Virtual Rule of Law

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I. INTRODUCTION

The rule of law generally requires that governments announce and follow the laws of the land. This allows citizens to know what to expect from their government and to make investments accordingly. ¹ Business also relies on the

¹ JOHN RAWLS, A THEORY OF JUSTICE 235 (1971) ("A legal system is a coercive order of public rules addressed to rational persons for the purpose of regulating their conduct and providing the framework for social cooperation. When these rules are just they establish a basis for legitimate expectations.").
rule of law; entrepreneurs want to know what activities are legal, whether the
government can interfere in business, whether agreements are enforceable, and
whether illegal actions by others will be stopped.

For this reason, many consider the rule of law a catalyst for economic
development, and there is reason to believe that it will be equally important in
virtual economies, despite differences from the real world. As more people turn
to virtual worlds to earn a livelihood, the rule of law will become more promi-
nent in encouraging investments in virtual business.

This Article is the first to consider whether virtual worlds currently pro-
vide a rule of law that sets expectations for virtual business. It is not surprising
that virtual worlds now lack many of the elements of the rule of law. Which
aspects fail is more surprising, however. Provider agreements and computer
software, the sources of regulation that are most often criticized as “anti-user,”
provide the best theoretical hope for achieving the rule of law, even if they cur-
tently fail in practice. On the contrary, widely proposed “reforms,” such as
community norms, self-regulation, and importation of real-world law face both
theoretical and practical barriers to implementation of the rule of law in virtual
worlds.

These conclusions follow from a four-step analysis. Part I is a brief in-
troduction to virtual worlds and their connection to business. Virtual worlds
allow their users nearly unlimited choices in their actions and interactions with
other users and the virtual environment. As a result, business permeates virtual
worlds, just as it does elsewhere. If a user can deliver something of value, other
users will trade something else of value (including real money) for it. Virtual
worlds are different, though, because virtual worlds are home to many that have
no interest in business. Thus, regulations must govern both business and non-
business in an immersive experience.

Part II introduces the rule of law and its importance to business. Trad i-
tional theory considers the rule of law an important component of economic
growth, and this Article agrees. However, measuring just how important the rule
of law might be in a virtual world proves more difficult. Because people may
participate in virtual worlds for fun as well as for business, generalized welfare
considerations are elusive.

As a result, this Article focuses on positive analysis of the rule of law by
examining the literature and abstracting ten indicia of the rule of law. Rule by
law must be: (1) non-arbitrary, (2) stable, (3) public, (4) non-discretionary, (5)
comprehensible, (6) prospective, (7) attainable, (8) consistently enforced, (9)
impartially applied, and (10) adjudicated in a factually neutral way.

These indicia, however, do not include traditional elements of “liberal”
rule of law, including democracy and personal rights. Just as normative mea-
surement of the rule of law’s impact on virtual business is inapt, so too is an
examination of liberal ideals in the context of virtual worlds. Technical limit a-
tions and user preferences render notions such as democracy and legitimacy
difficult to apply in virtual worlds. Furthermore, to the extent that setting expec-
tations is the most important benefit of law with respect to business, the absence
of liberal values is less relevant. Finally, the ten formal indicia discussed herein are usually a prerequisite to the liberal rule of law. Thus, the analysis is descriptive and formalistic, such that providers and users may objectively determine whether the rule of law is present in a world and make decisions based on their determinations.

Part III examines law and sovereignty in virtual worlds. The four primary sources of law follow from general cyberlaw principles. Law is a constraint on behavior, and such constraints are imposed by four sources: the market (such as provider agreements), code (the virtual world software), norms (community defined rules), and real-world law (legislation and case law). Three potential sovereigns impose these regulations: real government, the virtual world provider, and the virtual community. Further, law regulates both the user and her online persona — her avatar.

While these dimensions imply law may come in twenty-four different flavors, this part narrows the consideration down to a single question: “How does the law, from whatever source, affect the end user?” This analysis focuses on human, rather than avatar, well-being.

Part IV critically examines the rule of law in virtual worlds. It argues that agreements and code present the best possibility for implementing the rule of law in virtual worlds, even though they currently fall short. Provider agreements and code can exhibit all of the indicia of the rule of law. They can be non-arbitrary, stable, and public. However, these sources often fail in practice. Agreements are not consistently enforced, and amendments might be frequent, arbitrary, or retroactive. Code, on the other hand, is perfectly enforced but is frequently hidden and potentially arbitrary and unstable.

Other sources, such as norms and real-world laws are unlikely to provide the rule of law in virtual worlds either in theory or in practice. Community norms are often unwritten, unspoken, and unfairly enforced. The very nature of community enforcement relies on vigilantism, which undermines rule by law. The application of real-world rules is also unlikely to fulfill the indicia, especially in the short run. Game rules that allow activity (such as theft) that would certainly be disallowed if perpetrated among humans makes determining which real-world laws should be imported into virtual worlds nearly impossible to generalize.

Based on the general finding that the rule of law is currently absent but theoretically achievable in virtual worlds, the Article concludes with some suggestions about how to enhance the rule of law. The suggestions focus on some of the key practical shortcoming, such as neutral fact-finding, more detailed in-world\(^2\) rules with finely tuned penalties, and formalized rule enforcement by users. It may be, however, that time will best improve the rule of law. As more disputes are resolved, a body of law that can more faithfully apply to conduct in virtual worlds will grow.

\(^2\) The terms “in-world” and “in-game” are used interchangeably throughout even though not all virtual worlds are games.
II. VIRTUAL WORLDS AND DIGITAL ENTREPRENEURSHIP

For the uninitiated, a virtual world is an interactive computer software program where users might interact (in modern times over the internet). Many human users remotely control characters — called “avatars” — in the world’s software. Participating in a virtual world is like guiding a character through a video game, except that the other characters are also humans who control their own avatars.3 Though avatar control is like a video game, many worlds are not games per se, as there is no competition. Avatars simply “live” in the virtual world as their users might live in the real world.

The virtual world concept is not new; original worlds include early “multi-user dungeons,” or MUDs, which were text-based on-line computer programs. Member users would log in to the server and type their communications with other users. Users could also type pre-defined commands such as moving to another “room,” which in effect allowed the user to chat with a different set of members that also moved to that virtual room. Modern graphics based virtual worlds are no different in theory from these early worlds; the primary practical difference is that the user is graphically represented, and room movement is performed with a mouse rather than a command. The basic function of entering an area and interacting with other users is quite similar.

The differences are important, though. Modern rooms can be much larger with visible representations of surrounding avatars; some appear close by and within “hearing” distance, while some may be further away on the graphical landscape. Virtual worlds allow avatars to do a range of things: walk, fly, build virtual buildings on virtual real estate, and otherwise interact. MUD users type, “I am naked,” while virtual world users appear naked. MUD users type, “I am flying” while virtual world users fly, play music, create art, and build visible buildings; there are literally signposts for different kinds of businesses. The result is that software code and user generated content are much more important.

For example, Figure 1 shows several avatars enjoying a live concert played by another avatar in the virtual world “Second Life.”4 Second Life’s software allows users to transmit live or pre-recorded performances to the virtual world, which the software then broadcasts to other avatars in the same virtual location.

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The modern form of virtual world is far more costly to provide than original text-based systems. The amount of computer server power, network bandwidth, and programming time required is much greater for graphical interaction as compared to textual worlds. Additionally, there are many more users due to growth in popularity and decreases in the cost of network access. Thus, today’s virtual worlds are run almost exclusively by companies with a profit motive. In order to draw paying users, worlds provide different experiences; some worlds are role-playing games, some are devoted to fantasy combat, some attempt to simulate the real world, and some appeal to children.

These worlds have one common denominator: most have some form of virtual money or other trading currency used to acquire virtual “stuff” such as services or information. Many worlds also allow avatars to obtain virtual property and to transfer that property to others. Several also incorporate varying levels of social status, especially worlds that involve combat with computer-controlled enemies; the more enemies killed, the higher the “level” an avatar might achieve. Rarer property and higher levels are valuable to those who do not want to spend their own time appropriating them. Those who do not wish to spend the time instead pay to obtain such property, levels, or any other virtual asset they do not have.
As a result, virtual worlds are home to serious business conducted by hundreds of thousands of users.5 One study suggests that virtual economies may reach the size of small countries.6 The business varies from mining virtual gold to real gambling and anything in-between.7

Virtual world entrepreneurship is somewhat ironic. Much of the fun of virtual worlds is unpredictability. The avatars one meets, the role one plays, and the opponents one conquers in game world are fun because they are risky in the same way that gambling is fun. As a result, most virtual worlds do not encourage businesses that aid users in advancing in status; they instead encourage users to explore the world and obtain desired items through expended energy. Yet, entrepreneurship thrives in these worlds. Like any economy, where there is a demand for something of value and someone willing to supply it, a market will form.8

As a brief example, the concert depicted in Figure 1 might include a few types of businesses. A concert promotion business might pay the virtual land owner for the right to use the space for a concert. A fledgling musician might pay the promotion company for the right to play a show — advertising for real-world music. Conversely, the promotion company might pay an established musician to play in the venue, so that the patrons might pay for the right to listen to the music. The “Muse Isle” sign could just as easily be an advertisement paid for by the sponsor of the concert. All of these payments are made either using


6 Edward Castronova, Virtual Worlds: A First-Hand Account of Market and Society on the Cyberian Frontier 33 (CESifo Working Paper Series No. 618, 2001), available at http://ssrn.com/abstract_id=294828. Though often cited, this calculation is not the best estimator of the size of virtual worlds. The study compares per capita production which may not be comparable to the real world. The real world is home to many unproductive citizens: infants and children, the disabled and elderly, and voluntarily and involuntarily unemployed adults. In virtual worlds, every avatar may be a productive member of society.

7 Greg Lastowka & Dan Hunter, The Laws of the Virtual Worlds, 92 Cal. L. Rev. 1, 10 (2004) [hereinafter Laws] (describing different purchases one might make in a virtual world); Post, supra note 5, at 181 (“They make stuff — clothing and jewelry for their avatars, huge buildings, paintings to put on the walls of those buildings, automobiles or airships that can transport them from one ‘place’ to another in the virtual world, videos . . . . and they exchange what they make with others; if you like the virtual clothing or the virtual jewelry I’m wearing, or the virtual picture I’ve painted, or the virtual building or virtual airship that I’ve created, you can try to persuade me to give it to you. Or sell it to you. For money. Not ‘real money,’ of course — play money, game money . . . . But here’s the thing: It turns out that it is real money. Linden Dollars can be exchanged for things of value, including . . . U.S. dollars . . . .”).

real dollars or virtual money (which can be exchanged for real money or other items of value).

Not all business is conducted in-world, however. Some business takes place in other markets, such as eBay’s auction site. Entrepreneurs work to obtain something of value in the virtual world, whether by luck, by purchase, or by investment of time.9 The assets for sale may be an avatar of a certain level, a virtual weapon, virtual real estate, or even simply virtual money. Buyers then pay real or virtual money to obtain the asset, which the seller transfers to them inside the virtual world. In the concert example above, the concert venue might have been purchased from a seller that obtained the virtual real estate through an auction run by the virtual world provider. Additionally, the music being performed might have been purchased via a music service like iTunes before being broadcast through the virtual world software.10

Another type of entrepreneur is the add-on developer. Many world providers create a programming interface that allows third-party software programmers to write tools that interact with the world. Additionally, some learn how to write such add-on software even if the provider does not disclose information about how to do so. Virtual world users might pay for these tools, or pay someone else to use them for the user’s benefit. In the concert example, a musician might pay for a program that allows her avatar to perform while she engages in real-world activities away from her computer.

In general, richer content and on-line interaction in virtual worlds creates new and different types of business opportunities. Much about virtual world business is the same as other on-line business; a lawyer can dispense advice by email or by typing into a graphical user interface. Yet, there is something different about “face to face” interactions with a virtual lawyer. This extends to how business is obtained. A lawyer dispensing advice by email must advertise to target clients through some means. The virtual lawyer need only hang a virtual sign to obtain business from virtual passers-by, though other advertisements might be helpful as well.

Most web-related businesses regulate only a single type of activity, and business is designed to take place within the site. For example, eBay expressly disclaims regulation of transactions not conducted through its website, 11 whereas virtual worlds are expressly concerned with many out-of-world transactions because such transactions affect the virtual world. While most on-line business transactions take place using the website, they are not about the provider. Instead, they are about real-world transactions that the website simply facilitates.

Virtual worlds might also facilitate transactions, but they are different because the avatars live in the world as well. In few other on-line environments

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9 Some hire low cost off-shore labor to perform that work.
10 Of course, there may be some copyright issues.
is business conducted not only for real-world users, but also for the avatars themselves — transactions benefit real people, virtual avatars, or both. This business also includes the creation of intellectual property — music and images — incorporated into virtual life.

Thus, there is reason to believe that regulating virtual worlds is different than regulating other on-line ventures. The types of interactions and “transactions” are unlimited; they go far beyond buying and selling, instant messaging and chatting, discussion forum posting, blog commenting, and social network status updating, or any other single activity. To be sure, each of these may be present in virtual worlds, but they are also all present, with the addition of three-dimensional graphics, customized artwork and music, virtual real estate and property boundaries, and role playing. Additionally, business activity appears in spite of virtual world platforms not designed for it.

Consequently, regulations must consider all of these transactions while at the same time maintaining order of the avatar population in day-to-day virtual activities that might have nothing to do with business. For all these reasons, regulating behavior can be far more complex and unpredictable in virtual worlds than in other on-line activities.

III. The Rule of Law and Virtual Economies

A. The Tie between Law and Virtual Business

The rule of law is generally normatively favored as a matter of theory, though the reasons vary by writer. Some argue that it allows citizens to plan investment in productive activities; following Coase, one might argue that the rule of law reduces transactions costs, which leads to the efficient allocation of goods. Others argue that it is a type of formal justice. Still others argue that there is no “legal system” without the rule of law or that the absence of law is tyranny.

It is relatively well settled that economies thrive under the rule of law. Some go further, by arguing that economies will fail without the rule of law.

