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Virtual Borders: The Interdependence of Real and Virtual Worlds

by James Grimmelmann

Abstract

The flourishing trade of virtual items for real–life money suggests that virtual worlds will sometimes welcome the intervention of real–life law. At first glance, this possibility seems to undermine the Law and Borders thesis that online spaces should enjoy independence from real–life law. These ideas are compatible, however, because they start from a common premise: that these new communities are developing their own distinctive values. The lesson of the real–money trade is that preserving those values requires recognizing the interdependence of virtual worlds and the real world.

Contents

Introduction

The "Great Debate" panel at the State of Play III featured six legal academics and a virtual world designer [1]. The designer, Richard Bartle, was teamed with David Johnson and David Post, authors of "Law and Borders: The Rise of Law in Cyberspace," published in this magazine almost ten years ago [2]. It was an interesting combination. Although virtual world designers often subscribe to the Law and Borders thesis that, much like the past, cyberspace is another country, they also often hold certain other views that inflect that thesis in some very, well, *interesting* ways.

If you ask designers of virtual worlds about their deepest long–term legal concerns, you will often get two answers. "Real–world governments shouldn't subject my world to inappropriate laws," is one [3]; "The law should shut down black–market sales of in–world items for real–life money," is the other [4]. Bartle is the most visible and articulate spokesman for the many designers who believe in both [5].

At the most superficial level, they reflect quite different attitudes towards law. The designers who adhere to the ideas of Law and Borders are afraid that real–world governments will censor their content, install virtual wiretaps, and limit playing time, among other interventions. They are afraid that the real world will use law as a tool in a misguided attempt to "fix" virtual worlds. But designers (often the same ones) also often claim complete control over economic activity in their worlds and wish that real–world governments would step in to prevent out–of–world sales of virtual items. They want to use law as a tool themselves.

These twin beliefs rest on the ideal that animates Law and Borders: that there is something uniquely valuable about virtual worlds, something wonderful and worth nurturing. Most virtual–world designers I have met believe deeply in this ideal — this confidence in the value of virtual worlds is almost a job requirement for them. Who else would spend so many hours and years creating imaginary places except someone who believed in the value of the virtual? [6]

The trouble comes because this ideal leads them to ask both for legal neglect and legal solicitude. A cynic might say that the underlying theory is that real–world courts should do whatever virtual–world designers ask of them. Most designers are not themselves so cynical, but innocence of spirit is not in this context a legal argument. (After all, plenty of people think that potato chips are great, too, but there's no special deference in law to the wishes of potato–chip fans.) To answer the cynic, designers need to articulate principles that would be convincing to the real world, that is, to real–life governments and to real–life courts.

It is easy to make an attractive argument that law should stay away entirely from virtual worlds. *Virtual worlds are such distinct places that real–life law shouldn't apply; what happens in virtual worlds doesn't affect the real world in ways that justify legal intervention.* It is also easy to make an attractive argument that law should forbid out–of–world sales of in–world items. *Virtual worlds are not such distinct places that real–life law shouldn't apply; what happens in the real world affects virtual worlds in ways that justify legal intervention.* As might be guessed, it is rather harder to make both these arguments at once.

Virtual worlds are entitled to respect because real people care about them and come together in them.

The answer, I will suggest, involves retreating from the easy arguments and the strong conclusions they justify. As one possible alternative, if one starts again from the value of the virtual and emphasizes that virtual worlds are real communities rather than real places, the outlines of a compromise emerge. Virtual worlds are entitled to respect because real people care about them and come together in them. This compromise limits a virtual world's ability to claim immunity from real–life law and limits the circumstances under which a virtual world deserves to have the trade in virtual items suppressed. But it is also more convincing when it asks for some immunity and some suppression both at once.

The move to a mutual respect between real and virtual is an old one — at least as old as Law and Borders itself. Johnson and Post conclude by suggesting a regime of virtual–real relations mediated by "comity — a situation–specific balancing of the interests of the virtual and the real. The designers' compromise also leads to comity, but with a different spin. Instead of antagonistic interests that must be traded off against each other, it suggests, reality and virtuality have interdependent interests. New forms of cooperation between the virtual and the real will emerge.

Freedom from Law

Let us begin with designers' first request — for law to leave their worlds alone. They have in mind a number of nightmare scenarios. Nations with laws against depictions of violence (such as Germany) might apply those laws against combat–oriented multiplayer games [7]. Nations with laws against gambling (such as the United States) might apply those laws against worlds that enable successful players to cash out their winnings in real–life money [8]. Nations with laws against indecency (such as Saudi Arabia) might apply those laws against worlds that allow avatars to go about wearing too few virtual clothes [9]. Almost every nation considers some kind of speech so offensive that it might take legal action against a virtual world too heavily infested with that sort of speech.

These scenarios have in common is the idea that a real–life government might seek to impose its values on a virtual world. Designers, however, insist that their worlds are intended to have different values. Virtual worlds don't have to be like the real world. They can be different. Indeed, a large part of their appeal is that they are different [10]. For a short–sighted government to impose its narrow–minded values on them, designers say, is censorship [11].

