrari does decide to open a
branch or dealership in Second Life (be it to sell virtual versions of its cars, or merely to use as a virtual showroom for vehicles), the company will want to be assured that the Second Life market is not already flooded with pirate dealerships. At the time of writing, there are already dozens of unofficial Ferrari dealerships in the world.

Owners also need to realize that a very significant share of users now consider their Second Life experience to be an important aspect of their real life existence. These users have invested a significant amount of time and effort in Second Life and have allocated emotional capital to their virtual-world possessions. As one commentator explains:

> It is revealing of the psychology of virtual worlds, and particularly of virtual property, that the property interests feel real to the parties . . . . That is, none of the disputes simply dissipate with a realization that the whole enterprise is “just a game.” This is not surprising; researchers in behavioral economics have found that people tend to become personally invested in objects that they perceive as belonging to them. The “endowment effect” is a persistent cognitive bias causing people to overvalue assets that they have acquired in relation to those that others own.

Why should this be of any concern to an intellectual property owner? When your intellectual property is abused in Second Life, it is being abused in full view of hundreds of thousands of potential customers who have a strong emotional attachment to their virtual possessions, and by association, to brands. It is not a game to them. It should not be one to you either.

V. VIRTUAL WORLD POLICING

Under these circumstances, owners must conclude that some

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89 Posting of Duranske, supra note 63.
90 See SL Browser, supra note 64, search for “Ferrari,” performed on June 30, 2008.
91 As related above, the average Second Life user spends forty hours per month in-world. Lazarus, supra note 31. Other worlds enjoy similar user commitment. See Lastowka & Hunter, supra note 13, at 9 (“20% of participants in a large survey of EverQuest’s users attested to living their lives mostly in EverQuest’s Norrath, 22% expressed the desire to spend all their time there, and 40% indicated that if a sufficient wage were available in Norrath then they would quit their job or studies on earth.”).
93 Gillies, supra note 61, at 132 (“If a virtual world host allows its players full freedom of expression to design its own clothes, vehicles, restaurants, etc., branded with real world trademarks, a blurred vision of trademark infringement arises . . . .”).
94 Lastowka & Hunter, supra note 13, at 10 (“Economic boundaries between the real and the virtual world are not as distinct as they might appear. If you’re going on a virtual date with a new acquaintance you met in There, you’ll probably want to dress to impress. So perhaps you’ll pick up some baggy Levi’s jeans, a Nike sweatshirt, or maybe a snazzy new hoverboard for your avatar.”).
degree of virtual world regulation is necessary to keep intellectual property violations in check. But who should bear the burden of policing these worlds?

A. Regulation by Virtual World Administrators

The usual answer is that the administrators of the virtual world at issue (such as Linden Lab for Second Life, or Sony for Norrath) should be responsible for monitoring in-world illegal activity. They already do so to some extent. Indeed, the first (and primary) line of regulation provided by world administrators is the End-User License Agreement, or EULA.

An end user license agreement is a legal contract between a software developer or vendor and the user of the software. It specifies in detail the rights and restrictions that apply to the software. Although there are big differences among EULAs, typical components are definitions, a grant of license, limitations on use, a copyright notice and a limited warranty.95

The EULA allows virtual worlds to set the ground rules of participation in the world, and provides the “legislative” basis for in-world policing. A user can accept the terms of a EULA: “(1) by . . . opening a shrink-wrapped package or an envelope containing the software,” “(2) by . . . mailing a signed agreement or acceptance card to the software developer or vendor,” or simply “(3) by . . . clicking on an acceptance form that appears on the user’s monitor. This method is typically employed for software that is downloaded from the Internet [like the Second Life software, for example].”96

Virtual world administrators, including Linden Lab, patrol the world for behavior that they deem inconsistent with their EULA (or in Second Life’s case, its “terms of service”). But for some in-world misbehavior, regulation and enforcement requires cooperation between users and administrators. With respect to copyright rights, for example, the Second Life Terms of Service provide that “Linden Lab will respond to [users’] allegations of

95 Linfo.org, EULA Definition, http://www.linfo.org/eula.html (last visited Nov. 20, 2008); see also Chin, supra note 32, at 1317-18 (“Typical click-wrap TOS agreements incorporate terms forbidding certain forms of communication, including use of racial epithets, and user behavior . . . [T]o remedy infractions by users, platform owners generally remove certain player privileges and powers or terminate a user account based on a violated TOS provision.”); see also Webopedia.com, EULA Definition, http://www.webopedia.com/TERM/E/EULA.htm (“An EULA is a legal contract between the manufacturer and/or the author and the end user of an application. The EULA details how the software can and cannot be used and any restrictions that the manufacturer imposes (e.g., most EULA’s of proprietary software prohibit the user from sharing the software with anyone else.”) (last visited June 30, 2008).

