

NOTE

DEFINING AND ADDRESSING VIRTUAL PROPERTY IN INTERNATIONAL TREATIES

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I. INTRODUCTION

The burgeoning levels of Internet usage have produced a multi-billion dollar industry that exclusively deals in virtual property. Unfortunately, the absence

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of a coherent international legal framework for defining virtual property creates inconsistent or entirely insufficient avenues of legal recourse for online users. Current traditional approaches to virtual property fail to understand the unique legal needs of this new type of property. Specifically, they apply inappropriate nation-based restrictions on property that operate in an inherently global and borderless realm: the Internet.

Scholars have been unable to draw complete analogies between traditional property theory and the socioeconomic exchanges that occur over the Internet and electronic networks.² Chattel theory grounds amorphous bytes of data representing property into the server where they are stored.³ In doing so, it binds information and property to traditional land-based conceptions of nationality, citizenship, and jurisdiction, and fails to recognize that there is an alternative *online* jurisdiction, a separate *loci* in which to find a *lex loci delicti* doctrine.⁴

Instead of a physical “real world” server in a “real world” nation, an Internet service provider’s⁵ domain serves as the “in-world” or online nation for avatars and users. In-world currencies⁶ are functioning less as proxies for real world monetary exchanges; rather, real world money is beginning to serve as a proxy placeholder for online currency.⁷ The boundary lines of physical and online worlds blur as children growing up with new technologies no longer, if they ever did, distinguish between virtual property and “real” property.⁸ Online

² See, e.g., Saba Ashraf, *Virtual Taxation: State Taxation of Internet and On-line Sales*, 24 FLA. ST. U. L. REV. 605, 622 (1997) (demonstrating unsuccessful application of representational nexus theory to online sales).

³ Chattel theory shackles virtual property rights to a physical server where the data regarding the property is stored. This means the rights are questionably placed between both the user and the server’s owner, which additionally brings in licensing considerations and inflexible server assignments in cases of data structure rearrangement. See generally Richard Epstein, *Cybertrespass*, 70 U. CHI. L. REV. 73 (Winter 2003).

⁴ See generally *id.* at 82 (arguing that invasions in cyberspace parallel those in physical space, claiming archaic analogies such as an Internet “highway” with digital properties as “sites” on that highway within the “architecture” of the Internet, so that “cybersquatters” theoretically trespass these spaces).

⁵ An Internet Service Provider (“ISP”) can provide any number of services, from e-mail, to a virtual first-person game, to a massively multiplayer online role-playing game (“MMORPG”), to sandbox-style worlds.

⁶ \$L Linden dollars, Sims simoleons, or MMORPG gold.

⁷ Candidus Dougherty & Greg Lastowka, *Virtual Trademarks*, 24 SANTA CLARA COMPUTER & HIGH TECH. L.J. 749, 757 (2008) (citing generally JULIAN DIBBELL, *PLAY MONEY* (2006) (describing a year of working in the virtual economy)).

⁸ See Elizabeth Townsend Gard & Rachel Goda, *The Fizzy Experiment: Second Life, Virtual Property and a 1L Property Course*, 24 SANTA CLARA COMPUTER & HIGH TECH. L.J. 915, 950-51 (2008) (describing 4-year old who considers and treats WebKinz, virtual pets,

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content, developer and user-generated, wields its own real-world impact and value, and presents complex intellectual and real property issues.

In addition, cloud computing and increasing ease of connectivity mean that property is no longer tethered to a physical location. Because an acre of land in Second Life (“SL”) can be *accessed* whether the user is in Mozambique or Monaco, the monetary, social, and criminal exchanges that occur in SL are judged as part of the “international” sphere of exchanges of the Internet. Current international treaties tether floating concepts like virtual property and Internet crime to the nations in which the servers reside, even though the authors, perpetrators, and victims are not the same nationality as the administrators.⁹ This will lead to even more undesirable and sometimes violent results when online users do not find the same legal recourse they have come to accept in real life, even when most of their lives are spent in a virtual world. The laws no longer match the context, and so we must construct new laws that understand the cultural, social, economic, and institutional specialties of the new context. Just because a law is familiar does not mean it is appropriate.

Therefore a new international treaty and governing body must be established to deal with virtual property and virtual interests on their own terms.¹⁰ A separate governing body would liberate the Internet from overbroad or inchoate regulations and haphazard analogy applications, and instead clearly define the tenets of virtual property on the terms and in the language of the Internet.¹¹ The online world has matured beyond proxy into reality, and the laws under which it operates must recognize the intangible, but valid interests that have emerged.

II. ECONOMIC IMPACT AND DIGITAL BACKGROUND

Through social networking, MMORPGs,¹² user-generated content, and

and real world pets the same way).

⁹ See *infra* Part IV.

¹⁰ See Jason S. Zack, Comment, *The Ultimate Company Town: Wading in the Digital Marsh of Second Life*, 10 U. PA. J. CONST. L. 225 (2007); see also Andrew E. Jankowich, *Property and Democracy in Virtual Worlds*, 11 B.U. J. SCI. & TECH. L. 173 (2005), for discussions on regulatory implications of a separate online state.

¹¹ F. Gregory Lastowka & Dan Hunter, *The Laws of the Virtual Worlds*, 92 CAL. L. REV. 1, 73 (2004) (“Courts will need to recognize that virtual worlds are jurisdictions separate from our own, with their own distinctive community norms, laws, and rights.”).

¹² MMORPGs: Massively Multi-player Online Role-Playing Games. Some are paid subscription services only, such as World of Warcraft, EVE Online, Aion, Ultima Online, EverQuest, Warhammer Online, Ragnorak, Lord of the Rings Online, Final Fantasy XI (the first console MMORPG), and more. Whereas others are free with subscription levels that provide additional options, such as Puzzle Pirates, Gaia Online, Club Penguin (a popular Disney-run kids service), Pirates of the Caribbean Online, Runescape, and many more.

virtual worlds, online communities introduced their own virtual market and economy. Online activities connect both individual users and corporate entities, making virtual worlds the stage for online translations of real-world transactions. Over 11.5 million subscribers paid for World of Warcraft (“WoW”) worldwide in 2008,¹³ making it the 72nd most populous “country” in the world,¹⁴ and generating \$800 million per year in revenue.¹⁵ SL boasted eight million residents in 2007¹⁶ (up from only 100,000 in 2005),¹⁷ with more than one billion U.S. dollars in virtual goods and services transactions and one billion hours of chat activity as of 2009.¹⁸ An Entropia user in 2005 purchased the most valuable virtual property in the world at \$100,000, worth one million U.S. dollars in 2007.¹⁹ A ship in EVE Online can cost nearly \$8,000 and over 3,000 hours to earn.²⁰ Online services are not mere children’s games with inconsequential costs, but rather full-fledged communities of substantial investment for working adults.²¹

¹³ Press Release, *World of Warcraft® Subscriber Base Reaches 11.5 Million Worldwide*, BLIZZARD ENTERTAINMENT (Dec. 23, 2008), <http://us.blizzard.com/en-us/company/press/pressreleases.html?081121>.

¹⁴ CENTRAL INTELLIGENCE AGENCY, *THE WORLD FACTBOOK: COUNTRY COMPARISON: POPULATION* (July 2009), available at <https://www.cia.gov/library/publications/download/download-2009/index.html>.

¹⁵ *The Unbelievable World of Warcraft*, UNREALITY MAG. (Feb. 2010), <http://unrealitymag.com/wp-content/uploads/2010/02/world-of-warcraft-image.jpg>.

¹⁶ Ben Quarmby, *Pirates Among the Second Life Islands – Why you Should Monitor the Misuse of your Intellectual Property in Online Virtual Worlds*, 26 CARDOZO ARTS & ENT. L.J. 667, 682 (2009) (citing Albert C. Lin, *Virtual Consumption: A Second Life for Earth?*, 2008 BYU L. REV. 47, 84 (2008)).

¹⁷ Press Release, *Second Life Welcomes 100,000th Resident to Virtual World*, LINDEN LAB (Jan. 5, 2005), http://lindenlab.com/pressroom/releases/01_06_06.

¹⁸ *1 Billion Hours, 1 Billion Dollars Served: Second Life Celebrates Major Milestones for Virtual Worlds*, LINDEN LAB, (Sept. 22, 2009), http://lindenlab.com/pressroom/releases/22_09_09.

¹⁹ Sharon K. Lowry, Notes and Comments, *Property Rights in Virtual Reality: All’s Fair in Life and Warcraft?*, 15 TEX. WESLEYAN L. REV. 109, 111 (2008) (citing Press Release, Entropia Universe, *Virtual World Entropia Universe Launches Blog at Entropiagateway.com* (Oct. 16, 2007), <http://www.terpin.com/entropia/?p=30>).

²⁰ Drew Harry, *The Ships of EVE Online*, GOSSIP GAMERS (Feb. 2010), <http://www.gossipgamers.com/wp-content/uploads/2010/02/wortheveonlineships.png>.

²¹ Theodore J. Westbrook, Note, *Owned: Finding a Place for Virtual World Property Rights*, 2006 MICH. ST. L. REV. 779, 785-86 (2006) (showing that most users of popular MMGs are adults, averaging 25-29 years, spending twenty-one hours per week in-world) (citing Nicholas Yee, *Player Demographics*, DAEDALUS GATEWAY: THE PSYCHOLOGY OF MMORPGS, http://www.nickyee.com/daedalus/gateway_demographics.html (last visited Jan. 7, 2011); Nicholas Yee, *MMORPG Hours vs. TV Hours*, DAEDALUS GATEWAY: THE PSYCHOLOGY OF MMORPGS, <http://www.nickyee.com/daedalus/archives/000891.php> (last

Many games, such as The Sims, a popular life-simulation series released by Electronic Arts (“EA”), allow users to customize their experiences with their user-created clothing, objects, or modifications in game behavior. EA recognizes the technical skill of their users, going so far as to invite notable creators to test Sims 3.²² It also develops content for tie-in sponsor deals with companies like McDonald’s and Intel.²³ In addition, EA releases expansion packs featuring licensed products, such as H&M virtual clothing, or IKEA furniture.²⁴ Dissatisfied with the licensed collection, many users create their own objects that copy Rolex watches,²⁵ Lexus cars,²⁶ and designer outfits.²⁷ Those users sell these non-licensed but trademark-bearing items on paid subscription websites, where other users pay to download and install the custom-made objects provided. Further complications arise when other users circumvent these paysites’ security and provide free downloads of unlocked paid subscription items.²⁸ The tiers of infringement are almost unlimited online and affect multiple levels of commercial trade.

Even in virtual worlds without explicitly user-generated content per se such as WoW, infringement is possible.²⁹ Real-world companies have not overlooked the importance of WoW-type markets: one American television

visited Jan. 7, 2011)).

²² SteveB, THE SIMS RESOURCE BLOG, (Jan. 4-17, 2009), <http://www.thesimsresource.com/blog>.

²³ Dougherty & Lastowska, *supra* note 7, at 765 (citing Ellen Edwards, *Plug (the Product) and Play: Advertisers Use Online Games to Entice Customers*, WASH. POST, Jan. 26, 2003, at A1; Matt Richtel, *Big Mac Is Virtual, But Critics Are Real*, N.Y. TIMES, Nov. 28, 2002, at G8).

²⁴ *TheSims2.com – About – The Sims™ IKEA Home Stuff*, ELECTRONIC ARTS, http://thesims2.ea.com/about/sp8_index.php (last visited Mar. 15, 2010); *TheSims2.com – About – The Sims™ H&M Celebration Stuff*, ELECTRONIC ARTS, http://thesims2.ea.com/about/sp5_index.php (last visited Mar. 15, 2010).

²⁵ FSMCDesigns, *The Sims Resource – FSMCDesigns*, (Dec. 15, 2004), <http://www.thesimsresource.com/downloads/details/category/sims2-clothing-female-adult-everyday/title/FSMCDESIGNS/id/97158/>.

²⁶ Fresh-Prince, *The Sims Resource – Lexus GS300*, (Sep. 29, 2006), <http://www.thesimsresource.com/downloads/details/category/sims2-objects-furnishing-misc-vehicles/title/Lexus%20GS300/id/364099/>.

²⁷ Mishu999 et al., *TSR – Downloads / Sims 2 / Searching for ‘christian dior’*, <http://www.thesimsresource.com/downloads/browse/category/sims2/search/christian%20dior> (last visited Mar. 15, 2010).

²⁸ See, e.g., *PAYSITES MUST BE DESTROYED!*, <http://paysites.mustbedestroyed.org/> (last visited Mar. 15, 2010).

²⁹ Alisa B. Steinberg, Note, *For Sale-One Level 5 Barbarian for 94,800 Won: The International Effects of Virtual Property and the Legality of Its Ownership*, 37 GA. J. INT’L & COMP. L. 381, 406 (2009) (noting that South Korea has banned gold farming and online businesses have sold gold farming services on eBay).

commercial showed a WoW user defeating an enemy with the help of a Toyota truck.³⁰ A Chinese commercial used WoW game animations to advertise Coca-Cola.³¹

In SL, where the in-game currency is directly exchangeable for U.S. and E.U. currency, and where real-world elements – concerts, business meetings, nightclubs, and even sexual transactions – are conducted using virtual currency, the need for regulatory control and clear line-drawing about virtual property is even more important. Just like in real life, developers may seize property,³² hackers may hijack auctions,³³ and theft may occur online.³⁴ With corporate entities such as Intel, Bain, American Apparel, Starwood Hotels, Coca-Cola, News Corporation, Adidas, General Motors,³⁵ and even law firms establishing a presence in SL, many brands may enter just to discover an enterprising user already counterfeited their products and profited in real money.³⁶ These brands thus lose the opportunity to determine their own market value. There is not just money lost, but online presence, online goodwill, and online publicity rights.

