The Myth of the Magic Circle: 
Rejecting a Single Governance Model

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INTRODUCTION

Connecting to and conducting activities via the Internet, a.k.a. going online, was once the sole purview of knowledgeable Information Technology (IT) workers with access to specialized hardware. With the invention and societal proliferation of the World Wide Web in the early 1990s, the process of accessing resources on the Internet has become radically simplified. As a result, many information- and entertainment-oriented technologies now rely on persistent Internet connectivity to perform to their full capacity. This increase in the need...
for connectivity has been accompanied by a rapid spread of low- or no-cost connectivity such as the free Wi-Fi services offered by Starbucks\textsuperscript{1} and McDonalds.\textsuperscript{2}

This rise in connectivity between technologies has been accompanied by a rise in connectivity between individuals, as well. Individuals can now access online social hubs, which keep them in constant connection with their online friends. Social activities facilitated by these online hubs have become ubiquitous in the news. Online sites now promote dating (OkCupid.com), group shopping (Groupon.com), parties (Evite.com), general interaction and socializing (Facebook.com), business networking (LinkedIn), and other activities that used to require face-to-face interaction.

Social connectivity among online users can be traced through a series of technologies commonly referred to as virtual worlds. Virtual worlds originated with text-based collaborations known as multi-user dungeons, or MUDs,\textsuperscript{3} and evolved into graphics-based virtual environments in which avatars representing individual players interacted with one another and participated in collective game-like experiences.\textsuperscript{4} The launch of Linden Lab’s Second Life further expanded the notion of a virtual world by offering an online community with close parallels to the real world, while eschewing a central plot and other game-play components embraced by prior technologies.\textsuperscript{5} The community itself became the narrative structure of interaction within Second Life. Newer social networks like MySpace and Facebook have taken the community-centric experience exemplified by Second Life to its logical end. Although these network sites might seem at first glance to be far removed from graphics-rich virtual worlds that incorporate elements of gameplay, a more nuanced consideration reveals populations of users engaged in building online homes (pages), communicating with one another through direct postings, pursuing common goals in service of the networks, and generally interacting in a manner highly consistent with prior iterations of virtual

\textsuperscript{1} Starbucks offers free and open Wi-Fi connections at all locations. \textit{Wi-Fi (United States), STARBUCKS}, \url{http://www.starbucks.com/coffeehouse/wireless-internet} (last visited May 28, 2012).

\textsuperscript{2} McDonald’s offers free and open Wi-Fi connections at all locations. \textit{Free Wi-Fi @ McDonald’s}, \url{http://www.mcdonalds.com/us/en/services/free_wifi.html} (last visited May 28, 2012).


\textsuperscript{4} See Edward Castronova et al., \textit{What Is a Synthetic World?}, in \textit{SPACE TIME PLAY 174} (Friedrich von Borries ed., 2007) [hereinafter Castronova et al., \textit{What Is a Synthetic World?}]; LASTOWKA, VIRTUAL JUSTICE, supra note 3, at 39–44 (discussing the evolution from text-based MUDs to crude graphics to contemporary graphics-rich environments).

worlds experiences. Participants in all of these environments face many of the same questions regarding the applicability and propriety of real-world regulation of their online activities.

Some scholars have argued that virtual worlds are indeed separate spaces and are sufficiently distinguishable from the real world to be treated differently under the law. This view considers at least some subset of virtual world activities to be a state of play—a “magic circle”—which, like the fence around a schoolyard playground, should shield activities performed therein from outside intrusion or intervention by the government. Actions performed on a playground sometimes have real-world consequences: children can and do trip and fall, or push one another overly hard in spirited games of tag and suffer injuries that require adult intervention or even medical attention. Yet, few would seriously suggest that the government should regulate the rules of children playing tag at recess.

Nevertheless, while activities performed in virtual worlds can often seem more pretend than real, virtual worlds clearly share many attributes with the real world in which they were developed. While the legal treatment of assets and income arguably produced within them remains unclear, scholars have widely recognized that virtual worlds both interact with real-world economies and, indeed, represent actual economies in and of themselves. Not only have real-world crimes been linked directly to virtual activities, but criminal terms like


rape\textsuperscript{12} and murder\textsuperscript{13} have been used in describing wholly virtual attacks as well.\textsuperscript{14} Virtual activities profoundly affect real-world relationships.\textsuperscript{15} Modern workplaces utilize online technologies in ever more varied ways, with some real-world employment now taking place almost entirely in virtual spaces.\textsuperscript{16} Virtual banks and virtual stock exchanges using virtual world currency create and destroy economic value.\textsuperscript{17} As participation in virtual life expands, and as the distinctions between real and virtual world activities blur and break down, it is often difficult to justify exempting virtual spaces from real-world government oversight.

Of course, real-world life is governed by a vast and growing array of government regulations. The food we eat, the air we breathe, the goods and services we buy and sell, and the places we work are all the subject of one or more regulatory regimes. When bad things happen, people clamor for government to take action, and legislators and regulators are happy to oblige. Should the same hold true for virtual worlds? If so, then how?

Scholarly analysis of the appropriateness of regulating online activity sometimes stems from a desire to protect virtual property\textsuperscript{18} or to impose criminal

\textsuperscript{12}See, e.g., Julian Dibbell, \textit{A Rape in Cyberspace}, \textit{VILLAGE VOICE}, (December 23, 1993), http://www.juliandibbell.com/texts/bungle_vv.html (using the term “rape” to describe an incident in which one participant manipulated his character to portray violent sexual assaults against other mostly female characters in a virtual community called LambdaMOO); see also Mary Anne Franks, \textit{Unwilling Avatars: Idealism and Discrimination in Cyberspace}, 20 COLUM. J. GENDER & L. 224, 243–44 & n.76 (2011) (discussing the same incident and noting other instances of or opportunities for virtual rape).

\textsuperscript{13}See Mike Musgrove, \textit{Tokyo Woman Jailed for Avatar “Murder,”} \textit{WASH. POST} (Oct. 23, 2008, 2:10 PM), http://voices.washingtongpost.com/posttech/2008/10/tokyo_woman_jailed_for_avatar.html (using the term “murder” to describe an incident in which a woman logged into a virtual world and deleted another person’s avatar, although the criminal charges she faced were less severe); see also Susan W. Brenner, \textit{Fantasy Crime: The Role of Criminal Law in Virtual Worlds}, 11 VAND. J. ENT. & TECH. L. 1, 86–88 (2008) (discussing whether the elimination of one avatar by another can be murder).


\textsuperscript{18}See, e.g., Joshua A.T. Fairfield, \textit{Virtual Property}, 85 B.U. L. REV. 1047, 1052–64 (2005) [hereinafter Fairfield, \textit{Virtual Property}] (arguing that certain types of code are designed to resemble real-world property and should be legally protected as virtual property); Hannah Yee Fen Lim, \textit{Virtual Property}
penalties\textsuperscript{19} or create liability in tort\textsuperscript{20} for intentional bad acts within virtual communities. Such analyses also encompass a range of potential areas of targeted governmental efforts to guide, circumscribe, or incentivize the choices people make in the context of otherwise voluntary relationships, including but not limited to taxation and the Internal Revenue Code,\textsuperscript{21} labor and employment statutes like the Fair Labor Standards Act,\textsuperscript{22} and securities laws like the Securities Exchange Act of 1934.\textsuperscript{23} Competing theories of governance and responsibility play a role in these discussions as well.\textsuperscript{24} But the scholarly discussion of the need, desirability, and legitimacy of real-world regulation of virtual world activities suffers in part from a lack of definitional consensus, and thus a failure to agree upon the parameters of the debate.

One point of contention is the scope of the virtual world label, particularly in an era in which the focus of online social interaction has moved from online games to include social networks. The distinctions between game-like scenarios like World of Warcraft or Everquest and online activities that are considered to be real-world analogues like Second Life or Facebook have become blurred. The existence of online social communities attached to sites ranging from shopping (Amazon.com\textsuperscript{25}) to sports and hobbies (TheSandTrap.com\textsuperscript{26}) to entertainment (Netflix.com\textsuperscript{27}) underscores the potentially vast differences in user groups who all use the same technology, but for quite different communal ends.


\textsuperscript{21} See, e.g., Lederman, supra note 9; Camp, supra note 7.

\textsuperscript{22} See Miriam A. Cherry, \textit{Working for (Virtually) Minimum Wage: Applying the Fair Labor Standards Act in Cyberspace}, 60 ALA. L. REV. 1077 (2009); see also Cherry, \textit{Taxonomy}, supra note 16 (discussing the applicability of other labor and employment statutes in the virtual worlds context).

\textsuperscript{23} See Thompson, supra note 17.

\textsuperscript{24} See, e.g., Sal Humphreys, \textit{Ruling the Virtual World: Governance in Massively Multiplayer Online Games}, 11 EUR. J. OF CULTURAL STUD. 149 (2008); Risch, supra note 7; Nicolas Suzor, \textit{The Role of the Rule of Law in Virtual Communities}, 25 BERKELEY TECH. L.J. 1817 (2010).

\textsuperscript{25} Amazon.com currently ranks as the number one online retailer in the world. \textit{Top 500 Guide}, \textit{INTERNET RETAILER}, http://www.internetretailer.com/top500/list (last visited May 28, 2012). Its site enables active reviewing of items sold on Amazon. The community of reviewers active on Amazon frequently engage with one another indirectly through these reviews, and directly through message board type postings that are displayed elsewhere on the Amazon.com site.

\textsuperscript{26} The Sand Trap is a golf forum site with over 400,000 posts in approximately 25,000 threads. \textit{Golf Forum}, \textit{SAND TRAP}, http://thesandtrap.com (last visited May 28, 2012).

\textsuperscript{27} Netflix allows users to queue up movie selections from an online storefront. Users submit their personal preferences to gain recommendations based on the preferences submitted by others. Netflix also displays users with similar taste profiles to encourage further interaction. Finally, users
Scholars advocating regulation of virtual worlds have also failed to agree upon a common standard for defining the magic circle to distinguish play-like behavior that should not be regulated from online behavior that should. Simple binary metrics have proven inadequate to the task, with too many exceptions, leading some scholars to dispute the existence of any meaningful line for differentiating online and real-world activities. Hence, instead of top-down, centralized approaches to virtual world regulation that would require defining which online activities should or should not be regulated, some scholars have suggested more organic, bottom-up approaches emphasizing self-governance or other mechanisms more attuned to the norms of individual online communities.