96 Linfo.org, supra note 95.
copyright violations in accordance with the Digital Millennium Copyright Act (DMCA).”\textsuperscript{97} If a user sends a valid DMCA notification to Linden Lab, it will remove the offending content and allow the alleged infringer to respond.\textsuperscript{98} If Linden Lab receives a counter-notification from that person, the material is placed back in Second Life as long as “a legal action has been filed seeking a court order to restrain the alleged infringer from engaging in the infringing activity.”\textsuperscript{99} Linden Lab is quick to explain, however, that it “does not adjudicate the substance of the copyright claim: [and] do[es] not declare winners and losers.”\textsuperscript{100}

Trademark rights, for their part, are not directly addressed in Second Life’s Terms of Service, except insofar as they include the following guideline:

4.1 You agree to abide by certain rules of conduct, including the Community Standards and other rules prohibiting illegal and other practices that Linden Lab deems harmful.

You agree to read and comply with the Community Standards posted on the Websites . . .

In addition to abiding at all times by the Community Standards, you agree that you shall not: (i) take any action or upload, post, e-mail or otherwise transmit Content that infringes or violates any third party rights; (ii) impersonate any person or entity without their consent, including, but not limited to, a Linden Lab employee, or falsely state or otherwise misrepresent your affiliation with a person or entity; (iii) take any action or upload, post, e-mail or otherwise transmit Content that violates any law or regulation; (iv) take any action or upload, post, e-mail or otherwise transmit Content as determined by Linden Lab at its sole discretion that is harmful, . . . , invasive of another’s privacy, . . . or otherwise objectionable; . . . Any violation by you of the terms of the foregoing sentence may result in immediate and permanent suspension or cancellation of your Account. You agree that Linden Lab may take whatever steps it deems necessary to abridge, or prevent behavior of any sort on the Service in its sole discretion, without notice to you.\textsuperscript{101}

\textsuperscript{98} Id.
\textsuperscript{99} Id.
\textsuperscript{100} Id.
\textsuperscript{101} Second Life, Terms of Service, http://secondlife.com/corporate/tos.php (last visited Nov. 20, 2008) (emphasis added). These provisions are largely representative of standard virtual world EULAs. In general, EULAs function as a mix between a constitution and a holy book. Game developers create the EULAs with almost no player input. These EULAs establish the basic
Second Life’s Terms of Service are thus useful for owners of intellectual property to the extent that they provide a framework within which owners monitoring the world may report to the administrator any clear copyright or trademark abuse, which can in turn lead to cancellation of the infringer’s user account under the Terms of Service. But reliance on the Terms of Service and their enforcement by world administrators alone has its limits.

First, any user deleted by an administrator can always reenter the world under a separate account name or with a different IP address, and will not have been assessed any damages. There is no strong disincentive to repeat this behavior – all the infringer has to lose is the time it took to create the virtual objects at issue.

Second, as touched upon earlier, Linden Lab will only act at its own discretion. It may perfectly well refuse to help an intellec-

principles that govern virtual worlds and the interactions within them. For example, most EULAs have clauses regarding ownership of intellectual property, clauses immunizing developers against suit, and clauses setting out billing rates with provisions stating that those rates can change at any time. They also regulate the interactions between players. Frequently, the EULAs of virtual worlds have clauses forbidding theft, harassment, or sexist and homophobic speech.

See Glushko, supra note 18, at 516-17. Indeed, once an infringer is identified by Linden Lab, it is very easy to simply delete his or her account. See Second Life, Terms of Service, supra note 101, § 2.6. This approach is far from unique to Second Life. See Jankowich, supra note 53, at 45-46 (explaining that “[t]he power of termination is one of the most expansive powers in virtual worlds,” and one that is widely reserved by virtual world administrators. According to the author, “[t]he vast majority . . . of the EULAs surveyed allowed the proprietor to delete a player account at the proprietor’s discretion. Some proprietors claim a clearly unlimited right to delete participants.”).