How do these conflicts play out on the international stage? Online theft, online counterfeiting, online fraud, and online civil disputes all happen internationally and all involve some form of virtual property, but there exists no explicit definition of “virtual property,” and no agreement over what constitutes virtual property. Current international treaties that apply to virtual

³⁰ Dougherty & Lastowska, *supra* note 7, at 760 (citing Mike Musgrove, *Toyota Ad Shows How Game Is Changing*, WASH. POST, Oct. 10, 2007, at D1).

³¹ *Id.* (citing Seth Schiesel, *Online Game, Made in U.S., Seizes the Globe*, N.Y. TIMES, Sep. 5, 2006, at A1).

³² Zack, *supra* note 10, at 240.

³³ Three-quarters of the registered complaints at the FBI Internet division deal with online auction fraud. *Protect Yourself from Online Auction Fraud*, FINDLAW, <http://public.findlaw.com/internet/hazards-of-online-auctions.html> (last visited Dec. 23, 2010).

³⁴ Michael Thompson, *Virtual theft in EVE Online creates run on bank*, ARS TECHNICA (July 6, 2009, 11:51 PM), <http://arstechnica.com/gaming/news/2009/07/virtual-theft-in-eve-online-creates-run-on-bank.ars>.

³⁵ Leonard T. Nuara, Daniel A. Feuerstein, Kristin M. Bohl & Claude W. Roxborough, III, *No Man Is An Island, Not Even In A Virtual World*, 943 PLI/PAT. 523, 548 (2008); *see also* Quarmby, *supra* note 16, at 675-76 (“Sun Microsystems, Toyota, Nissan, and Sony BMG Music Entertainment rely on Second Life to obtain feedback on advertising schemes. Microsoft, Hewlett-Packard, and Verizon have started conducting job interviews in Second Life.”) (citing Bettina M. Chin, Note, *Regulating Your Second Life: Defamation in Virtual Worlds*, 72 BROOK. L. REV. 1303, 1305 (2007)).

³⁶ *See* Melissa Ung, Comment, *Trademark Law and The Repercussions of Virtual Property (IRL)*, 17 COMM'LAW CONSPECTUS 679, 701-03 (2009) (discussing dilution and confusion possibilities between virtual goods); *see also* Zack, *supra* note 10, at 231.

property only do so by drawing analogies to conventional, non-virtual technologies.³⁷ The lack of consistent legal response while the authorities struggle to catch up to technology only encourages a deluge of unregulated misfeasance.³⁸

III. WHAT IS VIRTUAL PROPERTY?

To comprehend and address the needs the digital world presents, we must examine the property its denizens use. This Note categorizes virtual property into four areas and distinguishes their virtual property issues. Avatars, domain names, virtual chattels, and intellectual property, are all important aspects of virtual property that present their own problems. International treaties must address these concerns in multinational contexts. This Note will first define the virtual property category, discuss the current approaches, and then analyze the distinct legal needs of each category.

A. *Avatar*

An avatar is a user's representation of an individual entity that can be used in online games, forums, and worlds. Commonly a representation – real, idealized, or deceptive – of the user, an avatar can also represent a third party persona. As merely the outward placeholder to which actions and views are assigned, an avatar's potential uses and manifestations are myriad. In an Internet forum, an avatar may be a simple image of something associated with the user. In a world like SL, an avatar becomes a three-dimensional digital persona that is completely open to user modification and design. The concept of a model or mannequin receiving intellectual property protection is not foreign to jurisprudence, but digital identities are not always protected consistently.³⁹ Local police failed to help one American when her SL identity was stolen.⁴⁰ Conversely, an SL avatar designer successfully registered an SL

³⁷ See *infra* Part IV.

³⁸ Quarmbly, *supra* note 16, at 678 (citing Ben Leapman, *Second Life May Be Haven For Terrorists*, TELEGRAPH (May 14, 2007), <http://www.telegraph.co.uk/news/main.jhtml?xml=/news/2007/05/13/nternet13.xml>).

³⁹ One court granted a taxidermist copyright protection for “animal mannequins,” recognizing that the creative expression of their display was divisible from their utility. Harris Weems Henderson, Notes, *Through The Looking Glass: Copyright Protection In The Virtual Reality of Second Life*, Symposium: James Bessen and Michael J. Meurer's Patent Failure: How Judges, Bureaucrats, and Lawyers Put Innovators At Risk, 16 J. INTELL. PROP. L 165, 190 (2008) (citing *Superior Form Builders, Inc. v. Dan Chase Taxidermy Supply Company, Inc.*, 74 F.3d 488, 491 (4th Cir. 1996)).

⁴⁰ Quarmbly, *supra* note 16, at 677 (citing Eric Weslander, *Virtual-Reality Crimes Present Literal Challenge for Real-Life Police*, LJWORLD.COM (Nov. 12, 2006), http://www2.ljworld.com/news/2006/nov/12/virtualreality_crimes_present_literal_challenge).

avatar as a federal trademark.⁴¹

A coherent rule of law must identify the legal rights vested in avatars, and deal with them accordingly. As early as 1903, the United States Supreme Court laid the groundwork when it justified copyright protection for intangible property interests, recognizing the “constitutive relationship with identity,”⁴² a connection that can also be made to avatars. Later, the Visual Artists Rights Act protected artists’ two moral rights, even after the transfer of such rights to a third party: the right of attribution and the right of integrity, both significant to a virtual avatar that might both constitute and advertise an artist’s creative output.⁴³

Any change to an avatar that compromises its integrity raises issues of attribution, originality, defamation, and misrepresentation. Avatars of celebrities might violate rights of publicity as well,⁴⁴ especially if they are intended to defraud or impersonate, and some Internet services already recognize the threat that impersonation poses.⁴⁵ Avatars are far too complex not to stand on their own, especially when an avatar can represent individual identity and expression, as well as simultaneously advertise goods and services. Shunting avatars into trademarks or any other existing intellectual property framework lessens the scope of the protection they deserve.

B. Domain Names

A domain name server holds a bank⁴⁶ of domain names that link to IP addresses.⁴⁷ Routers use this bank to connect the names to addresses when

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⁴¹ Dougherty & Lastowska, *supra* note 7, at 771-72 (citing U.S. Trademark Serial No. 77110299 (filed Feb. 18, 2007), <http://tarr.uspto.gov/servlet/tarr?reg-user=serial&entry=77110299>).

⁴² Alfred Fritzsche V, *Trespass to (Virtual) Chattels*, 8 U.C. DAVIS BUS. L.J. 235, 250 (2007) (citing *Bleistein v. Donaldson Lithographing Co.*, 188 U.S. 239, 250 (1903); Justin Hughes, *The Philosophy of Intellectual Property*, 77 GEO. L.J. 287, 351 (1988) (recognizing copyright law’s protection of owner’s reputation and identity as the creator)).

⁴³ Woodrow Barfield, *Intellectual Property Rights In Virtual Environments: Considering The Rights of Owners, Programmers and Virtual Avatars*, 39 AKRON L. REV. 649, 690-91 (2006) (citing William A. Tanenbaum & Jeffrey M. Butler, *The Impact of the Visual Artists Rights Act*, 9 N.Y.L.J. 1, 11, col. 1. (1993)).

⁴⁴ *Id.* at 676-77 (citing *White v. Samsung Elec. Am., Inc.*, 971 F.2d 1395, 1395,1401-02 (9th Cir. 1992); *Midler v. Ford Motor Co.*, 849 F.2d 460 (9th Cir. 1988); *Pesina v. Midway Mfg. Co.*, 948 F. Supp. 40 (N.D. Ill. 1996)).

⁴⁵ Crystal, *Twitter Support: Impersonation Policy*, TWITTER (Jan. 14, 2009, 09:43 AM), <http://twitter.zendesk.com/forums/26257/entries/18366>.

⁴⁶ Otherwise known as a Domain Name System, or DNS.

⁴⁷ An IP address, or Internet Protocol address, is a numerical label assigned to a networked device (such as a computer or a printer) that uses the number to identify its host

sending packets of data.⁴⁸ When an ISP blocks a user's access,⁴⁹ it removes that information from the bank and from the router, so the user can no longer use his IP address to get online because the address effectively becomes an island.⁵⁰

Although there is already an international system in place to address top-level domains,⁵¹ actual legal approaches are imperfect. Secondary vendors may legally use trademarked names in domain names to advertise their products, under the fair use doctrine.⁵² Specifically, using an entire trademarked name does not trigger a finding of infringement or bad faith, as long as the vendor legitimately sold the related trademarked goods on the site.⁵³ Nevertheless, even with a stated affiliation or a legitimate, non-infringing use,⁵⁴ courts may still find infringement and refuse a fair use defense based on likelihood of confusion or other theories.⁵⁵ Currently, the

and itself. IP, or Internet Protocol, refers to the number system that is used, such as Internet Protocol Version 4 (32-bit numbers), or Internet Protocol Version 6 (128-bit numbers). See IANA, *Glossary of Terms*, <http://www.iana.org/about/glossary/> (last visited Dec. 23, 2010). The Internet Corporation for Assigned Names and Numbers (ICANN) administers the Internet Assigned Numbers Authority (IANA), which oversees global IP address allocation, and other IP-related systems. See IANA, *Introducing IANA*, <http://www.iana.org/about/> (last visited Dec. 23, 2010).

⁴⁸ The Santa Cruz Operation, *DNS Resolution*, http://docsrv.sco.com/NET_tcpip/dnsC.resolution.html (Nov. 5, 1999).

⁴⁹ An Internet Service Provider (ISP) provides customers primarily with Internet access, but occasionally also supplies e-mail addresses and data storage. See COLLINS UK, *COLLINS ENGLISH DICTIONARY* (2003).

⁵⁰ Yahoo! Help, *IP Blocking Overview*, <http://help.yahoo.com/l/us/yahoo/smallbusiness/store/risk/risk-17.html> (last visited Dec. 23, 2010).

⁵¹ See *infra* Part IV.B.vi.

⁵² Roberta Jacobs-Meadway, *Use, Misuse, Nonuse—"Use" of Third-Party Trademarks on The Internet and In Virtual Space*, 1 No. 4 LANDSLIDE 28, 32 (2009) (citing *Ty, Inc. v. Perryman*, 306 F.3d 509 (7th Cir. 2002) (finding Beanie Babies vendor's use of Bargain-Beanies.com was fair use because domain name identified vendor as seller on the secondary market)).

⁵³ *Id.* (citing *Anlin Indus., Inc. v. Burgess*, No. 1:05cv1317 DLB, 2007 WL 715687, at *8 (E.D. Cal. Mar. 5, 2007)).

⁵⁴ *Id.* (citing *PACCAR, Inc. v. TeleScan Technologies*, 319 F.3d 243 (6th Cir. 2003) (finding the failure of a fair use defense despite a posted disclaimer of affiliation); *Audi AG v. D'Amato*, 469 F.3d 534 (6th Cir. 2006) (finding the use of a trademark was not a fair use even when the website did serve some legitimate non-infringing purpose)).

⁵⁵ *KP Permanent Make-Up, Inc. v. Lasting Impression I, Inc.*, 543 U.S. 111, 116 (2004) (holding that a fair use defense is still vulnerable to a risk of confusion challenge, even though the defending party does not need to rebut a likelihood of confusion defense); *PACCAR*, 319 F.3d at 255-56.

most direct remedy for domain name infringement is revocation of the registration.⁵⁶ The justice behind this status quo is questionable because while the deterrence through economic and goodwill deprivation is high, the payment to the injured party is nonexistent.⁵⁷

In addition, recall that ISPs and virtual worlds provide both the infringing content as well as the access to such content.⁵⁸ Courts and negotiators can view the ISP and domain name situation through the lens of sports arena tickets-*cum*-licenses and real-world flea market stalls. For example, in the Seventh Circuit, a flea market owner may be contributorily liable when a market vendor sells shirts that infringe trademarks.⁵⁹ The Ninth Circuit also entertained (but ultimately vacated) the idea of contributory liability in a similar situation involving counterfeit recordings.⁶⁰ Indeed, an ISP was liable for contributory infringement in hosting a site selling trademark-infringing goods, despite not providing the actual materials for the products themselves.⁶¹ ISPs must be wary about domain name registration and their users activities, especially given the aforementioned imperfect stance towards domain name IP infringement.

Although domain names are regulated in registration by multinational registration entities per the generic Top Level Domain-Memorandum of Understanding (gTLD-MoU),⁶² their unique potential for expression, advertising, and functionality distinguishes them from other types of virtual property.

C. Virtual Chattels

Virtual chattels exist with service providers and not in physical servers.

⁵⁶ Henry H. Perritt, Jr., *Will The Judgment-Proof Own Cyberspace?*, 32 INT'L LAW. 1121, 1147-48 (1998).

⁵⁷ *Id.* at 1132-33.

⁵⁸ Dougherty & Lastowska, *supra* note 7, at 817-18 (comparing ISP access to Internet and e-mail to Second Life access to user-generated content and online markets, as well as ISP "presence" allowing users to rent space to Second Life's "presence" of avatars and virtual real property on Linden Lab's servers) (citing *Columbia Ins. Co. v. Seescandy.com*, 185 F.R.D. 573, 578 n.1 (N.D. Cal. 1999)).