12 Friedrich A. Hayek, The Road to Serfdom 72 (1944).
13 Rawls, supra note 1, at 235.
16 Brian Z. Tamanaha, On the Rule of Law: History, Politics, Theory 119 (2004) (“A growing body of evidence indicates a positive correlation between economic development and formal legality that is attributable to these characteristics [of the rule of law.]”); id. at 53 (describing Montesquieu’s view of the rule of law as facilitating commerce by “facilitating their transactions, enforcing their agreements, protecting their property, and otherwise leaving them be.”); see also, Kevin E. Davis & Michael J. Trebilcock, The Relationship Between Law and Development: Optimists Versus Skeptics, 56 Am. J. Comp. L. 895 (2008); Norman L. Greene, Perspectives From the Rule of Law and International Economic Development: Are There Lessons for the Reform of
Regardless of how strong the tie between business and rule may be, governments throughout the world appear to favor the rule of law as a harbinger of economic stability.18

Virtual economies are no different in theory, and the rule of law will become more important as virtual commerce expands.19 When planning business investments, every entrepreneur will ask questions: Can I operate this business now? Will I be able to do so in the future? What are the penalties if I break a rule? Will rules be enforced against others? How do I ensure that my customers follow the rules? Professor Post adds:

How many people are going to give their hard-earned money — real money! — to Chiaretta Charron [a virtual banker] without some assurance that she (or he, or it) will behave reasonably with it? How many people will extend credit to anyone else without some way to enforce the obligation? How many people will invest large amounts of time or effort or money in any substantial undertaking — building a law school, say, or organizing a recording studio — without some assurance that it won’t be destroyed by other participants in the “game,” or by the operators of the virtual world themselves, for “no good reason” at all?20

The presence (or absence) of the rule of law helps answer these questions; for the most part, rule of law will expand business opportunities.21

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17 Arias, supra note 5, at 1339 (real-world social order could break down without virtual law).
19 Jack M. Balkin, Virtual Liberty: Freedom To Design and Freedom To Play in Virtual Worlds, 90 Va. L. Rev. 2043, 2044 (2004) (“Even at this early stage of technological development, people have simply invested too much time, energy, and money in virtual worlds to imagine that the law will leave these worlds alone . . . .”). Compare James Grimmelmann, Virtual World Feudalism, 118 Yale L.J. Pocket Part 126 (2009) [hereinafter Feudalism] (describing virtual worlds as feudal societies), with TAMANAH, supra note 16, at 29–31 (describing the rise of the rule of law and related demise of feudalism).
20 POST, supra note 5, at 184.
21 Id. (“The answer, I think, is: not nearly as many people as would do so if there were a functioning legal system in place . . . .”); JACK GOLDSMITH & TIM WU, WHO CONTROLS THE INTERNET?: ILLUSIONS OF A BORDERLESS WORLD 129 (2006) (“. . . eBay quickly learned that to prevent fraud, enforce its contracts, and ensure stability in its auction services, it would depend critically on government coercion and the rule of law . . . .”); id. at 145 (eBay’s refusal to expand into Russia, which “suffers from private harms gone unchecked: insecurity of private property,
Notwithstanding the general answer, it may be impossible to know just how important the rule of law might be in any particular virtual economy because there are so many worlds from which to choose. Virtual world providers are free to establish the type of system they deem best. Providers have done so — there are many virtual worlds ranging from free-for-all worlds targeted at fraud and fighting to tightly-controlled worlds targeted at children.

As a result, normative judgments about the appropriate level of rule of law in virtual worlds are extremely difficult to make for four reasons.

First, users are not burdened with any particular world by birth and may choose which virtual world to join, if at all. User well-being is determined in large part by individual choices, and only a small portion of user happiness might be business income.\(^{22}\)

Thus, the normative value of the rule of law varies widely by user. Lack of legal rule harms some users, who will demand rule of law and perhaps withdraw without it, leaving fewer customers for virtual businesses. The rule of law has normative benefits for any user — even non-entrepreneurs — harmed by a lawless virtual society.

However, other users might well prefer a lawless virtual society for many reasons, including the reckless abandon that comes with shedding real-world risks and consequences. The EVE Online world, for example, encourages fraud and theft. These users do not see their choices as morally wrong\(^{23}\) or socially non-optimal, and virtual world providers that offer lawless outlets may be benefiting society even if virtual business stagnates in those worlds.\(^{24}\)

As a result, users choose worlds based on their own perception of the rule of law, among other considerations.\(^{25}\)

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\(^{22}\) Raph Koster, *Declaring the Rights of Players*, in *The State of Play: Law, Games, and Virtual Worlds* 63 (Jack M. Balkin & Beth Simone Noveck eds., 2006) (“[T]he common good is that which increases the population of a [world] without surrendering core social tenets or mores.”);

\(^{23}\) Philip Stoup, *The Development and Failure of Social Norms in Second Life*, 58 DUKE L.J. 311, 313 (2008) (“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.’”).

\(^{24}\) Orin S. Kerr, *Criminal Law in Virtual Worlds*, 2008 U. CHI. LEGAL F. 415, 427 (2008) [hereinafter *Criminal*] (“More broadly, a strong regime of criminal enforcement would threaten one of the foundational strengths of virtual world games: the ability of each virtual world to define its own terms and to appeal to specific users who want that virtual environment instead of another.”).

\(^{25}\) Tamanaa, *supra* note 16, at 5 (“Like all ideals, there are certain social-cultural contexts for which [the rule of law] is ill suited, and it must be weighed against and sometimes give way to other important social values.”);

Castronova, *supra* note 5, at 262 (“The ideal future would have a broad portfolio of worlds for us to visit, and we would all be able to spend time in the worlds we prefer, whether or not their governments are legitimate.”); Balkin, *supra* note 19, at 2050; Richard A. Bartle, *Virtual
Second, in a free-market context balancing the needs of users and providers is normatively ambiguous. One author, for example, argues that — for the good of the virtual world — providers must have carte blanche to change game rules and code at any time and with retroactive effect. This suggestion is contrary to the rule of law, but may be normatively superior for worlds that harbor the goals the author discusses, namely world evolution, user achievement, and exclusion of the real world.

Further, while efficiency maximizing economic analysis might yield generalized normative answers, such analysis is less helpful in assessing whether the rule of law in any particular world is normatively justified. Similarly, use of the rule of law to further natural rights is difficult in virtual worlds. For example, the formal rule of law described below might be present in authoritarian regimes where some rights are impinging. As discussed below, many — and perhaps most — virtual world providers fit the mold of rights limiting authoritarians.

However, stripping providers of the right or ability to act authoritatively in the name of liberty might mean that certain worlds close or never even open. Determining whether user rights outweigh the good that comes from the ability to be users in the first place is an unanswerable question.

Third, a little lawlessness may be a preferable way to encourage innovation and improve well-being in virtual worlds. Schumpeter, for example, argued that innovation thrives with disruptive activities by entrepreneurs. Presumably, some lawlessness and breaking of pre-existing norms encourages Schumpeter’s “creative destruction.” For example, lawbreaking can create efficiencies and help identify unjust and inefficient rules. Further, use of others’ creative work

Worldliness, in The State of Play: Law, Games, and Virtual Worlds 37 (Jack M. Balkin & Beth Simone Noveck eds., 2006); Yochai Benkler, There is No Spoon, in The State of Play: Law, Games, and Virtual Worlds 182 (Jack M. Balkin & Beth Simone Noveck eds., 2006); Caroline Bradley & A. Michael Froomkin, Virtual Worlds, Real Rules, 49 N.Y.L. SCH. L. REV. 103 (2004) (suggesting that different virtual worlds might be used to test effectiveness of different sets of laws). But see Laws, supra note 7, at 61–62 (questioning whether free choice works in practice).

26 But cf. Goldsmith & Wu, supra note 21, at 141 (discussing differing needs of and influential power of different groups).
27 Bartle, supra note 25, at 43.
28 Id.
29 See, e.g., Castronova, supra note 5, at 261 (arguing that whether users should own virtual property depends on the type of world and how isolated it is from the real world).
30 Tamahana, supra note 16, at 93, points out that “formal legality” is often used to justify authoritarian practices.
can increase creativity as a whole.\textsuperscript{33} Because lawlessness may have a positive effect on entrepreneurship, categorical pronouncements about the rule of law would be normatively incomplete.\textsuperscript{34}

Fourth, in any event, there is no consensus about which aspects of the rule of law are normatively superior.\textsuperscript{35} In some societies, for example, pre-announced rules may not be normatively superior.\textsuperscript{36}

Therefore, this Article focuses on the positive, rather than normative, aspects of the rule of law in virtual worlds.\textsuperscript{37} It determines whether virtual worlds implement the rule of law and assumes that more rule of law is better for entrepreneurship in virtual worlds. Armed with that information, providers, users, scholars, legislators, and judges can further assess the normative implications in the future.\textsuperscript{38}

\textbf{B. Defining the Rule of Law}

There are many ways to define the “Rule of Law.” Some formulations require more than others do, and some conflict with each other.\textsuperscript{39} Thus, defining the rule of law is the subject of many books. One commentator notes: “Read any set of articles discussing the rule of law, and the concept emerges looking like the proverbial blind man’s elephant — a trunk to one person, a tail to another.”\textsuperscript{40}

The analysis here begins with the trunk and the tail — two possible definitions of the rule of law that are seemingly on different ends of the spectrum: (1) government must follow the law, or (2) rules must be announced beforehand and applied non-arbitrarily.\textsuperscript{41}
While one could argue for either of these two formulations, among others, this Article attempts to combine them; a focus on rules incorporates the requirement that the government follow those rules. Hayek describes the combination:

Stripped of all technicalities, [the rule of law] means that government in all its actions is bound by rules fixed and announced beforehand — rules which make it possible to foresee with fair certainty how the authority will use its coercive powers in given circumstances and to plan one’s individual affairs on the basis of this knowledge.42

However, Hayek’s combined definition is a blunt instrument: the most insignificant failure would technically negate the rule of law. Indeed, any sweeping definition is insufficient to fully consider the presence or absence of the rule of law.43

Fortunately, many have identified elements of the rule of law that might contribute to an analytical scalpel. Unfortunately, this Article cannot examine every element, nor can it resolve every conflict between political philosophers about which elements are most important.

Thus, the Article aggregates several points of view, treating a variety of considerations as indicators of legal rule. The list begins with Fuller’s eight conditions for a legal system, which is supported by various other thinkers throughout history. Added to this list are some further considerations regarding enforcement — considerations not fully explored in Fuller’s list but that are likely important to entrepreneurs in virtual worlds. While there are many potential indicators of the rule of law, these ten capture the analysis of many thinkers across the political spectrum:

apply rules previously declared as those to be followed by the citizen and as being determinative of his rights and duties. If the Rule of Law does not mean this, it means nothing.”); LOCKE, supra note 15, at § 137; RAWLS, supra note 1, at 235 (“[T]he conception of formal justice, the regular and impartial administration of public rules, becomes the rule of law when applied to the legal system.”); TAMANAHA, supra note 16, at 33; Belton, supra note 18, at 3. The second view extends even further to the “liberal” rule of law — that individuals have rights and that government must be democratic. RAWLS, supra note 1, at 235 (“The rule of law is closely related to liberty.”). Part III.C. below discusses these extensions.

42 HAYEK, supra note 12.

43 DICEY, supra note 34, at 183 (“[W]e may safely conclude that . . . whenever we talk of Englishmen as loving the government of law, or the supremacy of law . . . are using words which, though they possess a real significance, are nevertheless to most persons who employ them full of vagueness and ambiguity.”); TAMANAHA, supra note 16, at 3 (“Notwithstanding its quick and remarkable ascendance as a global ideal, however, the rule of law is an exceedingly elusive notion.”); Belton, supra note 18, at 26 (because the rule of law has many different ends, it is impossible to establish a unitary measurement of the rule of law).
1. **Non-arbitrary:** Laws should not be arbitrary or contradictory. Methods of measuring arbitrariness will differ from person to person, but two general conditions apply. First, rules should not be randomly selected. Second, rules should not be ad hoc, but instead should apply to all. For example, bills of attainder directed at a single person or small group have no place in a sovereignty governed by the rule of law.

2. **Stable:** Changes should be infrequent; frequent changes render laws arbitrary.

3. **Public:** The rules must be publicly available and, in modern times, written.

4. **Non-discretionary:** Further, laws must be applied with minimal discretion. This traditional requirement is interesting, as discretion might be considered normatively valuable in a free society. Montesquieu, for example, suggests that the legislature have the power to “moderate the law in favor of the law itself by pronouncing less rigorously than the law.”

5. **Comprehensible:** Regulations must be discernable and understandable.

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44 “Laws,” “rules,” and “regulations” are used interchangeably here for variety. Part IV, below, discusses the sources of regulation in virtual worlds, whatever they might be called.

45 Dicey, supra note 34, at 198; Fuller, supra note 14, at 39; Locke, supra note 15, at 37.

46 Hayek, supra note 12, at 73–74, for example, argues that if the government must decide how many buses to run, then it is arbitrary. See also Dicey, supra note 34, at xxxviii (judicial authority given to officials connected with elected government shows decline in rule of law); Tamahnah, supra note 16, at 64–65 (discussing A.V. Dicey’s criticism of the administrative state as a degradation of the rule of law).

47 Fuller, supra note 14, at 39.

48 Fuller, supra note 14, at 39; Locke, supra note 15, at 137; Tamahnah, supra note 16, at 33; Belton, supra note 18, at 17.

49 See Fuller, supra note 14, at 39; Montesquieu, The Spirit of the Laws, Book XI, ch. 6 (Anne M. Cohler et al. eds., Cambridge University Press 1989); Tamahnah, supra note 16, at 33; Belton, supra note 18, at 7. But see Dicey, supra note 34, at 196 (describing certain guarantees of freedom as simply “the law of the land” rather than being guaranteed in a written document).

50 Dicey, supra note 34, at 198; Hayek, supra note 12, at 72–73 (“[T]he discretion left to the executive organs wielding coercive power should be reduced as much as possible . . . .”); Montesquieu, supra note 49, at Book XI, ch. 6.

51 Montesquieu, supra note 49, at Book XI, ch. 6 at 163.

52 Fuller, supra note 14, at 39.
6. **Prospective:** The sovereign must not punish an offense without a law proscribing that offense, and new laws should not be applied retroactively.\(^{53}\)

7. **Attainable:** The law must not require more than the affected parties have the power to accomplish.\(^{54}\)

8. **Consistent Enforcement:** Laws must be enforced regularly, accurately, and in accordance with their text.\(^{55}\) This means that those enforcing the rules must know them, understand them, and apply them without bias.\(^{56}\)

9. **Impartial Application:** Regulations must be applied impartially, such that similar circumstances are treated similarly.\(^{57}\) Hayek pushes this indicator to the limit, arguing that any government-provided service cannot be impartial.\(^{58}\) Hayek’s view is generally disfavored in the modern welfare state.

10. **Neutral Fact-finding:** A neutral arbiter of the truth should determine when the law has been broken. Some argue that this

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\(^{54}\) FULLER, *supra* note 14, at 39.


\(^{56}\) RAWLS, *supra* note 1, at 235 (“One kind of unjust action is the failure of judges and others in authority to apply the appropriate rule or to interpret it correctly. It is more illuminating in this connection to think not of gross violations exemplified by bribery and corruption, or the abuse of the legal system to punish political enemies, but rather of the subtle distortions of prejudice and bias as these effectively discriminate against certain groups in the judicial process.”).

\(^{57}\) DICEY, *supra* note 34, at 198; MONTESQUIEU, *supra* note 49, at Book XI, ch. 6; RAWLS, *supra* note 1, at 237 (“The rule of law also implies the precept that similar cases be treated similarly.”); TAMANAHA, *supra* note 16, at 33; Belton, *supra* note 18, at 3.

\(^{58}\) HAYEK, *supra* note 12, at 76–77.
indicator requires an independent judiciary, but the minimum is an impartial fact-finder independent of the dispute.