An IP address is the name given to the numeric address of a computer on the Internet. See MERRIAM-WEBSTER DICTIONARY, IP Address, http://www.merriam-webster.com/dictionary/IP%20address.

As a result, the remedy of expulsion does not necessarily meet the needs of a victim, see Chin, supra note 32, at 1316:

On a basic level, [TOS] agreements are helpful to ensure that no one resident oversteps her social boundaries when interacting with another resident. However, they are nonetheless insufficient to protect the residents when a more serious injustice, particularly virtual property disputes, fraud, or defamation, is committed against them by other Second Life participants. Furthermore, mere termination of an account may not be a viable solution when victims of these cyber-crimes have suffered an actual loss, whether pecuniary or not. Legal remedies are thus essential to protect against virtual crime and bullying because merely exiting Second Life, an obvious and potential solution, is not necessarily the best option for a resident who has devoted time and money in the virtual worlds.

See also Berry, supra note 18 (“Linden Lab has a terms-of-service agreement that many attorneys in Second Life feel is too broad to be used as a basis for a legal structure, especially when dealing with complex commercial disputes. Linden will step in if abuse is reported, but there is little recourse for people for, say, a breach of contract.”).

Some commentators, however, disagree. See Mayer-Schönberger & Crawley, supra note 8, at 1793 (“[P]articipants in virtual worlds incur significant social and financial costs when they are forced to leave. They not only have to leave behind a network of friends and their accumulation of social and other capital, but also are forced to abandon the persistent narrative that they have constructed around their avatar. There are additional financial costs: the required use of credit cards for payment of the virtual world’s monthly fees ensures that individual participants are linked to specific credit cards (and thus, by approximation, people), making it difficult for individuals to re-register for a virtual world from which they have been banished.”).
tual property owner trying to enforce its rights, and may do so for any reason it sees fit. A less-clear cut infringement case may therefore not be deemed to mandate expulsion of the alleged infringer.\footnote{Again, this is perfectly standard behavior for an administrator. See Glushko, supra note 18, at 517 ("EULAs are largely enforced at the developers' discretion, with many containing clauses indicating that while the developers 'reserve the right to take any necessary measures for the purpose of preventing and acting against frauds and Non-Approved Transactions,' they are not liable for any damages that 'arise from a breach of this agreement ...").} As a commercial entity focused on keeping its client base happily immersed in its virtual world, Linden Lab is understandably reluctant to take on the mantle of a police state. It simply reserves the right to terminate the accounts of individuals who appear to be infringing on others’ intellectual property – a step that it will not take lightly.

Indeed, Second Life’s budget is derived to a great extent from the fees paid monthly by island owners,\footnote{Posting of Daniel Terdiman to CNET News, http://news.cnet.com/Second%20Life%20membership%20now%20free/2100-1043_3-3855481.html (Sept. 8, 2005, 15:25 PDT) ("Second Life has 45,000 members and is growing at about 10 percent a month. There are now more than 16,000 acres of owned land in the virtual world, and new land sells for about $120. Users must pay a fee of about $25 a month to maintain their land. Thus, Linden Lab is earning about $400,000 a month without ever factoring in membership fees."); see also Second Life Registration FAQ, https://secure-web8.secondlife.com/join/faq.php (last visited Nov. 20, 2008) (setting forth the various Second Life membership plans and the fees, if any, associated with each).} many of whom are attracted to Second Life principally by the prospect of owning the copyright to their online creation. While Linden Lab may well choose to summarily confiscate a user’s virtual property and ban her from the world at the slightest sign of an intellectual property violation, the backlash by the user population is certain to be swift and furious. News spreads fast on Second Life, as users chat in-world and congregate in discussion forums.\footnote{See, e.g., Second Life, Forums, http://forums.secondlife.com/ (last visited June 26, 2008); SL Universe, Forums, http://www.sluniverse.com/php/vb/index.php (last visited June 26, 2008). It appears, however, that the Second Life Forum moderated by Linden Lab is about to close. See Posting of Robin Linden to Second Life Blog, http://blog.secondlife.com/2006/08/10/forums-take-a-new-turn/ (Aug. 10, 2006).} If Linden Lab proves too enthusiastic in the enforcement of intellectual property rights, some users will feel wronged, and some will lose confidence in the safety of their virtual property. Shops will close, businesses will wind up, and users will leave for other worlds.\footnote{Mayer-Schönberger & Crawford, supra note 8, at 1806 ("Before Second Life, competition among virtual worlds was largely about first-time users, as most people tend to belong to only one virtual world at a time. But ever since the grant of property ownership in Second Life, competition among virtual worlds is also about retention. In this very important aspect, granting IP rights has made virtual world providers act more like governments who are competing to attract mobile resources.").}

