THE DEVELOPMENT AND FAILURE OF SOCIAL NORMS IN SECOND LIFE

PHILLIP STOUP†

ABSTRACT

This Note analyzes the development and efficacy of social norms in maximizing the welfare of participants in the virtual community of Second Life. Although some of these norms developed appropriately in response to the objectives and purposes of this virtual world, Second Life is so thoroughly steeped in conditions that have impeded the development of successful social norms in other communities that any system of social norms in Second Life will ultimately fail. Because social norms will likely fail to successfully maximize resident welfare, regulatory schemes imposed both by the operators of the virtual world and by real-world governing institutions are needed to enhance the functioning of this particular alternative reality inhabited by millions.

INTRODUCTION

Beliefs lawyers hold about computers, and predictions they make about new technology, are highly likely to be false. This should make us hesitate to prescribe legal adaptations for cyberspace. The blind are not good trailblazers.[1]

Despite Judge Frank Easterbrook's admonition, for over two decades lawyers and legal scholars have debated the role, presence, and effect of real-world regulations on the internet and property in

---

1. Frank H. Easterbrook, *Cyberspace and the Law of the Horse*, 1996 U. CHI. LEGAL F. 207, 207.

cyberspace. For ease of understanding, this ongoing debate can be divided into two opposing viewpoints on how real-world legal rules and regulations should affect the internet and virtual property: first, a camp of "exceptionalists" who believe that cyberspace is fundamentally distinct from the real world and thus should be subject to a different set of rules, and second, a camp of "unexceptionalists" who believe that cyberspace is no different from the real world and should be governed by the same regulations.[2]

Out of this debate between the exceptionalists and the unexceptionalists emerged a middle ground: the theory of "Code is Law" recognizes both the validity of cyberspace as a distinct world regulated by the computer code that defines it,[3] and the theory acknowledges a need for some level of real-world regulations to protect the virtual world from infractions its regulating computer code cannot prevent.[4] This theory, formulated primarily by Professor Lawrence Lessig, can be further illustrated by analogizing the balance between computer code and real-world law to a farmer installing fences around a field.[5] There, the fencing operates like the computer code: it stops potential intruders from accessing the farmer's land by making access to the land impossible where the fence bars the way. Like computer code that can be hacked or manipulated, however, a trespasser can climb over the fence or cut through its barbed wire. Therefore, society needs laws and rules like the tort of trespass to protect further the farmer's land when the fence fails.[6] In cyberspace this interplay between computer code–created rules and real-world regulation presents two questions, which are further explored in this Note. First, if there is to be a mix between code-created rules and real-world regulations, what is the optimal combination? And second, if code-created rules are to at least partially govern the internet and

---

2. Julie E. Cohen, *Cyberspace as/and Space*, 107 COLUM. L. REV. 210, 213–14 (2007).

3. LAWRENCE LESSIG, CODE: VERSION 2.0, at 83–84 (2006) ("Life in cyberspace is regulated primarily through the [computer] code of cyberspace. . . . Regulated in the sense that bars on a prison regulate the movement of a prisoner, or regulated in the sense that stairs regulate the access of the disabled. Code is a regulator in cyberspace because it defines the terms upon which cyberspace is offered.").

4. Greg Lastowka, *Decoding Cyberproperty*, 40 IND. L. REV. 23, 59–60 (2007).

5. LESSIG, *supra* note 3, at 169–71.

6. Lastowka, *supra* note 4, at 60 (agreeing with Lessig that "the correct solution would not depend wholly upon technology, but would mix some degree of private fencing and some degree of trespass law").

cyberspace, who is best positioned to create these new governing laws?[7]

The optimal mix between code-created rules and real-world regulations could be determined by finding the "mix that provides optimal protection at the lowest cost."[8] Put differently, the determination of what norms ought to be used in cyberspace should be guided by the consideration of what norms will maximize the participants' welfare.[9] This economic-minded analysis is not a call for a uniform set of norms to be applied to the internet as a whole.[10] Instead, whatever norms that a society employs must necessarily be highly tailored to the context in which they are applied. Therefore, the first step in determining what norms should be used is to ascertain the potential objectives of the cyberspace being regulated.[11] The second step, in light of those objectives, is to choose the rules that maximize the welfare of the various participants in this particular area of cyberspace.[12] This highly tailored approach to rule creation in cyberspace may also require rules to be created by small communities that are intimately associated with the objectives of the portion of cyberspace being regulated. This microapproach to rule propagation suggests that social norms created by individual communities may be the most efficient approach to rule creation in cyberspace.

Even if the above assertions are correct and lead to optimal welfare maximization, they are meaningless if the parties choosing the mix are irrational, if there exist inefficiencies barring an effective negotiation, or if other transaction costs are so high that it is

---

7. *See* LESSIG, *supra* note 3, at 6–8 (identifying the choice of government and checks on that government as questions that should be answered). Lessig implied a desire for the users of the internet to create governing rules. He feared that the special interests of government would be ill suited to promulgate efficient regulating norms. *Id. But see* Joel R. Reidenberg, *Lex Informatica: The Formulation of Information Policy Rules Through Technology*, 76 TEX. L. REV. 553, 587 (1998) (arguing that code-created regulations should be harnessed in the service of state and regulatory interests).

8. LESSIG, *supra* note 3, at 169.

9. Robert C. Ellickson, *A Hypothesis of Wealth-Maximizing Norms: Evidence from the Whaling Industry*, 5 J.L. ECON. & ORG. 83, 84 (1989).

10. *See* ROBERT C. ELLICKSON, ORDER WITHOUT LAW: HOW NEIGHBORS SETTLE DISPUTES 169 (1991) ("The hypothesis of welfare maximizing norms is not a blanket normative recommendation that social controllers use norms as rules.").

11. *See* JOHN P. DWYER & PETER S. MENELL, PROPERTY LAW AND POLICY: A COMPARATIVE INSTITUTIONAL PERSPECTIVE 59–60 (1998) (suggesting by way of example a method for analyzing social norms in a community).

12. *See id.* (explaining and applying the suggested two-step process for analyzing social norms in a community).

impossible to develop a system of norms that will regulate the participants in such a way that their welfare is maximized efficiently.[13] This Note analyzes one area of cyberspace, the virtual world of Second Life,[14] to determine whether the mix of code-created rules and real-world regulation is maximizing the participants' welfare. Additionally, this Note analyzes and compares the efficacy of norms being created by Second Life participants who are intimately close to its objectives against the norms being developed by the world's creators or some real-world regulatory body.

To determine if the norms in Second Life are efficient, several legal theorists' observations regarding the emergence and efficacy of social norms in other communities will be used as a framework.[15] To establish the first component of this framework, this Note surveys the conditions affecting the treatment of property in these other communities and analyzes the policies and objectives of those communities. The second component of this framework is established by comparing the conditions, policies, and objectives that gave rise to the social norms in these other communities with the conditions giving rise to the emerging norms in Second Life. This comparison illuminates the efficacy of social norms in Second Life.

Although Second Life seems to be an ideal environment for social norms to maximize participants' total welfare given the overall objective of this virtual world,[16] the conditions of this virtual reality make social norms alone an inefficient vehicle to maximize the participants' well-being. Part I of this Note describes the virtual world of Second Life and differentiates it from other cyber realities. Part II compares the objectives that gave rise to successful social norms in other small communities to some of the objectives that inspired the social norms that have developed in Second Life. Part III shows that conditions in Second Life are not conducive to social norms operating efficiently. Finally, to best allocate property rights within the virtual community and to guide real-world courts and regulators in resolving

---

13. Harold Demsetz, *Toward a Theory of Property Rights*, 57 AM. ECON. REV. 347, 347–50 (1967).

14. *See infra* Part I (describing the video game-like world of Second Life where people can interact with each other and the cyber-landscape in a virtual three-dimensional setting).

15. *See generally* JAMES M. ACHESON, THE LOBSTER GANGS OF MAINE (1988) (revealing the complex web of relationships affecting lobster fishermen); Ellickson, *supra* note 9, at 84 ("This essay advances the hypothesis that when people are situated in a close-knit group, they will tend to develop for the ordinary run of problems norms that are wealth-maximizing.").

16. *See infra* Part I.

virtual-world disputes, Part IV recommends combining real-world regulation with the code-based regulation in the virtual world. In conclusion, this Note observes that lessons learned from this analysis of Second Life can be extrapolated to other virtual realities and other online communities in an attempt to better maximize cyber residents' welfare.

I. DESCRIPTION OF SECOND LIFE

Second Life, created by the California-based corporation Linden Lab, is a virtual world in which users can interact with each other in a three-dimensional setting.[17] Unlike other popular virtual worlds,[18] Second Life does not focus on a story or some overarching quest that unites its users.[19] Instead, Second Life is simply a forum in which people, through virtual representations known as "avatars," can interact with each other and engage in general commerce through the production, sale, and acquisition of virtual goods.[20]

Second Life as a world is often referred to as the "grid."[21] The world of Second Life is referred to as the grid because its virtual landscape is nothing more than a patchwork of individual regions called "Sims," which is short for simulators.[22] These regions each cover an area of 65,536 virtual square meters and are often subdivided into smaller parcels, which residents can purchase for their own use.[23] The grid is aptly described as a patchwork of Sims because each Sim is unique. For instance, some Sims are devoted to building activities and include vast empty areas where residents can build

---

17. Cory Ondrejka, *Collapsing Geography:* Second Life*, Innovation, and the Future of National Power*, INNOVATIONS, Summer 2007, at 27, 30 (describing Second Life as a simulated world, roughly the size of Singapore, with approximately seven million users).

