

Bartle, Richard A.: *Why Governments aren't Gods and Gods aren't Governments.*  
In *First Monday*, Special Issue #7: *Command Lines: the Emergence of Governance in Global Cyberspace*. 4<sup>th</sup> September, 2006.  
<http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/1612>

## Why Governments aren't Gods and Gods aren't Governments

Dr Richard A. Bartle

University of Essex

United Kingdom

### Abstract

Virtual worlds (also known as MMORPGs, MMOGs and assorted other acronyms<sup>i</sup>) raise awkward questions concerning how they are governed, central to which is the status of the developers of such worlds. The currently-solidifying view of the legal establishment is that developers themselves are the de facto government of their respective creations, while being in turn subject to the laws of whatever real-world government asserts jurisdiction. The players of virtual worlds, however, while agreeing that real-world governments take precedence, have traditionally not considered developers to be acting as governments; rather they regard them as deities for their (virtual) reality.

This paper argues that the players' view is the better metaphor, insofar as it leads to better virtual worlds (experientially and artistically) than does the developers-as-government model.

### Introduction

There are three parties involved in the governance of a virtual world: the real-world government; the virtual world's developer<sup>ii</sup>; the virtual world's players. The power relationship that exists between them can be described as follows:

- Real-world government prevails in the real world. Virtual worlds are part of the real world because their hardware exists in the real world, therefore they are subject to real-world laws: virtual worlds that don't comply with the real-world laws can be switched off<sup>iii</sup>. Reality always wins, and, as law-makers in Reality, that means real-world governments always win.
- Virtual world developers prevail in their virtual worlds to the extent that they are allowed to by real-world governments. They assert their control of the virtual world through the physics of that world or by applying real-world laws. For example, they can prevent the theft of virtual objects by coding in the concept of ownership (so that a player can only pick something up if it's theirs or if it's unclaimed); alternatively, they can prevent such theft by banning the practice under the provisions of their end-user licence agreement (EULA).
- Players organise into their own groups with their own rules within the constraints of the virtual world's physics and the real world's laws. The physics may (at the developers' behest) be passive in this regard, or active, or both. The real world uses exclusively passive physics, in which forms of government emerge from the interactions of individuals<sup>iv</sup>; virtual worlds can also use active physics, in which the virtual world has governance features coded in directly.

Note that in theory, this relationship is rock/paper/scissors: it should be possible in a democracy for the players of a virtual world to prevail over real-world governments through the power of their vote. This is not a situation which has ever occurred in practice, however (yet).

Through their code, developers clearly have regulatory powers<sup>v</sup> for their virtual worlds. This gives them a form of sovereignty<sup>vi</sup>, and it is easy to suppose that they therefore assume the role of government<sup>vii</sup>. It is on this basis that social scientists regularly take developers to task for behaving dictatorially and ignoring the needs or perceived rights of their players<sup>viii</sup>: governments must uphold certain standards, and any government-like entity operating under the auspices of a superior government can expect to be held accountable for its behaviour.

### Conflict

Conflict can arise when a higher-tier government does not understand or does not accept the decisions of a lower-tier government. For example, most real-world governments feel that theft is wrong. If a virtual world were to allow the theft of virtual goods that had real-world value<sup>ix</sup>, the real-world government might require a change be made to the game code to prohibit the practice. Alternatively, it could ignore the developer and apply existing anti-theft laws regardless. Alas, this could well ruin the virtual world! For example, if a game had an “escape from a prisoner of war camp” theme and its guards were unable to confiscate any digging tools constructed by the players, that would seriously reduce the fun<sup>x</sup>. It's part of the game for captives to steal things from guards and for guards to confiscate things from captives; banning “virtual theft” would render the game unplayable. The real-world government might not have intended this<sup>xi</sup>, but it's what happened. Virtual world developers would protest the law; thus, conflict (albeit, in this example, conflict born of ignorance).

Yet there is a genuine problem here. Virtual world developers routinely use their draconian powers to punish players without trial<sup>xii</sup>, exile them<sup>xiii</sup>, restrict their freedom of speech<sup>xiv</sup>, destroy their property<sup>xv</sup>, infringe their privacy<sup>xvi</sup> – sometimes for reasons of protecting

the virtual world from its players<sup>xvii</sup> and sometimes for no apparent good reason whatsoever<sup>xviii</sup>. Any real-world government that were to ride roughshod over civil liberties in this manner would be roundly condemned. Is it not wrong, therefore, for a real-world government professing to support human rights to look the other way when a lower-tier government over which it has authority flouts them?