Linden Lab is aware that its approach may fail to satisfy many owners of intellectual property, but responds that it does “not intend to become the law enforcement of Second Life.”\footnote{See, e.g., Second Life Grid, Open Source FAQs,}
ing upon this position, Linden Lab explains:

[Y]ou will not see Linden Lab getting involved to adjudicate specific disputes between residents. We will of course help all residents uphold their legal rights and do what we can to advise them of their legal requirements. This extends to copyright . . . .

Ultimately, like any business, be it in-world or other, it’s up to the owners and management of that operation to safeguard and protect their creations and interests. We believe the Second Life Grid has a balanced and fair framework within which to do it, backed by national laws with which it complies. In the short term, we’re also able to use our Terms of Service to prohibit certain behavior.

We are fortunate that many of the consumers of original content on the Second Life Grid are also creators of their own content. Hence the community has a foundation of respect for the works and creations of others. . . . There are laws such as the DMCA which can be applied to Second Life creations, and in some instances that may be the only course of resolution, but we feel the most effective and immediate way is through the community itself. We believe that vigilant community members will shun plagiarism, and evolve increasingly effective social norms to encourage creativity through enlightened self-interest (the desire to benefit from further creativity).\footnote{Id.}

Such a high-minded approach is unlikely to reassure owners of intellectual property who see it abused in virtual worlds.\footnote{Id.} The conclusion is inevitable: the regulation and enforcement of intellectual property rights by virtual world administrators will never be as effective or as efficient as that of the owners whose property is being infringed. In addition to reporting abuses of their intellectual property to administrators, owners would do well to increasingly shoulder the burden of monitoring and enforcing their rights themselves. However, taking on the responsibilities of intellectual property enforcement creates its own set of obstacles.

B. Enforcement by Owners

Indeed, while enforcement by owners should allow them to confront most infringers (and sharply cut down on abuses of their intellectual property), it will not be a perfect remedy for such
abuses. At best, an owner who identifies an alleged violator through its monitoring of a virtual world will find itself in possession of his or her in-world name, a fictitious name attributed to each avatar upon first entering Second Life. An owner seeking to confront an alleged infringer will therefore have to turn to Linden Lab for help in identifying the person behind the avatar. This can be quite a hurdle. The fact that Linden Lab may be able to identify the wrongdoer does not mean that it will provide user information to any and all that ask for it. It will likely be necessary for an owner to initiate legal proceedings and seek a court-ordered subpoena compelling the release of the identifying information necessary to pursue a wrongdoer.\textsuperscript{113} The issuance of such a subpoena cannot be taken for granted. Courts may well, under certain circumstances, deny an owner’s request to unveil a user out of concern for that user’s privacy.\textsuperscript{114}

A second obstacle is a purely technological one. Linden Lab will not necessarily be in a position to provide an owner with the name of the alleged infringer, even if it is court-ordered to do so. Formerly, Linden Lab required prospective users to provide a valid credit card or Paypal account, or to respond to a cell phone SMS text message, in order to open an account.\textsuperscript{115} After June 6, 2006, however, its users may create an account with only an e-mail address.\textsuperscript{116} Linden Lab will therefore not be able to provide you with the name of a recently-added user. It should, however, still be in a position to provide that user’s IP address.\textsuperscript{117} But even that is not always guaranteed. Indeed, a variety of software companies now commercialize programs that allow users’ computers to generate a new IP address every time they go online, thus thwarting attempts to easily track down an infringer by IP address alone.\textsuperscript{118}


\textsuperscript{114} See Doe v. 2TheMart.com Inc., 140 F. Supp. 2d 1088, 1093 (W.D. Wash. 2001) ("If Internet users could be stripped of that anonymity by a civil subpoena enforced under the liberal rules of civil discovery, this would have a significant chilling effect on Internet communications and thus on basic First Amendment rights."); see also Lyrissa Barnett Lidsky, Silencing John Doe: Defamation & Discourse in Cyberspace, 49 DUKE L.J. 855, 889 (2000).