Because these are indicators, no single element (except perhaps non-arbitrariness) is either necessary or sufficient to prove that law rules in a virtual world. Rather, the more indicators, the more a virtual world is governed by law. Multi-factored analysis makes intuitive sense as well; many readers might be surprised by the absence of several factors in their own countries that were previously thought to follow the rule of law.

Further, some indicators may be more important in some circumstances. Stability in the law might be favored by those about to make an investment. Enforcement of the law might be favored by those who rely on contracts. Public availability may be favored by those who need to convince others of the legality of a business plan.

C. Liberty and the Rule of Law

Missing from the foregoing ten indicators are several values that many have come to associate with the rule of law. The following are five governance concepts that this Article does not consider part of the rule of law.

A. Democracy: Dictators can — though they often do not — live by the rule of law; the Magna Carta shows that a non-

59 Montesquieu, supra note 49, at Book XI, ch. 6; Rawls, supra note 1, at 239 (“While there are variations in these procedures, the rule of law requires some form of due process: that is, a process reasonably designed to ascertain the truth . . . as to whether a violation has taken place and under what circumstances. For example, judges must be independent and impartial, and no man may judge his own case.”); Tamanaha, supra note 16, at 35; Belton, supra note 18, at 17. But see Fuller, supra note 14, at 81 (arguing that a judiciary can detract from the rule of law if laws are not enforced as written).

60 Tamanaha, supra note 16, at 9 (Aristotelian rule of law requires “reason unaffected by desire.”).

61 See, e.g., Belton, supra note 18, at 6–7 (“The ends are the reason why we value the rule of law and are what most people mentally measure when determining the degree to which a country has the rule of law. Another type of definition describes the institutions a society must have to be considered to possess the rule of law. Such a society would have certain institutional attributes . . . .”); Palombella, supra note 35, at 35 (“When dealing with the rule of law, legal theory concentrates typically on the features which law generally needs in order to rule.”).

62 Tamanaha, supra note 16, at 91 (describing this as the difference between formal rule of law — as described in this Article — and substantive rule of law). The indicators described above align most closely with a “Formal Legality” regime.

63 Tamanaha, supra note 16, at 10 (Aristotle and Plato believed that the “best government was the rule by the best man, not rule by law, for law does not speak to all situations, and cannot contemplate all eventualities in advance.”); Lon L. Fuller, Positivism and Fidelity to Law — A Reply to Professor Hart, 71 Harv. L. Rev. 630, 660 (1958) (problem with Nazi rule was not the dictatorship, but instead that the dictatorship had no fidelity to law); see also Tamanaha, supra note 16, at 37.
elected sovereign can obey the law.\textsuperscript{64} and similar limitations might be possible in virtual worlds.\textsuperscript{65} Further, Madison’s tyranny of the majority implies that democracy does not equal rule of law.\textsuperscript{66} As de Tocqueville pointed out:

A majority taken collectively is only an individual, whose opinions, and frequently whose interests, are opposed to those of another individual, who is styled a minority. If it be admitted that a man possessing absolute power may misuse that power by wronging his adversaries, why should not a majority be liable to the same reproach?\textsuperscript{67}

Finally, the definition of democracy itself is slippery. Federalist voting concepts like the U.S. Senate and the winner-take-all Electoral College might seem highly undemocratic to citizens of a parliamentary state. Parliamentary systems are undemocratic to those who desire direct democracy. Although democracy is ambiguous, no one takes the view that the U.S. is not governed by the rule of law due to lack of democracy.\textsuperscript{68}

B. \textit{Freedom}: Rules that violate personal autonomy might still satisfy the rule of law.\textsuperscript{69} Most of the rights guaranteed by the U.S. Bill of Rights\textsuperscript{70} are about personal freedom,\textsuperscript{71} not about

\begin{itemize}
\item \textsuperscript{64} TAMANAHA, \textit{supra} note 16, at 25–26.
\item \textsuperscript{65} James Grimmelmann, \textit{Virtual Worlds as Comparative Law}, 49 N.Y.L. SCH. L. REV. 147, 175–76 (2003) [hereinafter \textit{Comparative}].
\item \textsuperscript{66} \textit{THE FEDERALIST} NO. 10, at 42–43 (James Madison) (“Complaints are every where heard . . . that measures are too often decided, not according to the rules of justice and the rights of the minor party, but by the superior force of an interested and over-bearing majority.”).
\item \textsuperscript{67} 1 ALEXIS DE TOCQUEVILLE, \textit{DEMOCRACY IN AMERICA} 269 (Knopf 1945) (1835); \textit{see also}, TAMANAHA, \textit{supra} note 16, at 37 (discussing arguments that a judiciary is needed to enforce the rule of law when democracy expands the laws).
\item \textsuperscript{68} \textit{See, e.g.}, DE TOCQUEVILLE, \textit{supra} note 67, at 272 (“If, on the other hand, a legislative power could be so constituted as to represent the majority without necessarily being the slave of its passions, an executive so as to retain a proper share of authority, and a judiciary so as to remain independent of the other two powers, a government would be formed which would still be democratic while incurring scarcely any risk of tyranny.”); \textit{see also id.} at 271 (American legislature elected by majority, executive elected by majority, even judges elected by the majority in some states); TAMANAHA, \textit{supra} note 16, at 34 (liberals argue that democracy leads to freedom).
\item \textsuperscript{69} TAMANAHA, \textit{supra} note 16, at 37 (“A regime with oppressive laws can satisfy legal liberty [rule of law] by meticulously complying with those laws.”); Palombella, \textit{supra} note 35, at 36 (“It follows that a perspective of neutrality accepts that it is possible for rights and human dignity to be infringed, even when those requirements of the rule of law are satisfied.”).
\item \textsuperscript{70} U.S. CONST. amends. I – X.
\item \textsuperscript{71} TAMANAHA, \textit{supra} note 16, at 35 (describing role of personal autonomy in liberal view of freedom).
\end{itemize}
whether the rules are pre-announced and followed by the sovereign.\footnote{But see Hayek, supra note 12, at 82 (“Man is free if he needs obey no person but solely the laws.” (quoting Immanuel Kant, Metaphysical Elements of Justice)); Montesquieu, supra note 49, at Book XI, Ch. 3 at 155 (“Liberty is the right to do everything the laws permit . . . .”); Tamanaha, supra note 16, at 34 (liberal argument is that if the government is constrained by pre-existing rules, then freedom will ensue).} A country could, for example, make a law allowing search warrants to be issued upon any application by law enforcement.\footnote{Tamanaha, supra note 16, at 35 (Tamanaha notes that the definition of minimal personal autonomy is imprecise. Thus, the proposed search rule might also satisfy a “freedom” requirement. This imprecision is one reason why the rule of law ideal should be separated from the freedom ideal.).} So long as all knew the law and the government undertook no search without an application, the rule of law would be satisfied despite the abandonment of probable cause.

C. \textbf{Legitimacy}: Consent of the governed is helpful for enforcement and political stability,\footnote{Friedrich Kratochwil, Has the ‘Rule of Law’ Become a ‘Rule of Lawyers’?, in Relocating the Rule of Law 177–78 (Gianluigi Palombella & Neil Walker, eds. 2009) (rule of law cannot be separated from those who create and implement it).} but the rule of law might persist without legitimacy.\footnote{Compare Castronova, supra note 5, at 157 (arguing that limitations of rights in virtual worlds as potentially benefiting the community’s interests “would be even more persuasive if the community’s interests had been validated and expressed through some unbiased consensus-building process”) with id. at 208 (“What is interesting about [provider agreements] is that while they do solicit the consent of governed they offer no due process of enforcement or amendment.”).} Further, the rule of law does not necessarily follow from the legitimacy of lawmakers. Duly elected lawmakers can still act arbitrarily.\footnote{Hayek, supra note 12, at 82.}

D. \textbf{Non-coerciveness}: Even if everyone follows the law, the sovereign could — and some would argue should — still have coercive machinery.\footnote{Lawrence Lessig, Code and Other Laws of Cyberspace 188–89 (1999) (arguing that architecture for enforcement is important for any regulation to be effective); Rawls, supra note 1, at 240 (arguing that the sovereign must be able to enforce rules even if they are never violated: “[T]he existence of effective penal machinery serves as men’s security to one another.” (citing Thomas Hobbes, Leviathan, chs. 13–18 (Liberal Arts Press Inc. 1958))); Belton, supra note 18, at 17 (enforcement is required for rule of law); Goldsmith & Wu, supra note 21, at 135 (coercion supplements community norms and cooperation); Laws, supra note 7, at 55–59 (describing how wizards in LambdaMOO needed to retain power even if the users ruled the virtual world by democracy); Orin S. Kerr, Enforcing Law Online, 74 U. Chi. L. Rev. 745, 751 (2007); cf. Tamanaha, supra note 16, at 47.}

E. \textbf{Happiness}: Laws need not improve citizen welfare.\footnote{Madison argued that limited terms and elections were sufficient to}
give legislators an incentive to maximize citizen welfare. Madison’s argument is morally neutral; it says nothing about what the legislature should do. Thus, every country that purports to follow the rule of law has a variety of laws that might hinder the welfare of some part of the population.

These five points contradict a rule of law interpretation that incorporates a requirement of liberty. For that reason, excluding them from rule of law considerations in virtual worlds may prove controversial.

However, liberal rule of law is a modern and decidedly Western view of the rule of law. Many countries have varying levels of civil liberties, yet are still governed by pre-announced and impartially applied rules. For reasons discussed below, virtual worlds should be included with such societies.

The liberal rule of law is usually a moral good; liberal values certainly improve welfare in most cases, including in virtual worlds. Take, for example,
the termination of Peter Ludlow’s account because of his blog “newspaper” in The Sims Online. The newspaper reported the abuse of community norms, such as new users cheated out of their cyber-property and purportedly underage users running cyber-brothels. The newspaper was a good thing. Its reporting provided important information to users, and the authoritarian world provider did not want such information disseminated because it discouraged users from joining.

Yet, even if all newspapers were banned, the formal rule of law might still be satisfied despite the moral good associated with the press. However, to the extent that banning this particular user was arbitrary and not in accordance with existing rules, then the action would violate the formal rule of law.

The newspaper example might imply that liberal rule of law should be a goal for virtual worlds. Nonetheless, this Article does not apply liberal democratic principles to virtual worlds for three reasons.

First, game play in the virtual world may not lend itself to freedoms. For example, many worlds are dedicated to player versus player combat, and concepts like “citizen happiness” depend on enjoyment of and winning the battle. Of course, many worlds do lend themselves to freedoms, but even these worlds may have rigid rules about the type of business which may be conducted.

In addition, the computer sees all — and indeed must do so — in order for the software to work properly. As a result, guarantees that the provider (as sovereign) will not “search” a user’s virtual possessions are difficult to enforce.

There is a difference between a computer knowing information and the

87 Castromanov, supra note 5, at 305 n.5; Balkin, supra note 19, at 2075–76.
88 Ludlow, supra note 86, at 13 (describing events relating to termination); Balkin, supra note 19, at 2075–76 (“Ludlow argued that this was a pretextual enforcement of a technical violation of the TOS not regularly applied against other players.”).
89 Balkin, supra note 19, at 2075–76 (discussing Ludlow and speech values); Koster, supra note 22, at 66 (players expect a certain level of treatment from providers, whether or not such “rights” are expressed as such or written in a document); Laws, supra note 7, at 51–52 (many new users want traditional liberal rights in virtual worlds). But see Eric Goldman, Speech Showdowns at the Virtual Corral, 21 Santa Clara Computer & High Tech. L.J. 845, 851 (2005) (virtual worlds are not different from other on-line providers and do not warrant additional regulation to maintain free speech).
90 Laws, supra note 7, at 59 (“[W]e might well conclude that virtual democracy and avatar rights are not ideals worth pursuing. The reasons for this are many, but certainly include arguments that the worlds are built and maintained out of the funds of a private entity, or that democracy and these worlds are not good bedfellows.”).
91 Indeed, such protections would likely not even apply to real governments to the extent that a user’s virtual possessions are visible to other avatars in the world. See generally Joshua Fairfield, Escape Into the Panopticon: Virtual Worlds and the Surveillance Society, 118 Yale L.J. Pocket
world provider having access to information, but providers often take actions based on in-game information, which implies that provider employees have access to in-game information.

Second, requirements of democracy and legitimacy are difficult to apply because virtual worlds are democratically selected dictatorships. Providers are in power by fiat because they invest in the hardware and software to build the world. They gain sovereign rights only by attracting subscribers who vote with their feet and their wallets. Of course, in-world regulation is not democratic. While providers may listen to input provided by their users, the rules providers impose are not, with few exceptions, by majority vote or any other form of democratic representation. Even those sites that have some user voting do not allow complete user control over game rules. Further, users cannot revolt to depose the provider’s rule if they disagree with how they are regulated. In-

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92 Castrovilla, infra note 5, at 152 (describing providers as having dictatorial powers).
93 Laws, supra note 7, at 55.
94 Laws, supra note 7, at 59–60 (“The standard argument against avatar rights, therefore, is that wizards, by virtue of their private (and corporate) ownership of the computer equipment and substantial investments in creating the virtual world, should have a right to do exactly as they please.”). Compare Castrovilla, infra note 5, at 207 (“[O]ne does not find much democracy at all in synthetic worlds . . . . The typical governance model in synthetic worlds consists of isolated moments of oppressive tyranny embedded in a widespread anarchy . . . . There is a tyrant in place from the beginning, but an extraordinarily inactive one.”) with id. at 261 (“[C]ompetitive pressures force companies to keep as many people as possible just happy enough to stay.”). See also Comparative, supra note 65, at 176–78 (describing that right of exit puts pressure on providers to consider user desires); Laws, supra note 7, at 59; David G. Post, Anarchy, State and the Internet: An Essay on Law-Making in Cyberspace, 1995 J. ONLINE L. ART. 3, para. 42 (1995), http://web.wm.edu/law/publications/jol/articles/post.shtml (“A kind of competition between individual networks to design and implement rule-sets compatible with the preferences of individual internetwork users will thus materialize in a new . . . market for rules.”).
95 Dibbell, supra note 85, at 142–43; Balkin, supra note 19, at 2051.
97 Bradley & Froomkin, supra note 25, at 143–46; Koster, supra note 22, at 63 (users have almost no power to seek rights, and providers do not want to surrender the control necessary to grant rights).
98 Comparative, supra note 65, at 176 (“[A]t least since Locke, the legitimacy of republican government has been intertwined with the right of revolution. If the government refuses to obey the results of an election, it must expect the citizenry to rise up and depose. But there is no way to depose the designers of a game.”).
Instead, subscribers democratically choose to have their avatars be subject to dictatorial laws.\textsuperscript{100}

Third, freedom is further limited \textit{a priori} because virtual lives and property are not portable.\textsuperscript{101} Once an avatar lives in a world, it cannot leave except by death.\textsuperscript{102} The democratic choice of a particular dictatorship is locked-in, and the more time and effort one spends in a world, the more it hurts to vote for another world.\textsuperscript{103} This effect is more pronounced with respect to virtual business, which requires more investment in a particular world for success.