Well yes, it is wrong. However, that's not quite what's happening here. Virtual world developers do rule their respective virtual worlds, but not in the same sense that that real-world states are ruled – even tyrannical dictatorships. They rule not as governments, but as gods. There's a difference. Gods operate by changing the laws of physics, whereas governments work by the judicious application of the laws of physics that pertain to their world. I have no option but to obey the laws of physics, but I can consider disobeying the laws of the land if I believe I can either avoid detection or evade or defeat whatever force is sent to arrest me for my temerity.

Two key features of this difference together undermine any attempt to treat developers as being the government of their virtual world:

- Governments can be deposed by those they govern; gods can't.
- Governments can relinquish powers; gods can't.

The first of these statements says that developers can do whatever they wish in their world. The second says that this is true whether the developer likes it or not.

## Levels of Constraint

There is a hierarchy of worlds-within-worlds at work here. Each level in the hierarchy operates under constraints imposed from the levels above, and imposes its own constraints on the levels below. The constraints all use physics, either passively or actively. Passive use means that only what the laws of physics allow is applied to impose constraints (i.e. the legitimate use of force<sup>xix</sup>); active use means changing the laws of physics themselves to impose the constraint. Laws made passively with regard to physics have to be enforced to be meaningful<sup>xx</sup>; laws made actively with regard to physics are enforced by definition.

The position of developers with respect to their players and to real-world governments becomes much clearer upon examination of this hierarchy of worlds. Because it is possible to have a virtual world implement another virtual world within itself<sup>xxi</sup>, in theory the hierarchy is a continuum. However, for the purposes of this discussion it is sufficient to address the case where there is one level of virtual worlds set within the real world<sup>xxii</sup>.

The hierarchy is as follows (top down):

- Gods. These are individuals conjectured to exist independently of Reality. They are able to change the laws of physics. If you are a monotheist, Reality has only one god; if you are an atheist, the hierarchy starts at the next level down.
- Physics-bound. Those defined by the physics (i.e. us) can do nothing to change it except by appealing to the gods (who may or may not oblige). No matter how much you want, you can't ever construct a flashdark (like a flashlight, only it shines darkness rather than light) because you are bound by the laws of physics and they don't support such a concept.

- Real-world governments. These are determined by people within the limits of real-world physics. Their ability to enforce laws is limited by their ability to persuade people to adhere to them. There is no formal support from real-world physics for particular forms of government: democracy isn't a state of matter<sup>xxiii</sup>.
- Virtual world developers. These are people bound by real-world physics who, operating within those physical laws, create their own realities that exhibit possibly different laws of physics. Because developers can change these laws of physics, for those virtual realities they are bona fide deities. They are not real-world deities, however, because they can't change real-world physics. Furthermore, because their players and hardware are real-world objects there are real-world physical constraints operating on the virtual world: it would be impossible to have a virtual world that allowed time travel for individuals, for example, as this would require time travel in the real world, too<sup>xxiv</sup>. However, purely within its own context, the virtual world's physics does not have to map to that of Reality. You can have a flashdark in a virtual world if you want.
- Virtual physics-bound. Those defined by the virtual physics (i.e. player characters) can do nothing to change it except by appealing to the developers (who may or may not oblige<sup>xxv</sup>). If that doesn't work, they can appeal to those who govern the developers (i.e. real-world governments). If that doesn't work, they can appeal to those who govern Reality (i.e. gods), although praying that a government will order a developer to give you a kick-ass virtual sword does seem perhaps a little over-the-top.
- Coded-in governments. Developers can (if they wish) set up the physics of their virtual world to support some predefined forms of government. When you (as a player) build a new town, you might at some point construct a special "town hall" building and find that

lo! You're presented with a question as to what form of government you want the town to have. You pick democracy, tweak a few parameters (voting franchise, times between elections, offices) and the virtual world will thenceforth set up regular elections for enfranchised individuals to specific offices, automatically. Office-holders will have office-specific commands which only they can physically use<sup>xxvi</sup>. Note that's physically: the ability of the tax collector to collect taxes is embodied in code, not in a piece of legislation<sup>xxvii</sup>. There is no equivalent of this in the real world<sup>xxviii</sup>.

- Virtual-world governments. These are determined by player characters within the limits of the virtual world's physics. Their ability to enforce laws is limited by their ability to persuade people to adhere to them.

Graphically, the relationship between gods, governments and citizens can be visualised as in figure 1.