Even discounting the issues faced in practically defining and applying a magic circle construct, real-world regulators rely upon a number of different approaches to guide primary behavior, from ex ante command-and-control regulation supported by government enforcement efforts, to ex post tort liability imposed through private party litigation, to taxes and even market forces, depending on the circumstances. Yet many arguments for regulating virtual worlds focus principally on fitting the square peg of virtual worlds into the round hole of statutes and regulations already on the books. Even if existing statutory or regulatory terms are sufficiently elastic to reach virtual activities, applying legal regimes designed for real-world circumstances may not be the best or most effective means of accomplishing regulatory goals in the virtual context.

While we respect concerns regarding a lack of democratic legitimacy of regulatory actions imposed upon virtual worlds from outside government actors, as well as gamers’ fears that the heavy hand of government regulation will ruin their fun, we consider it unlikely that contemporary governments will be content to leave virtual worlds entirely alone to govern themselves. The real world and virtual worlds have become too intertwined for legislators and regulators to resist increasingly frequent entreaties for them to become involved. At the same time, many virtual world participants are rightly concerned that government actors with little understanding of or appreciation for virtual worlds will blunder their way into trying to kill flies with sledgehammers. Thus, rather than resist the inevitable regulatory impulses altogether, it is far better to anticipate and guide them toward...
a more appropriate calibration. Hence, endeavoring once again to define the magic circle, so to speak, from a regulatory perspective strikes us as a worthwhile endeavor.

In our attempt to consider these issues afresh, we begin our analysis in Part I with a brief overview of virtual world evolution, tracing the development of virtual worlds from traditional gaming scenarios to contemporary social networks. Recognizing important similarities among these environments, we argue that the proper analytic construct for evaluating virtual world regulation is that of the virtual community. In so doing, we identify a number of essential attributes inherent in virtual communities that we believe are relevant to the question of virtual world regulation. In Part II, we approach the task of drawing meaningful lines between virtual communities that should be the subject of regulation and those that should not—that is, defining the magic circle. Relying upon the essential attributes identified in Part I, we attempt to create a more robust, multidimensional taxonomic framework for the classification of virtual communities. To do so, we draw upon Activity Theory—a theory based in classical psychology more recently applied by scholars considering the field of Human-Computer Interaction, or HCI—to inform our taxonomic framework.

While we believe the framework we develop provides a theoretically defensible basis for distinguishing communities that should be regulated from those that should be left alone, we acknowledge that our approach is highly complex and more suited to analytic differentiation than practical day-to-day operations. To us, the high variability among virtual communities necessitates that level of complexity, but also suggests that virtual communities are simply resistant to the generalization necessary for at least some types of external regulation to work well. Accordingly, in Part III, we consider the significance of virtual communities’ high variability for choosing among the tools in the regulatory toolbox. In particular, the lack of generalizability among virtual communities limits the appropriateness of the ex ante statutes and regulations that some scholars have suggested as regulatory mechanisms for existing virtual communities.

I. VIRTUAL WORLDS AND VIRTUAL COMMUNITIES

What is a virtual world? As scholars have debated the relationship between real-world laws and online environments, virtual activities have expanded and changed dramatically. Once the province of a relatively small number of more or less like-minded individuals arguably capable of disciplining the bad actors within their midst, virtual worlds have become ubiquitous. Yet while some scholars call for applied regulation of online activities and clearly emphasize the multiplicity of virtual spaces, others who resist such calls focus on a narrower subset of more game-like scenarios. Thus, to approach the topic of regulating virtual communities, some discussion of the nature of virtual worlds and their relationship to the real world is necessary.
A. The Evolution of Virtual Worlds

Although online social activity may seem like a new development, the use of technology for direct interaction within an online community dates back at least forty years. Early networking technologies such as e-mail were specifically designed to allow remote users to communicate and collaborate. In the 1970s and 1980s the development of MUDs allowed individuals to interact with one another in a text-based virtual environment.32

As network speeds improved, the data flow between a user’s computer and the host computer increased to allow audio and video streams to be sent in real time, thus heightening the interactive potential. These high-traffic streams, combined with advances in computer graphics processing, allowed the text-based MUDs to be replaced by graphically rich virtual environments in which users could be represented by customizable graphical proxies. These proxies, commonly known as avatars, allowed users to be perceived as they wished within the context of a specific virtual space33 and became a defining feature of graphics-based online virtual worlds.34 Many commercially run virtual worlds are referred to as massively multi-player online communities or MMOs. Virtual communities in which players are urged (or required) to adopt an avatar that participates in a fantasy-style story are sometimes known as massively multi-player online role playing games or MMORPGs.

At the turn of the twenty-first century, Sony’s Everquest was the most populous virtual world in existence, with over 400,000 registered users.35 Fully a third of that population spent more time interacting with the Everquest world through their computers than at work in the real world. Roughly twenty percent of Everquest users considered the virtual world their place of residence.36 As the connectivity and technologies required to participate in virtual world experiences grew, so did their audience. By 2011, the total active population of the leading virtual world, World of Warcraft, numbered over 3.5 million.37 The variety of virtual worlds currently available strays significantly from the Tolkienesque, fantasy-based archetype represented by Everquest and World of Warcraft.

33. See, e.g., id. at 18–20.
34. See Castronova et al., WHAT IS A SYNTHETIC WORLD, supra note 4.
36. See id. at 22–25.
37. World of Warcraft is currently the most populous virtual-world experience in the Western world that holds to the traditional fantasy archetypal graphics/avatar based experience embodied by Everquest. The current census of active players who have visited World of Warcraft in the last thirty days is available at Warcraft Census, WARCRAFT REALMS, http://www.warcraftrealms.com/census.php (last visited May 28, 2012).
From the standpoint of virtual community classification, one significant development in the history of virtual worlds was the launch of Second Life. Second Life is a graphical-based virtual world that offers users the opportunity to develop the world itself. By eliminating publisher-mandated plot and role playing motivation, Second Life advertised itself as a new opportunity: an online space that reflected the real world, but with the freedoms offered by virtual world technology. For example, humans cannot fly in the real world, but in Second Life the ability is only a purchasable physics alteration away. Notably, however, these alterations were not free. Second Life encouraged players to participate in its virtual economy through the use of its own proprietary currency of Linden Dollars. Participants could trade or earn Linden Dollars inside Second Life or could purchase them by paying real-world currency to Linden Lab, Second Life's publisher. Second Life attracted a high level of corporate attention in the mid-2000s with companies as diverse as Coca-Cola and IBM establishing virtual presences.38

Perhaps the most significant aspect of Second Life, however, was not earning Linden Dollars or interaction with real-world corporate brands. Instead, it was the community, or really the collection of communities, that actively participated in and evangelized the Second Life experience. Second Life allows its users to own and modify property within its virtual space. Different types of properties attract and accommodate user groups that exhibit vastly different preferences. A Second Life user who attends virtual meetings for a real-world company is unlikely to cross paths with a user who enters the world to frequent virtual brothels, yet these individuals utilize the same virtual space to interact with their individually preferred social groups. The divergence of the communities within the single online space strongly suggests that the traditional notion of a virtual world is insufficiently granular to expose the interactive mechanisms of the smaller communities that exist within that space. Given Second Life’s prominent role in the literature on regulating virtual worlds,39 the multiplicity of virtual communities within this one environment highlights the diminished utility of the concept of a virtual world as a singular unit of study. Thus, any motivations for applying a blanket categorization to a virtual world in terms of the behavior of its whole population is likely to be not only overbroad but largely inaccurate.

B. Virtual Communities and Social Networks

Modern studies of virtual worlds often focus on spaces and activities that in

some respects resemble but are otherwise distinct from our real-world experiences. These studies particularly emphasize three individual characteristics as being essential for a virtual world setting. Edward Castronova termed these elements persistence, physicality, and interactivity: (1) the existence of a persistent virtual space in which objects retain positional and temporal consistency; (2) the user’s ability to navigate this virtual space via a representation commonly known as an avatar or virtual body; and (3) the potential for many people to inhabit the same virtual space at the same time.40 In addition to including an expectation of a physical persistence, other traditional definitions of virtual worlds include mathematical physics models41 and real-time feedback.42 While these characteristics may once have been essential for differentiating virtual spaces from real-world activities in a scholarly manner, this strict three-fold definition of virtual space now artificially limits our understanding of current online communities. In a number of ways, both technology and common use thereof have evolved to expand the necessary scope of study from the limiting concept of a virtual world.

One element, physicality, is particularly troublesome to a modern understanding of online communities. The property of physicality defines a navigational component, which itself suggests an environment that can or must be navigated. In many ways, this is an artifact of game-style participation, relating to the need of game providers to establish artificial goals like getting from point A to point B by negotiating a series of obstacles. The embodiment of a physical presence, an avatar, would force players to participate in the navigational component of the game as a part of the narrative experience. Second Life, despite having a virtual space that can be navigated, recognized the limitations of physical presence and implemented a teleport capability to allow avatars to instantly change their location within the virtual world.43 In addition, our modern understanding of navigation has changed dramatically because of the World Wide Web. As more of our daily real-world life capabilities are shifted into immediately accessible virtual abilities like shopping (Amazon.com, eBay.com), entertainment (Netflix.com, iTunes.com), business (LinkedIn.com), and news (CNN.com, NewYorkTimes.com), we navigate by simply clicking on links or typing in URL addresses. Mobile devices can scan printed codes that cause the device to navigate to a specific

40. See Castronova, Virtual Worlds, supra note 35 at 6; see also LASTOWKA, VIRTUAL JUSTICE, supra note 3, at 31 (describing a “rough consensus” definition of virtual worlds as “persistent, interactive, simulated social places where users employ avatars”); Richardson, supra note 9, at 747 (using Castronova’s definition); Kevin W. Saunders, Virtual Worlds—Real Courts, 52 VILL. L. REV. 187, 191 (2007) (also using Castronova’s definition).