Calling censorship "censorship" does not end the discussion. Some kinds of censorship are uncontroversial in the real–world. No nation tolerates absolutely free speech. You can't shout "fire" in a crowded theater; you can't use fighting words in a tense situation; you can't leak trade secrets; you can't utter insults deliberately calculated to inflict severe emotional suffering. Even where people struggle over the boundaries of what speech should be allowed, few of them oppose the idea that the effects of some speech are so awful that that speech can be punished. In most cases, governments would simply be applying to virtual worlds the same laws they apply locally in the real–world. If cries of "censorship" don't work in the real–world, why would they work to protect virtual worlds? What is needed is something special about virtual worlds.

The usual move at this point is to appeal to virtuality itself. Designers from the Law and Borders school of thought might put it this way: Yes, governments can control what happens in their territory. But their territory doesn't include virtual worlds. The spatiality of the metaphor is not accidental; virtual worlds really are distinct places. People "go to" virtual worlds, and when they do they leave the real world behind in the relevant sense. Virtual worlds are often transnational communities in which the real–life locations of the participants are irrelevant. The community they make in the virtual space should be allowed to have its own rules. What happens in Virtual Vegas stays in Virtual Vegas [12].

This appeal has a nice ring to it. It also has critics. This simplified version of the Law and Borders thesis can be reduced to a syllogism —

1. Virtual worlds are separate places; and
2. Real–life governments shouldn't regulate what happens in separate places; *ergo*
3. Real–life government shouldn't regulate what happens in virtual worlds.

— and advocates of regulation by real governments challenge both premises [13].

The first premise is that virtual worlds really are separate places [14]. Yes, they seem to have spatial identity, say the

skeptics. But virtual worlds also run on real computers, and those computers are in the real world somewhere. They are designed and programmed by real people, and those designers and programmers are in the real world somewhere. They are populated by avatars controlled by real people, and those players are also in the world somewhere. People who are "in" virtual worlds haven't gone anywhere at all. They're sitting at computers, and when they cause grief to other people sitting at other computers, governments have the right and the obligation to pay attention. If I lie to you in person and take your money, that's fraud. If I lie to you over the phone and take your money, that's fraud. If I lie to you in a virtual world and take your money, why is that not fraud also?

The split here is between what Orin Kerr has dubbed the "internal" and "external" perspectives, between two ways of thinking about what happens in an online "space" [15]. When we put on our "internal" goggles, we see the avatars in a virtual space, engaging in virtual conduct, living virtual lives, and generally taking the metaphors and rules of that space seriously. When we put on our "external" goggles, we see people at keyboards and bits flowing along wires. The virtualists and the realists here are disagreeing on which perspective is the salient one for talking about virtual worlds. Virtualists say that the internal perspective should predominate; realists prefer the external perspective.

The second premise is that being somewhere else is actually significant. In real life, often it is not. If you conspire to fix prices in the United States, the United States will prosecute you whether you and your co–conspirators met in Italy or in EverQuest. If you stand in New Jersey and fire a howitzer over the Hudson River into New York, you can be sued in New York. In law, this principle goes by the name of "effects jurisdiction." Effects jurisdiction asserts that a government has the right to regulate conduct that has effects within its borders, regardless of where that conduct takes place. Regardless of whether, for example, that conduct took place in a virtual world. Indeed, the realists might argue, for many purposes, Star Wars Galaxies is a lot closer than Moldova; daily life in the United States may be more affected by the former than the latter [16].

One sees a number of replies from the virtualists, but I would like to focus on the most audacious. Sometimes, designers and their allies respond by arguing (in effect) that effects jurisdiction itself is illegitimate, that communities have no natural right to enforce their values beyond their borders. The international lawyers might say that it is a customary compromise among sovereign states as a matter of deference to each other; each will allow the others some measure of say–so beyond their own borders. But so? The virtual worlds had no say in that agreement. We want out of this oppressive system. Your monopoly of force in the real world is what gives rise to this assertion of power beyond your own territory. We, here in this virtual space, we will create a new civilization not founded on such arbitrary authority.

To summarize, then, designers and others fully committed to the strongest form of the Law and Borders thesis make two important assumptions in support of that thesis. The first is that the internal perspective is the correct way to think about virtual worlds, so that we can ignore the external perspective and we treat virtual worlds as separate places. The second is that the principle of effects jurisdiction is illegitimate as applied to virtual worlds, so that real–life governments have no natural right to demand that virtual worlds respect their values. Both of these assumptions are plausible, in the sense that there are very smart people who subscribe to them. Both are controversial, in the sense that there are also very smart people who oppose them. The point is that in appealing for freedom from real–life laws, some virtualists cast their lot with the internal perspective and against effects jurisdiction.

The Real–Money Trade

Understanding designers' second concern requires a little more background. Many (not all) virtual worlds allow avatars to change over time [17]. Many (not all) of those changes allow the avatars to accomplish more, or to accomplish it more easily, to wield greater power within the world, or just to see neat things. Sometimes the world makes the avatars themselves more capable; perhaps they can go places other avatars cannot. Sometimes, it is the virtual items that come into the avatars' virtual possession that provide the benefits. These items could be units of virtual currency, virtual weapons, virtual gadgets that put on sound and light displays, fancy virtual clothes, and so on.