⁵⁹ *Hard Rock Cafe Licensing Corp. v. Concession Servs., Inc.*, 955 F.2d 1143, 1151 (7th Cir. 1992) (noting defendant may be contributorily liable even though defendant had provided space and facilities but not counterfeiting materials).

⁶⁰ *Fonovisa, Inc. v. Cherry Auction, Inc.*, 76 F.3d 259, 265 (9th Cir. 1996) (finding vicarious liability where swap meet operator knew of trademark infringement on the premises).

⁶¹ *Gucci Am., Inc. v. Hall & Assoc.*, 135 F. Supp. 2d 409, 412-17 (S.D.N.Y. 2001) (finding ISP not immune due to Communications Decency Act of 1996, 47 U.S.C. § 230, where hosted site sold fake Gucci products).

⁶² *See infra* IV.B.vi.

Virtual chattels can represent anything from user-generated content, to developer-created game equipment, to land and architecture in a virtual world. The absence of established and reliable legal recourse in the virtual world presents a genuine and immediate danger for users and real world non-users alike.

Courts already confront the question of electronic data as property, be they computer documents as entities with utility,⁶³ or e-mails subject to excludability and trespass.⁶⁴ In fact, South Korea recorded 10,000 arrests for virtual property theft in 2004,⁶⁵ an unsurprising figure given that the popularity of online gaming led to Korean gaming television stations⁶⁶ and millions of dollars in corporate sponsorship deals for professional Starcraft players.⁶⁷ Yet, the United States Supreme Court in 2004 emphasized the tangibility of products as an important factor in considering trademark confusion.⁶⁸

Certainly some courts recognize that intangible digital property, such as computer software, grants property rights.⁶⁹ A Chinese court ordered developers to pay a user damages for inadequately protecting the user's gaming account, as well as the attached weapons and armor, from hacking theft.⁷⁰ A New York court ruled that the idea for a website was excludable

⁶³ Noah M. Schottenstein, *Of Process and Product: Kremen v. Cohen and the Consequences of Recognizing Property Rights in Domain Names*, 14 VA. J.L. & TECH. 1, 5 n.30 (citing *Mundy v. Decker*, No. A-97-882, 1999 WL 14479 (Neb. App. Jan. 5, 1999)).

⁶⁴ *Id.* at 5, n.38 (citing *Intel v. Hamidi*, 71 P.3d 296 (Cal. 2003)).

⁶⁵ Quarmby, *supra* note 16, at 693 (citing Joshua A.T. Fairfield, *Virtual Property*, 85 B.U. L. REV. 1047, 1088 (2005)).

⁶⁶ Tom Goldman, *Blizzard Prepares to Sue Over Illegal StarCraft TV Broadcasts*, THE ESCAPIST, <http://www.escapistmagazine.com/news/view/105854-Blizzard-Prepares-to-Sue-Over-Illegal-StarCraft-TV-Broadcasts> (Dec. 4, 2010, 11:45 AM).

⁶⁷ Alex Bellos, *Rise of the e-sports superstars*, BBC NEWS (Jun. 29, 2007), http://news.bbc.co.uk/2/hi/programmes/click_online/6252524.stm.

⁶⁸ *Dastar Corp. v. Twentieth Century Fox Film Corp.*, 539 U.S. 23, 31 (2003).

⁶⁹ A Texas appellate court held software code to be property subject to theft because under the Texas theft statute, "property" includes "all writings of every description, provided such property possesses any ascertainable value." Andrea Vanina Arias, Comment, *Life, Liberty, and the Pursuit of Swords and Armor: Regulating the Theft of Virtual Goods*, 57 EMORY L.J. 1301, 1313 (2008) (quoting *Hancock v. State*, 402 S.W.2d 906, 908 (Tex. Crim. App. 1966) (citing Tex. Penal Code Ann. Tit. 17, ch. 8, art. 1418)).

⁷⁰ Michael Meehan, *Virtual Property: Protecting Bits In Context*, 13 RICH. J.L. & TECH. 7, 49 (2006) (referring to *Li Hongchen v. Beijing Arctic Ice Tech. Dev. Co.*); Nuara, *supra* note 35, at 553; Westbrook, *supra* note 21, at 805 (citing *Online Gamer in China Wins Virtual Theft Suit*, CNN.COM, Dec. 20, 2003, <http://www.cnn.com/2003/TECH/fun.games/12/19/china.gamer.reut/index.html> (last visited Jan. 7, 2011)).

intangible property rather than intellectual property.⁷¹ This analysis is troubling because physical excludability, so common to traditional property rights, is irrelevant to digital copies scattered across the world.

Nor is criminal prosecution for virtual property theft and virtual activities isolated, for online activities can lead to physical altercations, even death. In 2005, one gamer murdered another over a valuable sword, because the authorities refused to redress the murderer's property injury.⁷² In 2010, one teenager cheating in a CounterStrike game was stabbed in the skull with a rusty knife at a local Internet café.⁷³ Another MMORPG employee in China became the first to be sentenced by Chinese courts for stealing virtual property, on the basis that the time, energy, and money invested in the virtual accounts and goods imbued the intangibles with value.⁷⁴ The problem of virtual theft in China grew large enough that criminal convictions for such crimes expanded to even seventeen-year olds,⁷⁵ and the Chinese Public Security Ministry released an advisory letter to law enforcement officials regarding appropriate prosecution.⁷⁶ This is more than the United States has done.⁷⁷ The Taiwanese government prosecuted several criminal cases involving virtual property.⁷⁸ Taiwan's Ministry of Justice actively assigned virtual property owners the same alienability and transferability rights of real property owners, and declared that criminal law could govern virtual property theft.⁷⁹ In 2003, South Korean police arrested 10,187 teenagers for virtual property theft.⁸⁰ Dutch police arrested a teenager in 2007 for virtual furniture theft in a United Kingdom-based virtual world.⁸¹ Many of these cases, however, demonstrate

⁷¹ Schottenstein, *supra* note 63, at 8 (citing *Astroworks, Inc. v. Astroexhibit, Inc.*, 257 F. Supp. 2d 609, 618 (S.D.N.Y. 2003)).

⁷² Westbrook, *supra* note 21, at 789.

⁷³ Artefact, *Cheater's Brain Stabbed in Wallhack Brawl, SANKAKU COMPLEX* (Mar. 22, 2010, 14:44 JST), <http://www.sankakucomplex.com/2010/03/22/cheaters-brain-stabbed-in-wallhack-brawl/>.

⁷⁴ Arias, *supra* note 69, at 1342-43.

⁷⁵ Quarmby, *supra* note 16, at 693 (citing Joshua A.T. Fairfield, *Virtual Property*, 85 B.U. L. Rev. 1047, 1085 (2005)).

⁷⁶ Fairfield, *supra* note 65, at 1085 (citing Dec. 1, 2003, <http://games.sina.com.cn/newgames/2003/12/12019148.shtml> (Chinese language website)).

⁷⁷ See Quarmby, *supra* note 16, at 693.

⁷⁸ Fairfield, *supra* note 65, at 1087 (citing *Prosecutor of the Dep't of the Procurator v. Lin Qunzhi*, 82, 777 (Taiwan Nantou Dist. Ct.) (finding defendant guilty of cheating the victim into selling him her virtual equipment)). See also Arias, *supra* note 69, at 1343.

⁷⁹ Fairfield, *supra* note 65, at 1086.

⁸⁰ *Id.* at 1088.

⁸¹ Jacqui Chen, *Online property theft once again leads to real-world legal action*, ARS TECHNICA (Nov. 14, 2007, 3:41 PM), <http://arstechnica.com/news/ars/post/20071114-online-property-theft-once-again-leads-to-real-world-legal-action.html>.

the attempts of physical courts to apply traditional rules to virtual crimes. The very flexibility of these applications includes the danger of future inconsistencies, because the traditional laws applied here are based on property theories of physical excludability and trespass.

To be clear, a user's private document is no longer physically possessed or excluded when he stores it in a Google Docs file on a Google server. When he shares a user-created Sims sofa online in exchange for money, he is not exactly in possession in the traditional sense. A developer for a popular Facebook Flash game is not "physically" excluding users from accessing it, just as a network administrator does not possess or exclude the data links that many of his users access for his network to have any utility. In light of this nontraditional treatment of property, it is helpful to conceptualize virtual property rights as operating in a contractual licensing sense.

Private parties already preemptively claim unrecognized property rights on chattels through End-User License Agreements ("EULAs") and Terms of Service ("ToS") contracts,⁸² and only confuse the situation by encouraging user creation and world growth without providing any genuine rights incentive. A majority of EULAs and ToS's completely restrict the right to transfer.⁸³ In the physical world, courts recognize particular limits to liability for injury in sports arenas, much the same way a EULA requires users to waive certain rights in order to play the game or use the world's resources.⁸⁴

As an example, the SL ToS grants users rights to use, transfer, and exclude others from use of the created objects,⁸⁵ but Linden Labs apparently does not respond to claims for action from users, leaving the courts to step in and remind the ISP of Digital Millennium Copyright Act ("DMCA") and ToS obligations.⁸⁶ Users often sign contracts granting the service provider so much

⁸² Westbrook, *supra* note 21, at 803. ISPs frequently use either a EULA or a ToS, and the effective control they offer over the user is very similar, because the user must agree to them in order to use a service. For that reason, in this article, EULA and ToS are used interchangeably. See Corrine, *EULA/TOS Confusion*, SECURITY GARDEN (Feb. 6, 2008), <http://securitygarden.blogspot.com/2008/02/eulatos-confusion.html> (using EULA and ToS interchangeably).

⁸³ Examples include WoW's EULA, which has no user-generated content, and EverQuest II's EULA, which restricts transfers to the EverQuest II transfer system. Nuara, *supra* note 35, at 540.

⁸⁴ Sean F. Kane & Benjamin T. Duranske, *Virtual Worlds, Real World Issues*, 1 No. 1 LANDSLIDE 8, 11 (2008).

⁸⁵ Second Life, *Terms of Service*, <http://secondlife.com/corporate/tos.php> (last visited Apr. 4, 2010).

⁸⁶ See Nuara, *supra* note 35, at 556 (citing Complaint at 1, 14-15, and 17-18, *Eros, LLC v. Simon*, (E.D.N.Y. 2008) (No. 7 Civ. 4447), available at http://virtuallyblind.com/files/07_10_24_eros_et_al_v_simon_complaint.pdf); Eric Reuters, *SL business sues for copyright infringement*, REUTERS/SECOND LIFE (Jul. 3, 2007, 12:13

power. For example, a Pennsylvania federal court declared SL's ToS unconscionable.⁸⁷ The validity of such ToS claims is dubious, because many ToS screens do not require users to read the actual terms, and users can merely click through in order to access the game.⁸⁸ In terms of virtual real property, the first SL millionaire, in real-world dollars, actively manages large online real estate projects for real-world companies.⁸⁹ Yet, Linden Labs, which manages SL, merely grants a license to use this land and the servers storing and processing the land's data, even when users have developed and contributed labor to make the land valuable.⁹⁰

Herein lies the problem, for ISPs have created a situation such that anything online must be subject to a license to use on servers, even artistic works of expression that are stored on e-mail accounts or websites. When asked to consider computer networks themselves (consisting of an interconnected system of computers or servers) as real property, one court derogated the issue to future legislative policy, which is an insufficient decision for the present problem.⁹¹

New definitions of virtual properties must prevent original ownership of derivative works from vesting in ISPs or the server owners. Situating a chattel theory of virtual property in a server location is insufficient because virtual property can be accessed and stored with effortless ease in multiple countries. Google even stores a copy of every webcrawled web site on its servers⁹² in different states⁹³ and provides a public DNS.⁹⁴ Furthermore, ToS's and

PM), <http://secondlife.reuters.com/stories/2007/07/03/sl-business-sues-for-copyright-infringement/>.

⁸⁷ Lowry, *supra* note 19, at 110 (citing *Bragg v. Linden Research, Inc.*, 487 F. Supp. 2d 593, 611-12 (E.D. Pa. 2007); Marty Linden, *Resolution of Lawsuit*, OFFICIAL SECOND LIFE BLOG (Oct. 4, 2007, 10:38 PM), <http://blogs.secondlife.com/community/features/blog/2007/10/04/resolution-of-lawsuit>).

⁸⁸ Nuara, *supra* note 35, at 544 ("Second Life does not currently require a new user to view the entire TOS prior to his/her assent"); *cf.* *ProCD, Inc. v. Zeidenberg*, 86 F.3d 1447, 1452 (7th Cir. 1996) (finding enforceable a license agreement that required user acceptance before permitting access to the software).

⁸⁹ Nuara, *supra* note 35, at 548 (citing 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).

⁹⁰ *Id.* at 550 (citing Answer at para 7, *Bragg v. Linden*).

⁹¹ Schottenstein, *supra* note 63, at 10 n.55 (citing *Intel v. Hamidi*, 71 P.3d 296, 311 (Cal. 2003)).

⁹² Dedicated Server School, *What's A Datacenter Anyway?*, <http://www.serverschool.com/datacenters/whats-a-datacenter-anyway/> (last visited Dec. 23, 2010) ("Google crawls the Web from its datacenter and stores a copy of the web pages it indexes then analyzes those web pages in order to rank them for specific search queries.").

⁹³ Pandia Search Engine News, *Google: one million servers and counting*,

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EULAs grant ISPs nearly unlimited control over the persistence of property, which is a vital part of real world chattel property rights.⁹⁵ Rather, a license to use and develop online chattels will recognize the maintenance fee and creation of base property, the original undeveloped land, but preserve ownership rights within the creator and investor of any additional works on the property.