To be sure, the lock-in effect means that dictatorial world providers have less incentive to obey both formal and liberal rule of law principles because they perceive reduced likelihood of emigration.\textsuperscript{104} Thus, some have suggested mandatory alienability of virtual possessions as a way to improve avatar rights,\textsuperscript{105} so that unhappy users can sell their possessions and move to another world. Such proposals would certainly improve the rule of law.\textsuperscript{106} Even so, if users know that they cannot sell their possessions at the time they join a world, then they are voting against the freedom to do so.\textsuperscript{107} If instead a provider withdraws the right to sell possessions after a user joins, then the formal rule of law would be violated.

Either way, the issue is not about freedom, but about predictability. The important question, therefore, is whether the lock-in effect is so great that the dictatorial provider will \textit{never} provide the predictability associated with the formal rule of law.\textsuperscript{108}

Fourth, to the extent that the rule of law fosters investment by setting expectations, liberal ideals are less important. So long as expectations are fixed,

\textsuperscript{100} LESSIG, supra note 77, at 201 (the amount of regulatory power of a site coincides with its market power).

\textsuperscript{101} Id. at 202 (because switching costs are high, users cannot effectively vote with their feet). More precisely, they can only vote once without having to reinvest in a new world.

\textsuperscript{102} An avatar can, however, be transferred to another user.

\textsuperscript{103} CASTRONOVA, supra note 5, at 152, 261 (“If you disagree, and want to abandon the fruits of thousands of hours of work and effort, as well as all of your friendships, click ‘I Disagree’ [to the provider agreement] and go spend some time as a lonely hobo in some other world.”); Balkin, supra note 19, at 2051; Joshua A.T. Fairfield, \textit{Anti-Social Contracts: The Contractual Governance of Online Communities}, 53 McGill L.J. 427, 470 (2008) [hereinafter \textit{Anti-social}] (providers design worlds to create high switching costs); Laws, supra note 7, at 61–62.

\textsuperscript{104} CASTRONOVA, supra note 5, at 206–07 (arguing that good government requires limited power: “The premise here tends to be that any individual will exploit any power to her own ends, to the maximum feasible extent, unless constrained in some way by a countervailing incentive.”).

\textsuperscript{105} \textit{Anti-social}, supra note 103, at 471.

\textsuperscript{106} Comparative, supra note 65, at 178–81 (arguing that a user’s ability to sell an avatar limits the cost of leaving a world, thus making it easier to leave and exerting less pressure on providers to change their rules).

\textsuperscript{107} Goldman, supra note 89, at 851.

\textsuperscript{108} Comparative, supra note 65, at 181–83 (providers acting as non-intervening dictators may be preferable than attempting to create a virtual democracy).
users can allocate investments appropriately. Of course, liberal governance may maximize total wealth as compared to non-liberal governance, but given the other limitations discussed above, fixed expectations may be the most achievable goal.

Thus, this Article focuses on formal rule of law. This is an appropriate first step even for those who favor freedoms in virtual worlds, as formal rule is a necessary component of liberal rule.

IV. DEFINING “LAW” IN RULE OF LAW

The two primary components of the rule of law — sovereigns and rules — take on new meaning in the context of virtual worlds. For example, just who is the sovereign? Is it the virtual world provider or the real-world government? Both? What are the rules? Are they set by contract? Through user democracy? By real-world legislatures? Answering these questions must precede consideration of the rule of law.109

As Professor Lessig and others have pointed out, four types of regulations generally govern behavior in cyberspace.110 These four types also apply in ways specific to virtual worlds:

- **Market:** The market will affect (a) who joins the world, (b) who leaves the world, and (c) what users do while in the world. Thus, services offered by and uses for each virtual world will affect what users can do. Additionally, contracts provide many rules governing activities in and relating to the virtual world.111 This conduct sets a baseline that acts like the basic law of the virtual land.112 If consumers want a particular set of rules, they will flock to worlds that provide the preferred combination and away from worlds that do not.113 If providers attempt to change the rules, users may leave or just threaten to do so.114 For exam-
ple, with respect to the concert depicted in Figure 1, the Second Life terms of service do not forbid the playing of live music. However, if Linden Lab ever modified the agreement to ban live music, users might leave for another world. The contract would constrain concert activities, and market forces would create pressure to limit those constraints.

- **Architecture (code):** The ability for virtual world providers to control what avatars can and cannot do through software is a perfectly enforceable regulation. As Professor Lessig notes, “Code is law.” Code provides private parties with a previously unavailable coercive force. For example, Linden Lab may disable the software that allows for transmission of live music to the Second Life servers to ban all concerts.

- **Law:** These are rules announced and enforced by some sovereign with coercive power. Unlike code, enforcement may not be perfect due to cost, distance, or personal choices. For example, copyright laws may forbid the public performance of someone else’s musical work in Second Life, and the copyright owner might seek an injunction to stop the concert.

- **Norms:** These are rules, written and unwritten, followed by avatars in a particular community. Other users may enforce the rules, and the sovereign may even enforce them. For example, gatherings with live music are unlikely events in worlds

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115 JONATHAN ZITTRAIN, THE FUTURE OF THE INTERNET AND HOW TO STOP IT 168–69, 172 (2008). But see Orin S. Kerr, The Problem of Perspective in Internet Law, 91 GEO. L.J. 357, 372 (2003) (“Saying that the power of code is akin to the power of law is simply too loose a use of the word ‘law’ to be helpful. If code is law to an Internet user, then a sports referee’s calls are law to an athlete, and Steven Spielberg’s decisions about how to shoot a movie are law to a movie viewer.”); Tateru Nino, Code is Law (May 31, 2007), http://www.secondlifeinsider.com/2007/05/31/code-is-law/ [hereinafter Code is Law] (“However, it's not that code is a limiting factor for the most part. What it is, instead, is an enabling factor.”).

116 LESSIG, supra note 77, at 6. But see CASTRONova, supra note 5, at 205 (code may be law, but more than code creates a virtual “state.”).

117 See, e.g., RAWLS, supra note 1, at 236 (“The constitutional agencies that [a legal system] defines generally have the exclusive legal right to at least the more extreme forms of coercion. The kinds of duress that private associations can employ are strictly limited.”).

118 Anti-social, supra note 103, at 459–61; CRIMINAL, supra note 23, at 422.

119 David R. Johnson, The New Visual Literacy: How the Screen Affects the Law, in THE STATE OF PLAY: LAW, GAMES, AND VIRTUAL WORLDS 246 (Jack M. Balkin & Beth Simone Noveck eds., 2006) (“We may soon take it for granted that the act of visiting a particular on-line space corresponds to submission to the special rules that apply to action in that context.”); ZITTRAIN, supra note 115, at 168 (“Social problems can be met first with social solutions — aided by powerful technical tools — rather than by resorting to law.”).
featuring player versus player combat, even if the code allowed music in combat zones; instead, the musician and audience might get attacked, stopping concerts before they begin.

Each of these types of regulation can theoretically emanate from two sovereigns — real government and virtual world providers — both of which can effectively regulate behavior. Even though a community is not a true sovereign, community-based enforcement of norms might constitute an additional source of regulation. Further, the regulations may affect two entities — the human and the avatar.

Of course, particular sovereigns more naturally apply some types of regulation. It is unlikely that providers will pass any binding legislation, just as it is unlikely that the federal government will write software code for virtual worlds. However, overlap is not as far-fetched as it may sound. A government could, for example, set default rules about required or unenforceable contract terms and software functionality. Furthermore, a virtual world might enforce the laws of a government (for example, exacting in-world punishment for defamation).

There are twenty-four potential combinations of regulation type, sovereign, and affected entity. It is tempting to consider each of the twenty-four options separately with respect to the rule of law, but such complexity is neither warranted nor fruitful. Because the law applies to individual entities, it should be examined from the standpoint of individual entities. What matters is the cumulative effect of the law on its subjects.

Thus, this Article considers one question: “What constraints are imposed on real people in their activities relating to virtual worlds?” These constraints are surely overlapping, such that questions of conflict and preemption must be considered to determine which regulations will govern the user.

A focus on the user is consistent with the effect of the rule of law, or lack thereof, on digital entrepreneurship. Humans are a better focus than avatars.

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120 Burke, supra note 97, at 2; Feudalism, supra note 19 (the provider both grants property rights and sets the law relating to those rights); LESSIG, supra note 77, at 189 (“We can have an idea of sovereign power — the right of the sovereign to regulate or control behavior — but our idea is meaningful only when we place it within a particular regulatory context, or within particular architectures of control.”); Radin, supra note 112, at 7 (“Sovereignty has been abrogated in favor of whatever firm has promulgated the regime.”).

121 The combination is 4 types x 3 sovereigns x 2 affected entities.


123 LESSIG, supra note 77, at 192.

124 Joshua A.T. Fairfield, The Magic Circle, 11 Vand. J. Ent. & Tech. L. 823, 829–30 (2009) [hereinafter Magic Circle] (“The fundamental issue of on-line regulation is not the balance of power between nation-state sovereigns. Rather, it is the balance between sovereign and citizens.”); cf. CASTRONOVA, supra note 5, at 151 (“It is frankly impossible to deny that the gold pieces of fantasy worlds are money, just like the money in your pocket. They are sustained by exactly the same social mechanisms and perform exactly the same functions.”).
tars for three reasons. First, humans, not avatars, make decisions based on rules.125 Even automated decision processes must be initially programmed by humans. As a result, humans direct much of the debate and political deliberation about virtual worlds both inside and outside the virtual world. Inside the world, avatars perform protests, while outside they complain to customer service (and threaten to take their business elsewhere).126 The observation that most of the “democratic” discussion about what users want in their virtual world occurs in the real world reinforces a human focus.127

Second, human well-being is more important than virtual well-being,128 though perhaps some might disagree.129 As a society, we care about what happens to people, not about what happens to their avatars.130 If Linden Lab closed Second Life, millions of avatars would “die.” Their owners might be unhappy, but their well-being would suffer little more than losing at a video game. If, however, such a shutdown meant that real people would lose real money (and productive time) invested in Second Life, then those negative effects are worth considering.131

To be sure, “fun” is part of the economic utility (compensation, jollies, or utils) that one gets from playing in the virtual world.132 Ironically, though, the less “fun” a type of character is, the more valuable it is because fewer people choose to play with that type.133 There is a limit to this argument — people will

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125 LESSIG, supra note 77, at 190 (“Whenever anyone is in cyberspace, she is also here, in real space. Whenever one is subject to the norms of a cyberspace community, one is also living within a community in real space. You are always in both places if you are there, and the norms of both places apply.”).

126 CASTRONOVA, supra note 5, at 152–53.

127 Id.

128 Jonathon W. Penney, Understanding the New Virtualist Paradigm, 12 No. 8 J. INTERNET L. 3, 4 (2009) (“Virtual people in virtual communities are real people with real-life concerns.”).

129 See, e.g., Laws, supra note 7, at 63–65 (discussing the projection of the user into an avatar, rather than the projection of the avatar onto the user. Despite differing terminology, the authors still consider the user’s well-being as the end goal: “Yet while an avatar's owner may be perfectly comfortable with killing the avatar when she grows sick of it, she may feel genuine anger when a more powerful avatar decides to use her avatar for target practice.” Id. at 63.).

130 Cf. id. at 9 (“One does not study the labor market because work is holy and ethical; one does it because the conditions of work mean a great deal to a large number of ordinary people. By the same reasoning, economists and other social scientists will become more interested in Norrath and similar virtual worlds as they realize that such places have begun to mean a great deal to large numbers of ordinary people.”).

131 CASTRONOVA, supra note 5, at 152 (“Should something happen to the conditions of being a wizard — say, a formerly powerful spell gets weakened — all those who are settled into wizarding as an occupation experience a genuine loss of well-being.”); Balkin, supra note 19, at 2071 (“If virtual items have real-world equivalent values, though, the game designer may be destroying a considerable amount of value by turning off the game, and the more value that is destroyed, the less likely the law will stand for it.”).

132 CASTRONOVA, supra note 5, at 154–55.

133 Id.
choose to avoid worlds that have no fun character types. This Article’s focus is slightly different — it places less value on fun and other psychological effects where the world is used for entertainment only and has no business component. This formulation favors business well-being over psychological well-being; analysis focused on non-business aspects might give more weight to those who are attached to their avatars for reasons other than time or monetary investment.

Third, humans might control several avatars, in the same or multiple virtual worlds. The rule of law in one world might counteract lawlessness in another world; the net effect on the user (and the user’s choice to participate in multiple worlds) is the important and interesting point of study.

Thus, if code, norms, law, or markets exert control on real people, then this Article questions whether the rule of law governs those controls.

V. VIRTUAL RULE OF LAW

The foregoing background provides a foundation to consider the rule of law in virtual worlds. This part considers the effect of provider contracts, community norms, code, and real-world legislation and jurisdiction.

The results are unexpected. Maligned sources of law such as agreements and code hold the most theoretical hope for the rule of law, despite often falling down in practice. Lauded sources of law, such as community norms and importation of real-world law appear to fail not only practically but also theoretically.

A. Market Regulation Via the User Agreement

For better or worse, provider agreements define many of the rules that users must obey. Many object to the notion that such agreements — which are undoubtedly contracts of adhesion — should govern behavior within the worlds. Others argue that contracts have a positive impact in virtual worlds. Either way, contractual sovereignty is the fact of the matter. If an agreement states that users do not own the “virtual property” that their avatars “possess,”

134 Tateru Nino, Can an Avatar Sign a Contract? (May 4, 2009), http://dwellonit.taterunino.net/2009/05/04/can-an-avatar-sign-a-contract/ [hereinafter Can an Avatar Sign] (pointing out the “shocking” fact that humans are not, in fact, the same as their avatars).

135 See generally Anti-social, supra note 103. See also Balkin, supra note 19, at 2071–72 (predicting that courts will not enforce all user agreements).

136 Balkin, supra note 19, at 2065 (restricting ownership of virtual property can enhance game play); Dibbell, supra note 85, at 143 (To the extent that users have input with providers, “[t]he EULA starts to look less like a contract of adhesion . . . and more like a social contract.”).

137 Anti-social, supra note 103, at 432; Goldsmith & Wu, supra note 21, at 137 (even with informal dispute resolution, contract enforcement is critical to on-line business). But see Lessig, supra note 77, at 197 (contracts in cyberspace are entered nearly costlessly, which might warrant real-world limitations on the rights that might be signed away by contract); Stoup, supra note 22, at 338–39 (provider implemented rules are more effective than community policed norms).
then users do not own such virtual possessions, no matter how seemingly unfair, inefficient, or unfortunate the announced rule might seem.138

In theory, contractual regulations may exhibit the ten indicators discussed in Part III. Contractual rules can be general, stable, announced in advance, non-arbitrary, neutral, and so forth.139 Further, contracts fulfill the simpler definition that the rule of law only requires the sovereign to behave in accordance with law. Real courts of law will almost certainly hold providers to the explicit terms of their agreements.140 That users agree to such contracts without reading them141 does not change the result; most people have not read the U.S. Code, state codes, court cases, or even most of the contracts that affect them.

1. Contract Modification

Of course, in practice the rule of law may not apply. For example, providers can (and most do) modify their agreements at any time,142 often without notice. These changes are binding on users; they must typically agree to new terms every game session, or forfeit their account, much like credit card agreements.