42. See BARTLE, supra note 32, at 4.

Internet site. Corporations routinely use telepresence technologies such as videoconferencing and virtual meetings to reduce travel costs, allowing employees and clients to interact despite being geographically separated. Thus, as the lines between physical and virtual participation are blurred, the requirement of a singular representative presence like an avatar seems anachronistic at best.

Although each virtual world offers participants a mechanism for interaction, when contemplating regulation of virtual worlds, the group of users employing that mechanism—the virtual community—represents a far more logical and inclusive starting point. Whereas the virtual world is bounded by the technologies used to create the interface and depict the world, the concept of the virtual community must also include the motivations, feelings, activities, and other real-world baggage that participants bring with them—consciously or unconsciously—into the virtual space. Specifically, given that the existence of many virtual communities derives from common interests or a desire for a shared experience, the intentions and expectations of virtual communities and their users must be central to any discussion of virtual world regulation.

By recognizing the concept of a virtual community, the notion of pretend play, which commonly has been used to describe play activity in virtual worlds, is not only extensible to the larger psychological profile of a group participating within the virtual world, but is also more meaningful as an evaluation of in-group motivation. After all, it is well established that different participatory archetypes interact with a single virtual space in different ways and that these archetype groups may have limited interaction with one another. Moreover, even the most casual examination of social network sites such as Facebook reveals that some participants routinely engage in pretend play within these communities as well, even though social network sites in theory more accurately reflect one’s real-world persona than a traditional graphics-based virtual world. For example,

To all of Chris’ friends: This is his father. My son carelessly left his account logged in so I decided to snoop around. Upon reading my son’s personal information, I would like to clear a few things up. My son is not a “gangsta,” he will not “beat a ho’s ass” and he will most certainly not “roll a fatty wit his boyz.” So for all of those who believe he is some hard ass thug, think again... He is Chris ******, a 15 year old kid that was afraid of the dark until he was 12 and cried at the end of Marley and Me.

The terms virtual world and virtual community are differentiable so long as one holds the virtual world to be solely the technological space in which the game

44. See Maija Palmer, Screen Time: How Video Conferencing is Gaining Ground, FIN. TIMES ONLINE (Sept. 11, 2011, 4:59 PM), http://www.ft.com/cms/s/2/d5d696f4-d8a3-11e0-9089-00144feabdc0.html.
45. See BARTLE, supra note 32, at 1.
or activities take place, but any discussion of behavior in a virtual world inevitably encompasses the community aspect of the activity. A single virtual world may host multiple virtual communities. Different sets and subsets of users may actively engage one another within the virtual space, each with their own intents and interests. Alternatively, a virtual world may exist to serve a community that is far larger than the population of individuals contained within its boundaries. For example, a virtual space could serve as a meeting place for a real-world corporation or as a training ground for a real-world competitive sport. 47 For these situations, discussion of the virtual world without the context of the community that necessarily exists outside the virtual world could seem simplistic or ignorant.

C. Meaningful Attributes of Virtual Communities

For all of these reasons, we propose that the primary object of evaluation for purposes of future scholarship in comparative studies of virtual spaces is not the individual worlds, but instead the communities within those worlds. Having reached that conclusion, in considering the contemporary landscape of virtual worlds, certain commonalities emerge—attributes or traits that virtual communities broadly construed seem generally to share, though with a high level of variability from one community to another. These attributes serve as meaningful points of consideration and comparison for evaluating user and provider actions and intentions in a virtual world context. To the extent these attributes relate directly to a user’s behavior and actions vis-à-vis a greater virtual community to which the user belongs, they are also potentially useful for measuring user identification and attachment to that community as well as the intent of a user when choosing to participate in that community.

1. Self, Representation, and Interface

Within contemporary virtual communities, the self—that is, the real-world self, which includes but is not limited to the representations, truths, identities, and ephemera that constitute one’s online identity—is a more accurate unit of analysis than the avatar. Even the ultimate pretend of role-playing, wherein one adopts a personality or character that may be completely different physically, mentally, and socially from one’s real-world persona, is still a representation of the self.

This realization brings us to the classic question of why people participate in virtual communities. For many, virtual worlds are appealing largely because of their apparent separation from the real world. Rather than actually experiencing the community as part of corporeal reality, each participant engages with the virtual environment through a computer or other connected device, thus creating a sense of separation between the real world and the virtual community. In

addition, the artificial interface further allows a certain level of cognitive disassociation from potential crossover effects—i.e., real-world consequences—arising from online activities. Because the means of interaction is limited to a specific device, a participant can conceive of the virtual world as contained within that device, even though such a conception does not conform to the overall online community experience. Thus, virtual worlds can be and often are perceived as imaginary places untrammeled and untouched by the real world, including real-world laws and regulations.

Further proof of the perceived separation between real-world and virtual experiences is reflected in the differences in behavioral norms and standards between the real world and the various virtual communities in which individuals choose to participate. Users selectively choose to participate in specific virtual communities by seeking out the environments that align with their preferences. The fact that a range of choices is available among these virtual worlds, including the default choice of no participation at all, signals their otherness from the real world. Of course, we regulate the choices that people make all the time. Hence, at least to many would-be regulators, the mere availability of so many options also offers a normative justification for regulating—to guide and influence participants’ choices among virtual communities as well as within them.

The relationship between online activities and real-world impact is both real and multidimensional. Therefore, the boundaries between the different places are consciously maintained by our greater concept of the self. We project bits and pieces of ourselves into different types of activities. For example, an athlete may seek to project himself as being an emotionless competitor during a race while experiencing a surfeit of emotion after winning (or losing) that same race. Neither of these emotional states fully reflects the self of the athlete, but rather the aspects of self that are appropriate within each discrete circumstance. More importantly, neither state is made up of whole cloth; both states must be part of the central self in order to be projected at the appropriate time. The representation of self in the virtual space is thus necessarily a subset of a whole being.

Much of the distinction between these aspects of self can fortunately be captured via one of the core elements of the notion of a virtual community: representation within that community. Although the nature of the interface between the user and the online space no longer defines the existence of a virtual community, the notion of a representative proxy like an avatar is a powerful one that connotes a level of attachment and persistence on the part of the user. In a non-graphical MUD, the proxy would be a participant’s user name. In a social network, the role of the proxy is assumed by a participant’s page or wall. Many virtual world experiences use avatars that are far removed from human physiology

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or real-world principles. World of Warcraft allows players to take on avatars with monstrous physical aspects.\textsuperscript{49} EVE Online uses spaceships as one’s interface to the world, although player pilots are represented by a static portrait in chat and interactive communications.\textsuperscript{50} Second Life allows users to purchase animal or other non-human avatars.\textsuperscript{51} On a web-based social network, users are free to post whatever images they like as their profile pictures. Given the enormous range of possibilities, the proxy represents a focal point for a person’s projected self in a specific community. It establishes not only her presence in the world but also an attachment point for any artifacts she may have accumulated and a point of focus for others in the virtual setting. In the context of traditional virtual world gaming, users’ association with the world itself is strengthened through the amount of time one puts into building a powerful avatar.\textsuperscript{52} Given the work one puts into developing a representation in virtual space, the detail and variation of a representative proxy is a potentially important measure for the attachment a user has to the respective online community.

In addition, the mechanism of interaction between a user and a community provides a metric for evaluating the nature and the extent of their relationship. Can a user casually visit the virtual space quickly from a mobile device, or must he intentionally go to a specific room and use specific equipment to access the community? A dedicated software package that requires an extensive boot time and/or specialized computer hardware to run implies a greater degree of commitment on the part of the user to participate in that community. A community accessed via a web browser from a variety of different mobile and portable platforms arguably implies a more casual user engagement. The mechanism used to gain entrance to a community simultaneously constrains the conditions in which the user may access the communal space.

Traditional, game-like virtual worlds often require proprietary software that enables the characteristic third- or first-person perspective required for participation. Web-based technologies like Adobe Flash and Microsoft SilverLight now allow for virtual world-style interfaces to be realized directly in a web browser. According to player populations released in 2007, the MMORPGs

\textsuperscript{49} The races available for user avatars in World of Warcraft currently include not only traditional fantasy archetypes such as dwarves, trolls, orcs, and goblins, but also races based on wolves (Worgen), cows (Tauren), and demons (Draenei). \textit{Game Guide, World of Warcraft}, http://us.battle.net/wow/en/game (last visited May 28, 2012).

\textsuperscript{50} Details of the EVE Online character portrait creation process can be found at the EVE Online developer blog. \textit{Introducing Our New Character Creator, EVE Online} (Oct. 5, 2010, 3:54 PM), http://www.eveonline.com/devblog.asp?a=blog&bid=803.

\textsuperscript{51} For an example of Second Life users discussing avatars, see Answers, \textit{How Do I Create an Animal Avatar?}, \textsc{Second Life}, http://community.secondlife.com/5/Avatar/how-do-i-create-an-animal-avatar/qaq-p/1087349 (last visited May 28, 2012); see also \textit{The Basic Avatar Shapes}, \textsc{Avatar Toolbox}, http://avatar.toolbox.info/Avatar_Shapes.html (last visited May 28, 2012).

RuneScape and Puzzle Pirates had 5 million and 1.5 million active users, respectively.\(^\text{53}\) (By comparison, current MMO market leader World of Warcraft enjoys 8.5 million total subscribers, while Second Life has 500,000 active users.\(^\text{54}\)) With these sites, the web browser simply becomes another client through which virtual spaces can be accessed. That said, the ease of access via a web browser may well prompt a casual user to explore a new virtual world experience even though she would be unwilling (or unable) to download and install a custom interface. Further, as more users turn to the mobile computing platform as their primary online interface, the cross-platform capabilities of browser-based environments may attract a larger audience, including Android and Apple OS X users, than a proprietary interface limited to higher-end Microsoft Windows systems. In sum, the basic requirements of community participation may be predicated on users’ investment and upkeep of specific technologies. We conclude that the nature of the specific interface used to access a given community may therefore act as a proxy measure for the attachment and engagement of a user with that community.