18. Other virtual worlds include World of Warcraft, Eve Online, Sims Online and Everquest.

19. By contrast, the participants in the online multiplayer game World of Warcraft are united through the gameplay elements of engaging in various quests that increase the users' virtual characters' abilities and wealth. World of Warcraft Guide, http://www.worldofwarcraft.com/info/basics/guide.html (last visited Oct. 10, 2008).

20. Second Life, What is Second Life?, http://secondlife.com/whatis (last visited Oct. 10, 2008).

21. MICHAEL RYMASZEWSKI ET AL., SECOND LIFE: THE OFFICIAL GUIDE 366 (2d ed. 2008).

22. *Id.* at 6. The name derives from the fact that each region was originally compartmentalized on its own server. *Id.*

23. *See id.* at 33 (setting out the fees per area).

objects.[24] Other Sims are geared toward providing residents an area where they can engage in combat.[25] Some Sims are dedicated to the special interests of a specific group of residents in Second Life and include massive buildings where the group can meet and discuss their common interests.[26] Many Sims are even dedicated solely to providing Second Life residents a means to earn Linden dollars.[27]

How each Sim is used is largely determined by the owners of that Sim. The owners of the Sim can shape how it is used by creating code-based rules which will automatically prohibit certain behaviors the owners do not want occurring on their virtual land. For example, if the owners of a Sim do not want visitors to create objects while visiting their virtual property, the owners will select in the interface controlling the properties of their virtual land the option disallowing visitors to build objects.[28] After the owners select this option, visitors to their virtual land will not be able to select the control menu that allows them to build objects, thus visitors will be unable to create objects.[29] This method of control is an example of computer code–based regulation governing how residents interact and behave in a Sim by establishing what behavior is possible.

Another way that operators of a Sim can control how their virtual property is used is through establishing ground rules for how users can interact while on the operator's land. These ground rules can be made public to visitors when they enter the virtual land.[30] If

---

24.   *See id.* at 267 (describing such Sims as "sandboxes").

25.   *See* PAUL CARR & GRAHAM POND, THE UNOFFICIAL TOURISTS' GUIDE TO SECOND LIFE 79–82 (2007) (describing the history of "Jessie," a no-holds-barred combat Sim). Residents' avatars cannot be "killed" permanently. Instead, when avatars are slain they are kicked off the Sim where they died and are reincarnated at a point they designate as their home. *See id.* at 81 (mentioning this process).

26.   *See id.* at 85 (describing a Sim called "Luskwood," where a popular group known as "Furries" congregate).

27.   *See* RYMASZEWSKI ET AL., *supra* note 21, at 285 (discussing "camping" jobs that pay residents solely for their presence). A Sim called "Money Island," one of the most frequently visited Sims in Second Life, is an area of the virtual world where residents can make money simply by participating in short surveys. *See* Screenshot No. 1 (on file with the *Duke Law Journal*) (showing an avatar standing in front of a sign advertising how a resident could earn money by participating in a survey).

28.   RYMASZEWSKI ET AL., *supra* note 21, at 35 & fig.2.6 (showing how owners can control their virtual property by selecting options in the "About Land" panel). Some of the options users can select include "restricting access [to the land], issuing permission to run scripts, playing music, [and] banning specific residents." *Id.* at 35.

29.   Screenshot No. 2 (on file with the *Duke Law Journal*) (showing in the upper left corner of the user interface screen an icon indicating that an avatar cannot build in that Sim).

30.   For a description of some visitor-use restrictions, see *infra* notes 101–04 and

any of the ground rules are broken, other residents can report the violation to the owners of the virtual property and the owners can remove, and even bar, the offending visitor from ever visiting their virtual land again.[31]

One of the central tenets of Second Life is that its virtual world is created and owned by the residents and users who actively contribute to the world's content on a daily basis.[32] One way Second Life residents can contribute to the world's content is by creating objects. Users can create objects in Second Life by using a relatively simple three-dimensional graphics-creation software embedded in the game's interface.[33] By using this interface, users can create objects ranging from houses to rocket ships and from televisions to holographic projectors.[34] Through the object-creation system residents can even create the clothes and body parts that their avatars can "wear" to change their appearances.[35] To promote this active production of user-created content, Linden Lab gave its residents ownership over any virtual property they created or acquired in Second Life.[36] This decision led to Second Life being cultivated into a

---

accompanying text.

31. Screenshot No. 3 (on file with the *Duke Law Journal*) (showing the interface that can allow landowners to ban specific Second Life users from their virtual property).

32. RYMASZEWSKI ET AL., *supra* note 21, at 4 ("*Second Life* is a 3D online digital world imagined, created and owned by its residents. . . . [It] is a virtual environment in which almost all of the content is created by users . . . . You are the one who determines what *Second Life* means to you.").

33. Screenshot No. 4 (on file with the *Duke Law Journal*) (showing an avatar using the three-dimensional graphics-creation software).

34. *See* RYMASZEWSKI ET AL., *supra* note 21, at 144–77 (describing the creation process); *see also id.* at 144–45 (picturing an airport); *id.* at 160 (leather chair); *id.* at 38 (water slide); *id.* at 156 (oranges, apples, and bananas); *id.* at 297 (sea plane); *id.* at 126–27 (stone split-level near a lighthouse).

35. *See id.* at 166–68 (calling a wearable object an "attachment"). Users can create content by using the graphic-creation interface to manipulate and link together basic building blocks called "prims." *Id.* at 146. Prims can be molded into various shapes, given different texture qualities, or combined to form larger, more complex objects. *See id.* at 147–58 (providing instructions). Through this sculpting, manipulation, and compilation of prims, users can create sophisticated objects like waterfalls to populate the Second Life world. *See* BRIAN A. WHITE, SECOND LIFE: A GUIDE TO YOUR VIRTUAL WORLD 120–68 (2008) (leading readers step-by-step through the building process); *id.* at 273–78 (instructing readers how to construct a waterfall).

36. RYMASZEWSKI ET AL., *supra* note 21, at 316; *see also* Bragg v. Linden Research, Inc., 487 F. Supp. 2d 593, 596 (E.D. Pa. 2007) ("[Linden Lab's believes that its ownership] policy recognizes . . . users are making significant contributions to building these worlds and should be able to both own the content they create and share in the value that is created. The preservation of users' property rights is a necessary step toward the emergence of genuinely real online

virtual market economy, populated by digital avatars buying and selling virtual goods.[37] This economy of virtual goods does not stop at the edges of Second Life's digital world, but instead continues actively in a variety of internet portals ranging from a currency exchange on Linden Lab's website[38] to online auctions run by eBay where residents can acquire parcels of land.[39]

A Second Life resident gains a number of different ownership rights by acquiring virtual property. Some of these diverse ownership rights include the right to exclude others from using the property, the right to use the property, the right to destroy the property, the right to manipulate or alter the property, the right to prevent others from copying a unique or novel creation, and the right to put the property into the stream of virtual commerce by selling or transferring these rights to another resident. Exercising these entitlements can be done in a variety of ways. For example, the right to exclude others from property and the right to prevent copying of unique creations can be enforced by Linden Lab through the unique identification number Linden automatically generates for each item produced in Second Life.[40] This unique identification number enforces the exclusionary right by allowing Linden Lab officials to track property back to its

---

worlds." (quoting Press Release, Linden Lab, Linden Lab Preserves Real World Intellectual Property Rights of Users of Its Second Life Online Services (Nov. 14, 2003) (on file with the *Duke Law Journal*))).

   37.   Second Life has been described by its founder Philip Rosedale as being

   a developing nation . . . . When we were developing the idea we read a lot of books and were inspired by Hernando DeSoto's *The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else.*

   . . . The fundamental basis of a successful developing nation is property ownership. If people cannot own property, the wheels of western capitalism can't turn from the bottom.

Aleks Krotoski, *Second Life and the Virtual Property Boom*, GUARDIAN UNLIMITED'S GAMES BLOG, June 14, 2005, http://blogs.guardian.co.uk/games/archives/2005/06/14/second_life_and_ the_virtual_property_boom.html (quoting Philip Rosedale).

   38.   Residents of Second Life can trade U.S. dollars for Linden dollars on an exchange hosted by Linden called LindeX. *See* Second Life Currency Exchange, https://secure-web20.secondlife.com/account/login.php?type=second-life-member&nextpage=/currency/index. php (last visited Oct. 10, 2008). Linden dollars are the currency used by residents in Second Life. *Id.*

   39.   Second Life, Land Auctions, http://usd.auctions.secondlife.com (last visited Oct. 10, 2008).

   40.   *See* RYMASZEWSKI ET AL., *supra* note 21, at 7 ("[A]ny of the data [acquiring a unique ID] is guaranteed to be unique across space and time . . . ." (quoting Jeff Luan)).

rightful owner to prevent thefts or unauthorized copying of a virtual object.[41]

Another important feature of Second Life is the basic rules Linden Lab has set to govern residents' behavior in general. The core rules governing interaction between residents are contained in the Community Standards.[42] These rules are also commonly referred to as the "Big Six."[43] Instead of creating clear bright-line rules that residents must conform with precisely, these rules delineate what conduct is prohibited by establishing general standards of how residents should behave.[44] The Big Six are enforced primarily by residents making complaints to Linden Lab authorities.[45] If residents violate any of the Big Six rules, they run the risk of being suspended from Second Life or even having their accounts terminated permanently.[46] But the efficacy of these enforcement measures is uncertain, particularly the ability to terminate users' accounts, which results in the individual losing their virtual property. Part III explores the effectiveness of these enforcement measures in more detail.