Building a business using another’s technical platform is an inherently risky proposition, both in cyberspace and in the real world. For example, developers of third-party applications might spend months writing a cell phone add-on program only to have it rejected.143 Contracts with virtual worlds are no different and can cause entrepreneurs great losses if the provider makes contractual changes.

138 Castronova, supra note 5, at 151 (“Users are a community of interests who are affected by the decisions of a coding authority . . . .”); Comparative, supra note 65, at 150 (property rights are possessory — one has exclusive control as to other game players only so long as one holds onto the property); Anti-social, supra note 103, at 441 (“The question of whether these private-law contracts can deliver the public goods they promise is the centrepiece of this article.”) and 443–45 (describing why contracts cannot create all background law for virtual worlds); Criminal, supra note 23, at 428 (breach of agreements should not be criminalized, because terms of such agreements are “arbitrary, and can reflect the whims and biases of whoever sets them.”).
139 Dibbell, supra note 85, at 143 (describing importance of provider agreement in defining acceptable behavior and problems of uncertainty caused by ignoring the agreement).
140 But see id. at 144 (providers might overstep their own agreements in suits against users); Michael Meehan, Virtual Property: Protecting Bits in Context, 13 Rich. J.L. & Tech. 7, 26 (2006) (provider agreements allow for arbitrary revocation of property).
141 Anti-social, supra note 103, at 468–69; Magic Circle, supra note 124, at 831 (users consent to package of game rules even without reading them, including agreements and community norms).
Even so, amendments do not automatically negate the rule of law.\textsuperscript{144} The question is whether such modifications are: frequent, arbitrary, ex post facto, or targeted at specific users or groups. Anecdotal evidence suggests that some modifications suffer from these problems and some do not.

In many ways, the market is effective in policing such modifications. Providers often seem to respond to the desires of their users (and the corresponding market pressure) to avoid changes that will upset a large portion of the population, but there are also exceptions.\textsuperscript{145} Furthermore, providers often make promises about what can be done in a virtual world in order to attract users. If providers amend contracts contrary to those promises, real-world courts could provide a remedy to those who relied on the promise.

Four examples consider amendments and the rule of law.

First, Second Life decided to start taxing virtual property.\textsuperscript{146} A tax made great business sense for Second Life; as virtual property proliferated, revenues on such property would grow. Of course, users did not want to pay additional money, and their avatars staged virtual protests to make the point. Second Life eventually rescinded the change in response to market pressure.

Second, in 2007, Second Life outlawed gambling.\textsuperscript{147} On its face, this would appear to violate rule of law principles because those who joined Second Life to start a gambling business were now out of business.\textsuperscript{148} Closer examination reveals the opposite.

The ban was not a frequent change; it was not as if Second Life banned entire lines of business and then reinstated them on a regular basis. The contract amendment was not arbitrary; gambling is illegal in many jurisdictions. The rule had no ex post facto effect; no one was penalized for past gambling. Additionally, the change was not targeted; it was a general rule with general application. So long as Second Life made no affirmative promises that gambling would be legal, the contractual law against gambling was no different from any legislative ban on real-world gambling, in accordance with the rule of law.

Third, in March of 2009, Blizzard announced new rules regarding the use of software add-ons used in its World of Warcraft world. These rules purport to limit who can use add-ons and how. Add-on developers may not charge for add-ons nor may they seek donations in-game; they must make the source code visible to all and Blizzard may disable any add-on at any time.\textsuperscript{149}

\textsuperscript{144} But see Castrovona, supra note 5, at 208 (user agreements provide no “due process” of enforcement or amendment).

\textsuperscript{145} Castrovona, supra note 5, at 152–53; Dibbell, supra note 85, at 143.


\textsuperscript{148} Many likely went “underground.”

This rule has a definite ex post facto effect — time, effort, and money used to develop this software is now worthless if the add-on cannot be sold as anticipated and promised by Blizzard.\(^{150}\) Further, though apparently general, the rules may target specific users.\(^{151}\)

Fourth, modification may be arbitrary and targeted at specific individuals. As discussed above, The Sims Online banned Peter Ludlow based on a technical violation of its terms of service. The alleged violation was widely believed to be a pretext; the termination was instead triggered by a particular newspaper blog Ludlow published.\(^{152}\) To the extent that the provider agreement did not allow such a ban, the action was arguably a modification of the agreement as it applied to Ludlow and, as such, it was arbitrary.

This fourth example highlights a specific concern about contractual modifications. Customer agreements are not self-enforcing; someone — usually a customer service representative — makes decisions in response to requests and complaints by users. Thus, the “law” as applied may be highly discretionary and arbitrary depending on the time and focus of the provider’s employees. Every action that a customer service agent takes with respect to a user, if not specifically allowed by the agreement, is a potentially arbitrary modification of that agreement.\(^{153}\)

This leads to an objection to the use of contracts as the primary virtual world regulator. Some argue that contracts can never lead to predictable outcomes because providers will always modify them, and customer service representatives will always take actions that are arbitrary, unannounced, and not in conformity with the written rules. Even where a company modifies the agreement in response to customer requests, frequent changes violates one of the rule of law indicators.\(^{154}\)

To be sure, these objections have merit, especially in current virtual world administration. Nonetheless, the objections need not always apply. Contractual stability is feasible because it does not suffer from collective action or public choice problems. A single entity writes and enforces the contract. While users may not like the rules, a world provider committed to the rule of law is in the best position to deliver on the goal. Further, unless one subscribes to the

\(^{150}\) Posting of Mike Schramm to WOW.com, http://www.wow.com/2009/03/23/devs-respond-to-addon-changes (Mar. 23, 2009) (“Already, the creator of the popular QuestHelper has responded on his changelog, saying that the addon is ‘dead.’”).

\(^{151}\) Id. (‘ . . . [W]ord is going around that Blizzard released these new policies to put the kibosh on [one particular add-on provider]”.)

\(^{152}\) Castronova, supra note 5, at 127; Ludlow, supra note 86, at 13. See note 88, supra, for a discussion about whether such change complied with the agreement.

\(^{153}\) James Grimmelmann, Virtual Power Politics, in The State of Play: Law, Games, and Virtual Worlds 148 (Jack M. Balkin & Beth Simone Noveck eds., 2006) [hereinafter Power] (describing a variety of targeted responses to user conduct); Anti-social, supra note 103, at 468–69.

\(^{154}\) Dibbell, supra note 85, at 143 (provider agreement for EverQuest “effectively renegotiated on a daily basis”).
Dicey/Hayek view that the administrative state can never follow the rule of law, then one must accept that customer service staff might — under the right conditions — impartially apply the general rules set forth by contract.

2. Vagueness

A bigger problem than modification — indeed a critical problem in practice — is that provider agreements are notoriously vague and incomplete. These agreements become more opaque when they incorporate community standards as enforceable promises.

For example, the Second Life terms of service state that violation of community norms, including lack of “tolerance” and “respect” is punishable by account termination. In other words, the potential penalty for intolerance is death of the avatar. The rule of law problem is not the death penalty — if announced beforehand, users can avoid Second Life if they want to avoid penalties.

Instead, the problems are that: (1) intolerance is ill-defined; (2) there is no way that such a contract term can (or will) be enforced neutrally and consistently; and (3) there is no independent fact-finder to determine whether behavior is intolerant. Even so, these shortcomings may not negate the rule of law if Second Life announced that it never enforces contractual rules — users could predict the likely outcome and plan accordingly. Of course, other users might attempt to enforce the terms, which would dilute any provider abstention. This may be a reason why providers disfavor the third-party beneficiary doctrine.

Vagueness detracts even further from the rule of law when the penalty shifts from unenforced avatar death to enforced real-world imprisonment. At least one person has been criminally convicted for violating the Computer Fraud and Abuse Act by breaching a user agreement. That verdict has been vacated,

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155 See supra text accompanying note 46.

156 Taylor, supra note 122, at 157; Anti-social, supra note 103, at 436–38 (contracts create confusion); Dibbell, supra note 85, at 144 (there are questions that agreements cannot answer).

157 Stoup, supra note 22, at 319 n.43.

158 Tateru Nino, Policies . . ., http://dwellonit-comic.taterunino.net/archive/25 (last visited, May 7, 2009) (“New and ambiguous content policies from Linden Lab left everyone in doubt as to what was and was not allowed in Second Life.”).

159 Tamanaha, supra note 16, at 90 (indeterminate legal systems need not be unpredictable).


but could be reinstated on appeal.\textsuperscript{162} Thus, an avatar’s intolerance and lack of respect — constitutionally protected conduct in the real world — might lead to jail time if expressed in breach of a provider’s user agreement. This outcome — even the uncertainty generated by its mere possibility — is contrary to any number of the rule of law indicators discussed above; it is incomprehensible, discretionary, partial, and unattainable.

3. Lack of Enforceability and Enforcement

These vagueness concerns highlight a more general practical problem; provider agreements are not enforced or even enforceable consistently or equally, such that users cannot rely on agreement-based law.\textsuperscript{163} In some ways, this is not surprising. Like real-world prosecutors, companies must choose which wrongdoing to pursue. Customer service representatives are inundated with complaints from the masses and must use some prosecutorial discretion about when to take action. The rule of law question is whether a system without resources to enforce the law is governed by law. The answer depends on the resources devoted to enforcement and will surely vary by provider.

However, lack of enforcement may transcend lack of resources. An additional explanation for uneven enforcement is that providers do not include a variety of sanctions in their user agreements tied to particular types of breach. Sanctions could be written in the form of world rules, which might technically be considered provider-enforced liquidated damages. Violations with specific penalties might also be easier for providers to enforce, such as virtual monetary fines or reductions in status.

In the absence of pre-specified penalties, any wrongdoing is met with some unknown penalty chosen by the provider, including the maximum penalty of avatar death. Providers are loathe to terminate user accounts, especially paying accounts, for every little transgression that might not comply with the terms of the provider agreement.\textsuperscript{164} Indeed, lack of enforcement may be a deliberate choice to maximize profits.\textsuperscript{165} Providers have even less incentive to enforce


\textsuperscript{163} CASTRONOVA, supra note 5, at 208 (user agreements provide no “due process” of enforcement or amendment); Radin, supra note 111, at 4 (consistent enforcement of contracts only a hypothetical); Nic Suzor, The Rule of Law and Digital Constitutionalism, Feb. 3, 2009, http://nic.suzor.com/blog/2009/20090302-rule_of_law_and_digital_constitutionalism.

\textsuperscript{164} Anti-social, supra note 103, at 472–73 (strict rules are needed to keep the riff-raff out even though a majority do not want such rules, leading to limited targeted enforcement); Stoup, supra note 22, at 331–32.

\textsuperscript{165} Comparative, supra note 65, at 181 (“If driving away five $10 per month players causes a $100 per month player to double her spending, the game administration will happily make such a trade.”).
contractual terms in real-world courts for cost and publicity reasons. Thus, the penalties are usually unknown beforehand and often ineffective.

Furthermore, it is quite difficult for users to enforce provider agreement breaches against other users because — other than a user-to-user buy/sell transaction — users do not enter into contracts with each other. Instead, user activity in the world, including interaction with other users, is governed solely by an agreement with the provider. Some argue that enforcement of the provider agreement against other users is impossible;\textsuperscript{166} at the very least, it is difficult\textsuperscript{167} and inefficient.\textsuperscript{168}

Practical constraints may further limit enforcement. Even if a provider agreement is enforceable by users, equitable relief may not be available.\textsuperscript{169} Additionally, the offending users may be in another country or otherwise outside the practical jurisdiction of small entrepreneurs. Though these problems are no different from real-world constraints, they further complicate the enforcement analysis.

As a result, if the virtual world provider does not enforce the contract, at best users \textit{might} enforce the rules, and at worst no one will enforce them.\textsuperscript{170} Contractual regulations with limited and uncertain enforceability fail several indicators of the rule of law; rules become vague, arbitrary, discretionary, and partial.

Further, lack of enforcement means that provider agreements are almost never tested in court. In turn, lack of testing provides no pressure to write clear contractual rules defining specific penalties tied to specific misconduct.

B. Community Norms as Law

Lack of contractual enforcement in practice has led to community enforcement of norms.\textsuperscript{171} Community enforcement can be anything from a decrease in status to gossip, harassment, or attacking the offending avatars.\textsuperscript{172} Some have applauded community efforts as a successful response to what would otherwise be lawlessness.\textsuperscript{173} For example, some suggest that laws in virtual worlds might mimic rules relating to sports. Professor Fairfield uses hockey as an example; the rulebook disallows fighting, but community norms supplement

\begin{footnotesize}
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\item[166] \textit{Anti-social}, supra note 103, at 436–38.
\item[167] Risch, supra note 160.
\item[168] \textit{Anti-social}, supra note 103, at 429.
\item[169] \textit{Id.} at 451.
\item[170] \textit{Id.} at 448–49.
\item[171] \textit{See, e.g.}, \textit{Feudalism}, supra note 19 (Second Life land barons take on quasi-governmental role working through self-help).
\item[172] Balkin, supra note 19, at 2062; \textit{Comparative}, supra note 65, at 159–60; \textit{Laws}, supra note 7, at 51–52; \textit{Stoup}, supra note 22, at 319–20.
\item[173] \textit{Laws}, supra note 7, at 69–71; \textit{Anti-social}, supra note 103, at 459–61, 471–72 (adverse selection caused by lax rules causes only the most abusive members to stay in a world).
\end{itemize}
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background tort law by allowing — indeed expecting — some amount of fighting without being legally actionable battery. 174

From a rule of law point of view, however, matters are hardly so simple. Enforcement of community norms, even if effective some of the time, do not provide sufficient widespread stability to be considered the rule of law. 175 The large quantity of users creates a collective action problem in both deciding what to enforce and who to punish. 176 There is also a public choice problem because the community enforcers do not bear the costs of their actions and, thus, have too much incentive to take action. 177 This is in direct contrast to the provider’s limited incentives discussed above. Additionally, players have no coercive power to enforce the rules, other than through player versus player harassment. 178

Second, norms may be arbitrary. 179 They are also more vague and more secret than provider agreements for many reasons. 180 First, new users have no idea what the community expects, 181 and norms shift over time based on new user influx. 182 Second, vague notions of tolerance and respect are often unspoken because complaints are not aired publicly. 183 Third, norms do not effectively propagate to all groups in the virtual world because avatars might inhabit different computer servers that do not interact. 184 Fourth, providers might want vagueness so that they may cater to their users by terminating accounts of un-

174 Anti-social, supra note 103, at 459–61; Magic Circle, supra note 124, at 835 (“penalties” are breaches of game rules that are not legally actionable); Criminal, supra note 23, at 422.

175 MATTHEW WILLIAMS, VIRTUALLY CRIMINAL: CRIME, DEVIANCE AND REGULATION ONLINE 138 (2006); Arias, supra note 5, at 1340–41 (community norm enforcement fails to regulate users); Balkin, supra note 19, at 2044 (too much money is at stake for the law to allow community norms to settle all disputes); Stoup, supra note 22, at 328–30 (too many users to regulate). But see Magic Circle, supra note 124, at 831–32 (to the extent that sovereigns consider norms, then norms can have real-world effect).