2. Investment: Possessions and Pricing

The enormous opportunities for self-projection through highly individualized representative proxies have been accompanied by a sense of ownership, as well as new levels of commercialization. The persistence characteristic of virtual communities allows them not only to hold their structure but also to track in-world ownership of virtual possessions that may be attached to an individual proxy or avatar.\(^\text{55}\) In a non-graphical environment, these items could be badges displayed alongside one’s user name. In a traditional medieval fantasy-based virtual world, the accumulation of a magical sword or armor might be desirable. In a social network like Facebook, such possessions might include the collection of contacts, comments, and photos.\(^\text{56}\) Although items purchased, found, developed, held, and maintained within a virtual space are themselves a function of computer code, graphics files, and algorithms, such objects can seemingly be possessed and have potential real-world value.\(^\text{57}\) To some extent, that value is mostly subjective, the product of the effort expended to obtain or develop the object in question and of the resulting emotional attachment thereto. In some instances, however, as with the magical sword, the commercial value of online assets may be tied to their scarcity and utility in the virtual world and measured


\(^{54}\) See id.


\(^{56}\) See Richardson, supra note 9, at 747–57.

only by reference to the virtual world’s currency. Yet, external sites may also allow
for the transfer of such virtual items in exchange for real-world currency,58 raising
the question of whether these goods constitute recognizable property in the eyes
of the law.59 In their quest for a full range of individualized expressions of self,
virtual worlds allow participants to trade with one another. Where there is trade, a
real economy exists.60 Indeed, since possession and value make the control and
trade of virtual assets desirable, as in the real world, many scholars have argued for
regulatory protection of ownership for these virtual goods.61 Virtual possessions,
if allowed, provide a potential metric reflecting the value a given user places upon
participation in a particular virtual community. If a user has engaged with a
community for a long period of time, leaving that community may give rise to
emotional and financial switching costs, thus increasing user loyalty even in the
face of new community offerings.62

The general price for participation gives rise to similar issues of switching
costs and loyalty. Many virtual worlds maintain a subscription-based model by
which access is granted only if the user’s account is in good standing. Not all
virtual worlds rely on participation fees. A number of virtual worlds have either
modified their business models through additional fees known as microtransactions63 or dropped the subscription fee structure altogether in favor of alternative purchase and pricing models. Some MMOs have even gone wholly
free-to-play, relying on dedicated subscribers who want additional or upgraded
content for their revenue stream.64 The pay-to-play model familiar to Everquest

58. See, e.g., Steven Chung, Real Taxation of Virtual Commerce, 28 VA. TAX REV. 733, 744–47
(2009).
59. See, e.g., Edward Castronova, Real Products in Imaginary Worlds, HARV. BUS. REV., May 2005,
Property, supra note 18; Lastowka & Hunter, The Laws of the Virtual Worlds, supra note 6; Westbrook,
supra note 57.
60. See Castronova, On Virtual Economies, supra note 10; Chung, supra note 58, at 739–47.
61. See, e.g., Fairfield, Virtual Property, supra note 18; Lastowka & Hunter, The Laws of the Virtual
Worlds, supra note 6; Westbrook, supra note 57.
62. See, e.g., SAL HUMPHREYS, "You're In Our World Now": Ownership and Access in the Proprietary
Community of an MMOG, in INFORMATION COMMUNICATION TECHNOLOGIES AND EMERGENT
BUSINESS STRATEGIES 76 (Shenja Van Der Graaf & Yuichi Washida eds., 2006) (recognizing link
between social ties and long-term engagement). The recent debate over Facebook versus Google+
ofers an example, with many commentors concluding that while they might prefer Google+, all of
their friends are on Facebook, discouraging the switch. See, e.g., Adam Pash, Social Network Faceoff:
friends and family were on Twitter or Google+, for example, but they’re not. They’re on Facebook.
They’re not early adopters or Google lovers, and they’re not likely to make the switch to Google+ any
time soon.").
63. City of Heroes is an example. See CITY OF HEROES, http://na.cityofheroes.com/en (last
visited May 28, 2012). Zynga games like Farmville found on Facebook are wholly paid for by
microtransactions. See FARMVILLE, http://company.zynga.com/games/farmville (last visited May 28,
2012).
64. Champions Online and Dungeons & Dragons Online are examples. See CHAMPIONS
and Dark Age of Camelot users has been replaced by a pay-to-act model that monetizes virtually every player action.

In addition to the price of access, a critical element of analysis would seem to be the expectation of a return of funds by users. Regardless of the model, users may expect that the controlling corporation will continually apply fees for participation to improve service. From the user’s perspective, the motivation to pay increases if some perceived return exists. In many cases, the return is measured in the advancement of a user’s avatar and its possessions. Particularly, if an expectation of return exists, whether rightly or wrongly, then any payments made by users could be viewed as an investment they might potentially recoup.65

Expectations regarding a return on funds invested and continued access to and use of virtual possessions seem strongly linked to a user’s willingness to accept regulation. Of course, such claims are importantly subject to the rights that a community’s publishers assert over the objects that exist or are created within the virtual space. Publishers generally assert these rights explicitly before a user ever enters into the virtual space. Nevertheless, the presence or absence of virtual assets, as well as payments to acquire or maintain them, seem critical in evaluating the willingness of users, and thus virtual communities, to submit to external regulation of their activities.

3. Agreements and Communal Norms

Virtually every online interaction is governed by a user’s agreement to be held to a set of rules known as the End User License Agreement (EULA).66 The EULA is often, at heart, boilerplate rhetoric that may well be unenforceable under the actual law of the land.67 Further, users seldom bother to read or pay attention to any aspect of the EULA—if indeed it is even made available for perusal.68 However, the legal costs of fighting the control mandated by the EULA are so

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65. See Westbrook, supra note 57, at 786, 788 (describing the auctioning of virtual assets on eBay and the desire of gamers to profit from selling virtual assets they developed).
66. See, e.g., Andrew Jankowich, EULAw: The Complex Web of Corporate Rule-Making in Virtual Worlds, 8 TUL. J. TECH. & INTELL. PROP. 1, 17–18 (2006) (observing that EULA is a “shorthand term” for a collection of rules governing virtual world participation, including not only the End User License Agreement itself but also other terms of service and policy documents).
68. See, e.g., Jankowich, supra note 66, at 5. But see Julian Dibbell, Owned! Intellectual Property in the Age of Ebayers, Gold Farmers, and Other Enemies of Virtual State, in The State of Play: Law, Games, and Virtual Worlds 137 (Jack M. Balkin & Beth Simone Noveck eds., 2006) (describing interactions between users and game companies at EverQuest Fan Faire, resulting in a EULA that “starts to look less like a contract of adhesion, in other words, than like a social contract”).
high and the potential recovery so low so as to make resistance unpalatable to the
general social community user. Realistically, the only proactive remedy for
disagreement with a particular EULA is to choose another community not subject
to that EULA. The EULA is generally recognized as a form of contract, and
therefore provides a certain legal legitimacy to the publisher to enforce behaviors
that are governed through the basis of the EULA. But we do not consider the
presence or content of a EULA as a measure of contract adherence or expectation
of regulation precisely because of its perception by the general population of users
as a meaningless adhesion contract.

Although the EULA is the logical embodiment of the formal concept of a
contract, we suggest that the more important rules in a choice-based participatory
environment are those generated by the society itself. These rules are more
properly standards of behavior, and may not ever be set down. Nevertheless, just
as real-world societies capture ideals of fair play or right and wrong outside of the
formal construct of laws, online societies experience informal expectations
regarding user behavior and propriety—communal norms—as well. But what are
these communal norms before a community exists? Imagine a newly launched
virtual world as a tabula rasa. The first users from outside the publishing
corporation will quickly explore their space and begin to form communities within
it. These communities may be ad hoc parties of explorers (“What’s over there?”)
or may be formally defined by the virtual space itself (“You live on this island with
this group of individuals. All others are enemies.”). The important thing is that
new arrivals begin their participation with a set of proto-norms already emplaced
by the Interface and enforced by the EULA’s mandate that their actions conform
to a certain behavioral standard. If nothing else, the EULA gives the publisher
grounds to ban players who behave outside its boundaries or who disrupt a
nascent (or even an established) community.

Finally, EULAs act as a sort of additional switching cost for users who
participate in a virtual world. Most virtual world EULAs restrict players from
claiming any intellectual or physical property rights over any creations or objects
they find or create in the virtual space. Thus, a prolific creator of objects in
Second Life will be unable to peddle his (virtual) wares outside the scope of the
virtual world itself. We can see then that even though the EULA’s enforceability
as a contract is debatable when taken as a whole, the user agrees to be bound by
certain behavioral agreements and norms just by choosing to enter the community
over which the EULA has perceived authority. These agreements are not only
important for seeding the norms of a community, but also for maintaining the
stability and consistency of that community. Finally, of course, they are directly
evaluable by entities outside the virtual space, and thus have potential meaning for
regulators seeking enforcement within the virtual space.

4. Setting as a Function of User Choice

One critical division between real-world and virtual community spaces is the requirement for an individual to opt into virtual community participation. People are born into the physical world without a choice as to where. By contrast, while the ubiquity of computers means that complete avoidance of virtual activity is increasingly difficult, participation within a specific virtual community remains, at least for now, a matter of active choice.

Given the wide variety of options available, the specific choices invoked by users who do choose to opt into a community seem relevant from an evaluative context. The setting for a particular community’s virtual activities—that is, the type of experience and the nature of interaction within the community as established by the publisher—seems relevant in evaluating the central intent of an idealized user who chooses to participate. The intent of users playing a game in which medieval knights fight battles of good versus evil is likely much different from that of knitters discussing their favorite stitches. It is important to note that the choice preferences of a particular user or set of users do not necessarily characterize the direct real-world behaviors of those individuals. For example, at one point, the settings of most game-based virtual worlds were characterized as violent fantasy archetypes. Yet, the violence of the setting was contextual to the narrative of the game; the social connections developed between players in these games were not in themselves rooted in violence. Putting aside sensationalistic rhetoric between real-world crimes and violence in video games, the concept of economic marginal utility holds that different individuals are attracted to different hedonistic preferences and hence choose experiences based on their set of preferences. Users of virtual worlds thus seek out and choose the virtual communities that conform most closely to their idealized sets of preferences. So, although the users of those virtual worlds were not themselves violent, a certain subset of virtual world participants intentionally chose communities where online violence is an accepted norm. In these communities, of course, the virtual results of virtual violence are themselves virtual—and virtually meaningless. A virtual community that embraces player-versus-player fighting would hold killing as an expected daily event. If a player is killed in such an environment, the player can come back to life through the click of an icon. The very concept of death within that specific online community becomes very different from the notion of death in the real world. The specific norms of that community, therefore, hold that murder—by the way we understand it—is no more criminal than crossing the street. Thus players may choose to participate in a community where, to an

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70. See Caroline Bradley & A. Michael Froomkin, Virtual Worlds, Real Rules, 49 N.Y.L. SCH. L. REV. 103, 122–23 (2004) (explaining how early virtual worlds were populated by “elves, dwarves, and various types of monsters”).

outside observer, the norms are highly deviant from real-world expectations. However, to community insiders, the norms are simply a set of behaviors that are expected by those who choose to participate.