Finally, the combination of Second Life's interactive culture and the virtual world's democratic code-based infrastructure, which allows residents to define and implement rules determining their and other residents' behaviors,[47] presents an interesting confluence of two types of social norms regulating user behavior in the virtual world. The first type of social norms, referred to as "non-code-based norms" for the

---

41.   *See id.* (detailing how Linden Labs can use the identification number); *see also id.* at 165 (describing how an object's creator can limit, through "asset permissions" in the Build window interface, other residents' use of that object).

42.   Second Life, Community Standards, http://secondlife.com/corporate/cs.php (last viewed Aug. 29, 2008).

43.   CARR & POND, *supra* note 25, at 40–42. The Big Six prohibit the following conduct: (1) "Intolerance"; (2) "Harassment"; (3) "Assault"; (4) "Disclosure [of another resident's personal information]"; (5) "Indecency"; and (6) "Disturbing the Peace." Second Life, Community Standards, *supra* note 42.

44.   *See* Second Life, Community Standards, *supra* note 42. For example, "harassment" is described as "[c]ommunicating or behaving in a manner which is offensively coarse, intimidating or threatening, constitutes unwelcome sexual advances or requests for sexual favors, or is otherwise likely to cause annoyance or alarm." *Id.*

45.   *See* Second Life, Online Harassment, http://secondlife.com/policy/security/harassment. php (last visited Oct. 10, 2008) (instructing victims to file abuse reports for violations of Linden Lab's Community Standards).

46.   CARR & POND, *supra* note 25, at 40.

47.   "Democratic" in this instance refers to an approach of code creation, and in turn rule creation, which is decentralized, open to all residents, and not exclusively in the hands of the world's operators or original creators. For a description of the types of user-created rules, see *infra* notes 50–51 and accompanying text.

remainder of this Note, are norms that residents and the operators of Second Life create and enforce. An example of a non-code-based norm is the Big Six rules of behavior propagated by Linden Lab and policed largely by residents. Another example of non-code-based norms is the sanction of unfavorable gossiping.[48]

The second type of social norm in Second Life is code-based norms. Code-based norms can be created and employed by both residents and Linden Lab to fulfill the virtual world's important objectives, but unlike non-code-based norms, these rules are enforced through the very computer code of Second Life. As illustrated by the theory of "Code is Law,"[49] these norms enforce rules by defining what conduct or behaviors are possible in the computer program's virtual world. An example of a code-based social norm is an object creator's ability to define who can use the virtual property by making it impossible for those not entitled to use the property to put it into their inventory—a cyber "purse" where residents can store items they have collected.[50] Another example of a code-based social norm is the ability to define how an object will be used even after it has left the creator's control.[51] Like the previous examples for non-code-based norms, this list is not an exhaustive survey of all the code-based social norms in Second Life. The residents' ability to define through the very code of Second Life's program how their property is used, transferred, manipulated, or destroyed even after it has left the creator's control presents a plethora of possible code-based social norms that are commonly used to achieve the important objectives of this virtual community.

---

48. Users can sanction violators with unfavorable gossip by reporting the violator's illicit behavior (usually conduct prohibited by the Big Six) on public weblogs and websites. *See infra* Part III.

49. *See supra* notes 3–6 and accompanying text.

50. *See* RYMASZEWSKI ET AL., *supra* note 21, at 165 (discussing asset permissions); *see also id.* at 128 (showing a screenshot of an aviatar's inventory and explaining how an inventory functions in Second Life).

51. *See generally* WHITE, *supra* note 35, at 229–51 (describing some thirty ways in which scripting language, a more sophisticated component of the object-creation system, allows users to manipulate their creations' qualities). For instance, a script can be placed on a house to make it impossible for certain residents selected by the owner to enter the home. *See id.* at 230, 245–46 (describing a mechanism for locking one's virtual door).

II. The Development of Social Norms in a Small Community

To better understand how norms developed in Second Life and whether those norms are efficient in maximizing residents' welfare, this Part compares studies of social norms in other communities. This comparison focuses on the objectives and other factors that gave rise to effective social norms in these other communities. This comparison reveals that social norms have thrived in communities in which effective monitoring and sanctions for offending behavior are possible, adherence to and knowledge of the existing social norms are pervasive, and reciprocity between the community's members is common. In addition, the comparison focuses on which conditions prevent social norms from maximizing participants' welfare. Although the communities in this comparison are smaller and quite different in composition from the virtual world of Second Life, the common themes of these communities are illustrative in evaluating the potential success or failure of code-based and non-code-based social norms in Second Life.

A. Development of Norms in Other Small Communities

Like many fisheries across the world, the lobster beds off the coast of Maine are a finite resource. But unlike many fisheries, the Maine lobster beds are closely guarded and monitored by effective social norms that have emerged from the close-knit community. One of the most important social norms to emerge in this community was the establishment of territories over which small groups of lobstermen could claim ownership.[52] This particular social norm emerged, at least in part, to address the important objective of preserving the lobster population levels in Maine's coastal waters.[53] Although the gangs' territories are not recognized by any regulatory

---

52. *See* ACHESON, *supra* note 15, at 3 ("The most distinctive feature of lobstering clusters or harbor gangs is that they claim and defend fishing areas. Territoriality does not exist in any other Maine fishery."). The lobstermen of Maine are mostly divided into smaller groups often referred to as harbor gangs. *Id.* at 48. These smaller groups possess tracts of water off the coast in which they have the right to set traps for lobsters. *See id.* at 48–49 (describing the gangs' system of communal ownership). Through the social norms established by the larger community, gang members may destroy other gangs' traps placed within the first gang's territory. *Id.* at 48–49.

53. *See id.* at 55–56 ("[B]iologists are convinced that a fixed number of legal-sized lobsters inhabit any given area. If one man takes them, another cannot."); *id.* at 154–57 (laying out the economic and biological benefits of the gangs' trap-limiting policies).

body outside the small lobstermen communities, these norms are effective in regulating the lobstermen's interactions and, more importantly, their exploitation of the open resource of the lobster beds.[54] Partially privatizing the open resource is also advantageous because it forces the gangs to internalize the costs of owning their tracts.[55]

Effective monitoring and enforcement of the norms are two of the factors contributing to the success of these social norms when they operate outside the bounds of official regulation.[56] If conditions had made effective monitoring impossible, or if the repercussions for violating the social norms were inadequate, then the norms would likely have been ineffective in regulating community participants' behavior.

Similar to the emergence of social norms in the lobstermen communities, social norms emerged among early American whalers to address the varying needs of their resources' particular characteristics. Depending on the type of whale, the needs of the whalers were fundamentally different.[57] Early American whalers primarily hunted two types of whales:[58] the sperm whale, which is an aggressive, quick-moving creature that can be difficult and even dangerous to catch;[59] and the right whale, which by contrast is a slow and docile creature that is significantly easier to kill.[60] Unlike the sperm whale, however, the right whale can sink after it is killed, thus making it difficult for the whalers who killed the beast to claim its carcass.[61] The different characteristics of these two resources generated different norms determining when and how a whaler could

---

54. *See id.* at 49, 154–57 (describing the self-imposed regulations' efficacy).

55. *See* Demsetz, *supra* note 13, at 350 ("[T]he main allocative function of property rights is the internalization of beneficial and harmful effects . . . .").

56. *See* ACHESON, *supra* note 15, at 73–77 (examining how the lobstermen police their territory).

57. *See* Ellickson, *supra* note 9, at 89–94 (describing whaling property norms as the wealth-maximizing outgrowth of different whale species' attributes).

58. *See id.* at 91 (discussing the different norms for sperm and right whales).

59. *See id.* ("[S]perm whales swim faster, dive deeper, and fight more viciously than right whales . . . . The vigor of the sperm whale . . . increased the chance that a line would not hold or would have to be cut to save the boat."). If the sperm whale were able to break free from the lines and escape the hunt, it could still die later to be harvested by whalers who did not exert any effort or undertake any risk to capture the creature. *See id.* at 92 (describing the emergence of the "iron-holds-the-whale" rule).

60. *See id.* at 89 ("Because right whales are relatively slow and docile, a whale on a line was not likely to capsize the harpooning boat, break the line, or [otherwise escape] . . . .").