176 GOLDSMITH & WU, supra note 21, at 135 (reputation model of eBay did not “scale up” to large number of users).

177 LESSIG, supra note 77, at 159 (norms may not be effective where the community of enforcers does not include those who bear the cost of the norms).

178 CASTRONOVA, supra note 5, at 217; Burke, supra note 97, at 17; John Rothchild, Protecting the Digital Consumer: The Limits of Cyberspace Utopianism, 74 I N D. L.J. 893, 967–68 (1999) (LambdaMOO’s self-regulation failed because community norms are unenforceable); Stoup, supra note 22, at 328. But see Comparative, supra note 65, at 170–71 (discussing importance of guilds in forming and enforcing social norms despite their technical weakness).

179 Bartle, supra note 25, at 37.

180 Id. at 35 (discussing unwritten rules of virtual worlds).

181 See, e.g., Comparative, supra note 65, at 155–56 (describing complexities of different communities dealing with “kill stealing,” a practice whereby one person or group attacks a monster that others are already fighting). The author recalls feeling incredibly awkward at having said the wrong thing or entered the wrong building without permission in an early non-graphical virtual world.

182 Stoup, supra note 22, at 333–34.

183 Balkin, supra note 19, at 2067.

184 Stoup, supra note 22, at 332–33.
wanted users, or ignore high paying users that might harass less valuable users.\textsuperscript{185}

Further, while community enforcement can shape user behavior, it is often discretionary, inconsistently enforced, partial, and not determined by a neutral fact-finder.\textsuperscript{186} These traits are potentially exacerbated if users provide add-on software code that implements the community norms, because code cannot make any distinction between desired and undesired activity.\textsuperscript{187} As a result, community enforcement fails six of the ten indicators based on enforcement alone.\textsuperscript{188}

Additionally, it is unclear what level of violation of community norms will rise to the level of independently actionable torts.\textsuperscript{189} Typically, conduct that would otherwise be illegal is allowed when game players consent.\textsuperscript{190} No one sues a football player for tackling the ball carrier. The hockey example above shows how even conduct outside the rulebook — fighting — might be consensual.

However, even if users consent to being governed by community norms, they often have no idea what they are consenting to, and more importantly, they have no ability to find out other than through trial and error. There are no pre-announced, publicly available, attainable, written, forward-looking, impartially enforced rules. Using the hockey fighting example, new players know that fighting is expected despite the rulebook but may not know how much fighting is acceptable; many players will be unaware that the fight has gone too far until it is too late.

Finally, players might prefer community enforcement because it is more fun. This tends to undermine predictability even where other enforcement mechanisms are available.

\textsuperscript{185} Comparative, supra note 65, at 180–81.

\textsuperscript{186} CASTRONOVA, supra note 5, at 214 (“Even when guilds become powerful, their use of power rarely feels legitimate in the sense of being in the service of the community as a whole. Rather, they tend to act like a family of mighty people whose projection of their own power happens, coincidentally, to keep the peace on occasion.”).

\textsuperscript{187} ZITTRAIN, supra note 115, at 168–69, 172 (discussing “rough justice” of a single private party providing code that regulates what actions others can take on the internet: “These private programs are serving important functions that might otherwise be undertaken by public authorities — and their very efficiency is what might make them less than fair.”).

\textsuperscript{188} But see id. at 143 (arguing that community enforcement in Wikipedia, though not coercive, satisfies several indicia of the rule of law).

\textsuperscript{189} Anti-social, supra note 103, at 440–41.

\textsuperscript{190} Magic Circle, supra note 124, at 832 (consent is key to determining allowable conduct in virtual worlds).

\textsuperscript{191} Balkin, supra note 19, at 2068–69; Very Major Penalty, SPORTS ILLUSTRATED, Oct. 7, 2000, http://sportsillustrated.cnn.com/hockey/nhl/news/2000/10/06/mc2orley_assault_ap/ (Hockey player convicted of assault for fight: “Players and the NHL say the case shouldn't have gone to court.”). But see Anti-social, supra note 103, at 460 (“The process is just as simple as the one determining that tackling is not a tort, but high-sticking is.”).
Selective community enforcement through on-line violence might seem like the right idea in the absence of other enforcement, but the real world calls such behavior mob vigilantism.\textsuperscript{192} Such acts may be necessary to achieve some enforcement, but it is hardly the rule of law.\textsuperscript{193} Instead, vigilantism is ad hoc rather than generalized.\textsuperscript{194} It is potentially discretionary and partial.\textsuperscript{195} It is also ineffective much of the time.\textsuperscript{196} In all events, vigilantism does not encourage more business in the virtual world.\textsuperscript{197}

These concerns may transcend practical difficulties and present a theoretical bar to community norms as the rule of law. Communities shift by nature, and enforcement will always be at the whim of the group. Unless community norms can be “codified” in some form (such as an agreement) that is enforceable in a regular, consistent, and impartial manner, community norms will always be a barrier to the rule of law.

C. Fact-Finding

Contractual and community based enforcement suffer from an additional problem: the lack of any fact-finding, let alone neutral fact-finding, with respect to in-game violations.\textsuperscript{198} To be sure, parties can obtain a neutral determination in the real world, but there is no real-world right of action for many in-world wrongs, and there are few real-world checks on the provider’s ability to terminate an account or to otherwise curb activity through software programming.\textsuperscript{199} Even if communities perform their own fact-finding, there is no guarantee that providers will take any action based on such findings.\textsuperscript{200} Finally, the

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\textsuperscript{192} Comparative, supra note 65, at 168 (“When we look at the mechanisms by which players might enforce their notions of fair play and good behavior, an odd paradox emerges. The set of unpleasant and wrongful acts players might wish to deter is identical to the set of unpleasant and effective sanctions available as deterrence. To prevent violence, annoyance, and non-cooperation, players can engage in violence, annoyance, or non-cooperation.”).

\textsuperscript{193} Williams, supra note 178, at 138.

\textsuperscript{194} Tamanaha, supra note 16, at 97.

\textsuperscript{195} Zittrain, supra note 115, at 198–99 (discussing the need for rule of law to avoid the abuse of community power when “[v]irtue [gives] way to narrow self-interest and corruption.”).

\textsuperscript{196} Stoup, supra note 22, at 330–31 (shaming ineffective).

\textsuperscript{197} Castranova, supra note 5, at 209 (describing drop in world population when player versus player combat was allowed).

\textsuperscript{198} Comparative, supra note 65, at 173–74 (discussing limitations of provider designed political systems and norms enforcement).

\textsuperscript{199} Laws, supra note 7, at 50–51 (provider agreements make simple in-world dispute resolution difficult).

\textsuperscript{200} Arias, supra note 5, at 1340–41 (“Unfortunately, internal regulation methods have proven ineffective, because after most internal investigations, the MMORPG developer does not restore the stolen virtual goods to the victim.”); Dibbell, supra note 85, at 144 (“Ruling the EULA to be a valid contract, on the other hand, would have sent the question back where it belonged — into the much more finely tuned evaluative process that is the ceaseless, grinding struggle between players and designers over the shape of the game.”).
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cost of obtaining a neutral real-world fact-finding will likely outweigh the benefits of such adjudication even if the harm is actionable.

However, difficulties in fact-finding should be separated into those that affect the rule of law and those that do not. Fact-finding that is absent due to lack of adjudication and enforcement mechanisms implicate the rule of law. Fact-finding rendered impractical because the cost of obtaining resolution is higher than the harm at issue concerns the rule of law far less. Access to justice can sometimes be costly, whether real or virtual.

While inexpensive or even free adjudication may be normatively preferable, in most cases cost should not negate the rule of law, so long as it is not the sovereign imposing the cost. Thus, filing fees might negate the rule of law while attorneys’ fees would not. This distinction is relevant to provider agreements that require costly arbitration; where the provider-sovereign requires a large up-front cost such as arbitrator fees, an arbitration clause may negate the fact-finding and enforcement indicia.201

D. Code as Law

Provider-implemented software code that constrains behavior in the virtual world suffers from few of the shortcomings discussed above. There are no vague contract terms. The community neither defines nor enforces the rules.202 There is no need for fact-finding. Instead, the provider defines exactly what avatars can and cannot do — a reality often called the “wizard” or “god” phenomenon. Even the most forward-thinking providers exert complete control, and real-world laws have little to say about how they do so.203

1. Code and the Rule of Law

The rule of law analysis here is the inverse of user agreements as law. Instead of being vague, partial, and unevenly enforced, code is the ultimate impartial rule: it is precise, unambiguous, and perfectly enforceable (if there are no

201 See, e.g., Bragg v. Linden Research, Inc., 487 F. Supp. 2d 593, 609 (E.D. Pa. 2007) (“Such [arbitration] schemes are unconscionable where they ‘impose[] on some consumers costs greater than those a complainant would bear if he or she would file the same complaint in court.’” (citation omitted)).
202 But see Bradley & Froomkin, supra note 25, at 130–31 (code can influence social structure in virtual worlds).
203 Laws, supra note 7, at 53 (“As we explain, even when these owners are not wholly adverse to democratic governance within the virtual spaces they maintain, their exclusive ability to exert absolute control over these environments hopelessly complicates attempts to map traditional notions of democratic governance onto these settings.”).
204 But see LESSIG, supra note 77, at 192–93 (arguing that there is a battle for supremacy between real-world laws and other forms of regulation in cyberspace).
software bugs). It treats everyone equally and lacks all discretion. If a world disables the software that allows avatars to transfer virtual property to others, then avatars can no longer transfer virtual property inside the world.

In itself, unilateral code is not a problem under the rule of law; as discussed above, even a dictator can follow the rule of law. Indeed, depending on the administration, in theory, code could be the perfect rule of law. Unfortunately, in practice, code will often fail several indicators. Code changes are often frequent, hidden, unannounced, and potentially very arbitrary. Further, code is so unilateral that providers who do not respect the rule of law can more easily wield arbitrary power without any accountability.

The ease with which providers can change code undermines impartiality. Once written, software routines impartially execute themselves; however, providers have great discretion about how to write the routines. Interested parties thus spend a lot of energy seeking code changes to their benefit. While this is no different than any other public choice problem in the real world.

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205 Feudalism, supra note 19, at 127 (“What offline governments can do only after lengthy legal proceedings, Linden does unilaterally, just by changing an entry in a database.”); Radin, supra note 111, at 11.

206 Comparative, supra note 65, at 153–54 (“But in the world of software, increasing complexity does not bring with it increased discretion. This is so because software operates by itself. . . . Even as code-based property rights become increasingly complex, with more exceptions and special cases, they never become any less hard-nosed in their application.”).

207 Cf. Comparative, supra note 65, at 159–60 (describing how code allows for low risk contracting in sale of goods due to software mechanisms that allow for clean transactions and non-defective goods).

208 Dibbell, supra note 85, at 143 (describing user complaints leading to frequent changes in virtual world).

209 Burke, supra note 97, at 9 (“Who decides, how they decide, and when they decide, are almost always unknowns.”).

210 Burke, supra note 97, at 8 (“Most MMOG developers have treated communication with their customers as something of an afterthought, and have regarded it as a specialized activity to be managed independently from the development of the game itself.”).

211 Balkin, supra note 19, at 2051; Bartle, supra note 25, at 39 (discussing repercussions of changes to coded prices for goods); Burke, supra note 97, at 7–8 (“A precious few such changes are entirely neutral or positive, affecting all players equally.”); Laws, supra note 7, at 55.

212 Bartle, supra note 25, at 39 (describing complaints when code reduces number of killable monsters); Comparative, supra note 65, at 175–76 (Code can implement new laws without having to “bribe, bedazzle, brainwash or bully” anyone in the way a dictator would, such as the ability to revoke property without any kind of resistance by the avatar possessing it.).

213 LESSIG, supra note 77, at 199 (“My main concern is accountability — these architectures and the values they embed should be architectures and values that we have chosen.”).

214 CASTRONOVA, supra note 5, at 152 (describing how different segments plead to providers to enhance the benefits of their group, such as warriors).

215 Radin, supra note 111, at 13 (discussing industry group capture of intellectual property and digital rights management laws).
because code is not subject to the disclosure requirements of public lawmaking, there is a greater likelihood that lobbied for changes will be implemented frequently, arbitrarily, and secretly. If administered this way, code violates the rule of law.  

2. The Interaction between Code and Agreements

If a world’s code disallows an activity expressly permitted by contract, the rule of law will suffer by the provider not following its own rules. This renders the law contradictory, arbitrary, unstable, vague, and non-public. For example, one cannot fly in World of Warcraft because the code disallows it. If, however, the agreement expressly stated, “Avatars may fly,” then the code would be arbitrary. Of course, there may be debate about whether an activity is expressly permitted by agreement, though a vague agreement diminishes the rule of law as well.

The opposite scenario, where code allows avatars to take actions otherwise barred by agreement, raises concerns as well. For example, a world may bar player versus player combat in its agreement, yet the software design may allow one avatar to attack another. Similarly, the code may allow an avatar to obtain another avatar’s virtual property through fraud. Stopping barred activity through code varies in difficulty; for example, stopping player combat is far simpler than programming against deception.

The rule of law becomes relevant because many believe that if the software allows something, then it must be “legal.” Similarly, the code may allow an avatar to obtain another avatar’s virtual property through fraud. Stopping barred activity through code varies in difficulty; for example, stopping player combat is far simpler than programming against deception.

The rule of law becomes relevant because many believe that if the software allows something, then it must be “legal.” Such users would argue that the rules are arbitrary because they are contradictory; one source of regulation bars an activity while the other allows it.

This argument that the code/agreement interaction is contradictory is wrong because it underestimates the complexity of code. It is impossible to both predict and effectively block every type of action that might occur in a virtual world. Further, no matter how prescient the provider is, users will find some

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216 Comparative, supra note 65, at 181 (“One of the most frequently given pieces of advice is that almost nothing is more destructive to a thriving game community than regular intervention by its designers. Since designers are not bound by the same ‘laws’ of code as regular players, their presence can be destabilizing. When designers engage in conduct not available to players, it highlights their distance from players and their apparent unaccountability.”).

217 Virtual Crimes, supra note 3, at 309–10 (Ultima Online allows “harassment” by code, but game rules disallow such harassment, excluding theft and player killing from the definition of harassment).

218 Bartle, supra note 25, at 36; Code is Law, supra note 115 (“...[P]eople aren’t used to the idea of having to make their own behavioral choices within software. They simply assume that that which is not permissible is simply not coded, and therefore not possible... They don’t understand. ‘If it’s not allowed,’ they demand to know, ‘then why does it let me?’”).

219 Comparative, supra note 65, at 151–52 (discussing complexity of programming code for property rules); Bartle, supra note 25, at 36.
new activity that the code allows but that is otherwise forbidden.\textsuperscript{220} Additionally, humans can often find workarounds for limited functionality.\textsuperscript{221}

One example of the hurdles code faces in regulating all behavior is the complex in-game agreement. Most virtual world code includes the ability to make a simple trade — Avatar Buyer pays five virtual dollars for a hammer, and Avatar Seller transfers the hammer to Buyer. This transaction is self-enforcing; the code will not release Seller’s hammer unless Buyer has five dollars and consummates the transaction — the trade is simultaneous.