Whether these increased possibilities are treated as attributes of avatars or as distinct virtual items, they are likely to be desirable. They could be confirmation of success, the keys to unlocking interesting in–world experiences, markers of social status, or part of a complete collectible set. For almost all the reasons that people lust after possessions in the real world, they lust after possessions in virtual worlds [18]. A flourishing trade in virtual items naturally follows [19].

In–world trades of widgets for cyberthalers are one thing; border–crossing trades

of widgets for U.S. dollars are something else.

Things become especially interesting when that trade develops ties to the real world. In–world trades of widgets for cyberthalers are one thing; border–crossing trades of widgets for U.S. dollars are something else [20]. To pull off such a trade, players must be able to link up both in the virtual world and in the real world. Inside the virtual world, the first player's avatar hands the item being traded to the second player's avatar. Back in the real world, the second player transfers real money to the first player. They might use cash, if they can meet in real life, but more often they will use one of the fancy forms of payment systems our modern financial infrastructure has devised: a check, a money order, a credit card, credits with a respected third party, e–gold, or some yet more exotic financial instrument [21].

Some designers welcome the real–money trade. It can make virtual worlds into investment zones, add a thrill by giving in–world swings of fortune serious consequences, or even be a direct source of revenue for the designers. Second Life [22], EVE–Online [23], and EverQuest II [24], respectively, have prominently experimented with these models.

Other designers scorn the real–money trade. They see it as undermining their worlds' distinctive values. First, instead of starting off from the same point as everyone else, people with money to burn can buy their way into elite positions, skipping over the people hauling themselves up by the virtual bootstraps [25]. Second, by giving players the ability to sell their avatars for hard currency, it facilitates exit, reducing players' incentives to stay, to contribute to the virtual community, and to experience the whole of what would otherwise be a satisfying narrative arc [26]. Third, it attracts scammers and profiteers, who are often deeply unpopular with other players and who also undermine community spirit [27]. And fourth, it can run directly counter to other design goals. Some virtual worlds try to have economies that do not mimic real–world economies; their designers would be aghast if virtual items in their worlds became commoditized [28].

The real–money trade, however, is not easily thwarted. Designers can attempt to make it more difficult through careful design choices, but such choices seem often to lead only to awkward designs with odd mechanics [29]. Designers can try to ban players who engage in the trade, but they often have limited evidence — since the half of the exchange that involves real money takes place outside the virtual world, and is therefore often invisible to designers' surveillance of their worlds. What some designers would really like would be a helping hand from law.

Law could do several things to help designers out. It could state up front that players have no enforceable rights in virtual items. It could provide designers with lawsuits against players who engage in real–money trades. It could prosecute real–money trading players as criminals. It could treat real–money trades as deals in contraband, so that players scammed by unethical trading partners could not themselves seek assistance from law. It could shut down third–party sites that facilitate real–money trades by matching up trade–seeking players with each other. (One lawsuit in the United States teed up such a claim, but the case was dropped by the real–money trader at an early stage [30], after the company successfully asked the judge to require arbitration. Observers of the field are waiting for the next with the hushed mixture of thrill and dread that precedes a gruesome battle.)

And now we are ready to ask a most interesting question. What, precisely, is the justification for having real–life law step in in these ways? Players can make out a *prima facie* case that the virtual items their avatars virtually possess ought to be treated like any other kind of property — at the very least, subject to being bought and sold on the open market. Gregory Lastowka and Dan Hunter ground such a case in the similarity between players' experiences with virtual items and their experience with objects in the real world [31]. Joshua Fairfield grounds it in economic efficiency [32]. It is reasonable to ask that designers be able to offer some positive reasons for outlawing the real–money trade.

In fact, they often offer two. Both should seem oddly familiar.

The first reason one hears that law ought not allow a trade in virtual items is that designers have rights, too. Designers have property rights in the servers on which virtual worlds run [33]. Players who engage in the real–money trade are accessing those servers for purposes not allowed by designers and therefore could be said to be misusing designers' property and accessing computer systems without authorization [34]. Designers have contract rights based on the "end user license agreements" that players also enter into when they enter into virtual worlds [35]. Players who engage in the real–money trade are breaching their contracts with designers. Designers have intellectual–property rights in the designs of their worlds. Players who engage in the real–money trade are making unauthorized copies of designers' copyrighted works [36]; sites that facilitate the real–money trade are using designers' trademarks without permission [37].

These arguments are appeals to the external perspective. They all depend on real–world rights of designers in real–world things. The servers in which designers have property rights are objects in the real world. The contracts in which designers have contract rights are contracts with people in the real world. The creations of the mind in which designers have copyrights and trademarks — well, those rights are artificial creations of real–world governments, rights created by those governments "to promote the Progress of Science and useful Arts," in the catchy words of the United States Constitution [38]. From soup to nuts, the argument that designers have enforceable legal rights against real–money traders depends on valuing the designers' external perspective over the players' internal perspective. Hmmmm.

It is wrong to force every virtual world to walk and quack like the real world. The virtual isn't supposed to be just like the real, after all.