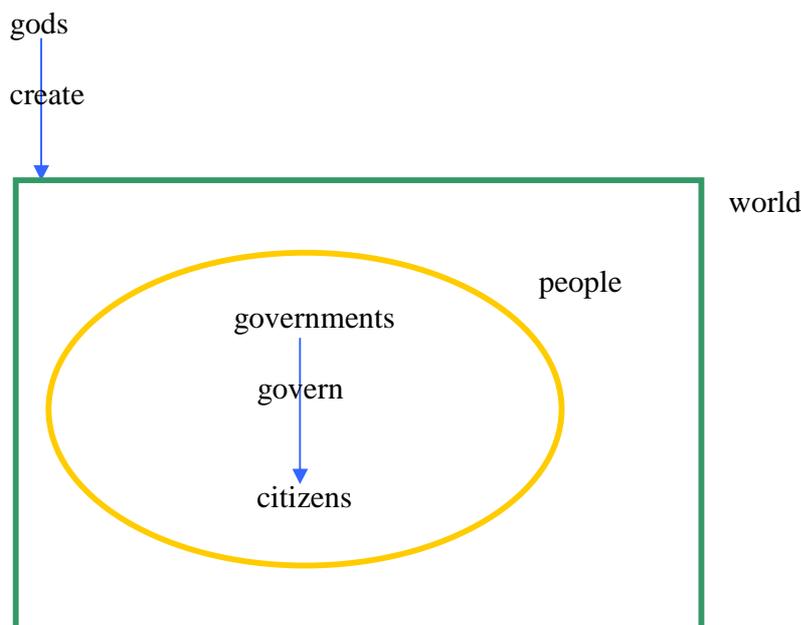


Figure 1: Gods, Governments and Citizens

Gods create a world. This world contains a set of people. Some of these people comprise a government, who govern everyone else<sup>xxix</sup> (hopefully, with their consent).

We can combine two instances of figure 1 to illustrate the relationship between the real world and virtual worlds, as shown in figure 2.