However, virtual world code has no method for making and self enforcing complex agreements between avatars.\textsuperscript{222} Avatars cannot programmatically agree to perform services or sell products at a future time. Avatars have no automated enforcement mechanism for breached contracts. Indeed, code does not make an avatar contractually liable at all; only the user is liable for the promises its avatar makes.\textsuperscript{223} Thus, code can provide only a limited set of protections; background rules, whether contractual or legislated, must govern behavior.\textsuperscript{224}

The real world has an analog: door locks and fences.\textsuperscript{225} These code-like devices keep humans from entering real property, but their existence does not mean that one breaks no law by entering someone’s unlocked home. The rules are not contradictory simply because both locks and laws regulate behavior; code does not act alone.\textsuperscript{226} Thus, the fact that code and agreements might allow different things is not a real problem for the rule of law. Both constrain users, and users must look to both as the source of regulation.

There are exceptions, of course. For example, where code allows an action due to a program error — an action not otherwise barred by agreement — the provider might undo the results of the “exploit” retroactively.\textsuperscript{227} Two examples illustrate this retroactivity. First, a user of Second Life sued the provider for

\begin{itemize}
  \item \textsuperscript{220} \textit{Code is Law}, supra note 115 (“Every time you encode a restriction, exceptions crop up. Every exception you encode lets a few cases slip through the cracks. Soon your code starts to look like the U.S. Tax Code, with more exceptions and encoded governance than environment simulation.”).
  \item \textsuperscript{221} Burke, supra note 97, at 4 (“In many cases, this is because the real-world capacities of human agents essentially outstrip the technical capacities of law-as-code.”).
  \item \textsuperscript{222} \textit{Comparative}, supra note 65, at 158 (“[W]hile on-line games have strong protections for property, they have nothing that we would recognize as a comparable body of contracts law. Most games have no way to draft any contract more complex than an immediate sale of goods for cash.”).
  \item \textsuperscript{223} \textit{Can an Avatar Sign}, supra note 134 (avatars are not legal entities that can make a contract).
  \item \textsuperscript{224} \textit{Comparative}, supra note 65, at 153 (“Code may be clear and free from doubt, but where ‘loopholes’ come up, the need for rules is present — humans will take advantage of the shortcomings of code, and there are \textit{always} shortcomings.”).
  \item \textsuperscript{225} Radin, supra note 111, at 12 (describing code as more like a fence than a trespass law).
  \item \textsuperscript{226} \textit{Code is Law}, supra note 115 (“The absence of code to allow you to perform a specific task or action does not necessarily constitute governance. The presence of code to allow you to perform a specific task or action does not necessarily constitute governance.”).
  \item \textsuperscript{227} \textit{Power}, supra note 153, at 147–48 (describing provider responses to user exploits).
\end{itemize}
revoking property the user purchased through an auction based on its suspicion that the user exploited a loophole in the software.228 Second, a provider in South Korea reverted possession of a virtual castle to prior owners, claiming that the battle for that castle should not have been allowed by program code.229

Provider action in these two cases is not surprising. Most provider agreements ban the exploitation of program errors230 for good reason — it diminishes the quality of user experience.231 Further, most users know they are exploiting such errors.

However, to the extent that the users’ actions were not barred by agreement (that is, the auction and battles were “proper” under game rules and the users were unaware of the program errors), then the retroactive changes were likely contrary to the rule of law.232 Then again, for the users who lost property due to computer bugs, the errors were arbitrary application of code as law.233 As a result, exploited program errors will likely diminish the rule of law one way or another.234

E. Legislated Lawlessness and the “Rules of the Game”

It is common for virtual worlds to allow unconstrained behavior — even behavior that might harm other avatars and their owners. The reason is quite simple — unconstrained activity is more fun for users.235 In such worlds, fraud, theft, avatar combat, and deception are “part of the game.”236 Professors Lastowka & Hunter analogize claims of actionable harm to a basketball player

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228 Bragg v. Linden Research, Inc., 487 F. Supp. 2d 593, 597 (“Linden sent Bragg an email advising him that Taessot had been improperly purchased through an ‘exploit.’ Linden took Taessot away. It then froze Bragg’s account, effectively confiscating all of the virtual property and currency that he maintained on his account with Second Life.”).

229 Laws, supra note 7, at 71.


231 Balkin, supra note 19, at 2051 (providers should be free to adapt game to preserve quality game play); Virtual Crimes, supra note 3, at 315 (those harmed by exploits include the provider).

232 Bartle, supra note 25, at 41 (discussing complexity of determining whether benefits of an exploit should be reversed by provider: “Who decides it’s wrongful? What makes some actions in the virtual world ‘exploits’ when other, similar actions, aren’t?”).

233 Power, supra note 153, at 148 (“[E]very change . . . will privilege some players while hurting others.”) and 149 (“There is nothing ‘wrong’ with the exploit, as far as the software is concerned.”).

234 Power, supra note 153, at 147 (user agreements allow providers to do whatever they want in response to an exploit).

235 Anti-social, supra note 103, at 460 (“For example, one virtual world called EVE Online is a science-fiction world of corporate fraud, yankee trading, and piracy. The game’s designers have openly stated that deception is part of the game — that, in fact, “fraud is fun.””).

236 See, e.g., Comparative, supra note 65, at 150 n.11 (Ultima Online has a “steal” function built into the code).
suing for “theft of a basketball on the court” and argue that avatars of a given world accept mandated lawlessness like any other game player. The question is whether one can have a law that there is no law.

Under this Article’s formulation, mandated lawlessness is not rule of law — at least not for entrepreneurial purposes. First, it is unlikely that new users would know before joining that what might otherwise be actionable wrongdoing, such as fraud, is legally acceptable within the game. Second, even if such rules are announced in some form, they are not concrete enough by which to plan affairs. Instead, lawlessness increases costs of investment just like vague and arbitrary rules. Mandated lawlessness is still lawlessness — few argue that the rule of law governed the Wild West.

F. Legislated Rules and the Magic Circle

Presumably, real-world laws can regulate conduct that affects virtual worlds. Consider a user that logs in using another person’s password and sells the avatar’s virtual property. Logging into another’s account is a real-world act that might be punishable civilly or criminally regardless of what the world’s rules are. For example, hacking into a computer to steal gold might be punishable, even if stealing gold within the game is allowed by the game rules.

However, where seemingly wrongful conduct is conducted in-world and not clearly allowed by game rules, the analysis becomes murkier. Users may not know which conduct will cross the line from allowable to unallowable. This

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237 Virtual Crimes, supra note 3, at 304–05; Criminal, supra note 23, at 419; Balkin, supra note 19, at 2062. But see Brenner, supra note 147, at 60 (arguing that real-world crimes map directly to virtual crimes).

238 Balkin, supra note 19, at 2067.

239 See, e.g., Jason T. Kunze, Regulating Virtual Worlds Optimally: The End User License Agreement, 7 NW. J. TECH. & INTELL. PROP. 101, 103 (2008) (describing how user bank that absconded with deposited funds in EVE Online was not punished because such fraud was part of the game).

240 Balkin, supra note 19, at 2067–68 (consumer protection laws will apply to shopping in virtual worlds); Brenner, supra note 147, at 52–53; Koster, supra note 22, at 56 (“It’s pretty clear that there are some rights which leak over from the real world.”); Virtual Crimes, supra note 3, at 298; Criminal, supra note 23, at 417–19 (most crimes cover actions taken with respect to physical reality rather than what happens to avatars).

241 Castronova, supra note 5, at 237; Virtual Crimes, supra note 3, at 298.

242 Criminal, supra note 23, at 423 (describing unauthorized use of password as crime). But see Magic Circle, supra note 124, at 833–34 (if one shares password information, there can be no liability for unauthorized access).


244 Virtual Crimes, supra note 3, at 296–97; Criminal, supra note 23, at 421 (“Yet if the rules of the game trump, this raises the important question of what ‘the rules of the game’ in a virtual world actually are. . . . [V]irtual worlds are open. In a practical sense, a user has an infinite num-
ambiguity is amplified by the difficulty of limiting in-game activity using software code. Furthermore, community norms may dictate allowable conduct, which is also indeterminate. Thus, the combination of vague agreements, incomplete code, and hidden norms reinforces the finding that wide-open game rules do not comport with the rule of law. Regulation is either incomprehensible or non-existent.

To overcome these shortcomings, virtual worlds must either engage in much more thorough legislative activity with respect to allowable conduct in the virtual world or more specifically rely on real-world background law.

1. In-World Legislation

The users of a world might attempt to create their own set of in-game laws. This goes beyond desires communicated to the provider, it is instead a form of self-government through legislation from within. For example, at one time LambdaMOO had a detailed set of rules based on majority rule voting. Other sites have instituted detailed community standards rules that are different from real-world law.

These efforts show that non-vague, non-arbitrary lawmaking within a world is possible. In fact, some even suggest that internal rules rather than real-world laws should always govern in-world actions. The reasons vary. Some argue that those living in a world have better information to regulate it. Others...
ers argue that world users have a right to self-government.\textsuperscript{253} Still others believe that real-world encroachment ruins the virtual world experience.\textsuperscript{254}

However, even if in-world regulation is normatively preferable, in-world lawmaking is not without problems. Neutral fact-finding and impartial enforcement, for example, continue to elude, and on-line communities may exhibit arbitrary and knee-jerk reactions to perceived wrongs. Even where the community carefully deliberates what action to take in response to avatar behavior,\textsuperscript{255} any penalty assessed for an offense that was undefined beforehand is an ex post facto penalty.

More important, legislating an entire criminal and civil law for each virtual world is unlikely to be sufficiently comprehensive. World specific laws can effectively capture the vagaries of that world,\textsuperscript{256} but no provider or population has the time, energy, or will to create a complete and detailed set of laws.\textsuperscript{257} Those laws would be exceedingly complex, including real and personal property, tax, insurance, torts, contracts and transactions, governance, and dispute resolution, among other things.\textsuperscript{258} These varied areas keep dedicated real-world governments busy; a critical mass of users is unlikely to pay for the opportunity to work at creating, managing, and enforcing such a detailed legislative system.\textsuperscript{259}

Furthermore, enforcement by users is often ineffective\textsuperscript{260} and suffers from the same problems associated with community norms. Providers cannot effectively implement rules that the majority may want, because such rules

\textsuperscript{253} POST, supra note 5, at 185 (“So why not begin by recognizing their right — perhaps even their inalienable right? — to govern themselves as they see fit? Why not let those who choose to enter, and to interact within, these on-line communities make their own law, deciding for themselves how they’d like to order their affairs?”).

\textsuperscript{254} Right to Play, supra note 243, at 68 (suggesting that real-world laws be used to require all in-world activity remain separated from real-world activity).

\textsuperscript{255} See, e.g., Laws, supra note 7, at 70–71 (discussing reasoned deliberations in LambdaMOO after virtual sexual assault).

\textsuperscript{256} Anti-social, supra note 103, at 460–61; Balkin, supra note 19, at 2073–74; Dibbell, supra note 85, at 144; Stoup, supra note 22, at 337–38.

\textsuperscript{257} Dibbell, supra note 85, at 142–43; Laws, supra note 7, at 55–59 ( wizards did not have enough time to handle all disputes). \textit{But see} POST, supra note 5, at 185–86 (if lawmaking institutions were created in virtual worlds, self-governed laws will follow); Beth Simone Noveck, \textit{Democracy — The Video Game: Virtual Worlds and the Future of Collective Action, in The State of Play: Law, Games, and Virtual Worlds} 250, 258–60 (Jack M. Balkin & Beth Simone Noveck eds., 2006) (democracy is more likely to thrive in virtual worlds than in other internet based applications due to social interaction).

\textsuperscript{258} Bradley & Froomkin, supra note 25, at 139–43 (describing different areas that could be legislated differently in virtual worlds); Anti-social, supra note 103, at 432 (“Instead, they fail because contracts cannot cheaply create default rules that bind large and shifting populations.”).

\textsuperscript{259} \textit{But see} Bradley & Froomkin, supra note 25, at 143 (virtual worlds are much less complex than the real world with respect to areas that need to be legislated).

\textsuperscript{260} Rothchild, supra note 178, at 967–68 ( LambdaMOO’s self-regulation failed because community punishment is unenforceable).
might lead to a disproportionate amount of abuse by those who take advantage of such rules.\textsuperscript{261} The majority will, by and large, want more freedom of speech and action; however, that freedom will attract abusers who make virtual life miserable for others.\textsuperscript{262} Because the virtual world is a profit-making business, providers may not want to enforce rules that drive customers away, even if the majority is willing to tolerate abusers. Of course, given that providers often fail to enforce their own rules designed to stop abusers, provider enforcement decisions may be irrelevant in the analysis. What providers generally want is a strict set of rules that they can enforce at will against a few users — a position directly contrary to the rule of law.

These concerns transcend mere practical hurdles. The complexity of an entirely self-legislated world, especially when combined with the inherent problem that desired rules might incentivize abusive behavior by a few avatars that can significantly harm the world, renders autonomous self-regulation theoretically unachievable.

2. Importation of Real-World Law

Unattainable comprehensive virtual legislation means that providers and users might rely, at least in part, on well-developed real-world laws.\textsuperscript{263} Many sites do so, outlawing activity that would otherwise be illegal in the real world. This satisfies several rule of law indicators, even if enforcement is intermittent.

Laws against murder, for example, are irrelevant where player combat is the norm.\textsuperscript{265} This is especially true where avatars do not really die but are, instead,\textsuperscript{261} \textit{Feudalism}, supra note 19, at 127 (Preemption of contracts “could leave [providers] powerless against abusive users who spoil the experience for others.”).

\textsuperscript{262} \textit{Anti-social}, supra note 103, at 472 (“[M]any communities currently have strict anti-harassment rules. Consider what would happen if a new virtual community were to relax those strict rules. If the new community were to state that it will have a higher tolerance for harassment, then a higher proportion of harassers would enter the community, eventually driving off even those who initially had a higher tolerance for such behaviour.”).

\textsuperscript{263} \textit{Anti-social}, supra note 103.

\textsuperscript{264} \textit{LESSIG, supra} note 77, at 198 (“As the rules that govern real space compete, cyberspace increasingly wins out”); \textit{Right to Play, supra} note 243, at 73; \textit{Anti-social, supra} note 103, at 459; \textit{Criminal, supra} note 23, at 418 (“But misconduct that draws social significance from its meaning in virtual reality normally will have no resonance with criminal statutes.”).

\textsuperscript{265} \textit{Virtual Crimes, supra} note 3, at 303 (“Indeed, one might reasonably predict that since Ultima Online is commonly understood to be a computer game, the gut reaction of state and federal prosecutors would be to view the legal status of thefts that take place in Ultima Online as similar to the gruesome murder of PacMan at the hands of Inky, Blinky, Winky, or Clyde.”).
simply weakened and sent far away. Even simpler crimes, such as theft, have no relevance in a world where theft is encouraged.