The second reason one hears that the law ought not allow a trade in virtual items is moral. It is wrong to force every virtual world to walk and quack like the real world. The virtual isn't supposed to be just like the real, after all. Utopian experiments in virtuality are trying to reject the commoditization of the real world, not have it crammed down their throats [39]. Game–like virtual worlds are trying to create a competitive experience that is both fun and broadly fair, not to allow whoever spends the most to purchase victory [40]. These virtual worlds are like cooperative apartments asking the law not to allow shares in the building to be traded entirely freely, or like groups of sports fans asking the law to punish athletes who use certain performance–enhancing substances. Conduct that might be allowable standing on its own undermines the distinctive values of these communities.

Put more abstractly, a community's ability to establish its own values is dependent on its power to make those values stick. For purely internal matters, the community can act to enforce its collectively–determined values on its own members. But where matters go beyond the community itself, it needs to be able to have its values enforced with respect to conduct taking place outside the community itself. Where the effects of real–life trade in virtual items threaten the deeply–held values of a virtual world, it ought to be able to call on real–life law to protect those values. Conduct that takes place in the real world has adverse effects inside a virtual world, those effects threaten the values of that virtual world, and so that virtual world's government has the right (indeed, the obligation) to regulate that conduct. In other words, designers asking the law to prohibit the real–money trade are appealing to effects jurisdiction. Double hmmm.

To summarize, then, designers' second concern is the funhouse mirror image of their first. There they were dyed–in–the–wool virtualists; here they are realists to the core. The kinds of arguments one naturally makes to justify demanding that real–life governments to use their power against the real–money trade undercut the arguments one naturally makes to justify demanding that real–life governments keep their hands off of virtual worlds. The claim that the real–money trade infringes legal rights of designers acknowledges the legitimacy of the external perspective. The claim that the real–money trade hurts virtual worlds acknowledges the legitimacy of effects jurisdiction. But it was precisely the *illegitimacy* of the external perspective and of effects jurisdiction that justified claiming a categorical exemption for virtual worlds from real–life laws.

Resolving the Tension

What follows from this antinomy? Is there a way for designers to have freedom from real–life law and legal protection from the real–money trade? As suggested above, it would seem not. Designers will need to pick one. A bird in hand is worth two incompatible birds in the bush. These two demands are rhetorically incompatible — at least in their strong forms.

But that is not to say that there are not compromise positions that retain the important virtues of both. By going back to the principles underlying designers' concerns, perhaps we can salvage some more moderate talking points that have the virtue of consistency. The starting point is designers' professional and personal belief in the value of the virtual. There are experiences that are only possible in virtual worlds; there are communities that can only exist online. Designers (and their players) believe deeply that such experiences should be possible. The lives of players are better because these communities exist. That is, the lives of real people in the real world are improved if they have access to a rich and diverse collection of virtual worlds. People need to be able to seek out virtual worlds that are profoundly unlike their everyday lives.

Unsurprisingly, this basic belief in the value of the virtual is compatible with both of designers' concerns. It generated them in the first place. Designers want their virtual worlds to be immune from inappropriate real–life laws as a way of protecting what is distinctive about them. Similarly, designers prefer that the real–money trade be prevented where it is inappropriate for a virtual world — also as a way of protecting what is distinctive about these worlds. Although these two demands diverge in the role they envision for law (and this divergence generates the tensions discussed above), they share a common vision of keeping the values of virtual worlds safe from being overwhelmed by different values of real–life communities.

Although this basic belief is broadly compatible with designers' twin concerns, it contains within it limitations on them, as well. To see why, consider how this belief would sound to an outsider. Virtual worlds, it says, have distinctive values. Players' lives are better if they have access to worlds with those values. Virtual worlds, it says, are

vital communities. Players' lives are better because they can participate in these communities. Virtual worlds, it says, deserve deference because they are *real* communities with *real* values for *real* people.

If this is the true virtue of the virtual, then designers need to qualify both of their concerns. Let us start with the request for independence from real–life law, with its denial of the external perspective and of effects jurisdiction. Designers are not going to escape from either if what matters in virtual worlds is their status as real communities for real people. The appeal to the real–life people inhabiting these communities is a concession to the external perspective. The appeal to the distinctive character of these communities as something worthy of respect is a concession to principles that justify effects jurisdiction.

These concessions do not, however, require repudiating entirely the wish for a measure of independence. All that they require are admissions that real–life governments can reach virtual worlds and that real–life governments have a legitimate interest in what goes on in virtual worlds. The former is an acknowledgment that the same people live in the real world and in virtual ones — what Larry Lessig would call "dual presence" [41]. The latter is an acknowledgment that communities everywhere have legitimate interests in protecting their values. Ultimately, what justifies maintaining independent virtual worlds is the same as what justifies intruding on their independence — some community somewhere would suffer if we didn't. These conflicts between communities will not always be easy to resolve, but the overall prospects for successful coexistence will be better if we start from a position of mutual respect [42].

Focusing on the role of community in virtual worlds also puts a different spin on the real–money trade. Consider what happens if the case against real–money trading is phrased as a matter of the social contract [43]. Calling it a social contract is at least plausible, since players join voluntarily and are free to leave if dissatisfied. Once it is so called, it becomes more reasonable to justify the case against real–money trading from a purely internal perspective. There is no need to refer to the servers, to intellectual–property law, to contract law in the real world [44].