\textsuperscript{116} Posting of Wagner James Au, supra note 115 ("[S]ince ’06, it’s no longer necessary to register a credit card or other identifying data with Linden Lab."); see Second Life, Registration Page, https://secure-web21.secondlife.com/join/?ref=eurobestshop.info (last visited Nov. 20, 2008).

\textsuperscript{117} Id.

Owners must also be aware of the hurdles they face in the courtroom. A United States-based litigant turning to the courts for relief from intellectual property violations in Second Life will—at least in the short term—face a relative dearth of applicable case-law, as well as judges and juries unfamiliar with the issues at play. The United States lags far behind many other countries when it comes to applying real-world laws to virtual worlds, combating online criminality, and recognizing virtual property rights.119

"China, [for example,] has already begun to develop law to regulate and protect these [virtual] interests as part of its program to attract and build a competitive technology industry."120 Theft of online virtual property there has led to numerous criminal convictions by the courts. The phenomenon has reached such proportions that “[t]o assist police in dealing with this new and rapidly increasing form of theft, the Public Security Ministry has published an advisory letter on how to punish the theft of virtual property.”121 Other countries with high levels of MMORPG participation have also developed appropriate judicial and legal approaches to cases arising out of virtual worlds—South Korea recorded over 10,000 arrests for theft of virtual property during the year 2004, many of which led to convictions.122 The United States has some catching up to do.

VI. Conclusion

Owners of real-world copyrights and trademarks thus find themselves at a cross-road. It is still unclear which worlds will establish themselves as the commercial platforms of the future, and thus, which worlds it is worth seeking to enter for commercial purposes. By contrast, it is already clear that owners are presently being financially harmed as a result of blatant abuses of their trademarks and copyrights in virtual worlds.

The author suggests that the onus is now on owners to come to terms with the role such worlds will play in the commerce of tomorrow and acknowledge that the time for in-world involvement has come. Whether such involvement should entail the initiation of commercial activity in-world, or merely the monitoring of worlds for intellectual property abuses, remains up to them. They

12, 2008); see also Gourlay & Taher, supra note 25 ("Intelligence sources said that although communications traffic through Second Life could in theory be monitored, often the only means of tracking an individual is by tracing the user’s IP address - the physical location of a computer in the real world - but even this can be faked."). Thankfully, these are not yet in widespread use. 119 Fairfield, supra note 55, at 1084 ("The United States is behind the curve in terms of recognizing and protecting virtual property rights.").
120 Id.
121 Id. at 1085.
122 Id. at 1088.
must, however, realize that the protection of intellectual property rights afforded by world administrators alone will not be sufficient. Owners must be prepared to devote resources to monitoring these worlds themselves, and must prepare themselves for the sometimes difficult process of identifying infringers and obtaining relief through the courts.\footnote{It is interesting to note that not everyone is keen on strong trademark and copyright enforcement in virtual world. As Professor Bartholomew puts it:}  

Strong trademark rights in virtual worlds would inhibit the “right to play.” Sometimes in virtual worlds, manipulation of commercial activities is part of the game. For example, members of a self-described “movement dedicated to the liberation of avatars” staged guerilla attacks on clothing stores, including Reebok, and stormed the stage at the meeting of the World Economic Forum in Second Life. One can envision further attacks on corporate brands, perhaps by generating virtual clothing or posters proclaiming “Reebok Sucks” or by going in and manipulating the code of Reebok’s Second Life store to change the store marquee into a statement of protest. If this was the real world, one could argue that the avatars could be responsible on a dilution cause of action for tarnishing Reebok’s famous mark. However, many would argue that the ability to subvert such commercialization without real world consequences is a reason why some participate in Second Life in the first place. 