61. *Id.* at 89–90.

establish a property claim over a slain or wounded whale because a single property norm would not have successfully accounted for both sperm and right whales' respective traits.[62] For example, a rule that allocated property rights to whoever first marked the whale with a "waif," or unique harpoon, was effective for sperm, but not right, whales.[63] The waif system suited sperm whales because they travel in schools, rewarding "boatsmen [who could] kill or mortally wound as many animals as quickly as possible" without forcing them to "paus[e] to secure the stricken whales to the mother ship."[64] But the waif system would have provided the wrong incentives for hunting docile, solitary right whales; instead, granting rights to whoever could keep the whale tethered to their ship "reward[ed] the first harpooner, who had performed the hardest part of the hunt, as opposed to free riders waiting in the wings."[65]

These norms were successful in regulating the behavior of the whalers because the social norms incorporated the community's important objective of allocating the ownership of the whale in such a way to maximize the community's wealth.[66] Additionally, the norms were successful because they were adopted and respected by the members of the whaler communities.[67] If these norms had not been followed by members of the community, or had there been a large influx of outsiders who disregarded the social rules, these norms would have been ineffective in regulating the participants' behavior in this small community.[68]

Finally, to at least partially avoid the high transaction costs associated with resorting to the legal system for rule enforcement, a small community of ranchers in a rural region of northern California, Shasta County, developed a set of social norms to regulate the behavior of the community's members.[69] For example, the social norm

---

62. *See id.* at 88–92 (differentiating the "fast-fish, loose-fish" rule for right whales from the "iron-holds-the-whale" rule for sperm whales).

63. *See id.* at 91–92 (describing the "waif-holds-a-whale" practice).

64. *Id.* at 91.

65. *Id.* at 89–90.

66. *Id.*

67. *See id.* at 94 ("Whalers had little use for law or litigation. . . . [F]or more than a century[,] American whalers [were] able to resolve their disputes without any reassurance from American courts.").

68. *See id.* at 94–95 n.39 (describing the norms' breakdown as the whaling community became "less close-knit" and "whalers' informal system of social control began to unravel").

69. *See* ELLICKSON, *supra* note 10, at 52, 61 (describing the residents' practices and attitudes).

of "neighborliness" was developed in this small community to protect the community members from the trespass of other members' cattle.[70] The social norm of neighborliness operates by creating the expectation that it is not morally justified to either reap a benefit or cause harm to another person without first providing fair compensation.[71] Thus, a rancher whose cattle wanders into a neighboring ranch causing damage to the neighbor's property would be compelled under the guidance of the social norm of neighborliness to provide fair compensation for the damaged property, even though the rancher may not be required to do so under state law because both tracts of land are in an "open range."[72] This loosely defined social norm of neighborliness is effective in regulating the community members' behavior because this form of social control is enforced through effective self-help sanctions like negative gossiping.[73] Negative gossiping is an effective sanction because the community's participants highly value their reputations and their reputations can be marred by negative social gossip spreading through the tight-knit community.[74] If either the members of the community did not value their reputations, or there was no reciprocity between the neighbors, the sanction of negative gossip would be an ineffective means of enforcing the social norm. Additionally, like the norms that developed in the community of lobstermen and whalers, the social norms that developed among these ranchers were successful because they incorporated the community's important objective of avoiding the high transaction costs that can arise when disputes resort to legal resolution.

The efficacy of social norms in these three communities required not only the incorporation of the communities' important objectives into the structure of the norms, but also the presence of a number of other factors. Some of the factors necessary for social norms to function efficiently include effective monitoring and sanctions for

---

70. *Id.* at 53.

71. *See id.* ("Cattlemen typically couch their justifications for the norm in moral terms. . . . Dick Coombs: It 'isn't right' to get free pasturage at the expense of one's neighbors. . . . Attorney-rancher Pete Schulz: A cattleman is 'morally obligated to fence' to protect his neighbor's crops, even in open range.").

72. *See id.* at 56 (describing one such incident).

73. *See id.* at 58 (illustrating how "truthful negative gossip" effectively sanctions nonneighborly behavior without resort to any legal authority).

74. *See id.* at 57 (describing the ranchers of Shasta as a close-knit group of neighbors who strongly "value their reputations in the community" because they plan to reside in Shasta indefinitely).

offending behavior,[75] adherence to and knowledge of the existing social norms,[76] and reciprocity between the community's members.[77] No one of these factors is likely dispositive in determining the success or failure of a social norm; taken together, however, these factors can determine whether a set of norms will efficiently regulate a participant's behavior within a community.

B. The Development of Social Norms in Second Life

Like social norms in other communities, social norms in Second Life developed largely in response to the virtual world's important objectives. Some of the important objectives in Second Life include the objectives of "creator empowerment," "respect," and "entrepreneurship."

One of Second Life's important objectives is to provide users the ability to maintain ownership rights over their virtual land and property.[78] To perpetuate this objective of "creator empowerment," the virtual world of Second Life has developed a set of social norms enabling owners of virtual property to define how their property is used. These norms are exercised both through the very code of the Second Life program and through the rules propagated by Second Life residents. For example, code-based social norms, like the ability to exclude others from using a virtual object through Second Life's scripting language, can define and protect an individual's ownership over virtual property.[79] Similarly, non-code-based social norms such as owner-created rules protect ownership rights by defining how visitors to an owner's Sim should behave.[80] Unlike code-based norms regulating visitor behavior, non-code-based norms require monitoring by the virtual land's owner and other visitors. If offending behavior is discovered, the landowner can enforce social norms preserving the

---

75. *See supra* notes 52–56 and accompanying text.

76. *See supra* notes 66–68 and accompanying text.

77. *See supra* notes 69–74 and accompanying text.

78. *See supra* Part I.

79. *See supra* notes 49–51 and accompanying text.

80. The Sim titled "The Sand Box on Heron Island" delivers rules to visitors the moment they enter the Sim in two ways: Rules are sent first via a message to the resident, delivered as a downloadable note. The rules of the Sim are also made available via giant signs near the entrance of the Sim. The sign in this particular Sim is user friendly, complete with a computer code function allowing the resident to change the language of the sign if the user does not read English. Screenshot No. 5 (on file with the *Duke Law Journal*) (showing the downloaded note transmitted automatically to the Sim's visitors and the billboard that welcomes the visitors when they arrive).

creator empowerment objective by either removing the offender from the Sim using a code-based tool or reporting the offender to Linden authorities for further sanctions.[81]

Another important objective of Second Life is to ensure that the interaction between the world's residents is respectful.[82] This objective prompted the development of norms fulfilling the objective of user "respect." One of these norms in Second Life is the Big Six rules created by Linden Lab.[83] Code-based norms like the automated controls set by Sim owners can also regulate the behavior of visitors to a Sim and thus also serve to fulfill the objective of ensuring respectful interactions between Second Life residents. For example, Sim owners can designate their Sims, through the user interface controlling the properties of their Sims, a "safe zone" where it is impossible to bring any object classified as a weapon.[84] This code-based norm is often employed to keep "griefers," Second Life residents who intend to harass and annoy other residents,[85] from creating a nuisance in a Sim.

Furthermore, the objective of "entrepreneurship" developed in Second Life in response to Linden Lab's desire to build a virtual world where the users would populate the alternate reality with user-created content.[86] To perpetuate the entrepreneurship objective, multiple social norms in Second Life emerged. These norms serve the entrepreneurship objective by creating incentives, primarily the incentive of earning a profit—both in the form of real-world currency and the virtual currency of Second Life—to create objects that will populate the virtual world. The entrepreneurship objective has largely been realized by several non-code-based norms that were established by Linden Lab in response to the growing requests of many Second Life residents. In particular, Linden Lab decided to adopt a "laissez-faire policy on buying and selling the official in-world

---

81. Second Life, Online Harassment, *supra* note 45.

82. *See* Second Life, Community Standards, *supra* note 42 (requiring users, through Second Life's Community Standards, to treat each other with "respect and without harassment").

83. *See supra* notes 42–46 and accompanying text (describing the broad standards of conduct with which the Big Six rules require residents to comply and how the rules are often enforced by residents lodging complaints of violations).

84. *See* CARR & POND, *supra* note 25, at 211–12 (describing how it would be impossible to bring a weapon into a "safe zone" because the code of Second Life will automatically remove any person who attempts to enter a safe zone with a weapon).

85. WHITE, *supra* note 35, at 358 ("A griefer is an individual whose enjoyment of [Second Life] is enhanced by negatively affecting the experience of other [Second Life] residents.").

86. *See supra* Part I.

currency" on open markets like Amazon or eBay for real-world money.[87] Additionally, Linden Lab followed the suggestions of Professor Lessig and began to formally recognize Second Life residents' intellectual property rights over the objects they created within the virtual world.[88] These two policies, inspired by Second Life residents, were the nucleus of the virtual economy's boom because these norms established the foundations of a viable market economy by creating real incentives for individuals to invest time and effort in creating virtual goods.[89]

Although these three important objectives and their corresponding norms cover a wide range of interactions in Second Life, they are by no means an exhaustive list of the objectives and norms that have developed in the virtual world. This limited sample, however, serves as a useful starting point for determining whether the necessary conditions are present for social norms to effectively regulate the cyber-reality of Second Life.