Even where the potential real-world consequences of virtual actions are more substantial, virtual communities sometimes conform to or even organize themselves around behavioral standards and expectations that are different from those of real-world communities. In the MMORPG EVE Online, players participate in the virtual world through an interface on their computer that represents the bridge of a virtual starship. To advance in the game, players purchase larger starships, which can engage in more activities throughout the virtual universe. To afford the largest classes of ships, players often band together into cartels or banks and pool their resources. Because EVE Online offers players a mechanism for cashing out their virtual currency, that community has experienced a history of individual cartel or bank members seizing the assets of the group, converting them to real-world funds, and absconding with the cash. 72 Although the real-world press portrays these activities in a negative light consistent with real-world norms and values, the virtual community of EVE Online often treats such events as part of the normal course of behavior; contrary to real-world societal behavioral expectations, the EVE Online community embraces virtual theft and bank fraud. 73 Even where real-world consequences result from online activities, the societal norms of virtual worlds can differ from real-world norms in profound ways. However, it is critical to note that explicit regulation can easily overturn these norms in favor of external mandates of behavior. 74

II. DEFINING THE MAGIC CIRCLE

Not every action that occurs within a virtual community merits government intrusion. Regulating some virtual activities would be pointless and stupid, akin to stretching the hand of government into a child’s Monopoly game. But, as we have observed, virtual activities are capable of achieving sufficient interaction with the real world to likely compel some amount of external regulation. The question then becomes, on what basis?

If virtual worlds are to be regulated, it becomes necessary to define the targets of that regulation. In particular, developing ex ante rules to govern primary behavior requires the ability to define and categorize the acts to be prohibited or circumscribed. Government regulation can offer a degree of flexibility to

73. But see Lim, Who Monitors the Monitor, supra note 17 (criticizing this assessment and calling for outside legal intervention).
74. See Balkin, Virtual Liberty, supra note 47, at 2046–47.
accommodate variable facts and circumstances, for example, by utilizing standards instead of bright-line rules. Nevertheless, if meaningful regulation is to be accomplished, some dividing line between acceptable and unacceptable spheres of regulation is necessary.

Scholarly efforts to identify a single, binary metric for defining a magic circle with universal applicability have proved inadequate to the task. In Part I, we justified virtual communities rather than virtual worlds as the appropriate basis for analysis, and we identified several specific attributes of virtual communities with particular salience in contemplating regulation thereof: self, representation, interface, possessions, pricing, agreements, communal norms, and setting. In this Part, we will draw upon these attributes as well for the purpose of differentiating virtual communities that should be regulated from those that should not.

A. Pretend Play and the Magic Circle

In his classic work on the culture of play, Johan Huizinga defined the distinction between games and real life—the magic circle—as an ad hoc agreement between individuals who have agreed to play together that is particular to a given situation, time, and area.75 The physical boundaries of the magic circle in this context may be a playground, a house, or a neighborhood. The temporal boundaries may be recess, until lunch, or for the next ten minutes.

All play moves and has its being within a play-ground marked off beforehand either materially or ideally, deliberately or as a matter of course . . . . The arena, the card-table, the magic circle, the temple, the stage, the screen, the tennis court, the court of justice, etc., are all in form and function play-grounds, i.e., forbidden spots, isolated, hedged round, hallowed, within which special rules obtain. All are temporary worlds within the ordinary world, dedicated to the performance of an act apart.76

In other words, in the classical sense, the magic circle is generated whenever a group agrees to play and is governed by the play activity taken on by that group.

The virtual world’s concept of a magic circle necessarily differs from the classical construct, most importantly in that there is no practical temporal or spatial limitation within the virtual world context. Virtual worlds are “artificial, fictitious, imaginary, intangible, and invented,”77 so items and experience gained in those places have entirely subjective value.78 The very persistence of the virtual world makes temporal boundaries unnecessary, as participation begins when one enters the world and ends when one exits. Nevertheless, scholars have invoked this idea of the magic circle as a state of play as the critical boundary in assessing

75. See Huizinga, supra note 7, at 8–10.
76. Id. at 10.
78. Castronova, On Virtual Economies, supra note 10, at 15.
whether and to what extent real-world law follows individuals as they partake in virtual activities.\textsuperscript{79}

In Huizinga’s terms, the magic circle may be undone if the consequences of the play activity produce an effect that is commonly recognized as not play: a skinned knee, a broken arm, or a summons by one’s parents to leave. Likewise, play in a virtual world may produce tangible real-world consequences,\textsuperscript{80} prompting calls to dismiss the protective power of the magic circle. Given the nature of virtual worlds, these consequences may be far different from those that may occur within a physical play space. Rather than physical, the real-world implications of virtual activities are more likely to be financial, emotional, or reputational.

On a case-by-case basis, the magic circle can be defined with some certainty. Within a specific virtual setting, certain elements are considered acceptable or expected based on the communal norms of the space and its users. Generalizing a magic circle that would apply across more than one virtual setting is more difficult. Indeed, one could argue that the entire point of the magic circle concept is its lack of consistency and its dependence upon individual settings.

\textbf{B. The Inadequacy of Binary Divisions}

Drawing from Huizinga, scholars use the theory of the magic circle as a common basis for evaluating the application of real-world regulations to virtual activities. For example, Edward Castronova uses ideas of significance and rules to demark the boundaries of a game.\textsuperscript{81} Bryan Camp proffers units of play as a meaningful distinction of behaviors.\textsuperscript{82} The circle then serves as a dividing line that separates and distinguishes those activities that may be subject to external regulation from those that should not, based on a single observable characteristic. For example, one of the most common binary distinctions suggested for regulating virtual worlds relies directly on the magic circle differentiation—game versus not-game. Scholars employ this general distinction using only slightly nuanced alternative metrics: Camp contrasts structured from unstructured

\textsuperscript{79}. For example, Edward Castronova argues that just as corporations are fictitious entities recognized and encouraged by the legal system, the play-space of virtual worlds ought to be legally protected as well. See Edward Castronova, \textit{The Right to Play}, 49 N.Y.L. SCH. L. REV. 185, 186–88 (2004) [hereinafter Castronova, \textit{The Right to Play}] (analogizing virtual worlds to corporations as fictitious entities deserving legal protection). Bryan Camp uses the magic circle (or fourth wall) as a precedent for demarking play-space in which income ought not be taxed, although he concludes that the actual act of impugning income is the trigger for regulatory applicability rather than simply crossing the representational boundary between play and not-play. See Camp, \textit{ supra} note 7. See also Joshua Fairfield’s discussion of “Cyberseparatism” in the 1990s for a fuller analysis of the legal argument put forth by advocates of a separate online space that is unregulated by the real world. See Fairfield, \textit{The Magic Circle}, \textit{ supra} note 7, at 828–31.

\textsuperscript{80}. See \textit{ supra} notes 9–18 and accompanying text.

\textsuperscript{81}. See generally Castronova, \textit{The Right to Play}, \textit{ supra} note 79.

\textsuperscript{82}. See Camp, \textit{ supra} note 7.
environments, Adam Chodorow distinguishes games from unscripted worlds, and Sal Humphries considers persistent worlds versus games. Regardless of the precise labels, the general characterization of play versus not-play or game versus not-game fits Huizinga’s original magic circle concept.

The traditional primary distinction between games and not-games is a simple one. Games have artificial goals that motivate gameplay: slay the dragon, save the princess, or destroy the One Ring. Such goal-directed behavior is motivated by in-process challenges, rewards, or achievements that are artificial to the environment and must be surpassed in order to advance gameplay. Online social environments like Second Life or Facebook have no such goals and are specifically designed to be open-ended. They exist to facilitate a community and the community provides them with the motivation for existence. At face value, then, we should be able to establish parameters for regulatory applicability based on this defining characteristic of game. An ideal, pure game that costs nothing to play and provides no benefit outside of the experience of playing clearly has no greater utility than the enjoyment of the individual player and would deserve no more governmental oversight or engagement than tic-tac-toe. An ideal, pure social network that reflects reality accurately, exposing real-world names, places, transactions, and events with all of their attendant real-world consequences, may well deserve or already be subject to regulation. Unfortunately, this approach inevitably runs into difficulties as real-world examples fail to neatly fit the ideal offered categories.

One issue with this distinction is that online games rarely have set endings. Gregory Lastowka and Dan Hunter have observed that this lack of finality makes such virtual worlds “a place more than a game.” The game versus not-game differentiation becomes further suspect when one recognizes, as many authors have, the real economic consequences of both. The economic activity present in many virtual-based games has the potential to alter the basic goals of the game, as participants’ primary concern shifts from fulfilling the game-plot motivated objectives to procuring rare or not-easily-obtained virtual items and selling them for profit. Countries like China and Korea famously have populations of game

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83. See id.
84. See Adam S. Chodorow, Ability to Pay and the Taxation of Virtual Income, 75 TENN. L. REV. 695 (2008).
86. See Camp, supra note 7, at 4.
87. See Humphreys, Productive Users, supra note 85, at 299–310.
88. See Bartle, supra note 3 (listing examples of game-related goals, including “accumulating and disposing of large quantities of high-value treasure, or cutting a swathe through hordes of mobiles (ie. [sic] monsters built in the virtual world)”).
89. See Lastowka & Hunter, Virtual Crime, supra note 19, at 300.
90. See, e.g., Castronova, On Virtual Economies, supra note 10.
participants known as gold farmers who make a real-world living through these practices. So the basic goal-based differentiation between games and not-games becomes blurred through the inclusion of virtual possessions. Many communities that invite user participation through message boards utilize reputation as a form of currency. Even though the reputation has virtually no real purchasing power, users with high reputation scores are reluctant to leave the boards.