This shift, to be fair, is not to be made lightly. Designers give up many prerogatives if they depend on a collective will of the players. If the collective will of the players says that real–money trading is fine, the communitarian normative case for designers to demand restriction of the real–money trade vanishes. This view of things is anti–paternalistic; it sees the designers, at best, as agents of player will. There is no divine right of virtual kings on this account.

But the communitarian account of virtual worlds also yields benefits to designers even over and above the escape from the external perspective. It is often argued that political legitimacy derives only from a genuine social contract [45]. To the extent that a virtual world's community norms rest on a genuine collective understanding, they are that much more legitimate.

Law can create; law can destroy. Its relationship to community norms is never simple.

This legitimacy, if genuine, has profound implications for the dignity of virtual world communities. If we feel comfortable saying that the internal perspective shows us a genuine community, that community's consensuses seem more just. Which is to say that when it comes time for that community to make requests of other communities, it stands on that much firmer a footing. Speaking of virtual worlds in this communitarian sense provides real–life governments with more compelling reasons to listen to their wishes. The case against real–money trading sounds more convincing if it can be phrased in terms of preventing one of the world's own members from violating one of its deeply–held and collectively–agreed values.

Finally, speaking in terms of real communities resolves a puzzle. This essay opened by noting the tension between designers' desire to be free of unwelcome laws and their desire to have the law's active support. At the time, it seemed perhaps a little opportunistic, too much like a desire to pick and choose only favorable laws. If we speak of real communities, however, we can do better. This tension is one shared by all communities. Sometimes, the intervention of law can help them secure their values and come together as a community. Sometimes, the intervention of law breaks down the structures that allow their community to operate. Law can create; law can destroy. Its relationship to community norms is never simple. The contradiction, if there is one, is inherent to law itself. Expressing this tension is the mark of a community mature enough to have regular dealings with both the creative and destructive aspects of law [46].

Conclusion

Appealing to the communitarian aspects of virtual worlds is not the only way of resolving this tension. There are

even quite reasonable ways of talking about virtual worlds that do not cause the tension to arise in the first place. Nonetheless, focusing on the tension between freedom from law and banning the real–money trade offers a revealing window onto cyberlaw.

Legal regulation is not the only potential source of unwelcome pressure on cybercommunities. Lawrence Lessig and those who have adopted his mantra that "code is law" added that technical changes to the software architecture of cyberspaces can also radically reshape what happens online. The real–money trade stands as an example of yet another force pressing on cybercommunities; it shows that their values can be deeply undermined by conduct that takes place entirely offline.

This reorientation of an old debate emphasizes that virtual jurisdictions and real ones will need to cooperate as well as compete. Pointing out what real–life law can do for cyberspaces suggests that cyberspaces may wish to approach real–life governments with requests for assistance, which suggests that cyberspaces may wish to offer their own respectful assistance in return. We are entering an era in which virtual communities will have increasingly important real–life interests.

This general principle is familiar in real life. It applies between equal sovereigns and between unequal partners. It is a basis for treaties among nations. It is an essential element of federalism. We might as well call it by its proper name: "comity." In legal usage, comity is the voluntary recognition by a court of another jurisdiction's laws. That's not a bad description of what the process might look like. In lay usage, comity is an atmosphere of social harmony. Given that everyone who lives in a virtual world also lives in the real world, an atmosphere of social harmony between the two seems like a good start.

And so we return to Law and Borders, which also endorsed comity as a lodestar. Something has changed, however. Johnson and Post treat comity as a way to resolve "conflicts" between the laws of two entities; the one with less interest in a matter defers to the other. The entire exercise is about picking the more appropriate regulator and "mitigat[ing] some of the harsher features of a world in which lawmaking is an attribute of control." Their argument for comity, briefly, is that real–life governments need to recognize their attenuation of their own interests when it comes to conduct in cyberspace.

The scenario we have been discussing, however, does not quite fit with this model of a brass–knuckle, brass–tack balancing of competing interests. There is an aspirational aspect to the political economy of cyberspace — an aspect to comity — that is not apparent without a good case study or two of how entirely offline actions can profoundly shape online society. None of Johnson and Post's examples quite fits that mold. The issue of trademark protection in cyberspace, for example, does not immediately suggest the question, "What about trademarks granted online? Should real–life governments have a role in enforcing them?"

It takes a certain sustained engagement with particular virtual societies to come up with this second kind of example. But that's why Bartle belonged on the panel with Johnson and Post. He and his colleagues have new changes to ring on some old themes in cyberlaw.

In the end, talking about the real–money trade points out the deep interdependence of the virtual and the real. It is possible only because of their interrelationship. If avatars in virtual worlds were not so profoundly linked to people in the real one, there would be no real–money trade. To the extent that the real–money trade is a problem, its solution also must recognize the interdependence of the real and the virtual.

Law and Borders chose an interesting metaphor for thinking about virtuality. It pinpointed the border–crossing between real and virtual as problematic, and on that basis questioned the validity of extending real–life law into virtual spaces. But borders have always also been problematic because of the limits they put on the extension of local law. Borders both real and virtual attract smugglers, fugitives, bandits, and refugees. It takes two to clean up a borderland. Ultimately, borders connect as well as bound. We can continue to hope that the borders of virtual worlds will be places of fruitful contact and exchange.