III. CONDITIONS FACILITATING AND IMPEDING THE EFFICACY OF SOCIAL NORMS IN SECOND LIFE

Studies of social norms in other communities indicate that several conditions may be required for social norms to successfully maximize the welfare of Second Life participants.[90] Some of the conditions include effective monitoring and adequate sanctions for behavior that violates the norms, adherence to and respect for the established norms, and reciprocity between the participants in the community.[91] Despite the existence of some conditions facilitating the development of social norms in Second Life, the pervasive presence

---

87. RYMASZEWSKI ET AL., *supra* note 21, at 316. This laissez-faire policy is different than the stance taken by many other online virtual worlds that forbid the exchange of virtual currency for real-world currency. *See, e.g.*, World of Warcraft, Terms of Use Agreement, http://www.worldofwarcraft.com/legal/termsofuse.html (last visited Oct. 10, 2008) ("Blizzard does not recognize any virtual property transfers executed outside of the Game or the purported sale, gift or trade in the 'real world' of anything related to the Game. Accordingly, you may not sell items for 'real' money or otherwise exchange items for value outside of the Game.").

88. RYMASZEWSKI ET AL., *supra* note 21, at 316.

89. *See id.* (describing how the growth of a "substantial mercantile class" of artisans, entertainers, builders, and designers was the byproduct of Linden Lab's decisions to allow residents to retain ownership of virtual goods and to allow the free exchange of virtual Linden dollars for real-world currency).

90. *See supra* Part II.A.

91. *See supra* Part II.A.

of conditions impeding the development of social norms such as the inadequate sanctions implemented by Linden Lab, ineffective policing for offensive conduct, marginal adherence to the social norms resulting from an influx of uneducated outsiders, and a lack of reciprocity stemming from the anonymous format of the network, have likely stymied the efficacy of social norms in maximizing the welfare of the virtual world's residents.

A. Monitoring and Sanctions

Similar to the monitoring scheme enacted by the Maine lobstermen,[92] much of the monitoring for offending behavior in Second Life is conducted by the participants in the community. For instance, when a resident contravenes one of the standards set out in the Big Six, any resident who witnessed this breach of conduct can file a report with Linden Lab and start a process that could end in a sanctioning of the alleged illicit behavior.[93] Additionally, groups of concerned residents have also come together to form groups that police the Sims of Second Life, looking for any residents who are acting in contravention of the norms of respect. One of the most famous vigilante groups is the Second Life Alliance.[94] Unlike the above example of individuals acting independently, members of the Second Life Alliance dealt directly with the offensive behavior by punishing it in turn with their own form of griefing.[95]

Unlike the relatively small community of Maine lobstermen, the world of Second Life is massive with over fifteen million registered users,[96] thousands of groups,[97] and more than twenty million dollars spent in the virtual world every month.[98] Because of the massive scope and scale of interactions between Second Life residents, it is very difficult for Linden Lab authorities to effectively monitor the entire

---

92. *See supra* notes 52–56.

93. Second Life, Online Harassment, *supra* note 45.

94. CARR & POND, *supra* note 25, at 66.

95. *See id.* (describing how the Alliance built massive ships around the afflicted areas, and how they used these ships to compel behavior the Alliance deemed acceptable).

96. Second Life, Economic Statistics, http://secondlife.com/whatis/economy_stats.php (last visited Oct. 10, 2008).

97. CARR & POND, *supra* note 25, at 50.

98. *See* Second Life, Economic Statistics: Graphs, http://secondlife.com/whatis/economy-graphs.php (last visited Oct. 10, 2008) (indicating the historic amount of U.S. dollars spent per month in Second Life).

grid.[99] This inability to police the entire grid could prompt users to file tort claims of negligence against the operators of the virtual worlds for failing to ensure the safety of the network.[100] Therefore, the exponential success and growth of Second Life may have generated the condition of ineffective monitoring which will in turn impede the proper development of efficient social norms.

Despite the inherent difficulties of monitoring a massive community of individuals, Second Life has improved on the group monitoring schemes used by the Maine lobstermen by employing some automated monitoring controls to alert Linden officials of offending behavior. For instance, when a resident tries to bring a weapon into a Sim that is designated a safe zone and is booted off that Sim for the offending conduct, Linden Lab is eventually alerted to the individual's trespass on the norm of respecting the Sim owners' intent to keep their Sim a safe environment.[101] Even more automated monitoring controls have been developed by Second Life residents through the adaptable scripting-language feature. For example, scripted language can be added to virtual objects making it impossible for other users to place the object in their inventory.[102] Thus the object itself incorporates antiburglary measures that are in some ways more powerful than real-world burglary protections.[103] Automated monitoring controls, like the two above examples, are likely the most efficient and effective means to monitor illicit conduct because these controls can be accomplished with little cost once the code is created.[104] Although this automatic control seems to be the most

---

   99. CARR & POND, *supra* note 25, at 66–67 (relaying how many residents have complained that it takes Linden officials a long time to respond to complaints, sometimes up to an hour, and how many complaints remain unresolved without an investigation or sanction).

   100. Benjamin Duranske, *Virtually Blind's Predictions for Virtual Law in 2008*, VIRTUALLY BLIND, Jan. 1, 2008, http://virtuallyblind.com/2008/01/01/2008-virtual-law-predictions.

   101. *See* CARR & POND, *supra* note 25, at 211–12 (noting that Linden Lab will suspend a resident who repeatedly tries to bring a weapon into a Sim designated as a safe zone).

   102. *See* Screenshot No. 6 (on file with the *Duke Law Journal*) (showing an avatar not being able to pick-up an object because the "take" command which would normally allow the avatar to do so is grayed out and unavailable).

   103. For example, a car alarm in real life will only deter burglars from stealing a car. Script language in Second Life can change the very qualities of a virtual object, making it impossible for a potential thief to pick up the object. *See supra* note 50 and accompanying text. Thus, the protections in Second Life, which actually determine what is possible, are more powerful defenses than the simple deterrents of real-world protections.

   104. The costs of maintaining the code-based automatic monitors are likely to be less than the costs of employing Linden Lab employees, or other residents, to patrol the cyber-streets of Second Life. Automated code monitors will likely cost less because a single piece of code can

efficient system of alerting Linden officials to illicit conduct, automatic monitors cover few of the behaviors outlawed in Second Life and are thus an inadequate solution to the problem of monitoring the massive world.

Although there is some evidence of successful monitoring schemes in Second Life, the virtual world has long struggled to implement effective sanctions that deter offensive behavior and enforce established norms. An example of an early sanction's failure to effectively enforce norms was the use of the "cornfield purgatory" to punish residents.[105] The cornfield purgatory sanction entailed banishing a resident who violated one of the rules of Second Life to a Sim where all the resident could do was ride a tractor in a field of corn.[106] This sanction was ultimately an ineffective deterrent because many residents wanted to see the cornfield purgatory and started to purposefully violate Second Life's rules to experience the tractor ride.[107]

Amusing anecdotes aside, the failure to employ effective sanctions has continued in Second Life. For example, one of the most common sanctions employed in Second Life is the punishment of negative gossiping.[108] Gossiping as a sanction has been used to publicly shame residents who have employed automated programs known as "landbots,"[109] which frustrate the objective of entrepreneurship in Second Life. One weblog in particular compiles a list of all known landbots and their possible operators so that residents who have their land sold unbeknownst to them by a landbot can contact the landbot's operator and request a refund.[110] Though alerting other residents to the illicit behavior of some may serve a

---

apply to all objects in Second Life and would require little involvement from Linden Lab employees once implemented, whereas personal monitoring would require many Linden Lab employees or Second Life Residents.

105. CARR & POND, *supra* note 25, at 43.

106. *Id.*

107. *Id.*

108. *See, e.g.*, Second Life, Community: Incident Report, http://secondlife.com/support/ incidentreport.php (last visited Oct. 10, 2008) (listing the offenses reported to the Second Life Governance Team, and the eventual sanctions given to the offenders).

109. Landbot Invasion, Landbot FAQ, http://landbot.wordpress.com/landbot-faq (last visited Oct. 10, 2008) (defining "landbots" as automated computer programs that search through listings of Second Life land for sale and purchase the land cheaply even when the owner may not intend to sell the land for that price).

110. Landbot Invasion, Landbot Directory, http://landbot.wordpress.com/directory (last visited Oct. 10, 2008).

useful purpose, gossiping is likely an ineffective deterrent if the offenders do not care about their reputations or if the offenders can easily change their identities. Because residents in Second Life can easily change their identities,[111] the sanction of gossiping is likely not an effective sanction. Furthermore, unlike the residents of Shasta County who closely guarded their reputations, many residents in Second Life are indifferent to other residents' perceptions of them and are thus unaffected by negative gossip. For example, a Second Life resident named Lazarus Devine angered many other users by erecting garish virtual signs calling for an end to the war in Iraq and to "Impeach Bush" on property he purchased adjacent to the disgruntled users.[112] The disgruntled users tried to stop the sign propagation by engaging in negative gossip and a heated campaign of sending the offending resident an endless stream of "instant messages" complaining about his actions.[113] Despite the best efforts of the disgruntled users, Lazarus Devine continued his campaign to erect garish signs.[114]

Even Second Life's harshest sanction, the threat of account termination, which is prescribed as a possible punishment in the virtual world's Term of Service, is also likely an ineffective sanction.[115] Because the potential property loss from an account termination is great,[116] it is uncertain whether Linden Lab has the authority to terminate a user's account without providing compensation for the lost virtual property. This uncertainty became evident in a 2007 preliminary ruling in a federal case concerning a dispute between Linden Lab and a disgruntled former user.[117] In the ruling, the federal

---

111. *See infra* note 139.