D. Intellectual Property

The existence of novel forms of virtual property by no means indicates that traditional forms of property have no place online, but it would be fallacious to suppose that traditional legal approaches would suffice. Because of inadequate responses from nation-based authorities, the online manifestations of trademark and copyright inspired primarily user-motivated forms of regulation, through organizations such as the SL Patent and Trademark Office (“SLPTO”),⁹⁶ Creative Commons (“CC”),⁹⁷ and the Organization for Transformative Works (“OTW”).⁹⁸ The emerging intellectual property issues that users and creators currently tackle are aspects of virtual property that face the same nationally-restricted problems as avatars, domain names, and virtual chattels. The second layer of intangibility – stories instead of swords – and the low cost of reproduction – blogging instead of coding – involved in online intellectual property demands novel and transnational forms of regulation.

i. Trademark

Much like avatars, trademarks are representations affiliating products and services with sources. Like avatars, online trademarks are limitless in the geographical area of use, making even unregistered common law-recognized marks valid all over the world because the international nature of their scope means they can be reasonably expected to expand globally. Restricting online

<http://www.pandia.com/sew/481-gartner.html> (last visited Dec. 23, 2010) (referring to Google data centers in California, Virginia, Georgia, Oregon, Ireland, and Belgium).

⁹⁴ *Introduction to Google Public DNS*, GOOGLE, <http://code.google.com/speed/public-dns/docs/intro.html> (last visited Apr. 4, 2010); Jon Lee, *How Does Google Store All of its Data?* (Sep. 25, 2007), <http://www.jonlee.ca/how-does-google-store-all-of-its-data/>.

⁹⁵ Arias, *supra* note 69, at 1316.

⁹⁶ Currently the SLPTO website appears to direct to an advertisement, but for more information and an interview with the founder, see Benjamin Duranske, *SLPTO Offers Second Life Content Creators Suite of Intellectual Property Protection Tools*, VIRTUALLY BLIND (Oct. 29, 2007), <http://virtuallyblind.com/2007/10/29/slpto-goes-live/>.

⁹⁷ Creative Commons, *What is CC?*, <http://creativecommons.org/about/what-is-cc> (last visited Dec. 23, 2010).

⁹⁸ Organization for Transformative Works, *About the OTW*, <http://transformativeworks.org/about> (last visited Dec. 23, 2010).

trademarks to a single country ignores the reality of a trademark being used in a borderless, nation-less realm like the Internet.

Real-world companies find that unauthorized users and vendors are profiting from their brands when such products would normally fall under trademark infringement laws in the real world.⁹⁹ In 2007, a vendor could earn nearly \$1,000 U.S. dollars selling online “fake” Cartier jewelry.¹⁰⁰ In 2005, Marvel sued the maker of City of Heroes because its software allowed players to create characters whose appearances and identities were similar to Marvel’s characters.¹⁰¹ Even invisible metatags embedded in a website’s code, by *affecting* what advertisements a consumer might view, are candidates for protection in consumer use when they contain trademarked words.¹⁰²

Also troubling is when government organizations, such as the U.S. Patent and Trademark Office (USPTO), fail to understand the very digital world entities users are seeking to trademark.¹⁰³ In 2007, Kevin Alderman attempted to register his SexGen mark in connection with a SL bed that would allow avatars to simulate sexual acts.¹⁰⁴ After seven rejections and three USPTO suggestions that completely misunderstood the product,¹⁰⁵ Alderman finally obtained a trademark. The case eventually settled out of court, but it highlights the problems ISPs face when online trademark violations are subject to an unknown quantity of enforcement.¹⁰⁶

⁹⁹ Benjamin Duranske, *Rampant Trademark Infringement in Second Life Costs Millions, Undermines Future Enforcement*, VIRTUALLY BLIND (May 4, 2007), <http://www.virtuallyblind.com/2007/05/04/trademark-infringement-vws>.

¹⁰⁰ Benjamin Duranske, *Expensive Luxury Knockoffs in Second Life Raise Trademark Stakes*, VIRTUALLY BLIND (June 21, 2007), <http://www.virtuallyblind.com/2007/06/21/expensive-luxury-knockoffs-raise-trademark-stakes>.

¹⁰¹ *Marvel Enters., Inc. v. NCSOFT, Corp.*, 74 U.S.P.Q.2d (BNA) 1303 (C.D. Cal. 2005).

¹⁰² *Jacobs-Meadway*, *supra* note 52, at 31 (citing *North American Medical v. Axiom Worldwide*, 522 F.2d 1211 (11th Cir. 2008) (finding use of a competitor’s mark as a keyword or in a metatag constitutes “use in commerce” even if consumers never see the keywords or metatags)).

¹⁰³ Lowry, *supra* note 19, at 132.

¹⁰⁴ *Id.* (“In June 2007, Eros filed an application to register the SexGen mark with the USPTO in connection with a [s]cripted animation system utilizing a defined menu to actuate avatars within a virtual world accessed through a three-dimensional virtual platform’ in International Class 9, a classification that includes data processing goods.”) (citing U.S. Trademark No. 77202601 (filed June 11, 2007), <http://tarr.uspto.gov/tarr?regser=serial&entry=77202601>).

¹⁰⁵ *Id.* at 132-33.

¹⁰⁶ *Dougherty & Lastowska*, *supra* note 7, at 763 (stating the court ruled, prior to settlement, that players had not used marks in commerce).

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Furthermore, even in online worlds with police blotters,¹⁰⁷ ISPs are reluctant to over-regulate, lest they choke off the fount of user input that drives their profits. This illusion of *laissez faire* deregulation actually means that Linden Labs' noninvolvement denudes IP rights enforcement of any real power. In recognition, SL users themselves formed an SL Patent & Trademark Office ("SLPTO") to offer intellectual property protection tools such as registration, automated DMCA notices, copyright applications, and time-stamps for creation documentation.¹⁰⁸ With the absence of official courts in SL, these grassroots measures are dubiously effective unless courts recognize the ability for digital residents to police digital transactions, a method that may only be possible by recognizing private ISP authority.

Because of this, one commentator proposes putting the burden of trademark enforcement on the ISPs themselves through ToS's, real-world companies through trademark licensing or gamers through arbitration systems and educational programs.¹⁰⁹ ToS's might provide the regulatory groundwork for each gaming or social world, but they do not predict the entire gamut of user activities, nor will they be consistent between services. Interoperability and cross-platform compatibility is an increasing feature in software programs and online services, and inconsistencies in their legality and dispute arbitration methods would produce an inefficient user experience. ISPs approach regulation very cautiously, however, because the more regulated content is, the less prolific the free flow of creative works becomes, and the less profit the ISPs generate.¹¹⁰ Increasing enforcement of rules may also produce a black market economy for dedicated players willing to defy rules to gain an in-world edge.¹¹¹ The resulting co-evolution of enforcement and infringement may bring unreliable results from increased litigation.¹¹²

Furthermore, because of the lack of a relevant connection between the private corporation and the latest, most popular Internet realm, private party

¹⁰⁷ Linden Labs, *Second Life | Community: Incident Report*, SECOND LIFE, <http://secondlife.com/community/blotter.php> (last visited Apr. 4, 2010).

¹⁰⁸ Duranske, *supra* note 96.

¹⁰⁹ Ung, *supra* note 36, at 721-27.

¹¹⁰ *Id.* at 722-23 (citing BENJAMIN TYSON DURANSKE, *VIRTUAL LAW: NAVIGATING THE LEGAL LANDSCAPE OF VIRTUAL WORLDS* 130-31 (2008)).

¹¹¹ Dougherty & Lastowska, *supra* note 7, at 761 ("...when virtual world companies actively enforce rules, this makes certain forms of virtual property increasingly inaccessible to all but the most dedicated players. Increased scarcity, in turn, often gives rise to "black market" economies within games where real money might be traded between players who are willing to buy or sell rare virtual items.").

¹¹² *See, e.g., id.* at 761-62 ("[T]he makers of *World of Warcraft* brought a lawsuit against businesses that offer [goldfarming], claiming that these businesses have promoted cheating." (citing *Blizzard Entm't, Inc. v. In Game Dollar, L.L.C.*, No. 07-0589 (C.D. Cal. 2007)); *MDY Indus. L.L.C. v. Blizzard Entm't, Inc.*, No. 06-2555 (D. Ariz. 2006)).

monitoring often is not sufficient. Corporations need to incur large costs and maintain constant monitoring efforts to ensure their trademarks are not infringed, but that has not stopped certain corporate sponsor deals, such as when Coca-Cola licensed its trademark to SL vendors.¹¹³ Corporations recognize that a sponsor presence lends legitimacy to their online mark and effectively de-legitimizes fraudulent marks. For example, when SL users sold fake virtual Herman Miller chairs, the real corporation produced licensed virtual versions of its chairs for free, so long as the downloading users deleted the fake products.¹¹⁴ The Herman Miller campaign, known as “Get Real!” dramatically reduced the infringing product’s popularity.¹¹⁵

The primary problem facing trademark definition and regulation requires standardized guidelines for approaching trademarks online, so that courts can consult a centralized, logical source devised by experts in the field to properly address any private litigation.

ii. Copyright

Internet publication is a comparatively simple medium to consider as an extension of print publishing, compared to the mental gymnastics of conceptualizing digital land and invisible swords. Yet because the Internet allows nearly anyone to publish and distribute their works, a majority of online copyright issues stem from derivative works.

Online role-playing, as well as fan fiction, often conducted through texts and images, might be considered derivative works of a performative or written nature. Author response to such speculative works has varied,¹¹⁶ but many authors support fan fiction, to both encourage publicity and to be more accommodating of fans.¹¹⁷ In response, fans and fan activists created the

¹¹³ Ung, *supra* note 36, at 723 (citing Adam Reuters, *Update—Coca-Cola Gives Away Its Trademark in SL?*, REUTERS SECOND LIFE NEWS CENTER (Jun. 28, 2007 1:39pm PDT), <http://secondlife.reuters.com/stories/2007/06/28/coca-cola-gives-away-its-trademark-in-sl/>).

¹¹⁴ Kane & Duranske, *supra* note 84, at 14.

¹¹⁵ *Id.* (citing Benjamin Duranske, *Herman Miller Fights Trademark Infringement in Second Life with ‘Get Real’ Campaign*, VIRTUALLY BLIND (October 8th, 2007), <http://virtuallyblind.com/2007/10/08/herman-miller-second-life/>).

¹¹⁶ Some authors, such as Anne Rice, have notoriously declared, “I do not allow fan fiction. The characters are copyrighted. It upsets me terribly to even think about fan fiction with my characters. I advise my readers to write your own original stories with your own characters. It is absolutely essential that you respect my wishes.” Anne Rice, *Important Message From Anne on “Fan Fiction,”* ANNERICE.COM (Apr. 7, 2000), <http://www.annerice.com/ReaderInteraction-MessagesToFans.html>.

¹¹⁷ See, e.g., Melissa, *Fanfic and False Press – The Real Story on James Potter and the Hall of Elders’ Crossing*, THE LEAKY CAULDRON (November 21, 2007, 03:44 PM), <http://www.the-leaky-cauldron.org/2007/11/21/fanfic-and-false-press-the-real-story-on-james-potter-and-the-hall-of-elders-crossing/> (noting that author J.K. Rowling’s

OTW, to advocate the legality of fandom activities, such as fanfiction, anime music videos, and other fan-made works.¹¹⁸ Far from being a small-time organization, OTW's board of directors for 2010 includes authors, academics, and lawyers, including Rebecca Tushnet, Naomi Novik, and Rachel Barenblat.¹¹⁹ Furthermore, OTW reported total assets exceeding eighteen million United States dollars as of December 31, 2008.¹²⁰ The derivative works of fans on the Internet are unique because of their large-scale, easily publishable, and easily removable nature.

Developers themselves struggle to straddle the line between creative incentive and liability, reflecting again the profitability limits of enforcement¹²¹ and the fluctuating responses to enforcement attempts. SL saw copyright infringement issues when a series of twenty-six novels were distributed online as part of a role-playing world, though no court action was ever pursued.¹²² A group of SL designers sought¹²³ and won an injunction and damages against an avatar/user who made and sold unauthorized copies of complainants' SL products.¹²⁴ Another SL copyright infringement case resulted in a default judgment because the defendant never answered the complaint.¹²⁵ One company, set up to profit in the real world from buying and selling in-world items, even sought declaratory judgment to protect the

representative has allowed non-profit works of fan fiction).

¹¹⁸ *What We Believe*, ORGANIZATION FOR TRANSFORMATIVE WORKS, <http://transformativeworks.org/about/believe> (last visited Apr. 5, 2010).

¹¹⁹ *Who We Are*, ORGANIZATION FOR TRANSFORMATIVE WORKS, <http://transformativeworks.org/about/people> (last visited Apr. 5, 2010).

¹²⁰ *Annual Report 2008*, ORGANIZATION FOR TRANSFORMATIVE WORKS, <http://transformativeworks.org/about/annual-report-2008> (last visited Apr. 5, 2010).

¹²¹ Westbrook, *supra* note 21, at 787-88 (reasoning that out-of-game transactions for in-world benefits threaten profitability and subscription revenue; in attempting to compromise, Blizzard Entertainment prohibits real-money trading on World of Warcraft content, whereas Sony Online Entertainment has created an Everquest II auctioning system).