About the author

James Grimmelmann received his J.D. in 2005 from Yale Law School, where he was a Student Fellow of the Information Society Project, Editor–in–Chief of LawMeme, and a member of the Yale Law Journal. He holds an A.B. in computer science from Harvard College. He has worked as a programmer for Microsoft and as a legal intern for Creative Commons and the Electronic Frontier Foundation. He is currently working as a law clerk.

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Notes

1. Webcast versions of the panel are available at http://www.nyls.edu/pages/3903.asp.

2. David Johnson and David Post, 1996, "Law and Borders: The Rise of Law in Cyberspace," *First Monday*, volume 1, number 1 (May 6, 1996), at http://www.firstmonday.org/issues/issue1/law/.

3. Post and Johnson phrased their argument in terms of the law applicable to "Cyberspace." More recently, Gregory Lastowka and Dan Hunter have made this argument specifically about virtual worlds. F. Gregory Lastowka and Dan Hunter, 2004, "The Laws of the Virtual Worlds," *California Law Review*, volume 92, pp 1–73.

4. See Julian Dibbell, 2003, "Owned! Intellectual Property in the Age of eBayers, Gold Farmers, and Other Enemies of the Virtual State: Or, How I Learned to Stop Worrying and Love the End User License Agreement," In: Jack M. Balkin and Beth Simone Noveck (editors), in press, *The State of Play: Law and Virtual Worlds*; Edward Castronova, 2005, "The Right to Play," *New York Law School Law Review*, volume 49, number 1, pp. 185–210; James Grimmelmann, 2003, "Free as in Gaming?" *LawMeme*, at http://web.archive.org/web/20040603114815/http://research.yale.edu/lawmeme/modules.php?name=News&file=article&sic

5. Richard Bartle, 2005, "Virtual Worldliness: What the Imaginary Asks of the Real," *New York Law School Law Review*, volume 49, number 1, pp. 19–44; Richard Bartle, 2005, "The Pitfalls of Virtual Property," at http://www.themis-group.com/uploads/Pitfalls%20of%20Virtual%20Property.pdf.

6. See generally Richard Bartle, 2004, *Designing Virtual Worlds*, Berkeley, Calif.: New Riders Publishing; Raph Koster, 2005, *A Theory of Fun for Game Design*, Scottsdale, Ariz.: Paraglyph Press; Cory Ondrejka, 2005, "Escaping the Gilded Cage: User Created Content and Building the Metaverse," *New York Law School Law Review*, volume 49, issue 1, pp. 81–101.

7. Germany enforces these laws against various media, including video games. See "Bundesprüfstelle für jugendgefährdende Medien," *Wikipedia*, at http://en.wikipedia.org/wiki/Bundespr%C3%BCfstelle_f%C3%BCr_jugendgef%C3%A4hrdende_Medien; "Video Game Controversy," *Wikipedia*, at http://en.wikipedia.org/wiki/Video_game_controversy#Germany.

8. The United States is currently facing international pressure before the World Trade Organization to back away from enforcement of those laws against online gambling sites not located in the United States. The WTO materials are online at http://www.wto.org/english/tratop_e/dispu_e/cases_e/ds285_e.htm.

9. Saudi Arabia requires all Internet traffic to pass through government–operated proxy servers that block sexually explicit content. See Jonathan Zittrain and Benjamin Edelman, 2002, "Documentation of Internet Filtering in Saudi Arabia," at http://cyber.law.harvard.edu/filtering/saudiarabia/.

10. For a good example of just how different, see Jacqueline Stevens, 2005, "Legal Aesthetics of the Family and the Nation: agoraXchange and Notes Toward Re–Imaging the Future," *New York Law School Law Review*, volume 49, issue 1, pp. 317–352.

11. On the free speech interests in virtual worlds, for example, see Jack M. Balkin, 2004, "Virtual Liberty: Freedom to Design and Freedom to Play in Virtual Worlds," *Virginia Law Review*, volume 90, number 8, pp 2043–2098.

12. The most direct and forceful statement of this position is John Perry Barlow, 1996, "A Declaration of the Independence of Cyberspace," at http://homes.eff.org/~barlow/Declaration-Final.html. A more sustained and careful statement of it is David G. Post, 2002, "Against 'Against Cyberanarchy,'" *Berkeley Technological Law Journal*, volume 17, pp. 1365–1387.

13. Notable critiques include Neil Weinstock Netanel, 2000, "Cyberspace Self–Governance: A Skeptical View from Liberal Democratic Theory," *California Law Review*, volume 88, pp. 395–498; Jack Goldsmith, 1998, "Against Cyberanarchy," *University of Chicago Law Review*, volume 65, pp. 1199–1250; Joel Reidenberg, 2005, "Technology and Internet Jurisdiction," *University of Pennsylvania Law Review*, volume 153, pp. 1951–1974; Tim Wu, 1997, "Cyberspace Sovereignty? The Internet and the International System," *Harvard Journal of Law and Technology*, volume 10, pp. 647–666. Wu and Reidenberg, along with Viktor Mayer–Schönberger, argued the anti–independence side in the Great Debate.