112. Steven Johnson, *Brave New World*, DISCOVER, Mar. 4, 2006, http://discovermagazine.com/2006/apr/well-intro.

113. *See id.* (explaining how the angered residents engaged in negative gossip by erecting their own signs which said "Impeach Lazarus Devine").

114. *Id.*

115. Second Life, Terms of Service, http://secondlife.com/corporate/tos.php (last visited Oct. 10, 2008).

116. The Second Life Terms of Service indicates that a user will not receive compensation for a terminated or suspended account:

> In the event that Linden Lab suspends or terminates your Account or this Agreement, you understand and agree that you shall receive no refund or exchange for any unused time on a subscription, any license or subscription fees, any content or data associated with your Account, or for anything else.

Id.

117. *See* Bragg v. Linden Research, Inc., 487 F. Supp. 2d 593, 595 (E.D. Pa. 2007) ("Plaintiff, March Bragg, Esq., claims an ownership interest in such virtual property. Bragg contends that

judge hinted that although the property in dispute was "virtual," the ownership entitlements to the virtual property may be real and thus the plaintiff's seizure claims could be valid.[118] As a result, Linden Lab may no longer be able to utilize the sanction of account termination without first providing compensation for the user's lost virtual property.

B. *Adherence to Social Norms*

As another condition necessary to facilitate the efficacy of social norms in Second Life, residents must adhere to the social norms of the virtual world. Because Second Life as a world and a community is so expansive and diverse,[119] it is difficult to gauge the level of adherence with any amount of precision. Despite this reality, an analysis of the general types of communities in Second Life can be useful in determining the level of adherence to social norms. Generally, there are two types of communities in Second Life: those that congregate on a Sim they control, and those that have no Sim control. The first group can implement social norms and enforce adherence with real success. Communities with virtual land can enforce norms and create adherence because ownership of land empowers an individual to enact several measures that can aid in increasing the rate of adherence to social norms.[120] The first of these measures is notification and publication of the norms. Owners of Second Life land can enable an automatic function, to inform the visitor of the virtual property's rules once the visitors enter the virtual land.[121] Because nonlandowners do not have access to this feature, it is harder for nonlandowners to inform residents of the governing social norms, and will correspondingly impact the rate of adherence. Nonlandowners have some tools at their service to inform other residents of norms. These tools include objects with script language that will communicate the social norms to any residents in proximity to the automated virtual object,[122] manual distribution of note cards

---

Defendants, the operators of [Second Life], unlawfully confiscated his virtual property and denied him access to their virtual world.").

118. *Id.*

119. Ondrejka, *supra* note 17, at 30 (detailing that more than 70 percent of Second Life's users reside outside of the United States).

120. *See supra* notes 28–31 and accompanying text.

121. *See supra* note 80 and accompanying text.

122. *See* RYMASZEWSKI ET AL., *supra* note 21, at 195 (displaying scripting language that can be added to a virtual object to make that object "chat" with any residents in proximity).

detailing the norms, and dissemination of the rules through online websites outside of Second Life.[123] Although these measures will spread details of the social norms, they are likely neither as effective nor as efficient as the automated controls because the automated controls will inform every visiting resident whereas the nonlandholder measures will likely miss some residents because they have a more limited reach.

The second measure land-controlling groups have at their disposal are the automatic controls to police and enforce established social norms. Virtual landowners have the ability to enable automated, code-based controls that can monitor certain behaviors and either alert the virtual property owner to that offensive behavior or automatically boot the offender from the virtual land.[124] Nonlandholding groups, however, must rely on group policing and the limited presence of Linden authorities to ensure that their norms are upheld.[125] Similar to the inefficiencies inherent to the nonautomated means of distributing the details of governing norms, nonautomated enforcement measures are more likely to fail to catch offending behavior than are automated controls. Additionally, the automated controls are more likely a less expensive method than employing individuals to watch for behavior violating relevant social norms. For these reasons, the level of adherence to social norms in Second Life largely depends on the availability of tools to automatically inform residents of the norms and enforce them. Therefore, although it is impossible to determine the universal level of adherence in Second Life, the applicable level can be determined on a smaller scale by looking to see which communities have access to these tools, and which do not.

Additionally, other factors like the influx of outsiders who disregard the established norms can have a deleterious effect on the level of adherence in a community.[126] Because Second Life is an open network expanding rapidly,[127] a deluge of outsiders disregarding the

---

123. *See* Second Life, Community Standards, *supra* note 42 (listing the Big Six rules).

124. For a description of how one control was designed to automatically boot residents who attempted to bring guns into Sims designated as safe zones, see *supra* note 101 and accompanying text.

125. For a description of the difficulty associated with policing the entire grid, see *supra* note 99 and accompanying text.

126. ELLICKSON, *supra* note 10, at 94.

127. *Compare* Second Life, Economic Statistics, *supra* note 96 (indicating that Second Life has more than fifteen million registered users), *with* Ondrejka, *supra* note 17, at 30 (explaining

social norms is likely an ever-present problem in the virtual world. The influx of disruptive outsiders that motivated a group of Second Life citizens to form vigilante groups similar to the Second Life Alliance is one of the more infamous examples of this problem.[128] In the early days of Second Life, a large group of users from a competitive and battle-oriented virtual world joined Second Life and began to harass and attack the once peaceful residents.[129] This influx of outsiders with different cultural norms threatened the peaceful and cooperative culture of Second Life. But two coinciding occurrences greatly diminished the threat posed by these disruptive outsiders: concerned citizens began to retaliate against the disruptive outsiders by building defensive fortifications to keep the militant faction out of the peaceful areas of Second Life, and Second Life's grid expanded so much that Second Life users who wanted to fight had new territories all to their own.[130] The threat of outsiders undermining community norms can also be limited by organizing groups with exclusive membership and by limiting other residents' access to any Sims a resident controls.[131] Despite these salves, the flood of new residents joining the world of Second Life on a daily basis has created a reality in which outsiders will continually challenge the established norms.

Finally, limited evidence of well-developed relationships between Second Life users suggests some of the conditions which made the social norms in the Shasta County rancher community successful may be present in Second Life. One of the conditions which made social norms successful in Shasta County was the close relationships that existed between the community members.[132] Even though the world of Second Life is immense and highly heterogeneous,[133] the virtual world's residents are continually brought together by the desire to create micro-communities where residents can share their interests with other like-minded individuals.[134] These

---

that Second Life had only seven million registered users in the second quarter of 2007).

128.   RYMASZEWSKI ET AL., *supra* note 21, at 314–15 (describing the war of the Jessie Wall).

129.   *Id.* at 314.

130.   *Id.* at 315.

131.   *See* Second Life, Online Harassment, *supra* note 45 (describing how owners of land can determine, via code-based controls governing the settings of their property, which residents of Second Life can enter their Sim).

132.   ELLICKSON, *supra* note 10, at 56–64 (noting that Shasta residents prefer self-help tactics).

133.   *See* Ondrejka, *supra* note 17, at 30 (noting the large size of Second Life and that the majority of users reside outside of the United States).

134.   CARR & POND, *supra* note 25, at 50–51 (describing some of the many thousands of

groups often lead to multiple interactions between Second Life residents. For instance, the Second Life Bar Association has regular meetings in which residents come together and discuss their opinions about the emerging legal issues in Second Life.[135] These meetings give individuals the chance to share opinions, knowledge, and life experiences with each other, thus providing the opportunity to form close relationships.

Even though Second Life community members can form close relationships in the virtual world, there is little evidence that the virtual environment provides residents the chance to form multilevel relationships like those formed in the small Shasta cowboy community.[136] A multilevel relationship is a relationship in which individuals share connections extending beyond a single association.[137] An example of a multilevel relationship in Shasta County would be the relationship that two farmers have as neighbors, compounded by their relationship as members of the local Cattleman's Association, compounded by their relationship as distant cousins because the Shasta community is so small and insular. In contrast, Second Life residents generally only share one relationship, their virtual relationship.[138]

Additionally, similar to the situation in the Shasta County community, some argue there is evidence of good reciprocity amongst Second Life residents. Although anonymity is inherently present in Second Life's utilization of avatars and fictitious names to represent residents in the virtual world, and despite the fact that fraud is ever present because residents can create multiple accounts for $9.95 a month,[139] there is some evidence that the avatar system actually

---

groups on Second Life in which people with interests ranging from knitting to automobiles can come together to share their passions).

135.   Second Life Bar Association, SLBA Meetings, http://slba.info/meetings.html?current=three (last visited Oct. 10, 2008).

136.   *See generally* ELLICKSON, *supra* note 10 (detailing how neighbors in Shasta County had relationships with others in a number of capacities and how these deep relationships assisted in the enforcement of norms).

137.   *See id.* (same).

138.   Although this observation seems to be generally true, there is some evidence that Second Life residents attempt to form more complex relationships by establishing real-world relationships along with their virtual relationships. *See* RYMASZEWSKI ET AL., *supra* note 21, at 320 (describing a couple who met on Second Life, became romantically involved in the real world, and formed a Second Life business as partners).