Thus, the challenge is for each world to legislate exactly which real-world laws might apply to in-world wrongdoing, and how. A world might import the ban on defamation but reject real-world criminalization of theft, for example.

Unfortunately, world-by-world compromises about which law to import solve few rule of law problems inherent with a permeable barrier between real and virtual worlds — a broken magic circle. The magic circle is a term of art that describes the barrier between in-world activities and real-world activities. This circle, however, is routinely breached. In-game activities harm real-world users, and real-world activities harm in-game avatars and their property.

Rule of law concerns may be greatest where behavior is allowed by in-world rules, but where such behavior has real-world consequences. Some even argue that any leak of in-world activities to the real world necessarily harms human well-being. For example, even if in-world rules allow publication of false statements about avatars, such statements might cause real harm to the avatar’s user; real-world defamation law will vindicate the user despite legality inside the magic circle. Game rules cannot provide real-world immunity because they only apply to in-world harm to the avatar.

Indeed, arguments that users have no standing to sue each other for breach of the provider contract make the problem worse; if users are not contractually bound to each other, then the game rules cannot immunize conduct outside the game vis à vis other users. Instead, the victim would argue that she and the wrongdoer never agreed that the wrongdoer could defame her.

266 Castronova, supra note 5, at 305, n.3.
267 Right to Play, supra note 243, at 73; Virtual Crimes, supra note 3, at 301–03; see also Arias, supra note 5, at 1306–08 (describing several types of theft: embezzlement, deception, pickpocketing, and hacking).
268 Anti-social, supra note 103, at 459; Magic Circle, supra note 124, at 835.
269 Balkin, supra note 19, at 2063 (communications torts will apply in virtual worlds as well as real-space).
270 Magic Circle, supra note 124.
271 Anti-social, supra note 103, at 434.
272 In-game prohibitions are not as problematic because behavior that is barred in-game because of real-world illegality will also bear real-world consequences.
273 Right to Play, supra note 243, at 68.
274 Balkin, supra note 19, at 2063 (communications torts apply to conduct in virtual worlds); Brenner, supra note 147, at 54–55.
275 See notes 167 and 168, supra, and accompanying text.
276 As discussed in the conclusion, allowing users to exercise third-party beneficiary rights may enhance the rule of law.
More generally, the legal mechanism by which public law values might regulate private world behavior is exceedingly complex. One theory is to treat the virtual world as a “company town” which makes it quasi-public.277 However, virtual worlds are not really company towns,278 and treating them as such might lead to treating every private website as a quasi-public entity.

Other theories suggest importing only property law, treating virtual property as personal property with free alienability. However, this proposal is limited in scope — only a small subset of real-world legislation would be imported, defeating the rule of law purpose of applying real law to virtual activities.

Still another theory argues that criminal acts with purely virtual effect might still be criminalized by the state because they encourage real-life wrongdoing.279 This argument is appealing to the extent it is empirically true; many have argued that violent television, movies and video games have consequences beyond the private acts. Then again, virtual crime does not have the same detrimental effects of real crime, and the rule would likely ruin many worlds in which users desire at least some virtual wrongdoing. In any event, implementation of this theory is unlikely — violent video games are still legal.

Thus, it is unclear whether and which real-world laws will preempt contrary game rules and provide a cause of action for an aggrieved user.280 This highlights one of the most pressing concerns: nobody seems to have a firm understanding about how real-world laws will apply to virtual wrongdoing.281

277 Zittrain, supra note 115, at 172–73 (discussing complexity of applying “company town” jurisprudence from Marsh v. Alabama, 326 U.S. 501 (1946), to private actors in cyberspace); Balkin, supra note 19, at 2076–79 (same); Laws, supra note 7, at 59–60.

278 Estavillo v. Sony Computer Entm’t. of Am., No. C-09-03007, 2009 WL 3072887 (N.D. Cal. Sept. 22, 2009); Benkler, supra note 25, at 182 (virtual worlds are not company towns, and users are free to leave virtual worlds).

279 Brenner, supra note 147, at 87–89 (problem with virtual murder is that it may incite users to commit real acts of violence).

280 Lessig, supra note 77, at 199 (“Government should push the architecture of the Net to facilitate its regulation, or else it will suffer what can only be described as a loss of sovereignty.”); Tal Zarsky, Privacy and Data Collection in Virtual Worlds, in The State of Play: Law, Games, and Virtual Worlds 220, 221–22 (Jack M. Balkin & Beth Simone Noveck eds., 2006) (discussing privacy rights in virtual worlds and real-world preemption); Balkin, supra note 19, at 2046 (determining how law will apply to worlds is important because they can preempt norms), 2066–67 (discussing whether fraud laws should apply to in-game fraud); Brenner, supra note 147, at 67–69, 79–81 (discussing “victimless” cyber crimes such as prostitution and “consensual” virtual rape); Anti-social, supra note 103, at 459–61 (discussing sports rules and exceeding allowed conduct); Magic Circle, supra note 124, at 836–37; Virtual Crimes, supra note 3, at 305–06 (discussing conflict between sports rules and tort laws).

281 Post, supra note 5, at 182–84 (describing complications of regulating virtual banks and determining which laws apply to activities); Balkin, supra note 19, at 2071–72 (discussing uncertainty about enforceability of provider agreements); Anti-social, supra note 103, at 440–41; Virtual Crimes, supra note 3, at 311 (“Courts and legislators may conceivably refuse to defer to the private orderings created by contract and software. But we cannot, at this point, predict under
Many have contributed outstanding work toward answering this question, but actual legislation and court decisions are insufficient to determine what laws will apply.\textsuperscript{282} Until the laws applying to virtual worlds are far more developed, behavioral crossover with the real world reduces the rule of law to a shambles.\textsuperscript{283} No matter how well developed a game’s rules might be (whether through agreement, code, or norms), users will not know what their rights, remedies, limits, or penalties are. This is arbitrary governance.

In a sense, this is both the easiest and most difficult point of analysis. It is easy because the lack of any clear rules makes a finding of no rule of law straightforward.\textsuperscript{284} It is difficult, though, because simply dismissing the potential for real-world laws is not a terribly palatable answer. Surely, there must be some principled method of applying laws to behaviors in virtual worlds: harassment, theft, spam, conversion of intangible property, and so forth. Such analysis is the subject of many books and articles, but other than a smattering of cases internationally, few rulings have provided answers. As virtual worlds grow, more answers about whether the real world will provide the rule of law for virtual world participants may appear.

\textbf{G. Jurisdiction and Real-World Law}

The fact that regulation comes from multiple sources should not alone vitiate the rule of law. Given the complexity of virtual worlds, regulation from multiple sovereigns is to be expected.\textsuperscript{285} Real-world jurisdictions are subject to multiple levels of jurisdiction as well; U.S. residents are subject to federal laws, federal administrative regulations, state laws, state administrative regulations, county ordinances, city ordinances, and local rules imported from other sources, such as building codes. Just as the rule of law might be present in the United States, it might still be present in virtual worlds.

Some have argued that real-world territorial uncertainty violates the rule of law. For example, Professor Post argues that participants in cyberspace —

\begin{footnotesize}
\textsuperscript{282} Anti-social, supra note 103, at 435.
\textsuperscript{283} Dibbell, supra note 85, at 144 (“Considering the novelty of this realm, we might reasonably hope for future case law and legislation to do a better job of it, but I suspect it will be a long time before enough of those ambiguities are ironed out to make a difference.”).
\textsuperscript{284} Cf. Post, supra note 5, at 184.
\textsuperscript{285} Zittrain, supra note 115, at 168 (“One sovereign cannot reach every potentially responsible entity on a global network, and while commercial forces can respond well to legal incentives, the amateur technology producers that are so important to a generative system are less likely to shape their behavior to conform to subtle legal standards.”).
\end{footnotesize}
and virtual worlds in particular — face this uncertainty. Post describes cases where foreign countries impose laws on non-citizens who had no contact with such countries other than on-line activities about which the countries seemed to care. As a result, those users might be subject to penalties if they ever enter those countries.

This, he argues, violates the rule of law: “It’s a strange kind of law being served up by the Unexceptionalists — law that only gets revealed to the interacting parties ex post facto, and which can therefore no longer guide the behavior of those subject to it in any meaningful way.”

It is certainly true that countries might apply their laws in an arbitrary way against non-citizens. This, however, is not a problem of the rule of law in virtual worlds, but rather a problem of the rule of law in those specific countries. A country that tries non-citizens in absentia for activities that do not touch on the country surely fail several of the indicia of the rule of law with such arbitrary, targeted, and partial enforcement of laws. To be sure, virtual worlds make user conduct more visible to the authorities in such countries, but real-world television, radio, publishing, and banking activities will result in same uncertainty with respect to knowing which country might claim jurisdiction over activities. Iran’s fatwa calling for the death of Salman Rushdie due to his publication of The Satanic Verses is a prominent example.

More relevant are the effects of territorial uncertainty where conduct might legitimately affect citizens of another country. Uncertainty about the laws that might apply to an activity is not helpful guidance. But here, too, such uncertainty relates to the nature of overlapping sovereignty rather than the specifics of virtual worlds. To the extent that jurisdictional uncertainty weighs against the rule of law, it does so generally with respect to any medium that crosses borders, and such uncertainty existed long before the Internet. Indeed, this is why there are treaties about service of process, intellectual property, child custody disputes, and a myriad of other potentially border-crossing disputes.

It may be that certainty about which sovereign will claim jurisdiction over a matter is unattainable, but people live with this type of uncertainty every day. Blue sky laws in securities regulation are a good example, but even making a telephone call or sending a letter by international mail can implicate the laws of several states and even countries.

While users will likely not know which country other avatars come from, anecdotal evidence suggests that most users congregate in locally provided worlds — language barriers alone encourage locality. Even if they did

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286 Post, supra note 5, at 163 (“The tricky part, though, is: Which law? Whose law? . . . [O]n the inter-network, information moves in ways that seem to pay scant regard to [national] boundaries, and mapping them onto network activity is a profoundly difficult challenge.”).

287 Id. at 164–65.

288 Id. at 169.

289 Id. at 183–85.
not, people often do not know when their activities might implicate the laws of other countries, especially in modern commerce.

Finally, the bigger jurisdictional concern for virtual entrepreneurs may be the lack of jurisdiction over world users. To the extent that virtual entrepreneurs do business with avatars owned by foreign users, they will have greater enforcement hurdles in case of breach or other wrongdoing. However, these enforcement concerns are no different from any other remote business in the online or offline world. While difficult enforcement is unfortunate, so long as jurisdiction is territorially divided enforcement is a cost of doing business rather than a rule of law issue.

VI. CONCLUSION

This Article’s analysis shows that virtual worlds exhibit — in practice at least — few of the indicators of the rule of law. The reasons for the failure depend on source of regulation. Market based regulations, such as contracts, lack neutral and consistent enforcement mechanisms. Code based constraints are often implemented arbitrarily and without notice. Community norms are often vague, unwritten, and are enforced by mob rule. Autonomous self-regulation is too complex and costly. Real-world laws, no matter how clear and impartial in real-space, do not have a history that gives any confidence about how they might apply to virtual activity.

Further, academically popular sources of regulation — community norms, and autonomous self-regulation — are the least likely to achieve the rule of law.

Whether providers, users, or lawmakers should do anything about these failings depends on normative judgments about the rule of law. If providers want to attract virtual business, they might choose to do so by enhancing the rule of law. Of course, this is easier said than done; what providers might want to do and what they can actually achieve are two different things. The following are a few potentially achievable reforms.

First, providers should include more specificity about allowable activity in their agreements, with defined penalties that match the offense.290 Further, community norms — especially those enforced by the provider’s agreement — should be written and published.291 Many sites already do this, but most postings are vague.

290 Stoup, supra note 22, at 337–38; Magic Circle, supra note 124 (worlds can self-govern by creating penalties for breach of game rules); cf. Comparative, supra note 65, at 169 (“In deterrence terms, what a virtual world needs, in some sense, is a properly graded scheme of punishments”); Criminal, supra note 23, at 428 (“[V]irtual crimes should trigger virtual remedies.”).

291 Comparative, supra note 65, at 181–83 (comparing real-world rules with potential virtual world rules: “For similar reasons, administrative agencies issue guidance documents not only to put others on notice of the applicable law, but also to send a signal that they are constraining their own discretion with respect to particular issues.”).
Second, this specificity might explicitly incorporate which real-world laws apply (or not) to in-world behavior. Common torts and crimes have fairly well defined elements, and these can apply consistently to in-game behavior. Such incorporation will more precisely clarify what game rules allow and what they do not. Of course, real-world laws may still preempt the agreement because (a) some in-world activity may not be tolerated even if the provider’s rules allow it, and (b) some in-game activity may cause real-world harm that is preempted by real-world law.

Third, providers could incorporate explicit third-party beneficiary clauses into their agreements to allow users to seek relief against other users for breaches of the rules. While such provisions are arguably unnecessary, they would provide clarity about actionable claims. This is especially important to providing enforcement where the provider has no desire to enforce its own agreement. Furthermore, to the extent providers want to provide rule of law without losing central enforcement responsibility, the provider can enumerate exactly which types of claims are actionable while expressly reserving breaches that only the provider can enforce.

Fourth, providers could institute some neutral arbiter of fact, especially when they resist third-party beneficiary claims. For example, avatar arbitrators that hear argument and make factual findings could judge in-world wrongdoing. Non-virtual wrongdoing, such as exploiting a system bug in breach of contract, could have real-world arbitrators (hopefully cheaply) make factual findings. Neither option need be a full blown arbitration so long as a neutral party can determine whether the claimed offense occurred before the contractual penalty is issued by the provider. That said, such neutral determinations might allow greater enforcement if remedies are available that can be easily enforced against distant parties.

292 Compare Risch, supra note 160 (third-party beneficiaries created without special clause), with Anti-social, supra note 103 (specific contract language required to create beneficiary).

293 Comparative, supra note 65, at 181–83 (describing the beneficial implementation of certain rule of law features in virtual worlds: “I suspect that the ‘best practices’ of good games, ones which players think are basically fair, will closely resemble some of the ‘best practices’ of good governments.”).

294 Goldsmith & Wu, supra note 21, at 132 (discussing early dispute resolution on eBay by “Uncle Griff”); Laws, supra note 7, at 50 (“For instance, in LambdaMOO and other textual MUDs, the ethos is one of sharing and community, and property disputes seem capable of resolution within the confines of the virtual world.”); Noveck, supra note 257, at 260 (virtual worlds provide mechanisms for large scale deliberations).


296 In the alternative, the avatar death penalty could be barred absent real adjudication by some neutral party.

297 Cf. Zittrain, supra note 115, at 142–43 (describing dispute resolution mechanisms by the Wikipedia community); Comparative, supra note 65, at 169 (“The key is that the community as a whole needs sanctions not available to individuals.”).
These are just a few of the ways to implement a more robust rule of law; other methods can also satisfy some of the ten indicia. Further, these methods can and should be targeted at the specific shortcomings that this Article identifies. However, some problems, such as uncertainty about real-world laws, can only be improved by time and experience.