Another element that brings online games and social networks categorically closer is the concept of game-based communities that exist to support the game, but only outside of the gameplay sphere itself. Many publishers of instanced games (single-player or multiplayer games that require only one purchase to acquire the ability to play) now release additional game content through online distribution channels (commonly known as downloadable content or DLC) and have turned to online channels that create proprietary social networks or incorporate existing social interaction opportunities, such as Facebook or Twitter, to provide support and create a community for instanced games. This blurring of the game as a purchased product and the social interaction surrounding the game further emphasizes the futility of game versus not-game as a single differentiating characteristic. For example, if a participant is not playing a game, but is instead engaged in a community discussion of what happened the last time he was playing the game, is that interaction game or not-game?

Many alternative binary categories that might in theory offer a more nuanced distinction of types of communities ultimately devolve to variations on the game versus not-game categorization. For example, Edward Castronova, referencing anthropologist Thomas Malaby, defines a game using the economic sense as “a designed choice environment with an uncertain outcome.” Although Castronova explicitly singles out the uncertainty of the choice environment outcome as being a game, his use of choice and uncertainty offers a specific binary categorization that might appeal to regulators: Are people free to act as they choose, such that they may opt to flaunt regulation? Or are they specifically bound to a set of actions? In this case, however, it seems that the choice set on display is no choice at all. The explicit element of choice invoked is also the element that renders this division equivalent to the basic game versus not-game scenario. Although modern

91. See Chung, supra note 58, at 739–47.
95. See id.
games with Hollywood production values provide for the illusion of choice within the game environment, any modern goal-directed game has but one possible overall outcome set: a player will either achieve the next goal she has chosen (or with which she is presented) within the game, or she will stop trying to achieve that goal. The particulars of the goal achievement state are choices in name only—do we heal here or attack the monster, do I approach from the left or the right—while such choices are merely sequential elements that drive the final outcome of the goal. In the game context there must be success at definable goals to continue the game. Failure is merely an interstitial state before success. By comparison, imagine that X offers to flip a coin and pay out to Y on heads but not on tails. Imagine further that X adds a rule that after each flip, Y may choose to disregard the outcome and have X flip again. Assuming a fair coin, the certainty of achieving a heads flip in this scenario is 100%; while the first and subsequent flips may yield tails, Y is able to invalidate tails flips again and again until the result is heads. Given the inevitability of a final, successful result, any suggestion that the outcome of the game is uncertain is implausible. Choice, then, simply becomes a variation of the earlier game/not-game distinction.

In short, binary approaches to defining the magic circle between virtual communities offer only an idealized black and white spectrum of differentiation that is ill-suited for an evaluation of regulatory applicability. The alternative, however, cannot be to decline to define the magic circle at all. If a simple differentiation ignores many of the alternate characteristics that we have found to be salient for analyzing virtual communities, perhaps the answer is a more complex framework that is capable of addressing these important categories directly.

C. Leveraging Activity Theory

User and publisher intent pervade our discussion thus far. Although the best of intentions may be impracticable, the thoughts behind actions undertaken within a virtual space should be especially relevant to external observers seeking to regulate specific actions or behaviors in a virtual space. Unfortunately, intent is not directly observable even in the aggregate. In cases where direct human actions can be measured, classical cognitive theory would be useful as a basis for analyzing the motivation interaction between human and computer systems. However, as users are represented by proxies in virtual communities—either virtual world avatars or their social-network equivalent of writings, actions, and postings that make up their online projection of self into those settings—our ability to observe and differentiate the projected persona of a user in the virtual community from the user controlling that avatar is limited.

Specifically, we can witness actions performed by the proxy, but we cannot gain direct insight as to the reasons for those actions or the stimuli that may be influencing the physical user during execution thereof. This constrained viewpoint
undermines many psychology-based theories that could be otherwise used to classify actions, behaviors, and responses in the online setting. Given the one-way observational restriction on user interaction, we turn to the Activity Theory view of action and production.

Activity Theory is a psychology-based meta-framework that partially originated and grew to fruition as a basis for social historical analysis in the former Soviet Union under psychological theorists Lev Vygotsky, Alexei Leont’ev, and Alexander Luria. Following the end of the Cold War, Western and Eastern theorists recognized that the communal and societal aspects of Activity Theory could be applied to human use of and interaction with technology. They thus began a drive to integrate the core principles of Activity Theory with technological analytic concepts. The emerging field of Human-Computer Interaction or HCI studies has particularly embraced the Activity Theory framework.

Controversial in part for its roots in the philosophy of Karl Marx and its association with Soviet psychology, as well as for its more recent challenge of traditional cognitive psychological views of motivation and intent, Activity Theory attaches meaning and structure to human behavior based on a practical analytic view of that behavior and the corresponding scaffolding provided by the society in which that behavior occurs. The root of Activity Theory holds that humans act as Subjects who engage in actions (collectively the activity in Activity Theory) to produce Objects, which result in an Outcome. The interactions between Subjects and their Community lead to the production of artifacts, or Tools. The relationship between Subjects and Objects is further mediated by these Tools as additional Subjects within the Community take up their use. The


98. See, e.g., Engeström & Miettinen, supra note 96, at 3 (tracing philosophical origins of Activity Theory to Marx and Engels); Kuutti, supra note 96, at 25 (same). See Bonnie A. Nardi, Activity Theory and Human-Computer Interaction, in CONTEXT AND CONSCIOUSNESS: ACTIVITY THEORY AND HUMAN-COMPUTER INTERACTION 7 (Bonnie A. Nardi ed., 1996) [hereinafter Nardi, Activity Theory], and Kuutti, supra note 96, at 19, for discussions of the academic literature debating the significance of cognitive psychology research for HCI studies more generally.

99. See Kuutti, supra note 96, at 19–20 (for examples of recent scholarly controversy).

100. See Bonnie A. Nardi, Studying Context: A Comparison of Activity Theory, Situated Action Models, and Distributed Cognition, in CONTEXT AND CONSCIOUSNESS: ACTIVITY THEORY AND HUMAN-COMPUTER INTERACTION 69, 75 (Bonnie A. Nardi ed., 1996) (discussing the role of mediation in
relationship is also mediated by the social network in which the activity takes place, represented formally by Rules, Community, and Division of Labor. In turn, subsequent use of these Tools by other Subjects leads to modifications of the original Community. The six core elements of Activity Theory—Tools, Subject, Object, Rules, Community, and Division of Labor—interact as presented in Figure 1.

**Figure 1**: Activity Theory, Adapted from *Perspectives on Activity Theory*  

![Activity Theory Diagram](image)

In Activity Theory, the Subject is the primary actor under analysis within the framework. Tools are artifacts that Subjects use and make available to others to enable greater achievements by the society as a whole; as additional users adopt successful Tools for their own use, Tools proliferate throughout the Community and provide general lift to societal action through that proliferation. One of the more esoteric elements to grasp, the Object represents not only the scope and goals of the Subject(s), but also the extent to which the scope and goals exist outside of the Community. The Rules element represents external constraints placed upon Subjects under which they must be bound in order to be a part of the

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102. See Kuutti, supra note 96, at 26–28.
103. See Engeström, supra note 101, at 31; see also Susan L. Bryant et al., supra note 97, at 1–10 (using the same framework in the human-computer interaction context).
104. See Engeström, supra note 101, at 29–30 (discussing the theoretical basis for Activity Theory and presenting visual models of the framework).
106. See Engeström, supra note 101, at 31.
Community. Finally, the Division of Labor concept reflects the societal divisions that enable collective output.\footnote{107. R.K.E. Bellamy, Designing Educational Technology: Computer-Mediated Change, in CONTEXT AND CONSCIOUSNESS: ACTIVITY THEORY AND HUMAN-COMPUTER INTERACTION 125 (Bonnie A. Nardi ed., 1996).}

Activity Theory is inherently a practical analytic theory that focuses on the description and understanding of events as they happen.\footnote{108. See Nardi, Activity Theory, supra note 98, at 7.} The fundamental tenet of Activity Theory is that activity is a conscious choice on the part of the actor, but one that does not necessarily invoke the cognitive profile of the actor. The thought process that leads to an action or activity is thus minimized within this analytic framework, an approach that works well for situations in which the inner mental state of a population is not immediately known or knowable. In a virtual community, where proxies are the only visible interface to the technological system, one can only infer the mental processes of the user that promotes an action visible to other users in the community. Furthermore, since many actions in a game-like virtual world are directly responsive to the virtual environment (e.g., if a virtual monster attacks an avatar, then the avatar must defend itself), the psychic makeup of the real-world actor is largely irrelevant to the activity that can be witnessed in this situation.

There are also direct parallels between the cyclical nature of the basic Activity Theory framework and user interaction in virtual communities, particularly in heavily social environments like those observed in Second Life or Facebook. In Second Life, for example, users can build new objects that work within the Second Life environment and can even sell such objects to other users. In turn, the economy and the social makeup of Second Life change. Similarly, in Facebook, users readily produce applications and extensions to ease their activities within the community, or such applications are produced by external companies with marketing or sales objectives. In this case, these tools may directly change the user experience and the mechanisms by which individuals interact with Facebook. In the case of online communities, the outcome is dependent on the overarching goals of the society itself.

\textbf{D. The Framework Applied: Virtual Community Attributes in the Activity Theory Context}

We have asserted the significance of virtual communities and acknowledged the relevance of play in defining the spheres of regulation and nonregulation. We have also recognized the inefficacy of clear-cut binary distinctions that can be universally applied across online communities, and thus the need for a more robust framework for defining the commonly invoked magic circle.\footnote{109. See supra notes 81–95 and accompanying text (discussing previous efforts to define the magic circle along binary lines).} In Part I, we identified several attributes or traits beyond play as critical toward the
understanding of virtual communities: self, representation, interface, possessions, pricing, agreements, communal norms, and setting. Leveraging Activity Theory, we now undertake to map those identified attributes, along with community and play, directly onto the Activity Theory framework, and thereby create a multidimensional taxonomic framework that regulators could theoretically employ to denote the boundaries of the magic circle with greater precision. In other words, rather than attempt to classify a state of play that exists in common for all virtual communities, our framework provides a basis for comparison among those communities, and thus for differentiating them for regulatory purposes. We now address each of the six Activity Theory elements in conjunction with the attributes of virtual communities.