139.   *Id.* at 17. The ability to create multiple accounts can facilitate fraud because victims would be unable to identify and avoid the residents who committed the fraudulent act. For example, someone could be scammed by a user represented by a tall female avatar, only to

creates better reciprocity than the blind interactions that dominate most other transactions on the internet. For instance, at least one study has posited that the use of avatars may actually create more trust between users and thus promote more frequent and repeated exchanges between users than would occur in other internet spaces that do not have the avatar interface.[140] Assuming this is true, it is still unclear whether having avatars on Second Life is more likely to exceed, or at the very least match, the level of reciprocity that exists in small real-world communities with repeated face-to-face interactions. Therefore, it is difficult to determine whether similar levels of reciprocity between residents exist in Second Life as it existed between the ranchers in Shasta County.

Despite evidence of conditions facilitating the successful development of social norms such as the effective automated monitoring tools and close relationships that can form between residents, it is likely that the pervasive impeding conditions in Second Life undermine these facilitating factors. Impeding conditions ranging from the inherent challenges of monitoring a community populated by millions of users to the unavailability of effective sanctions to enforce social norms and the failure to form multilevel relationships all likely have created an environment in which social norms alone are inefficient in maximizing the participants' welfare.

IV. RECOMMENDATIONS FOR REGULATING SECOND LIFE

The shortcomings of social norms in efficiently regulating Second Life can be rectified by expanding the use of regulatory schemes employed both by Linden Lab and by real-world governments. Linden Lab already has at its disposal a tool that can rapidly improve the conditions in Second Life so that user-created social norms can thrive. This tool is the code-based automated monitoring and sanction mechanisms focused in 2008 on a limited set of behaviors in Second Life. By extending these automated controls to cover a wider set of illicit behaviors, such as using two different accounts to perpetrate a fraud against another resident, Linden Labs could improve the reciprocity between individuals and in turn improve a set of social norms like the norms trying to fulfill the objective of respect.

---

unwittingly be scammed again by the same user, this time represented by a short, fat male as an avatar.

140.   Ondrejka, *supra* note 17, at 40.

One potential automated control inspired by the norm of respect could be a feature that allows a resident to "tag" a Second Life user so that the resident will be informed when the tagged user is on the same Sim, or if the offensive behavior warranting the tag was sufficiently severe, Linden Lab could create a virtual restraining order that would cause the offending user to be booted from the grid whenever the user approached the original victim. Residents could use this potential feature to avoid unwanted confrontation with undesirables, thus improving the Second Life experience. Although this salve could improve the Second Life experience, the feature could be abused by the very griefers it seeks to limit.[141] To minimize any abuse, Linden Labs could require Second Life users utilizing the tag feature to complete a brief application describing the harm they are trying to limit. This additional step would help curb any potential abuse by griefers by ensuring only legitimate complaints warrant a punitive virtual restraining order.

Beyond automated controls, Linden Lab could institute non-code-based reforms to improve the efficacy of social norms in the virtual world. For instance, Linden Lab could clear up the uncertainty surrounding the enforceability of Second Life's harshest and likely most effective sanction, account termination, by devising a clearer and more comprehensive set of rules for punishing residents. Instead of only prescribing the severe punishment of "immediate and permanent suspension or cancellation of your Account" for any transgression of the broadly defined Big Six rules,[142] Linden Lab should create a more comprehensive penal code. This code could clearly outline the specific punishment for a particular behavior. For instance, although shoving or shooting an individual in a safe area may be undesirable behavior,[143] it seems irrational to terminate a user's account, which is a potential punishment under the Terms of Service,[144] solely for this marginal transgression.[145] A more proportional punishment may be temporary account suspension. On

---

141. Griefers could abuse a tag feature by using it on innocent Second Life residents.

142. *See* Second Life, Terms of Service, *supra* note 115 (illustrating that Second Life relies more on broadly defined standards than on explicit rules for conduct because what behavior is considered offensive is defined broadly).

143. *See* Second Life, Community Standards, *supra* note 42 (indicating that shooting or shoving an individual may constitute an "assault").

144. Second Life, Terms of Service, *supra* note 115.

145. *See* CARR & POND, *supra* note 25, at 210 (describing how a resident cannot be permanently killed by any violence in Second Life).

the other hand, the penal code could prescribe the harsh punishment of account termination and even a report to the real-world authorities for such illicit conduct as the dissemination of pornographic material in a Sim designated for teens.

Although Linden Lab has indicated its ability to dole out lesser punishment,[146] the opacity of which punishment will be prescribed to the offensive conduct can make Linden's response to certain misconduct seem irrational. Not having a clearly outlined penal code could make punishment to an outsider uninformed of the world's objectives and norms seem irrational. For instance, an uninformed outsider may find terminating the account of a user who uploaded spyware into the virtual world to be harsh and irrational when compared to the lack of action taken against users who fornicate in public.[147] It is important that Linden Lab's response appear rational— level of punishment corresponds to the necessary protection required to deter societal harms—because a real-world court would be more inclined to enforce the rules erected by Linden Lab if the court determines the rules were instituted for rational reasons.[148]

To ensure that regulations created by Linden Lab will simultaneously fulfill the objectives of the site and maximize the residents' welfare, the democratically inspired social norms of the virtual world should be used as a model for any regulations. For example, the social norm of creator empowerment could guide Second Life's potential codification of punishments for offensive behavior. Instead of relying on the uncertainty of a real-world court system in adjudicating the copyright claims that are beginning to emerge in Second Life,[149] a penal code created by Linden Lab could

---

146.   *See* Second Life, Terms of Service, *supra* note 115 ("You agree that Linden Lab may take whatever steps it deems necessary to abridge, or prevent behavior of any sort on the Service in its sole discretion, without notice to you.").

147.   *See id.* (describing how both types of conduct are partially forbidden)*; see also* Second Life, Community Standards, *supra* note 42 (detailing how some regions in Second Life are designated as "Mature" zones where adult activity can presumably occur in public).

148.   *See* Portola Hills Cmty. Ass'n v. James, 5 Cal. Rptr. 2d 580, 582–84 (Cal. Ct. App. 1992) (holding that unreasonable covenants and restrictions created by homeowner's associations to govern their communities are not enforceable equitable servitudes); Hidden Harbour Estates, Inc. v. Norman, 309 So. 2d 180, 181–82 (Fla. Dist. Ct. App. 1975) (finding that a restrictive covenant erected by a home owner's association that is related to the "health, happiness, and enjoyment of life of the various unit owners" can justifiably be enforced under a standard of reasonableness).

149.   Benjamin Duranske, *Six Major Second Life Content Creators Sue Alleged Copyright Infringer in NY Federal District Court*, VIRTUALLY BLIND, Oct. 27, 2007, http://virtuallyblind.com/2007/10/27/content-creators-sue-rase-kenzo (describing a copyright

authorize explicit punishments such as account suspension for the unauthorized copying of an individual's creation. Linden Lab could also find inspiration for future regulations in regulatory models proposed and created by its residents. For instance, a Second Life resident named James Miller created a proposed code to guide conflict-resolution hearings between avatars when disputes emerged in the virtual world.[150] Although this user-created regulation may have captured many of the objectives of the virtual reality, it likely failed to take hold because of the size and heterogeneous nature of the network. Therefore, implementing a system-wide regulatory scheme would likely require a centralized institution with the means to reach all Second Life users. The propagation of an explicit penal code, arbitration system, or other legal mechanism would have the additional effect of educating real-world courts about the important norms or objectives in the virtual world, thereby increasing the probability that an outside legal system would allocate property rights justly.

No matter how powerful or elaborate the automated controls are, and regardless of how sophisticated Second Life's preestablished rule structure becomes, there will likely always be individuals who have the inclination to ignore the clear rules and the knowledge necessary to tear down Linden's code laws. When the fencing of Linden's automated code fails, the regulations of real-world authority will be needed to effectively govern Second Life.

Before posing recommendations for how real-world regulatory bodies could effectively aid in the governance of virtual worlds like Second Life, it is useful to note that the presence of real-world authority has been felt in cyber-realities before. Real-world intervention in Second Life has not been direct, but instead felt through the actions taken by Linden Lab in response to a potential regulatory threat. For example, in 2007 Linden Lab closed all gambling establishments in Second Life in an attempt to preempt

---

infringement case filed in 2007 in a federal district court in New York).

150.   *See* Johnson, *supra* note 112 (setting forth a "conflict-resolution proposal featuring about 50 separate articles, sections, and clauses. . . . [such as] 'SECTION IV[:] A jury will meet on a hidden, off-world island, owned and maintained by Linden Lab. . . . [and] equipped with a number of simple Jury Meeting Rooms, suitable for a jury of 7 to meet, as well as interview parties in disputes'"); *see also* Bryan Gardiner, *Bank Failure in Second Life Leads to Calls for Regulation*, WIRED, Aug. 15, 2007, http://www.wired.com/gaming/virtualworlds/news/2007/08/virtual_bank (describing how the Second Life Exchange Commission, a user-created entity modeled after the U.S. Securities and Exchange Commission, was created to address allegations of fraud in the virtual reality's nascent securities markets).

potential regulations that could have resulted from an FBI investigation.[151] In other sites, real-world authorities have directly regulated user conduct. For instance, police in Holland arrested a young boy for theft after he broke into the virtual home of a user in the cyber-reality "Habbo Hotel" and stole the virtual furniture in the home.[152]

Assuming government regulation of virtual realities is desirable, the most pressing question becomes what level of intervention is appropriate. The level of government regulation, like an attempt to refine automated code controls or erect a more sophisticated set of internal regulations, should be guided by the users' social norms. Entrepreneurship norms could guide the government in potentially imposing some of the real-world regulations governing the law of contracts—like the concept of promissory estoppel—to reduce several of the risks associated with engaging in economic transactions with other consumers in the virtual world. Such an imposition of real-world law could aid in furthering the objective of entrepreneurship in Second Life and would likely be a desirable addition. Additionally, digital legal protection similar to the provisions of the Digital Millennium Copyright Act (DMCA) may be needed to assist in protecting Second Life's automated code-based controls.[153] Protection similar to the DMCA would likely make it illegal for any individual to hack or manipulate the computer code controlling the virtual world. Thus, similar to Lessig's fence analogy,[154] a DMCA-like piece of real-world legislation would serve to protect the virtual world when its code-based fences fail.