¹²² Curious Rousselot, *Ethics of copyright violations divide Gorean community*, THE ALPHAVILLE HERALD (February 11, 2007), http://foo.secondlifeherald.com/slh/2007/02/gorean_copyrigh.html.

¹²³ Lowry, *supra* note 19, at 110 (citing Compl. at 1-2, Eros, LLC. v. Simon, (E.D.N.Y. 2007) (No. 1:07 CV 04447 SLT-JMA)).

¹²⁴ Nuara, *supra* note 35, at 556 (citing Compl., Eros, LLC v. Simon (E.D.N.Y. 2007) (No. 1:07 CV 04447 SLT-JMA), available at http://www.virtuallyblind.com/files/07_10_24_eros_et_al_v_simon_complaint.pdf).

¹²⁵ *Id.* at 557 (citing Eros, LLC. v. John Doe, Entry of Default, Nov. 16, 2007, available at http://virtuallyblind.com/files/eros_default.pdf; Eric Reuters, *SL Business Sues for Copyright Infringement*, REUTERS SECOND LIFE (July 3, 2007), <http://secondlife.reuters.com/stories/2007/07/03/sl-business-sues-for-copyright-infringement/>).

copyright legality of its business activities.¹²⁶ Such a bid for legitimacy is rare given the hundreds of other real-world/in-world profit-making entities that have not sought such legal insurance. In a case involving a more tangible item, one court ruled that a compact disc containing user-generated Duke Nukem 3D levels substantively incorporated protected derivative content of the original game developer, leaving the actual user-creator no rights to the content.¹²⁷

This history of online copyright cases fails to present a clear set of enforcement responses that is possible through ISP and real-world authorities. Users, themselves creators and authors, recognize the need for online copyright control. A consistent international treaty can provide the necessary baseline for addressing online copyright concerns that authors have already attempted to resolve.

IV. INTERNATIONAL ATTEMPTS AT REGULATION

A. *Background*

International law recognizes three types of civil and criminal jurisdiction: jurisdiction to prescribe, to adjudicate (personal jurisdiction), and to enforce.¹²⁸ The very nature of international law, however, demands that this global jurisdiction must nevertheless respect the sovereignty of signatory nations and their respective national laws.¹²⁹ Treaties can expand or reduce the territories of these jurisdictions, but national legislation remains sovereign except where waived.¹³⁰ The intellectual property treaties grant rights by proxy only, by requiring signatory countries to grant at least a common minimum set of rights.¹³¹

The most crucial international intellectual property guidelines involve four treaties: the Paris Convention for the Protection of Industrial Property (“Paris Convention”), the Madrid Agreement Concerning the International

¹²⁶ Westbrook, *supra* note 21, at 790 (citing David Becker, *Game Exchange Dispute Goes to Court*, CNET NEWS.COM, Feb. 7, 2002, http://news.cnet.com/Game-exchange-dispute-goes-to-court/2100-1040_3-832347.html?tag=mncol;txt (last visited Nov. 15, 2010)).

¹²⁷ Nuara, *supra* note 35, at 541 (citing *Micro Star v. Formgen, Inc.* 154 F.3d 1107 (1998)).

¹²⁸ Perritt, *supra* note 56, at 1124 (citing RESTATEMENT (THIRD) OF FOREIGN RELATIONS LAW OF THE UNITED STATES § 401 (1986)).

¹²⁹ JEFFREY L. DUNOFF ET AL., INTERNATIONAL LAW: NORMS, ACTORS, PROCESS 61-3 (3d ed. 2010).

¹³⁰ *Id.* at 68-71 (discussing reservations to treaties under the Vienna Convention).

¹³¹ JULIE E. COHEN ET AL., COPYRIGHT IN A GLOBAL INFORMATION ECONOMY 35-6 (3d ed. 2010) (describing minimum substantive standards for the Berne Convention and the TRIPS Agreement).

Registration of Marks (“Madrid Agreement”), the Berne Convention for the Protection of Literary and Artistic Works (“Berne Convention”), and the Trade-Related Aspects of Intellectual Property Rights (“TRIPS”). Also relevant are the WIPO Copyright Treaty (“WCT”) and the WIPO Performance and Phonogram Treaty (“WPPT”), both created to accommodate nascent technologies. The generic Top-Level Domain-Memorandum of Understanding (“gTLD-MoU”) governs domain name registrations across the world. The World Intellectual Property Organization (“WIPO”) primarily administers these treaties (except for TRIPS), but some of these treaties mainly apply to World Trade Organization (“WTO”) member states.¹³² This gap in coverage is exacerbated by the United States’s inconsistent acceptance of all international treaty stipulations.¹³³

The main problem surrounding the operation of these treaties in the Internet world is that these international intellectual property treaties are inherently territorial in operation and jurisdiction,¹³⁴ so that even airtight definitions of virtual property fail on the merits of international applicability. This crucial limiting factor means that, while harmonization of the treaties’ ideas regarding intangible intellectual property rights and technological provisions can occur, whether they can be implemented requires a non-traditional, non-geographically restricted approach.

B. Analysis of Current International Treaties

i. The Paris Convention for the Protection of Industrial Property

Paris Convention easily protects digital industrial and commercial trademarks and patents from unfair competition, fraud, and intellectual property infringement,¹³⁵ regardless of content or nature of the goods represented.¹³⁶ A Paris Convention applicant from a member state obtains first

¹³² See *infra* Part IV.B.iv.

¹³³ OFFICE OF THE U.S. TRADE REPRESENTATIVE, 2009 SPECIAL 301 REPORT (2009), *available at* <http://www.ustr.gov/sites/default/files/Full%20Version%20of%20the%202009%20SPECIAL%20301%20REPORT.pdf>.

¹³⁴ See *infra* Part IV.B.

¹³⁵ Paris Convention for the Protection of Industrial Property art. 1(2), Mar. 20, 1883, as amended on September 28, 1979, 21 U.S.T. 1583, 828 U.N.T.S. 305, *available at* http://www.wipo.int/export/sites/www/treaties/en/ip/paris/pdf/trtdocs_wo020.pdf (hereinafter “Paris Convention”) (“The protection of industrial property has as its object patents, utility models, industrial designs, trademarks, service marks, trade names, indications of source or appellations of origin, and the repression of unfair competition.”).

¹³⁶ *Id.* at art. 7 (“The nature of the goods to which a trademark is to be applied shall in no case form an obstacle to the registration of the mark.”).

filing status in all other member states.¹³⁷ Paris Convention nevertheless requires that a member state's domestic legislation governs the trademark's filing and application.¹³⁸ National laws and jurisdiction hold even though applicants are not required to domicile or establish themselves in the claimed country of protection.¹³⁹ All the language in the Paris Convention requires certain provisions of member states, but only "if their legislation so permits."¹⁴⁰ With flexibility for the applicants, but domestic entanglement for legislative enforcement, the Paris Convention opens the window of hope for Internet applicability, but shuts the door to actual digital effectiveness.

Furthermore, marks registered under the Paris Convention are themselves entities independent of their registration in other member states, preventing a mark's failure in one country from affecting valid status in another.¹⁴¹ These Paris Convention stipulations are untenable and inefficient in the Internet's nigh borderless environment: if a mark fails in State A but not in State B, a B user can easily access information stored in A, and vice versa. In such a world, what decides the mark's validity and jurisdiction? Also, applying the Paris Convention to any context beyond trademark and copyright would be fruitless because of its narrow scope; avatars and domain names are not always "commercial," and therefore not always included despite the Paris Convention's disregard of the nature of the goods represented.

ii. The Madrid Agreement Concerning the International Registration of Marks

The Madrid Agreement also requires territorial identification¹⁴² during

¹³⁷ So long as the applicant files another application within 6 months (for trademarks and industrial designs) or 12 months (for patents) from the first filing. *Id.* at art. 4.

¹³⁸ *Id.* at art. 6(1) ("The conditions for the filing and registration of trademarks shall be determined in each country of the Union by its domestic legislation.").

¹³⁹ For example, a Spanish applicant seeking protection in France does not need to live in France to gain French trademark protection. *See id.* at art. 2 ("[N]o requirement as to domicile or establishment in the country where protection is claimed may be imposed upon nationals of countries of the Union for the enjoyment of any industrial property rights.").

¹⁴⁰ *Id.*

¹⁴¹ Paris Convention, *supra* note 135 at art. 6(3) ("A mark duly registered in a country of the Union shall be regarded as independent of marks registered in the other countries of the Union, including the country of origin.").

¹⁴² Madrid Agreement Concerning the International Registration of Marks art. 3bis-ter, Apr. 14, 1891, 828 U.N.T.S. 389, available at <http://treaties.un.org/doc/Publication/UNTS/Volume%20828/volume-828-I-11852-English.pdf> (hereinafter "Madrid"). Both the Agreement and the Protocol fall under what is known as the Madrid System, and members who are signatories of either document are considered to be part of the Madrid Union under this system. The Protocol is more popular than the Agreement by about twenty members, and the most significant substantive

registration, and refusal is based on Paris Convention grounds.¹⁴³ WIPO administers the Madrid Agreement and grants trademark rights in other member countries if trademark owners file in the owner's home country trademark office.¹⁴⁴ The owner must have an existing trademark registration, however, to be eligible for international registration.¹⁴⁵ Furthermore, the owner must have real commercial presence in, or be a national of, a member state.¹⁴⁶ Does this mean that an owner who cannot register his trademark anywhere and has commercial presence only in a non-member state cannot receive protection online from infringers located in member states?

Under the Madrid Agreement, an online guild's crest, a novel achievement title, or a trade name would not need to document mark legitimacy outside of the country of origin.¹⁴⁷ Yet for such digital marks and elements, what would be the country of origin? A user can use an online application suite such as Aviary¹⁴⁸ to process a crest designed for a guild in exchange for payment. Is the country of origin where the user is located, where the Aviary application is stored, where the Aviary developers are located, or where the crest will ultimately be used? The vagueness of the term "country of origin" weakens the relevant clause's applicability to digital property.

The Madrid Agreement clauses above provide a bundle of rights that buttress a right already existent in a country of origin or commercial presence.¹⁴⁹ Yet in what state does an online trademark have commercial presence if that digital mark can be potentially accessed anywhere and made through any proxy or VPN channels? An infringer might merely change the nationality of his IP address to escape an infringement accusation, leaving the owner without right or recourse.¹⁵⁰ And because any invalidation of registration within five years of the international registration date will nullify

difference between the two is the increased registration and coverage flexibility for trademark owners. A few members are signatories to the Protocol and not the Agreement for such reasons. If a country is signatory to both, only the Protocol applies from 9/1/2008 onwards.

¹⁴³ *Id.* at art. 5(1).

¹⁴⁴ *Id.* at art. 1(2).

¹⁴⁵ *Id.* ("Nationals of any of the contracting countries may...secure protection of their marks...registered in the country of origin...").

¹⁴⁶ *Id.* at art. 1(3); *cf.* Paris Convention, *supra* note 135, at art. 3 ("Nationals of countries outside the Union who...have real and effective industrial or commercial establishments in...one of the countries of the Union shall be treated in the same manner as nationals of the countries of the Union.").

¹⁴⁷ Madrid, *supra* note 142, at art. 5*bis*.

¹⁴⁸ Aviary is a suite of online applications for image, sound, and animation editing. Aviary, <http://www.aviary.com/> (last visited Dec. 23, 2010).

¹⁴⁹ Madrid, *supra* note 142, at art. 4, 6, & 9*bis*.

¹⁵⁰ *See supra* III.B.

Madrid Agreement rights, the owner is at the mercy of the domestic office where the trademark is registered.¹⁵¹ The low cost of escaping enforcement due to these loopholes makes the Madrid Agreement and other treaties difficult to enforce online.

iii. The Berne Convention for Protection of Literary and Artistic Works

The Berne Convention protects literary and artistic works for a period of the life of the author plus fifty years.¹⁵² No provision is made for “cinematographic” performances or works online *per se*,¹⁵³ but the Berne Convention protects public performances produced by “any means or process,” and might include online performances within its scope if the Internet is “public.”¹⁵⁴

The Berne Convention’s scope appears wide enough, but imposing a publishing requirement on authors means that wire, broadcast, exhibition, or construction, do not constitute publication,¹⁵⁵ making applicability to online copyright problematic. Hence, a unique architectural design stored on a computer but realized through construction in SL would not be protected. The SL architect would have no recourse should any infringement occur. Any works *solely* transmitted through broadband or exhibited online would also lack protection under the Berne Convention, though authors of dramas or musicals may *authorize* any form or process of public performance of such works,¹⁵⁶ including online performances.¹⁵⁷

¹⁵¹ Madrid, *supra* note 142, at art. 6(2) (“Upon expiration of a period of five years from the date of the international registration, such registration shall become independent of the national mark registered earlier in the country of origin...”); *id.* at 6(3) (“The protection resulting from the international registration...may no longer be invoked, in whole or in part, if, within five years from the date of the international registration, the national mark, registered earlier in the country of origin...no longer enjoys, in whole or in part, legal protection in that country.”).

¹⁵² Berne Convention for Protection of Literary and Artistic Works art 7(1), *opened for signature* Sept. 9, 1886, S. Treaty Doc. No. 99-27, 1161 U.N.T.S.29, *available at* <http://treaties.un.org/doc/Publication/UNTS/Volume%201161/volume-1161-I-18338-English.pdf> (hereinafter “Berne Convention”).

¹⁵³ In addition, protection for a cinematographic work lasts after the time of public performance or production. *Id.* at art. 7(2).

¹⁵⁴ *Id.* at art 11(1)(i).