Subject = Self + Representation

In the virtual community context, the Subject encompasses both the actor and the motivation for the actions undertaken insofar as they can be interpreted through causal observation. Using the components identified in Part I, the Subject is represented by the self as well as by the concept representation. The self represents the amalgam of the real-world user and the virtual space projection of that user. Representation reflects the choices made by users in terms of how they wish to be represented within the virtual space—for example, by the appearance, gender, and height of an avatar or by the photos and comments posted on a Facebook account—within the confines of the choices allowed by the virtual community.

The notion of Subject follows directly from Edward Castronova’s factors of interactivity and physicality in the traditional virtual worlds context and gives rise to the notion of active participation. Because the concept of the self embodies a group of hedonistic preferences that lead to the choice to participate, understanding that set of preferences is essential to the greater understanding of community differentiation. As discussed, the user is directly unobservable in the online context, but the presence of the user can be observed to differ according to both the representation of the user allowed within the virtual space and the exposure to personal information that correlates to the real-world user.

Users within a virtual community interact through presentations of their avatars, regardless of whether that avatar is a fully realized three-dimensional portrait or a static photo on a web page. Given the high degree of attachment between users and their avatars, the concept of representation within the virtual space has considerable value for our analytic construct. A community that only allows a choice of two default icons would be much less susceptible to personalization than one that allows posting from an online image bank of pictures from around the world. Since identification and a sense of belonging are

110. See supra note 40 and accompanying text (describing Castronova’s factors).
important to engagement within a community, we posit that higher levels of personalization to one’s representative avatar will lead to an increased level of attachment to a given community. This facet alone justifies the mode of representation as a specific area of interest for a framework that seeks to differentiate between communities.

The Subject is particularly relevant to regulation because of the nature of representation within the world. In the democratic tradition, those who are regulated must first consent to the regulation, at least indirectly, through democratic processes. If a user only projects a limited aspect of self into a virtual space—for example, a game of Scrabble in which the user would be represented by his tiles—then perhaps the user would be willing to sign away his representative rights to the publisher of the Scrabble game in order to play. But, the more vested a user is in the community, the more likely it is that he will demand a say in how the community is run and governed. From this, we conjecture that the greater parallels there are between a community and the real world, the greater the appropriateness of ex ante regulation on the community and the more community users would be willing to accept that regulation.

Tools = Interface

In virtual communities, Tools encompass both those originally provided by the developers (e.g., interface and mechanisms of interaction) and any customizations performed by end users, including those not allowed or intended by the developers. Accordingly, we maintain that the general technologies used by developers and users to access and interact with the virtual community are relevant from a comparative standpoint.

One of the primary elements in the definition of a traditional virtual world is interactivity. There are two obvious notions of interactivity: that between users participating in the community, and that between a user and the community itself. In a traditional virtual worlds setting, both of these interactions are performed through the avatar—a facet we refer to as representation—and hold as being a component of the Subject. In a virtual community like Facebook, these interactions consist of postings on one’s own or another participant’s space (wall). However, for purposes of the Tools element, the interface is the actual technology used to access the community, as discussed in Part I.C.

The interface underscores the intent of an individual user, and thus is important for evaluating that unobservable component. Proprietary software may also carry additional considerations of a contractual nature. The very concept of a EULA frequently extends to the technology underlying a software package—specifically the degree to which the software may be modified or resold. Thus,

111. See Castronova, Virtual Worlds, supra note 35, at 6.
from a contractual basis in regulation, the software becomes another important facet of analysis.

Object = Play + Setting

In an online setting, the scope and goals are part and parcel of a Subject's motivation for being present within the Community itself. Thus, the nature of a theoretical Object, which gains cohesion through the interaction of the Subject with the Community, is for all intents and purposes directly derived from the experience of the Subject within the Community. As this experience is gained directly from the play activity within the community, we leverage the Activity Theory notion of an Object to capture the concepts of play and setting categories. Thus, the Object becomes a close analog to the traditional state-of-play definition of a magic circle as invoked by scholars in virtual worlds literature.112

The scope of the Object also touches upon another distinguishing characteristic that may be used to differentiate the intent and regulatory aspect of a given virtual community: that of the visible environment—the setting—of that community. In MUDs, the setting was evoked through textual descriptions of areas in which users found themselves. In traditional virtual worlds, the graphics provide representation of a specific setting. The settings of many of these virtual worlds are characterized as fantastical or fictional,113 although one does not have to look far to find other virtual worlds that have closer parallels to everyday daily life, like Second Life or the now-defunct Sims Online.114 Edward Castronova notes that the strength of distinction between play and non-play spaces can be characterized by the expectations of the population within as to the applicability of real-world norms and culture.115 Thus, the more closely a virtual community setting is linked to the real world, the higher the expectations of regulation will be on the part of participants. A setting that is more fantastic, then, would imply a greater distance from the real world. By this reasoning, setting is important in capturing the unobservable expectations, or at least a baseline thereof, of the user community for that virtual space.

Extending this discussion to virtual communities like Facebook, it is tempting to conclude that there is no difference between Facebook and, say, e-mail—which is an essential component of real-world business life. According to this scenario, the lack of differentiation implies that real-world regulations should already be operative in a social-network setting. However, we note that not only

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113. See Bradley & Froomkin, supra note 70, at 128 (stating that “the virtual worlds most popular in North America involve fantasy, magic, and violence”).
does Facebook offer a variety of applications set in fantasy motifs, but also that many Facebook users engage in creativity and role-playing within their default postings—a primary mechanism of interaction in Facebook.

Perhaps most importantly, different settings inspire different tropes and behaviors, even relying upon certain expectations for a structured game experience. In a discussion where motivation and communal norms form an essential part of the analysis, the setting must be considered in order to arrive at a normative value of user intent when entering the virtual space.

Rules = Agreements + Communal Norms

A user seeking to enter a virtual community submits to a number of agreements, whether explicitly with the publisher through a EULA or tacitly with the community in regards to standards of behavior. These agreements collectively serve as a basis for the overall communal norms, but do not themselves fully shape the rules that users of a community obey. Users are likely to give as much weight to a community’s general social practices, which they witness in the virtual community, as to the explicit rules defined by the publisher as a condition of participation.

These norms can be seen as standards by which new participants are evaluated and by which long-term participants agree to be governed. Returning to the discussion of the choice of participation in a given community as an attempt to maximize a preferred set of hedonistic preferences, we posit that the norms of a community are a reflection of the commonality of preferences of its user base. Although some communities attempt to enforce a set of norms by providing behavioral guidelines, the actual norms of the community are highly dependent on the individuals within that community. Many behavioral patterns develop with no formal governance, oversight, or intervention on the part of the community administrators. Insofar as communal norms reflect the general preferences of the participating individuals, we suggest that the degree of similarity between a virtual community’s norms and real-world norms will offer a parallel as to how likely that virtual community is to embrace ex ante real-world regulatory oversight. In a hypothetical virtual community where possessions can be taken by anyone, and thus, where value is meaningless, regulation of realized value inside the game world through real-world regulation is equally meaningless.

116. Many applications, including Zynga’s Farmville and Ubisoft’s Smurf Village, put Facebook users into virtual-worlds-style play areas directly through their accounts. The integration between a Facebook user profile and these activities is very high, so that even while users are not in-game, their profiles play the game. See The Smurfs & Co., Ubisoft, http://www.ubi.com/US/Games/Info.aspx?pId=10090 (last visited May 28, 2012).

117. See Camp, supra note 7.
Community = Community

One analytic component that flows directly from our analysis into the Activity Theory construct is that of the concept of Community. The concept of a virtual community, and the concept of a real-world community that constrains yet enables the actions of the Subject, is the root of Activity Theory in general. Thus, even though the concept of Community captures a wide variety of other categories, including norms, the lens through which these categories are viewed in terms of Community differs significantly from the level at which they are considered in terms of the Subject. Because our notion of a virtual community is meant to reflect the differences between communities as well as to incorporate their unique technological elements, we conjecture that the truer notion of Community as represented by the Activity Theory concept is composed of the virtual community itself and the intent of the users of that community.

Division of Labor = Possessions + Pricing

It is difficult to reflect Division of Labor in the online social setting context, but we posit that the best analog is that of governance with regard to a specific virtual community—in other words, the division of responsibility and entitlement that comes from being a player as opposed to being an administrator or an owner within a virtual community. In a choice-based setting, this implies motivation on the part of the end user to continue participation in the society. To this end, we represent this motivation through the real-world requirements needed to continue participation in the community. This system captures a user’s choice to continue to participate in the community by dedicating time and cash to participation as well as his dedication to that participation as reflected in the roles available to be fulfilled by participants. We note that a community with a hierarchy of users based on seniority, experience, or other quantifiable aspects would seem to be more amenable to self-governance through shared norms than one ruled by fiat of the publishers, and reflect that a measure of one aspect of communal governance may be observed through this proxy. The combination of payments and property within the Activity Theory element of Division of Labor encompasses both time and cash outlays on the part of the user as well as switching costs that would be incurred from the standpoint of community abandonment.