Even if real-world regulation is desirable, a regulatory presence that is too oppressive should be avoided. Similar to the fracturing that occurred after the government heavily regulated internet file-sharing programs like the popular program "Napster,"[155] real-world

---

151. Duncan Riley, *Second Life Bans Gambling Following FBI Investigation*, TECHCRUNCH, July 25, 2007, http://www.techcrunch.com/2007/07/25/second-life-bans-gambling-following-fbi-investigation.

152. Robin Raskin, *Virtual Theft, Real-World Punishment*, YAHOO! TECH,, Nov. 16, 2007, http://tech.yahoo.com/blogs/raskin/16052.

153. *See* Digital Millennium Copyright Act of 1998, 17 U.S.C. § 1201 (2006) (making it illegal to use or disseminate technology that circumvents the digital protections placed on copyrighted material).

154. *See supra* note 5 and accompanying text.

155. *See* Viktor Mayer-Schönberger & John Crowley, *Napster's Second Life?: The Regulatory Challenges of Virtual Worlds*, 100 NW. U. L. REV. 1775, 1780 (2006) (discussing how the government's attempt to forestall MP3-transferring sites like Napster failed and how the

regulation could lead to the dissolution of Second Life. The dissolution of Second Life could result from oppressive real world regulation because users may become dissatisfied with the regulatory yoke placed on their virtual experience and thus opt to leave the site and either create their own smaller Second Life-like virtual worlds or join another cyber-reality.[156] This potential fracturing of Second Life into a myriad of independent, smaller virtual worlds would ultimately create a galaxy of cyber-realities too volatile and numerous to be effectively governed by institutionalized real-world regulation.[157] Although some fragmentation may be desirable,[158] decentralizing virtual worlds would have the adverse effect of removing the beneficial presence of the Leviathan-like head of the state, such as Linden Labs in Second Life. Maintaining a singular head of the virtual state is important because a single head of state can pool resources to implement beneficial changes such as establishing a system of uniform norms guiding participants' interactions and can create code systems defining the virtual world's reality in such a way that it betters the residents' collective experience. Furthermore, the virtual head of state can serve as a focal point in negotiating and facilitating relations between the virtual world and real-world regulators.

To improve the efficacy of social norms in Second Life, Linden Lab should engage in reforms ranging from the institution of new code-based tools to more comprehensive internal regulations to perpetuate and protect the important objectives—creator empowerment, respect and entrepreneurship—of the virtual reality. If these measures fail, however, the authority and force of external regulation may be needed to protect or further the objectives of Second Life. Regardless of the scope of internal or external measures taken to improve the conditions in Second Life, any action should consider the important objectives that formed the core of the virtual reality's social norms.

---

web evolved to avoid this regulation by becoming a decentralized archipelago of file-transfer sites too numerous to be regulated by the government).

156. *Id.*

157. *See id.* (predicting that a fracturing of virtual worlds would create a situation, similar to the negative end result of the fracturing of file-sharing programs, in which it would be impossible for governing bodies to effectively regulate the plethora of virtual worlds).

158. *See* CASS SUNSTEIN, REPUBLIC.COM 3–7 (2007) (explaining that, even though fragmentation could have deleterious effects on free speech and the marketplace for ideas, fragmentation does allow individuals to optimally follow and consume their particularized interests).

CONCLUSION

Because social norms alone cannot efficiently maximize participant welfare in Second Life, real-world regulators will likely have to expend valuable resources to help prevent and resolve cyber conflicts. Although some may regard any allocation of state resources to resolve this problem as a waste, there are several compelling reasons why this society should not ignore Second Life or treat it as merely a fad. The first is the immense size of Second Life's virtual population and economy. As of 2008, Second Life had over fifteen million users who collectively spend more than twenty million dollars in the virtual world every month.[159] The massive exchange of real-world currency in this virtual reality has turned Second Life into a discrete microeconomy that can cause real-world consequences. One of the more pronounced real-world consequences was the havoc that resulted from the virtual banking industry's collapse in Second Life. Following the financial missteps of one of Second Life's banks,[160] Second Life users lost an estimated $750,000 in real-world money in the virtual economy.[161] Given that Linden Lab has refused to take affirmative action to ameliorate the problem,[162] the vacuum may need to be filled by government regulation or the affected individuals will be with left with no recourse.

Immediate concerns affecting the virtual reality of Second Life are not the only reasons to pay attention to this cyber reality. Lessons gleaned from Second Life can also be used to resolve conflicts in other virtual realities. For instance, the failures and successes of social norms examined in this Note could be used to help successfully resolve a dispute that has emerged in the virtual reality of "World of Warcraft" (WoW). WoW is a virtual world similar to Second Life in which individual users can interact with each other and the virtual three-dimensional environment in a real-time setting.[163] WoW is different than Second Life in that the virtual reality is based primarily

    159. *See supra* note 96 and accompanying text.

    160. Duncan Riley, *Virtual Banking Banned in Second Life*, TECHCRUNCH, Jan. 8, 2008, http://www.techcrunch.com/2008/01/08/virtual-banking-banned-in-second-life (describing how a Second Life bank "Ginko Financial" offered Second Life residents Ponzi-like interest schemes but ultimately had to declare itself insolvent).

    161. Robin Sidel, *Cheer Up, Ben: Your Economy Isn't as Bad as This One*, WALL ST. J., Jan. 23, 2008, http://online.wsj.com/article/SB120104351064608025.html?mod=hpp_us_inside_today.

    162. *Id.* (discussing how Linden Labs has done nothing to help the users reclaim their lost money).

    163. World of Warcraft Guide, *supra* note 19.

upon a gamelike platform in which the world's users focus primarily on gaining combat experience, skills, and items to best each other and to defeat the computer characters in the game.[164] The conflict in WoW that the lessons of Second Life can be used to resolve concerns a complaint filed in a federal court by the operators of the virtual world.[165] The complaint alleges that a third-party program, called the Glider, has tortiously interfered with the contracts between WoW and its users.[166] The real-world regulator being asked to resolve this dispute, a federal court in Arizona, should consider the important objectives and norms of the virtual world before rendering any decisions. Following the social norm construct used by Ellickson in his study of the Shasta cowboys,[167] one of the important objectives of WoW is to preserve the fairness of the gamelike environment of the virtual world.[168] If "fairness of the game" is an important norm of WoW, the Glider program may be violating that norm because it permits some participants in the game to manipulate the rules of the world to create an unfair advantage.[169] Consequently, the disruptive nature of the Glider program, which may not be visible to an outsider, affects the in-game experience for many users and thus makes it difficult for WoW to deliver a satisfactory gaming experience to its customers. The social-norm analysis that this Note invokes could aid the federal court in determining how to efficiently and justly allocate the entitlements in a case presenting unique issues in a context, which a federal court may not clearly understand. The lessons that can be gleaned from Second Life and the real-world impacts it has on individuals are two reasons indicating why Second Life deserves meaningful attention.

---

164. *Id.*

165. *See* Complaint at 2, MDY Indus., LLC v. Blizzard Entm't, Inc., No. 2:06-CV-02555-DGC (D. Ariz. filed Oct. 25, 2006).

166. Benjamin Duranske, *WoW Glider Summary Judgment Motion Filed; Blizzard Exhibits Include Castronova Expert Report*, VIRTUALLY BLIND, Mar. 23, 2008, http://virtuallyblind.com/2008/03/23/mdy-blizzard-motions. The Glider program is a piece of software that allows users to "automate key tasks in World of Warcraft . . . . [allowing] users to . . . harvest resources and generate high level characters without actually playing." *Id.* Some individuals find the Glider desirable because it allows users to accumulate these valuable commodities without having to endure the labor and time other users expend to gathering these resources. *Id.*

167. *See supra* notes 69–74 and accompanying text.

168. *See* World of Warcraft, Terms of Use Agreement, *supra* note 87 ("Nonetheless, certain acts go beyond what is 'fair' and are considered serious violations of these Terms of Use.").

169. Edward Castronova, Effects of Botting on World of Warcraft 16–20 (unpublished expert opinion, on file with the *Duke Law Journal*).

As more attention is focused on Second Life and its virtual-world kin, the democratically inspired norms that guide these virtual worlds should not be forgotten. Following the advice of Judge Easterbrook,[170] the new regulators of these virtual worlds will not be good legal trailblazers if they begin their pursuit blind to the objectives of this new frontier.

---

170. *See supra* note 1 and accompanying text.