¹⁵⁵ *Id.* at art. 3(3) (“The performance of a dramatic, dramatico-musical, cinematographic or musical work, the public recitation of a literary work, the communication by wire or the broadcasting of literary or artistic works, the exhibition of a work of art and the construction of a work of architecture shall not constitute publication.”).

¹⁵⁶ *Id.* at art. 11(1) (“Authors of dramatic, dramatico-musical and musical works shall enjoy the exclusive right of authorizing: (i) the public performance of their works, including public performance by any means or process; (ii) any communication to the public of the

Also, the Berne Convention still relies upon national legislative definitions of protection and fixation to be effective.¹⁵⁸ The Berne Convention's protections apply to nationals and non-nationals alike, though non-nationals are required to have published before they can gain Berne rights.¹⁵⁹ Again, as with the Madrid Agreement, the owner is at the mercy of the country of origin's domestic laws, even when a non-member State fails to protect the work.¹⁶⁰

In addition, the terms "reproduction" and "recording" are not well-defined in the digital context and have unclear application to cases where a computer accessing an art or literary work online often stores a copy in the Internet browser cache for quicker referencing later.¹⁶¹ Furthermore, does an avatar or web site constitute a Berne-protected artistic work? If an avatar is animated or if a web site requires cinematic progression through pages, does it constitute a cinematographic work under the Berne Convention?¹⁶² While the ephemeral storage of protected works for access efficiency might not practically affect the commercial profit from a work, the non-digital wording and country of origin-tethering¹⁶³ creates significant gaps in Berne Convention coverage of online

performance of their works.").

¹⁵⁷ *Id.* at art. 11*bis*(1) ("Authors of literary and artistic works shall enjoy the exclusive right of authorizing: (i) the broadcasting of their works or the communication thereof to the public by any other means of wireless diffusion of signs, sounds or images; (ii) any communication to the public by wire or by rebroadcasting of the broadcast of the work...; (iii) the public communication by loudspeaker or any other analogous instrument transmitting, by signs, sounds, or images, the broadcast of the work.").

¹⁵⁸ Berne Convention, *supra* note 152, at art 2(2).

¹⁵⁹ *Id.* at art. 3(1)-(2).

¹⁶⁰ *Id.* at art. 6(1) ("Where any country outside the Union fails to protect in an adequate manner the works of authors who are nationals of one of the countries of the Union, the latter country may restrict the protection given to the works of authors who are, at the date of the first publication thereof, nationals of the other country and are not habitually resident in one of the countries of the Union. If the country of first publication avails itself of this right, the other countries of the Union shall not be required to grant to works thus subjected to special treatment a wider protection than that granted to them in the country of first publication.").

¹⁶¹ *Id.* at art. 11*bis*(3) ("[P]ermission granted [to authorize broadcasting or wire and wireless communication of works] shall not imply permission to record, by means of instruments recording sounds or images, the work broadcast. . . . The preservation of these recordings in official archives may, on the ground of their exceptional documentary character, be authorized by such legislation.").

¹⁶² *Id.* at art. 14*bis*(2)(a) ("Ownership of copyright in a cinematographic work shall be a matter for legislation in a country where protection is claimed.").

¹⁶³ *Id.* at art. 13(1) ("Each country of the Union may impose for itself reservations and conditions on the exclusive right granted to the author of a musical work and to the author of any words....").

works.

iv. Agreement on Trade-Related Aspects of Intellectual Property Rights

TRIPS aims to promote technological innovation, transfer, and dissemination, so as to benefit socioeconomic welfare.¹⁶⁴ WTO membership, administration, and enforcement of TRIPS narrow the jurisdiction and scope of protection.¹⁶⁵ WTO member states must notify the TRIPS Council of the national regulations that comply with the TRIPS Agreement and often comply due to the trading incentives that TRIPS and WTO membership provide.¹⁶⁶ The TRIPS Council, a review and compliance body, uses such reports to preempt formal disputes by reviewing TRIPS weaknesses and ensuring member state compliance.¹⁶⁷ This means that TRIPS is also tethered to the WTO conceptions of nationality, jurisdiction, and membership.¹⁶⁸

Guidelines for protecting intellectual property rights are generous: copyright is granted automatically without registration,¹⁶⁹ computer programs are protected as literary works,¹⁷⁰ trademark registrability requires neither use¹⁷¹ nor distinguishability,¹⁷² and patents can be granted for products or processes

¹⁶⁴ Agreement on Trade-Related Aspects of Intellectual Property Rights, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations art. 7 (1999), 1869 U.N.T.S. 299, 33 I.L.M. 1125, available at <http://www.wipo.int/export/sites/www/treaties/en/agreement/pdf/trips.pdf> (hereinafter "TRIPS").

¹⁶⁵ GRAEME B. DINWOODIE, ET AL., INTERNATIONAL INTELLECTUAL PROPERTY LAW AND POLICY 41 (Lexis 2d ed. 2008).

¹⁶⁶ TRIPS, *supra* note 164, at art. 63(2) ("Members shall notify the laws and regulations referred to in paragraph 1 to the Council for TRIPS in order to assist that Council in its review of the operation of this Agreement.").

¹⁶⁷ *Id.* ("The Council shall attempt to minimize the burden on Members in carrying out this obligation and may decide to waive the obligation to notify such laws and regulations directly to the Council if consultations with WIPO on the establishment of a common register containing these laws and regulations are successful."); *id.* at art. 64(3).

¹⁶⁸ See generally World Trade Organization, *WTO | accession | Relevant WTO Provisions*, http://www.wto.org/english/thewto_e/acc_e/acc7_3_e.htm (last visited Apr. 5, 2010) (detailing WTO membership and accession guidelines).

¹⁶⁹ TRIPS, *supra* note 164, at art. 9(1).

¹⁷⁰ *Id.* at art. 10(1).

¹⁷¹ *Id.* at art. 15(3) ("Members may make registrability depend on use. However, actual use of a trademark shall not be a condition for filing an application for registration.").

¹⁷² *Id.* at art. 15(1) ("Any sign, or any combination of signs, capable of distinguishing the goods or services of one undertaking from those of other undertakings, shall be capable of constituting a trademark. Such signs, in particular words including personal names, letters, numerals, figurative elements and combinations of colours as well as any combination of

in all fields of technology.¹⁷³ Computer program authors have no control over a commercial rental if the program itself is not the essential object of the rental.¹⁷⁴ Performers have the right to prevent wireless broadcasting and unauthorized fixation of unfixed performances, but the WTO dispute settlement mechanism may not treat storage of a digital avatar's performance as fixation, or even the digital occurrence as a performance in itself.¹⁷⁵ The broad inclusive language of TRIPS trademark specifications covers even personal names, such as might be attributed to an avatar.¹⁷⁶ TRIPS contains language for industrial designs, but does not expressly define textile designs, so potential TRIPS protection for digital textiles is uncertain.¹⁷⁷ Protection for patterns for avatar clothing and furniture might be better ascribed to virtual chattels or even copyright.¹⁷⁸ Likewise, granting patentability "in all fields of technology" does not necessarily anticipate or include software or digital technology.¹⁷⁹

In addition, remedies for rights holders include remuneration based on the economic value of any authorization for use, possibly even of virtual chattels, but TRIPS does not specify *which* economy must be used in that valuation.¹⁸⁰ In a digital world, the value of a virtual sword or households represent dramatically disparate economic values from a real world valuation.

Though TRIPS is one of the strongest and most inclusive international intellectual property treaties existing, small gaps in its definitions and specifications lead to doubts about the comprehensiveness of TRIPS' digital effectiveness.

v. WIPO Internet Treaties: WPPT and WCT

WIPO member states adopted the WPPT and the WCT in 1996 to update the

such signs, shall be eligible for registration as trademarks. Where signs are not inherently capable of distinguishing the relevant goods or services, Members may make registrability depend on distinctiveness acquired through use. Members may require, as a condition of registration, that signs be visually perceptible.”).

¹⁷³ *Id.* at art. 27 (describing patentable subject matter).

¹⁷⁴ *Id.* at art. 11 (describing rental rights).

¹⁷⁵ *See generally* TRIPS, *supra* note 164, at art. 14(1)-(3) (describing protection of performers, producers of phonograms, and broadcasting organizations).

¹⁷⁶ *Id.* at art. 15(1) (describe protectable subject matter for trademarks).

¹⁷⁷ THE SIMS RESOURCE, *TSR - Downloads / Sims 3 / Patterns / Fabrics*, <http://www.thesimsresource.com/downloads/browse/category/sims3-materials-fabrics/free/0> (last visited Apr. 4, 2010).

¹⁷⁸ TRIPS, *supra* note 164, at art. 25(2).

¹⁷⁹ *Id.* at art. 27 (“...patents shall be available for any inventions, whether products or processes, in all fields of technology, provided that they are new, involve an inventive step and are capable of industrial application.”).

¹⁸⁰ *Id.* at art. 31(h).

existing scheme of intellectual property protections to compensate for technological advances.¹⁸¹

Broad in scope, the WCT offers protection for computer programs as literary works as defined under the Berne Convention, thus giving rights to authors of a variety of scripts from online dance animation sequences to Facebook games.¹⁸² The WCT also protects books, music, photography, databases, sculpture, film, and other literary and artistic works.

The WPPT protects performances and phonograms “in any manner or form,”¹⁸³ fifty years from fixation of performances or publication of productions.¹⁸⁴ The WPPT also provides that “[c]ontracting [p]arties may enact national legislation that, in the absence of an agreement between the performer and the producer of a phonogram, sets the terms according to which performers and producers of phonograms shall share the single equitable remuneration” for public or commercial publications.¹⁸⁵ Therefore, any contracting party can notify WIPO regarding the applicability of the provisions.¹⁸⁶ Also, the WPPT provides that phonograms distributed publicly “by wire or wireless means. . . shall be considered as if they had been published for commercial purposes,”¹⁸⁷ thus providing an automatic commercial use authorization.

Unfortunately, because the timeline of technological development and issues runs much quicker than legal reform, much of the public policy surrounding the terms of the WPPT and WCT is outdated or no longer practical. Most notable of such terms is the broad language governing anti-circumvention of Digital Rights Management (“DRM”) systems and encryption methods.¹⁸⁸ DRM often requires online authentication of a legitimate copy and invades user privacy.¹⁸⁹ DRM has an implementation effectiveness so inconsistent that some manufacturers have abandoned DRM for traditional disc-based copy

¹⁸¹ WIPO Performances and Phonograms Treaty, Dec. 20, 1996, WIPO Doc. CRNR/DC/96, *available at* http://www.wipo.int/export/sites/www/treaties/en/ip/wppt/pdf/trtdocs_wo034.pdf (hereinafter “WPPT”); WIPO Copyright Treaty, Dec. 20, 1996, 36 I.L.M. 65 (1997), WIPO Doc. CRNR/DC/96 (Dec. 20, 1996), *available at* http://www.wipo.int/export/sites/www/treaties/en/ip/wct/pdf/trtdocs_wo033.pdf (hereinafter “WCT”). Any WIPO member state may be a party to WCT, without reservations. WCT, art. 17(1);6.

¹⁸² WCT, *supra* note 181, at art. 4.

¹⁸³ WPPT, *supra* note 181, at art. 7.

¹⁸⁴ *Id.* at art. 17.

¹⁸⁵ *Id.* at art. 15(2).

¹⁸⁶ *Id.* at art. 15(3).

¹⁸⁷ *Id.* at art. 15(4).

¹⁸⁸ *See* WCT, *supra* note 181, at art. 12; WPPT, *supra* note 181, at art. 19.

¹⁸⁹ *See generally* Julie E. Cohen, *DRM and Privacy*, 18 BERKELEY TECH. L.J. 575 (2003).

protection.¹⁹⁰ DRM is ineffectual at preventing infringement, and in fact might actually encourage illegal activity.¹⁹¹

Furthermore, WPPT's and WCT's definitions of distribution methods do not specifically anticipate a fast-changing digital environment. Current treaties' inadequacies highlight the need for a broad digital-focused treaty rather than a hodgepodge of copyright and trademark treaties that each try to address it in their own ways without providing a kind of coherent message or digitally-paced reform.

vi. Generic Top-Level Domain-Memorandum of Understanding

The Internet International Ad Hoc Committee ("IAHC"), in making recommendations for domain name organizational reform in 1997, reported that "[t]he Internet top level domain space is a public resource" that is significantly open to public and private sectors.¹⁹² These recommendations set up the gTLD-MoU. The gTLD-MoU established a framework for governing international domain name systems, and involves several committees and organizations.¹⁹³ The Council of Registrars ("CORE") is a Swiss-based international non-profit domain name registrar.¹⁹⁴ WIPO supports a domain name dispute resolution mechanism under WIPO's Arbitration and Mediation Center rules, known as Administrative Domain Name Challenge Panels ("ACPs") that have sovereignty over domain names only, not parties that are nationals of sovereign nations.¹⁹⁵ In establishing the ACPs, WIPO sought to

¹⁹⁰ Mike Fahey, *No DRM For The Sims 3*, KOTAKU (Mar 27, 2009, 9:40 AM), <http://kotaku.com/5186987/no-drm-for-the-sims-3>.

¹⁹¹ Patricia Akester, *Technological accommodation of conflicts between freedom of expression and DRM: the first empirical assessment*, UNIVERSITY OF CAMBRIDGE (May 5, 2009), <http://www.law.cam.ac.uk/faculty-resources/download/technological-accommodation-of-conflicts-between-freedom-of-expression-and-drm-the-first-empirical-assessment/6286/pdf>.