14. The spatial metaphor itself is controversial. See Dan Hunter, 2003, "Cyberspace as Place and the Tragedy of the Digital Anticommons," *California Law Review*, volume 91, pp. 439–519.

15. Orin Kerr, 2003, "The Problem of Perspective in Internet Law," *Georgetown Law Journal*, volume 91, pp. 357–405.

16. On the spectacular growth in virtual worlds, their populations, and economies, see Edward Castronova, 2002, "On Virtual Economies," *CESifo Working Paper Series*, number 752, at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=338500; Bruce Sterling Woodcock, "An Analysis of MMOG Subscription Growth," at http://www.mmogchart.com/.

17. See Bartle, *Designing Virtual Worlds*, *supra* note 6, ch. 5, particularly pp. 351–367.

18. For more on the varied motivations of players, see Richard Bartle, 1996, "Hearts, Clubs, Diamonds, Spade: Players who Suit Muds," *Journal of Mud Research*, volume 1, issue 1, at http://www.mud.co.uk/richard/hcds.htm, Bartle, *Designing Virtual Worlds*, *supra* note 6, ch.3, and Nick Yee, "The Daedalus Project," at http://www.nickyee.com/daedalus/.

19. See Julian Dibbell, 1995, "MUD Money: A Talk on Virtual Value and, Incidentally, the Value of the Virtual," at http://www.juliandibbell.com/texts/mudmoney.htm; Zachary Booth Simpson, 1999, "The In–game Economics of Ultima Online," at http://www.mine-control.com/zack/uoecon/uoecon.html.

20. See Julian Dibbell, 2003, "The Unreal Estate Boom," *Wired*, volume 11, issue 11, at http://www.wired.com/wired/archive/11.01/gaming.html.

21. An interesting thought experiment asks what distinguishes the world of exchanged promises to pay and complex intermediated financial instruments from a virtual world.

22. Second Life sees itself as a creativity–enhanced extension of the real world. Its license agreement with its players allows them to retain intellectual property rights in content they create. It runs an official exchange that converts in–world Linden Dollars to and from U.S. dollars.

23. EVE–Online is a highly competitive outer–space game, in which players band together into violent trading guilds. Enormous quantities of in–game resources can change hands as the result of well–executed gambits. One particularly remarkable example of a successful takedown of one group by another is described in Tom Francis, 2005, "Murder Incorporated," *PC Gamer* (September), pp. 126–129. Another, involving a confidence scheme that may or may not have constituted criminal fraud, is detailed in Nightfreeze, 2004, "The Great Scam," available at http://static.circa1984.com/the-big-scam.html.

24. EverQuest II is a medieval fantasy–themed game that is far less Hobbesian than EVE–Online is. Players band together to go questing, killing virtual monsters and accomplishing challenges offered them by the game. Sony, the company that runs the EverQuest games, created StationExchange, a site that allows players to auction in–game items to each other for real–life money. Sony takes a service charge of $1 per item listed for auction. See Sony's description of the process at http://stationexchange.station.sony.com/.

25. See, *e.g.*, James Hebert, 2005, "Online gamer? Buy your way to the top," *San Diego Union–Tribune* (9 October), p. F–3 ("'I frown upon it due to the fact that the game should be just as difficult for everyone,' says GuS Tovar, 14, a San Diegan who plays the online game Guild Wars. 'People who can afford to buy (millions in) gold can just dominate.'")

26. This concern is obviously related to the previous one. Both those who come late to the party and those who leave early are giving it less attention than someone who plays all the way through. On the community and individual implications of the depth of participation, see Bartle, *Designing Virtual Worlds*, *supra* note 6, pp. 425–445, 451–465.

27. For a discussion of the techniques used by in–game large–scale industrial profiteers, see Paul, 2005, "Secrets of Massively Multiplayer Farming," *Game Guides Online*, at http://www.gameguidesonline.com/guides/articles/ggoarticleoctober05_01.asp. An interesting fictional treatment of the same general material that explores its ethical complexities is Cory Doctorow, 2004, "Anda's Game," *Salon.com*, at http://www.salon.com/tech/feature/2004/11/15/andas_game/index_np.html.

28. See Edward Castronova, 2005, "The Right to Play," *New York Law School Law Review*, volume 49, issue 1, pp. 185–210.

29. The most prominent proposed "eBay–resistant" design is described in F. Randall Farmer, 2004, "KidTrade: A Design for an eBay–resistant Virtual Economy," at http://www.fudco.com/habitat/archives/000023.html. The comments — many of them from prominent designers — are also quite thoughtful and well worth reading. Barry Kearns proposed "No–Cash" in 2005; his draft, sadly, has disappeared from the public Internet. Interesting discussion of No–Cash, however, survives at http://blogs.parc.com/playon/archives/2005/05/thoughts_on_a_n.html and at http://terranova.blogs.com/terra_nova/2005/04/innovation_i.html.

30. The case was *Blacksnow Interactive v. Mythic Entertainment, Inc.*, No. 02–cv–00112 (C.D. Cal. 2002). A fuller account can be found in Julian Dibbell, "Serfing the Web: Black Snow Interactive and the World's First Virtual Sweat Shop," *Wired*, volume 11, issue 1, at http://www.juliandibbell.com/texts/blacksnow.html.