Summary

Taken together, our mappings of the critical components that provide distinction between one virtual community and another onto the six core elements of the Activity Theory framework form the basis for comparison among communities, which itself is potentially meaningful in evaluating communities relative to a regulatory standpoint.
Figure 2: Activity Theory Framework Adapted for Virtual Community Categorization

<table>
<thead>
<tr>
<th>Activity Theory Element</th>
<th>Virtual Community Attribute</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject</td>
<td>Self, Representation</td>
</tr>
<tr>
<td>Tools</td>
<td>Interface</td>
</tr>
<tr>
<td>Object</td>
<td>Play, Setting</td>
</tr>
<tr>
<td>Rules</td>
<td>Agreements, Communal Norms</td>
</tr>
<tr>
<td>Community</td>
<td>Community</td>
</tr>
<tr>
<td>Division of Labor</td>
<td>Possessions, Pricing</td>
</tr>
</tbody>
</table>

The framework is intended to provide a system of measurable traits that have relevance to individual and collective action within virtual communities. Much work remains to be done that we leave for the future. Specifically, while we have identified the attributes of virtual communities as they relate to the Activity Theory core elements, as discussed in Part I, different communities and their participants reflect those attributes in varying ways. To fully implement the framework, the range of each attribute must be fully developed. Consider, for example, the Subject element, reflecting the self and the representation thereof. A participant’s representation of self may be fully synchronized with her real-world self on LinkedIn, but simultaneously may also present differentially as a mere set of preferences on Netflix, as a protagonist in a role-playing game like World of Warcraft, or as a fantasy ideal in Second Life. Hence, one can envision breaking the representation attribute into different categories or types: real-world self, set of preferences, role-playing protagonist, and fantasy ideal. Each attribute possesses a similar range of categorical options. After identifying the range of categorical options within each Activity Theory element, we can combine the results into a multidimensional taxonomic matrix reflecting different combinations of attribute categories and permitting the assignment of each virtual community to the categorical combination that best fits its own collection of attributes. The magic circle or state of play can then be calibrated differently for each box on the matrix, some of which will be more appropriate targets of government regulation than others, depending upon the attributes of the virtual communities contained therein.

It is essential to note that this framework is not intended to be a preference or ratings-style classification system, but merely provides a basis for comparing virtual communities. No one classification is better or worse than any other. Rather, the significance lies in the similarities and differences among communities. We seek principally to organize these similarities and differences into a theoretically defensible basis for adopting different stances regarding regulation vis-à-vis individual virtual communities. Most importantly to us, therefore, the framework we propose is capable of supporting objective observations to provide differentiable categories at each node of the framework. It is only through
externally defined and measurable categories that an observer outside a virtual community’s participatory structure could derive a system of regulation that can be generalized across a series of virtual communities. Particularly from the perspective of ex ante regulation, these collections of categorization would allow for some types of virtual communities to be labeled as eligible for regulation and other types to not be. By classifying individual virtual communities categorically within the framework, however, regulators would be able to determine which regulations would fit with which communities. Regulation could thus be tailored to affect one category or another while leaving others alone, as appropriate. A flaw with this system, of course, is that operators of virtual worlds might try to create offerings that fit into a set of unregulated categories while achieving the ends that they would otherwise achieve using regulated categories. However, the objective nature of these categorizations makes this a flaw that would be difficult to exploit while still appealing to the expectations and desires of online participants.

We believe that the multidimensional taxonomic framework for categorizing virtual communities offers a theoretically defensible basis for distinguishing that which could be regulated from that which clearly should not. The obvious downside of this approach, however, is its complexity, particularly when government regulators are faced with multiple communities within a single virtual world space.

III. RISK, REGULATION, AND THE MAGIC CIRCLE

In the real world, governments regulate primary behavior to reduce or eliminate the likelihood that some members of society will suffer negative consequences from the actions of others, whether from deliberate bad acts or from market failure. Similarly, calls for regulating virtual worlds are largely concerned with deterring behavior perceived as giving rise to negative consequences, and thereby reducing or eliminating the risk of harm to other participants. Toward that end, much of the virtual worlds literature seeks to compare particular bad acts in virtual spaces with real-world analogues, with the suggestion of applying existing real-world laws to deter negative virtual behavior and protect participants from the resultant harms.

Of course, society utilizes a range of different tools to guide primary behavior and alleviate risk. Obviously, government actors can adopt statutes

118. Scholarly considerations of whether and to what extent virtual activities ought to give rise to income subject to taxation are somewhat of an exception. See, e.g., Camp, supra note 7; Chodorow, supra note 84; Lederman, supra note 9. Although taxation can be a form of regulation, these articles are principally focused on revenue-raising rather than on using taxes as a regulatory tool.

and regulations requiring or prohibiting certain acts and impose civil fines or criminal penalties upon violators. But governments can also impose taxes to increase the costs of certain behaviors, and thus decrease their incidence.\textsuperscript{120} Recognizing the limits of command-and-control regulation, good governance models rely on informal mechanisms including self-regulation to facilitate and incentivize good behavior.\textsuperscript{121} Private rights of action\textsuperscript{122} and potential liability in contract or in tort\textsuperscript{123} deter bad behavior, and hence serve regulatory purposes as well. Yet, these different regulatory tools are not interchangeable. Different approaches or combinations thereof will achieve better or worse outcomes depending upon the facts and circumstances of the contexts in which they are applied.\textsuperscript{124} As observed by then-Professor Stephen Breyer, \textquote{Too often arguments made in favor of governmental regulation assume that regulation, at least in principle, is a perfect solution to any perceived problem with the unregulated marketplace.}\textsuperscript{125}

Legal scholars have recognized several factors that regulators can use to guide their choices among regulatory tools.\textsuperscript{126} One key factor is the extent to which government agencies versus private actors are better positioned to obtain the information necessary to discern and reduce risk.\textsuperscript{127} In some cases, government experts are best positioned to accumulate the data necessary to evaluate risk and devise mechanisms for mitigating that risk. For example, government agencies with resources and scientific expertise are simply better equipped than most individuals to assess the risks to human health and the environment of exposure to various toxic chemicals and to develop ex ante regulations to limit such exposure appropriately.\textsuperscript{128} But in some instances, particularly where facts and circumstances are highly variable, individuals are

\begin{itemize}
\item \textsuperscript{120} See Shavell, \textit{Accident Law}, supra note 119, at 277–78 (recognizing taxation as a tool for controlling risk); Stephen Breyer, \textit{Analyzing Regulatory Failure: Mismatches, Less Restrictive Alternatives, and Reform}, 92 Harv. L. Rev. 549, 581 (1979) (discussing tax as a regulatory tool).
\item \textsuperscript{124} See, e.g., Steven Shavell, \textit{Liability for Harm Versus Regulation of Safety}, 13 J. Legal Stud. 357 (1984); Charles D. Kolstad et al., \textit{Ex Post Liability for Harm vs. Ex Ante Safety Regulation: Substitutes or Complements?}, 80 Amer. Econ. Rev. 888, 888–89 (1990); see also generally, e.g., Viscusi, supra note 119 (discussing the optimal mix of regulatory tools).
\item \textsuperscript{125} Stephen Breyer, \textit{Regulation and Its Reform} 5 (1982).
\item \textsuperscript{126} See, e.g., Shavell, \textit{Accident Law}, supra note 119, at 279–85.
\item \textsuperscript{127} See id. at 281–84 (considering role of information ex ante versus ex post and privately initiated versus state-initiated regulatory approaches).
\item \textsuperscript{128} See id. at 281–82 (using this example).
\end{itemize}
better situated to appreciate and weigh the risks they face, the actions they need to take to mitigate that risk, and the costs of pursuing those actions. For example, a homeowner seeking to remove a diseased tree is better positioned to evaluate the risk of damage to his neighbor’s house should he do the job himself against the cost of hiring an expert to perform the task instead. In such circumstances, liability in tort will likely suffice to deter excessively risky choices. Meanwhile, government efforts to articulate a set of ex ante rules and standards governing the decision would likely strike either too broadly or too narrowly.

Whether or not regulators have struck the right balance in a particular instance, real-world statutes and regulations reflect assessments as to the efficacy and propriety of different regulatory tools given the strengths and weaknesses of each in relation to the facts and circumstances of particular regulatory targets. Whatever the analogies, real-world and virtual world scenarios are not identical. In particular, as observed, virtual worlds and the communities within them are highly variable in terms of the shared norms and expectations of individual participants. EVE Online is different from Second Life is different from Facebook, and communities of participants within each are even more varied by degrees arguably much greater than the differences among individuals and entities subject to any particular nation’s laws. Meanwhile, statutes and regulations that seek to govern behavior on an ex ante basis work best when regulators are able to develop workable definitions of the targeted actors and actions. The dynamic evolution of technology and resulting expansion of participation in virtual communities suggests particularly that statutes and regulations adopted today are likely to be quickly outdated.

Such a conclusion does not altogether preclude regulation in the broad sense of that term. The growth of virtual activity means that virtual communities are unlikely to be able to avoid the intrusion of real-world governance altogether. But efforts to regulate virtual communities ought to be structured to take into account their peculiarities and not just rely upon their similarities with real-world analogues. While more work needs to be done, in general, we believe that appropriate emphasis on virtual communities as categorized using the framework we suggest most often will lead to a preference for market solutions and self-regulation, or EULAs and contract remedies, even where analogous real-world activity falls within the scope of direct regulation. Likewise, tort law is comparatively malleable in addressing varied evolving circumstances in a way that more static regulatory efforts are not.

CONCLUSION

The scope of the scholarly literature concerning law and regulation of virtual worlds demonstrates that, despite their frequent departure from reality, virtual
spaces present a number of very real legal issues concerning the activities that take place within their confines. As Internet technologies have proliferated from technologically aware experts into the general population, and as the mechanisms for online access have been consolidated into technologies as diverse as refrigerators and mobile phones, virtual worlds can no longer be sheltered as unique. Many of the same legal and regulatory concerns presented by the real world are extensible to this greater population of virtual communities.

From the regulatory perspective, we conclude that virtual communities can be directly evaluated using a collection of components including community, self, representation, interface, possessions, pricing, agreements, and communal norms, in addition to the element of play. By collecting these components into a framework based on classical Activity Theory, we form the basis of a comprehensive model for measurement by which virtual communities can be evaluated relative to one another. The resultant measurement should capture at least part of the unobservable element of intent inherent in a community and its users that is so often invoked in connection with the magic circle. Hence, our framework at least in theory would provide a basis for government regulatory efforts to apply directly to virtual communities on their own terms rather than merely by reference to real-world analogues.

That said, from a regulatory perspective, defining the magic circle in this way will most likely accomplish very little, at least from the perspective of those who want to extend or adopt statutes and regulations to govern online activity. When we assess virtual communities through this framework, it seems relatively if not conclusively apparent that centralized, top-down, ex ante regulation is likely to be a poor mechanism for regulating virtual worlds. The high level of variability among virtual communities and their overall resistance to easy generalization in particular suggest that more flexible regulatory tools are more likely to be appropriate.