¹⁹² Perritt, *supra* note 56, at 1140-41.

¹⁹³ The gTLD-MoU disbanded the IAHC and replaced it with the Interim Policy Oversight Committee ("IPOC") to solicit amendments. Also created were a gTLD DNS Policy Advisory Body (PAB), Council of Registrars (CORE), gTLD-MoU Policy Oversight Committee (POC), and other acronym-laden organizations. *Id.* at 1140. For more acronym-laden organizations associated with the gTLD-MoU, see generally <http://web.archive.org/web/19971211190034/http://www.gtld-mou.org/>.

¹⁹⁴ "CORE's statutory purpose is to operate, on a cost-recovery basis, a shared registration system (SRS) for Internet domain names....Core is a Registrar accredited by the Internet Corporation for Assigned Names and Numbers (ICANN) and currently operates as a registrar for domain names." CORE INTERNET COUNCIL OF REGISTRARS, *About CORE*, http://www.corenic.org/about_core.htm (last visited Nov. 13, 2009).

¹⁹⁵ Perritt, *supra* note 56, at 1142 (citing *Final Report of the Int'l Ad Hoc Comm.*, § 7.2.3 (visited Sept. 1, 1998) < <http://web.archive.org/web/19971211191039/www.gtld->

avoid inconsistencies in the registrars' mediation results that might result from balancing disparate national principles.¹⁹⁶ Significantly, the WIPO's mediation rules do not explicitly prevent online arbitration as a means for mediation, because the rules do not refer to a means of communication.¹⁹⁷

The prevailing trend demands removing nationality from the equation in the nation-less medium that is the Internet.¹⁹⁸ The intangibility of the Internet only touches conventional definitions of physical reality when we call upon the digital to mimic the analog. Rather than the Internet being a proxy for reality, it has instead become a competing universe and must be accorded the same completeness and probity of pertinent regulation.

V. SOLUTIONS

A. *Possible Solutions*

Three solutions emerge to the virtual property problem: a separate virtual property international treaty, an independent international watchdog governing body, and recognition of an Internet jurisdiction with its own sovereign body of laws.

i. *Separate International Treaty*

A virtual property-dedicated international treaty must balance respect for national sovereignty with the need for laws rooted in Internet activity and not based on proxies for physical property. Such a treaty must specifically recognize existing technologies, make allowances for future innovations, and be administered by experts in the fields of Internet usage, digital technologies, and intellectual property. This treaty must not be tethered to any national domestic legislation that would neutralize its universal effectiveness. Instead, the minimum required bundle of rights the treaty grants must be placed in the hands of neutral Internet organizations. Transactions, hearings, and enforcement should be carried out universally rather than one or two nations with proxy jurisdiction through existing treaties. This Note proposes a treaty that models the minimum requirements of existing treaties and the results of the gTLD-MoU, but with definitions and requirements grounded in Internet needs, behaviors, and technologies. Just as Delaware attracts businesses by having a superb legal framework for corporations, a well-defined treaty can attract countries interested in consistency and reliability rather than supreme

mou.org/draft-iahc-recommend-00.html >).

¹⁹⁶ *Id.* at 1144 (citing memorandum prepared by the Int'l Bureau, May 16, 1997, tdn/cm/I/3 (visited Sept. 1, 1998)).

¹⁹⁷ *Id.* at 1145.

¹⁹⁸ *See generally supra* Part IV.B.

deference to sovereignty.¹⁹⁹

It would be naïve to suppose that countries would eagerly sign up to relinquish their rights to police, tax, administer, and adjudicate transactions even in a global, borderless environment such as the Internet.²⁰⁰ Nearly every country in the world has some kind of stake in international Internet regulation, and especially in defining virtual property, given the Internet's near-ubiquitous presence. A separate international treaty would naturally require an institutionalized multilateral agreement with intergovernmental organizations.

Overseas enforcement has precedence even in nations with weak IP rights regimes. United States agents successfully arrested an employee of a Moscow-based company who had violated United States copyright law.²⁰¹ Such instances of extradition are not unheard of, and having reliable and apropos regulations may encourage countries to abide by an international virtual property treaty.²⁰² Furthermore, as a response to international enforcement concerns, the Brussels Convention, like other agreements,²⁰³ binds signatory states to jurisdiction and enforcement regulations and provides enforcement of specific foreign judgments.²⁰⁴

Crucial to the formation of any new Internet treaty would be to recognize the sovereignty of national interests, but introduce Internet-based solutions as the minimum first line of contact. The interests vested in an international world like the Internet are themselves international, but countries still cling to nationally-defined guidelines about Internet regulation. SL users in the

¹⁹⁹ Viktor Mayer-Schönberger & John Crowley, *Napster's Second Life?: The Regulatory Challenges of Virtual Worlds*, 100 NW. U. L. REV. 1775, 1813 (2006).

²⁰⁰ Cheryl L. Conner, *Compuserve v. Patterson: Creating Jurisdiction Through Internet Contacts*, 4 RICH. J.L. & TECH. 9, 63 (Spring 1998), available at <http://jolt.richmond.edu/v4i3/conner.html> (citing Todd H. Flaming, *The Rules of Cyberspace: Information Law in a New Jurisdiction*, 85 ILL. B.J. 174 (1997)).

²⁰¹ Arias, *supra* note 69, at 1327 (citing Bruce L. Benson, *The Spontaneous Evolution of Cyber Law: Norms, Property Rights, Contracting, Dispute Resolution and Enforcement Without the State*, 1 J.L. ECON. & POL'Y 269, 331-32 (2005)).

²⁰² Arias, *supra* note 69, at 1327 ("...the effective application of transnational jurisdictional principles is dependent on the 'respect and cooperation among sovereigns and parties.'") (quoting Ronnie D. Crisco, Jr., *Follow the Leaders: A Constructive Examination of Existing Regulatory Tools that Could Be Applied to Internet Gambling*, 5 N.C. J.L. & TECH. 155, 159 (2003) (citing Antonia Z. Cowan, *The Global Gaming Village: Interstate and Transnational Gambling*, 7 GAMING L. REV. 251, 252 (2003))); see also Ellen S. Podgor, *International Computer Fraud: A Paradigm for Limiting National Jurisdiction*, 35 U.C. DAVIS L. REV. 267, 311 (2002).

²⁰³ For the Uniform Recognition Act, see Perritt, *supra* note 56, at 4.

²⁰⁴ Paul R. Beaumont, *ANTON & BEAUMONT'S CIVIL JURISDICTION IN SCOTLAND* §§ 1.28-1.30, 14-16 (1995).

European Union (but not in the United States) must pay Value Added Tax.²⁰⁵ In order to appease those reluctant parties, instead of State A's plaintiff fighting for jurisdiction over the State B defendant in either state, the treaty would allow A's plaintiff to bring his case online without relinquishing his claims to sue in A or B. In this way, an Internet body with expertise and jurisdiction in the matter could hear the claim first before clogging inept domestic courts with "in-world" disputes.²⁰⁶

The gTLD-MoU model demonstrates how an Internet-specific multinational framework can provide regulatory, administrative, and dispute resolution mechanisms without challenging national sovereignty.²⁰⁷ By claiming sovereignty over domain names alone, the ACPs represent the ideal formulation of a borderless, consistent, and efficient regulatory governance of domain names.²⁰⁸ A more specific treaty would actually give enforcement power to the aforementioned IAHC and WIPO ACPs, outside of merely contractual agreements such as what the gTLD-MoU and CORE-MoU attempted to provide. In addition, the treaty must specifically define the various areas of virtual property: avatar, domain name, virtual real property, and intellectual property.

Because users invest a considerable amount of time, effort, and money into their avatars, avatars need to be specifically included as artistic forms of expression protected by the treaty. The myriad combinations that can be user-created, and the nature of representation and identity that avatars provide, need protection beyond mere trademark confusion inclusion. Avatars need to be an established and specific category of representation of identity and artistic expression. Beyond TRIPS' allowances for personal names, color, and other broad factors, no other treaties recognize anything resembling an avatar's nature and use outside of a trademark.

Unlike under the Paris Convention, marks need to be universally held valid and not merely in one state versus another.²⁰⁹ Additionally, unlike under the Madrid Agreement, marks cannot be confined to a country of origin, but must fall under a general Internet jurisdiction, divided and organized by markets.²¹⁰ In traditional parlance, the new treaty can redefine an online "market" into the types of commerce that are defined by existing ISPs and transactions.

²⁰⁵ Subject to the VAT are Premium account registration fees, Land Store purchases, land use fees, private region fees, land auctions, and LindeX transaction fees, but not private Linden dollar transactions between individual Second Life users. Linden Labs, *Value Added Tax | Second Life*, <http://secondlife.com/corporate/vat.php> (last visited Apr. 5, 2010).

²⁰⁶ For more on this, see *infra* Part V.A.ii.

²⁰⁷ See *supra* Part IV.B.iv.

²⁰⁸ See *id.*

²⁰⁹ See *supra* Part IV.B.i.

²¹⁰ See *supra* Part IV.B.ii.

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Therefore, a specific market for a mark, such as user-generated content, gauges confusion and originality per the market. For example, if Lexus sells a virtual version of a Lexus car on SL and on Sims 3, Lexus' online trademark validity would be protected. The owner of a profitable online avatar design referring to a Lexus car could not be sued under confusion because an avatar is in a different categorical market than a virtual car. Someone who reserves an avatar or name with Lexus' name might be treated the same way a domain name squatter would. A spurious metatag, however, might redirect traffic away from Lexus and pose a commercial and dilutive threat. A new treaty would govern such activities more efficiently by addressing these issues in the same realm and language in which they operate.

Drafters of such a treaty might start with the language found in the Berne Convention and TRIPS. The language pertaining to reproduction, recording, and broadcasting must be more specific in order to consistently apply to computer programs, designs, and transactions.²¹¹ The specificity of anti-circumvention techniques in WPPT and WCT only stifles access and innovation rather than protecting authorized use, so the balance for specific definitions must be carefully crafted.²¹² A new treaty must follow TRIPS's inclusive "all technology" clause by including the concept of virtual property, as well as the defined categories of Part III of this Note. Because TRIPS describes textiles but not necessarily digital patterns for clothing or designs, the new treaty must anticipate the traditional applications of industrial and creative designs to virtual properties and goods. The new treaty must also decide whether or not to invade the private licensing right placed by ISPs over use of virtual chattels, such as in-world currency, land, or objects.²¹³

Only a new international Internet treaty can – with specific definitions of virtual property and first line of defense for dispute arbitration – effectively address current intellectual property issues and anticipate future virtual property concerns without contravening extant national sovereignty practices.

ii. Independent Governing Body

One way to carry out such a new all-inclusive and comprehensive Internet-based international treaty would be to establish several independent governing

²¹¹ See *supra* Part IV.B.iii-iv.

²¹² See *supra* Part IV.B.v.

²¹³ See, e.g., Linden Labs, *Terms of Service | Second Life*, <http://secondlife.com/corporate/tos.php> (last visited Apr. 5, 2010) ("Linden Dollars represent a limited license right governed solely under the terms of this Agreement, and are not redeemable for any sum of money or monetary value from Linden Lab at any time. You agree that Linden Lab has the absolute right to manage, regulate, control, modify and/or eliminate such Currency as it sees fit in its sole discretion, in any general or specific case, and that Linden Lab will have no liability to you based on its exercise of such right.").

bodies to administer the arms of Internet identity, commerce, and crime. Even without such a treaty, the growth and influence of such bodies (much like how CORE was established) can present a market-based solution to the present confusion.

The reasoning behind several U.S. court decisions addresses the enforcement capabilities of such an organization and serves as an example of expanding traditional territory-based jurisdiction towards a more flexible model. *International Shoe v. Washington* denied American state courts personal jurisdiction over a civil defendant without the presence of certain minimum contacts with the state seeking jurisdiction.²¹⁴ *Compuserve v. Patterson* paved the way by permitting cross-state jurisdiction to deal with online-only business transactions and contracts.²¹⁵ In 1997, the Ninth Circuit found that merely having information online was not enough to support jurisdiction,²¹⁶ so a United States court requires more than mere access to allow states to have jurisdiction over a user accessing the data in another state. One year later, a federal district court granted one state jurisdiction over an out-of-state resident who had reserved a domain name similar to the plaintiff's trade name.²¹⁷ Additionally, the Trademark Law Treaty of 1994 also requires state filings according to address and nationality even though intellectual property has no borders.²¹⁸ It does not apply to three-dimensional or hologram marks, begging the question of whether three-dimensional models online would fall under three-dimensional or two-dimensional representation.²¹⁹ Various U.S. state legislatures have already expanded their jurisdictions to encompass both the location of use and of impact, attempting to eschew the location-free totality of the Internet and ground it in a potentially infinite number of jurisdictions.²²⁰ Although the U.S. is not representative of global approaches to online jurisdiction, the emerging flexibility of its courts' approaches may herald a more amenable international acceptance of a new

²¹⁴ *Int'l Shoe Co. v. Washington*, 326 U.S. 310, 316 (1945).

²¹⁵ Conner, *supra* note 200, at 60; *Compuserve v. Patterson*, 89 F.3d 1257 (6th Cir. 1996).

²¹⁶ Perritt, *supra* note 56, at 1129 (citing *Cybersell, Inc. v. Cybersell, Inc.*, 130 F.3d 414 (9th Cir. 1997)).

²¹⁷ *Id.* (citing *Panavision Int'l, L.P. v. Toeppen*, 141 F.3d 1316 (9th Cir. 1998)).