31. See Lastowka and Hunter, "The Laws of the Virtual Worlds," *supra* note 3.

32. See Joshua Fairfield, 2005, "Virtual Property," *Boston University Law Review*, volume 85, issue 4, pp. 1047–1103.

33. The leading U.S. case on the extent of those rights is *Intel Corp. v. Hamdi*, 30 Cal. 4th 1342 (2003). For a scholarly discussion of the issues (albeit one written before the final decision in Hamidi), see Dan Burk, 2000, "The Trouble with Trespass," *Journal of Small and Emerging Business Law*, volume 4, pp. 27–56.

34. Accessing servers without permission is also regulated by the Computer Fraud and Abuse Act, 18 U.S.C. § 1030, which establishes criminal and civil liability for "knowingly access[ing] a protected computer without authorization, or exceed[ing] authorized access." On the scope of the CFAA and similar laws, see Orin Kerr, 2003, "Cybercrime's Scope: Interpreting 'Access' and 'Authorization' in Computer Misuse Statutes," *New York University Law Review*, volume 78, pp. 1596–1668.

35. The extent of the enforceability of such contracts is controversial in legal academic circles. Leading cases on the enforceability of standardized software license agreements include *ProCD v. Zeidenberg*, 86 F.3d 1147 (7th Cir. 1996) and *Davidson & Associates v. Jung*, 422 F.3d 630 (8th Cir. 2005). The Davidson case is of particular interest to virtual worlds; it involved the reverse engineering of an earlier online gaming service from the makers of the immensely popular virtual world World of Warcraft.

36. There is little dispute that designers' contributions to virtual worlds and computer games are fully protected by copyright law; decades of cases have reached this result. See, *e.g.*, *Atari v. North American Phillips Consumer Electronics*, 672 F.2d 607 (7th Cir. 1982). These cases, however, are generally about unauthorized clones of games. Whether a player who has purchased a virtual item from another player in violation of the terms of service has committed copyright infringement is a more difficult question. Cases that have grappled interestingly with "changes" to the original software include *Lewis Galoob Toys, Inc. v. Nintendo of America, Inc.*, 964 F.2d 965 (9th Cir. 1992) and *Micro Star v. FormGen Inc.*, 154 F.3d 1107 (9th Cir. 1998).

37. Again, this is an unlitigated and therefore murky legal area. One case on modification of video games is *Sega Enterprises Ltd. v. Accolade, Inc.*, 977 F.2d 1510 (9th Cir. 1992). These sites are likely to claim that they are using the trademarks "fairly" to describe the goods they are actually selling (if it is indeed correct to refer to the virtual items as "goods" at all under these circumstances). On the fair use defense in trademark generally, see 15 U.S.C. § 1115(b)(4) and *KP Permanent Make–Up, Inc. v. Lasting Impression I, Inc.*, 543 U.S. 111 (2004).

38. United States Constitution, article I, section 8, clause 8. In Thomas Jefferson's words, "Inventions then cannot, in nature, be a subject of property. Society may give an exclusive right to the profits arising from them, as an encouragement to men to pursue ideas which may produce utility, but this may or may not be done, according to the will and convenience of the society, without claim or complaint from any body." Letter to Isaac McPherson (13 August 1813). Copyright law has a "fixation" requirement that creative works must be recorded in some reasonably lasting form (a live performance, for example, is not copyrightable unless it is recorded). Trademark law requires that the trademark be "used in commerce," and while the definition of such "use" is broad, it is not all–encompassing.

39. agoraXchange, described by Stevens, "Legal Aesthetics" *supra* note 10, is one such experiment. Yochai Benkler has discussed the creative potential of virtual worlds isolated from real–life intellectual property law. See Yochai Benkler, 2004, "There is No Spoon," In: Jack M. Balkin and Beth Simone Noveck (editors), in press, *The State of Play: Law and Virtual Worlds*.

40. Castronova's "game spaces" have such a goal. See Castronova, "The Right to Play," *supra* note 28.

41. See Lawrence Lessig, 1999, *Code: And Other Laws of Cyberspace*, Basic Books, p. 190.

42. The language of "respect" and "dignity" is omnipresent in United States discussions of the law of federal–state relations. The Eleventh Amendment, for example, which prohibits federal courts from hearing lawsuits by individuals against states, is often described as protecting the "dignity" of the states as sovereigns. See *Federal Maritime Commission v. South Carolina State Ports Authority*, 535 U.S. 743 (2002).

43. See Jean Jacques Rousseau, 1762, *The Social Contract: Or Principles of Political Right*.

44. I am not saying that designers will be volunteering to give up these legal rights, only that pointing to an in–world social contract provides one potential way to justify why designers deserve these rights in the first place.

45. See, *e.g.*, Robert Nozick, 1974, *Anarchy, State, and Utopia*, Basic Books.

46. Robert Cover called this creative function "jurisgenerative" and the destructive one "jurispathic," in an article whose surface I am only barely scratching here. See Robert M. Cover, 1983, "The Supreme Court, 1982 Term: Foreword: Nomos and Narrative," *Harvard Law Review*, volume 97, pp. 4–68.

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Contents Index

First Monday, volume 11, number 2 (February 2006),
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