²¹⁸ See Trademark Law Treaty, art. 3, *done* October 27, 1994, 2037 U.N.T.S. 35, available at http://www.wipo.int/export/sites/www/treaties/en/ip/tl/pdf/trtdocs_wo027.pdf.

²¹⁹ *Id.* at art. 2.

²²⁰ For example, New York Criminal Procedure Law § 20.60 states a "person who causes by any means the use of a computer or computer service in one jurisdiction from another jurisdiction is deemed to have personally used the computer or computer service in each jurisdiction." Arias, *supra* note 69, at 1326 n.174 (citing Laura Ann Forbes, *A More Convenient Crime: Why States Must Regulate Internet-Related Criminal Activity Under the Dormant Commerce Clause*, 20 PACE L. REV. 189, 212-13 (1999)).

online governing body. Additionally, as long as a claim has some relationship to the jurisdiction, some European courts will assert “exorbitant bases of jurisdiction” to allow plaintiffs to sue nonresidents,²²¹ which could reasonably be used to apply across online transactions.

Several scholars have suggested online dispute resolution systems as alternatives to real-world litigation or regulations.²²² For example, SquareTrade offers a free negotiation process that, if unsuccessful, escalates into an online mediation process through a third party’s assistance.²²³ Linden Labs’ ToS demands that disputes are within the jurisdiction of the City and County of San Francisco, California, with the exception of non-appearance-based arbitration through an established real-world alternative dispute resolution provider.²²⁴ A neutral independent body might free users from such demands by creating a competitive alternative to arbitration and litigation through Linden Labs’ terms, should the prevailing climate dictate that Linden Labs comply. In fact, domain name complainants prefer dispute resolution (such as the Uniform Dispute Resolution Policy, or “UDRP”) to litigation.²²⁵ The Internet Corporation for Assigned Names and Numbers (“ICANN”) manages and supervises domain name assignments and online dispute resolution via the UDRP²²⁶ in the United States, France, and the United Kingdom.²²⁷ The Cyberspace Law Institute, the AAA, the Centre for Information Law and Policy, and the National Center for Automated Information Research have also developed a virtual magistrate system that might function well as a model for actual digital arbitration.²²⁸

Furthermore, established online legal education, such as Continuing Legal Education courses in SL, can empower users to understand the new circumstances of legal recourse.²²⁹ Education will increase the effectiveness of

²²¹ Perritt, *supra* note 56, at 1128.

²²² Ung, *supra* note 36 (citing Philippe Gilliéron, *From Face-to-Face to Screen-to-Screen: Real Hope or True Fallacy?*, 23 OHIO ST. J. ON DISP. RESOL. 301, 304 (2008)).

²²³ *Id.* at 726 (citing ETHAN KATSH & JANET RIFKIN, ONLINE DISPUTE RESOLUTION 66 (2001)).

²²⁴ Second Life, *supra* note 85, at 12.2.

²²⁵ Ung, *supra* note 36, at 721 (citing ETHAN KATSH & JANET RIFKIN, ONLINE DISPUTE RESOLUTION 65 (2001) (explaining how court cases are few compared to the volume of UDRP cases)).

²²⁶ *Id.* at 720-21.

²²⁷ Gilliéron, *supra* note 222, at 309.

²²⁸ Perritt, *supra* note 56, at 1145-46.

²²⁹ Ung, *supra* note 36, at 727 (citing Martha Neil, *Attorney Avatars Create Virtual Bar, Virtual Law & Virtual CLE Courses*, A.B.A. J. (Jan. 8, 2008, 2:29 PM), http://abajournal.com/news/attorney_avatars_create_virtual_bar_virtual_law_virtual_cle_courses; Benjamin Duranske, *SL Bar Association to Offer CLE Credit for In-World Legal Seminars; Initial Sessions Free for Members*, VIRTUALLY BLIND (July 8, 2008),

newly introduced regulations and practices. A direct monitoring organization will only stifle the innovative and open-source nature of many Internet creations, so familiarity with alternative recourse will preserve the Internet community's autonomy.

iii. Online World as a Sovereign Body of Laws

Some scholars have proposed an autonomous, insular system of laws that applies only to the Internet world as a sovereign body.²³⁰ Unfortunately, while the ease of content creation and publication accrues benefits and innovations at an incredible pace, the cost-less and unregulated nature of creating an identity or affiliated product grants too much anonymity for the Internet to be self-governable. Many encrypted services, such as Hushmail,²³¹ allow for complete, free, and easy anonymity, thus creating an accountability vacuum in which fraud can run rampant. Yet confirmation of identity is not impossible online, which is why an online registry system might work.

The Internet provides an easily accessible anonymity that produces the potential for fraud and confusion, but several websites and online vendors have successfully and efficiently resolved the question of online masquerading. Reddit is a popular social news website that allows users to rate news stories and boasts anywhere from four million to six million users in any given month.²³² At times, Reddit must deal with identity authentication because the subreddit²³³ features volunteers who answer questions.²³⁴ IAmA, as in "I am a

<http://virtuallyblind.com/2008/07/08/sl-bar-association-cle-in-world/>).

²³⁰ Conner, *supra* note 200, at para. 63 (citing Todd H. Flaming, *The Rules of Cyberspace: Informal Law in a New Jurisdiction*, 85 ILL. B.J. 174, 174 (1997)).

²³¹ Hushmail is a web-based email service offering PGP-encrypted e-mail, file storage, vanity domain service, and instant messaging. For more information, see Hush Commc'ns Corp., *Hushmail – Free Email with Privacy*, <https://www.hushmail.com/> (last visited Nov. 13, 2010).

²³² Compete, Inc., *Site Profile for reddit.com (rank #906) | Compete*, <http://siteanalytics.compete.com/reddit.com/?metric=uv&months=12> (last visited Nov. 13, 2010).

²³³ The site is a conglomeration of various boards, known as subreddits, where users can post news, information, and links to other websites. Users then promote ("upvote") or demote ("downvote") submissions based on interest or worthy discussion content.

²³⁴ Various AMAs (Ask Me Anythings) have featured notable figures such as Stephen Colbert (political satirist), Michio Kaku (physicist), Stephen Chao (former FOX president) and C.S. Lee (actor), as well as non-celebrities who are willing to share their lives, such as 911 operators, people fresh out of surgery or jail, company founders, or admissions advisors. *See generally* AMA, <http://www.reddit.com/r/ama> (last visited Dec. 23, 2010); *see generally* reddit, *Stephen Colbert has answered your questions*, REDDIT, http://www.reddit.com/r/IAmA/comments/ee20j/stephen_colbert_has_answered_your_questions/ (Nov. 30, 2010); *see generally* Zuluu, *IAmA, Dr. Michio Kaku*, REDDIT,

____,” regularly features individuals whose identities are confirmed through various methods by the moderators of Reddit.²³⁵ Moderators mark the verified posts using a star²³⁶ and the site requires anyone claiming to be a “celebrity or notable public figure” to provide proof or risk his post’s removal.²³⁷ Amazon also provides “Real Name Attribution,” wherein a reviewer can establish consistent credibility by using a credit card to authenticate his identity.²³⁸ Therefore, some form of such existing authentication practices can effectively realize accountable registration of virtual property.

Even with identity confirmation, a self-contained online governance system could not hope to acquire legitimacy without significantly connecting to the physical world. The unique populist-based nature of Internet communities means that with their traffic and support, or “people-power,” user popularity can make a new ISP an overnight sensation or just as easily jettison or pirate unpopular ISPs and ISP practices. As a result, ISPs cannot be called upon to stably represent users the same way nations represent their populace at WTO summits and United Nations meetings. The cost for pulling out of responsibilities is very low for profit-based ISPs who no longer have an interest in Internet regulation. Careful users might easily avoid prosecution by abandoning accounts, assuming new identities and IP addresses, and encrypting any physical data, without fear of real-world repercussions.

http://www.reddit.com/r/IAMa/comments/eqnvp/iama_dr_michio_kaku/ (Dec. 23, 2010); see also stephenchao, *I was President of Fox, got fired by Rupert Murdoch, and now I own a web company* AMA, REDDIT, http://www.reddit.com/r/reddit.com/comments/ejo7w/i_was_president_of_fox_got_fired_by_rupert/ (Dec. 10, 2010); par5, *Hey it's Masuka. I'm new to Reddit and love it! AMA (not sure if I'm doing this right)*, REDDIT, http://www.reddit.com/r/reddit.com/comments/dk62q/hey_its_masuka_im_new_to_reddit_and_love_it_ama/ (Sep. 28, 2010).

²³⁵ */r/IAMaFAQ*, <http://www.reddit.com/help/faqs/iama> (last visited Dec. 23, 2010) (describing rules for IAMA, and the verification process); see also *IAmA Verified Submissions*, <http://ttam.org/reddit/> (last visited Nov. 13, 2010) (list of all verified IAmA submissions).

²³⁶ MercurialMadnessMan, *Verified posts are now indicated by a star. : IAmA* (Oct. 8, 2009), <http://www.reddit.com/r/iama/comments/9s6um>.

²³⁷ 32bites, *I am A, where the mundane becomes fascinating and the outrageous suddenly seems normal.*, REDDIT, <http://www.reddit.com/r/IAMa/> (last visited Apr. 5, 2010) (“Anyone claiming to be a celebrity or notable public figure must provide proof (an official Twitter update or a photo holding a note works) to everyone or a moderator. Posts that don’t follow this rule will be removed. If someone can’t provide enough proof to confirm they are who they say they are, a mod may give them a silver star [rather than a gold star] meaning ‘This person is probably who they say they are.’”).

²³⁸ Amazon.com, Inc., *Amazon.com Help: Your Real Name Attribution*, <http://www.amazon.com/gp/help/customer/display.html?nodeId=14279641> (last visited Mar. 15, 2010).

Net neutrality and open-source movements provide hope for an eventual democratic and autonomous community comprised of a citizenry knowledgeable in the field. Yet, as the Internet increasingly pervades the real world and vice versa, the Internet community cannot hope to govern itself as an island, independent of real world concerns and enforcement. Perhaps in the future, when universal connectivity and technology removes permanent tangibility from goods and borders, the Internet can truly assert universal jurisdiction. Until then, current circumstances do not allow online denizens to completely unplug from the legal realities of the physical world.

iv. No Regulation: Passive Contract-based World

The Internet might also police itself in an unregulated market-based, contract-based world. Contractual governance is not a novel idea, and in fact could be more equitable for users than a broad international treaty requiring a minimum of Internet-specific standards. *Bragg v. Linden* demonstrated the potential unconscionability of developer-dictated EULAs.²³⁹ User objections to EULAs can litigate such issues and rely on market forces to resolve discrepancies.²⁴⁰ However, an airtight EULA can remove user rights by precluding chances at litigation, arbitration, or any other legal recourse. Furthermore, the pace of judicial innovation may appear to create an advantage over international treaty negotiations, but the USPTO's past behavior²⁴¹ and the language of jurisprudence in dealing with ISPs,²⁴² demonstrates judges' inadequacy of information and experience to properly adjudicate Internet cases.

An additional problem with relying on contracts is that ISPs and their contracts govern many online transactions. Extending rights and actions to third parties that have not participated in such contracts presents problematic limitations regarding damages and performance remedies.²⁴³ Using only contracts without further Internet-specific regulation challenges registration

²³⁹ *Bragg v. Linden Research, Inc.*, 487 F. Supp. 2d 593 (E.D. Pa. 2007).

²⁴⁰ Jacob Rogers, Note, *A Passive Approach to Regulation of Virtual Worlds*, 76 GEO. WASH. L. REV. 405, 423 (2008).

²⁴¹ See Lowry, *supra* note 19, at 132 (discussing USPTO's handling of digital trademark registration).

²⁴² Rogers, *supra* note 240, at 423 ("...the integrity of the judicial system is maintained by avoiding the creation of inapt metaphors to deal clumsily with arguably fake events. In the early days of the Internet, courts 'analogized [Internet service providers] to telecommunications carriers, newsprint publishers, landlords of dance halls playing music illegally, landlords for the operators of infringing record swap-meets, and illegal radio stations.'") (quoting Dan Hunter, *Cyberspace as Place and the Tragedy of the Digital Anticommons*, 91 CAL. L. REV. 439, 474 (2003)).

²⁴³ Joshua A.T. Fairfield, *Anti-Social Contracts: The Contractual Governance of Virtual Worlds*, 53 MCGILL L. J. 427, 450 (2008).

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enforceability and true protection because EULAs and ToS's do not bind infringing parties to the property and contract clauses they often feature between ISP and user.²⁴⁴ Contracts cannot be the sole source of regulation and governance in the Internet world.

V. CONCLUSION

Current international treaties lack a coherent definition of what constitutes "virtual property" online, and are not ready to face the growing legal needs of a rapidly expanding online population. Online theft, online counterfeiting, online fraud, and online civil disputes all happen internationally, yet the legal responses to these activities are inconsistent across borders. Current international treaties that apply to virtual property only do so by drawing inadequate analogies to non-virtual technologies. These analogies are shackled to national boundaries and physical objects whose online and legal significance is ancillary at best. Avatars, domain names, virtual chattels, and intellectual property are all distinctive forms of virtual property that must be defined and addressed as multinational elements that transcend domestic regulations. A new broad, online-focused international treaty and governing body will better treat the Internet on its own terms, with specific regulatory mechanisms and organizations and a coherent message for virtual property needs.

²⁴⁴ *Id.* at 451.