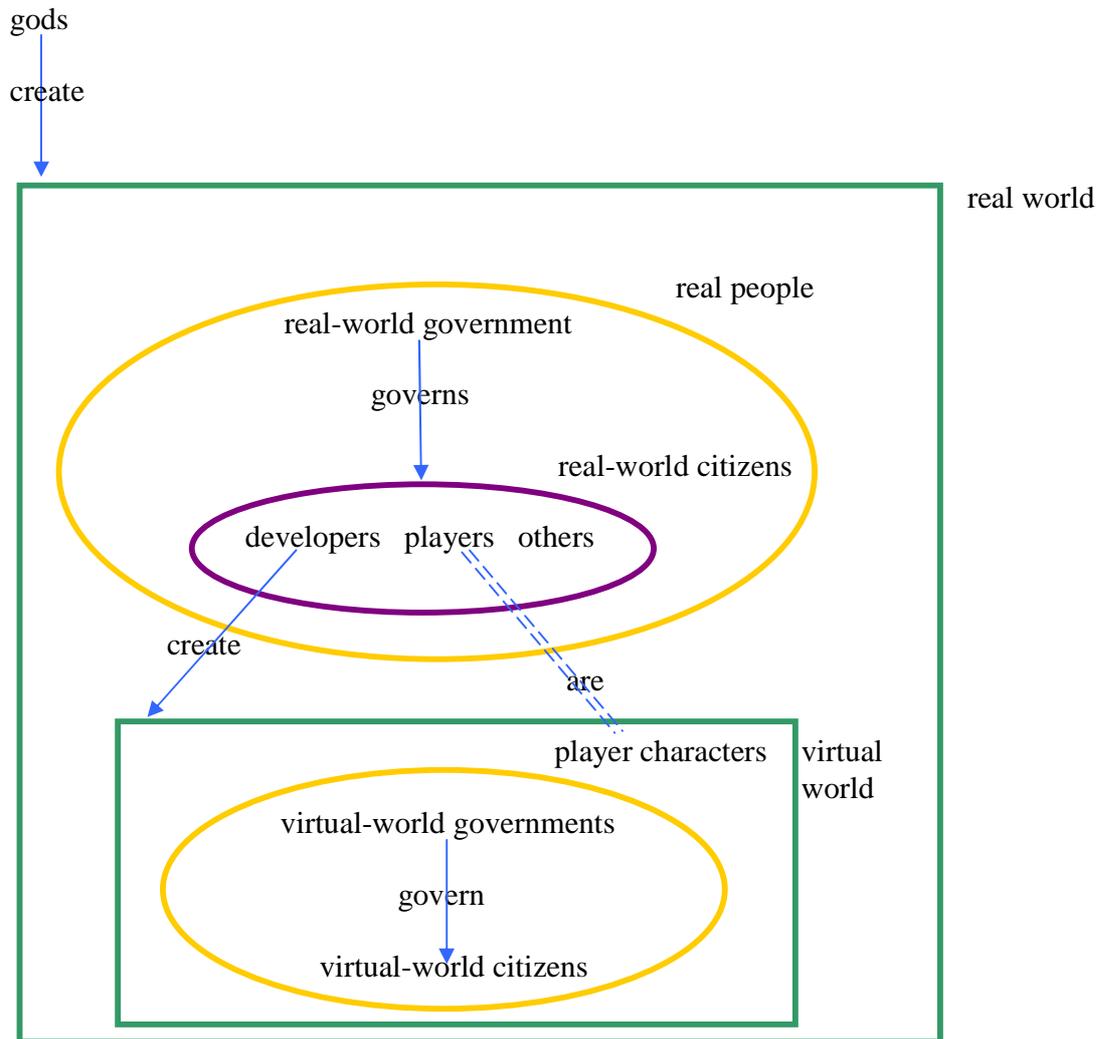


Figure 2: The Real World and the Virtual World

God(s)/nobody creates the real world, which contains a set of people. Some of these people comprise a government, which governs citizens. Some of these citizens are developers, who create a virtual world. This virtual world contains a set of player characters which is identical to the subset of real-world citizens that are players<sup>xxx</sup>. Other real-world citizens do not play. Within the virtual world, some of the player characters comprise governments who govern everyone else (hopefully with their consent).

Looking at figure 2, it's easy to see why developers can't be governments. Governments are formed by members of a population. For a virtual world, developers are not members of its population because they are external to it. Therefore, they cannot form its government.

It's almost that simple – but not quite. Figures 1 and 2 make some omissions for the sake of illustrative clarity: developers can be players; members of the real-world government can be developers and/or players; there may be non-player characters involved in the virtual world as citizens or members of governments<sup>xxx</sup>.

Thus, because developers can play as players (either openly or incognito), any argument based solely on the supposition that developers are not members of their virtual world's population does not entirely hold. The point is rescued, however, by the fact that even when developers do play as players they still can't form part of the government. If they're open about being developers, they are nonetheless universally treated as gods because their individual powers trump those of the government of which they claim to be a part. If they hide the fact that they are developers, their masquerade lasts only so long as they do not (as players) come into conflict with themselves (as developers).

#### Approaches to the Government of Players

The design of a virtual world always has some effect on the possible forms of government that can obtain in it, no matter how much developers might wish otherwise. It's difficult to envisage how a virtual world might be governed by a monarchy if player characters can't have children (i.e. heirs), for example. Even going for absolute real-life verisimilitude is a decision that will affect the forms of player government that are possible.

Because designers cannot claim disinterest in how their virtual world is ruled, usually they will therefore give the matter some consideration<sup>xxxii</sup>. Historically, there have been four main approaches:

1. Direct rule by fiat. The developers themselves rule the virtual world, by the application of their godly powers. This is the traditional method, dating back to MUD1<sup>xxxiii</sup>. Groups of players can organise within the framework of the virtual world's physics, but no special physical laws exist to facilitate this. Players cannot ever take control of the virtual world, because as characters they don't exist on the same plane as the developers; revolution is therefore impossible. This is how the real world works: you can revolt against your government, but not against your deity. Players do have a power denied real-world mortals, however, in that they can change realities: they can switch to a different virtual world, leaving the "gods" of the old one with no "worshippers"<sup>xxxiv</sup>. This does not appear to be possible in Reality<sup>xxxv</sup>.
2. Supported player-tier government. Here, the developers still rule directly by godly fiat, but they provide players either with a ready-made, formal governmental structure or with tools that help them to organise into self-determined groups (or both). They embed these in the physics of the virtual world. Originally, such a physics of organisation was introduced because the means of enforcing self-determination among players had become eroded (mainly due to the behaviour of griefers<sup>xxxvi</sup>). The success of this in enhancing the capacity of players to self-organise in fun-friendly ways led to its extension and enrichment, such that it is now the default for new virtual worlds. Normally this is done using a guild (or clan) method, as in wildly successful games such as Lineage<sup>xxxvii</sup>. In this

sense, each guild can be regarded as having its own government, but there is no single player-tier government of the virtual world as a whole. That said, the potential exists to implement a single, built-in governmental structure for the entire virtual world, or at least to provide mechanisms that would allow such a government to arise<sup>xxxviii</sup>.

3. Descent into the virtual world. In this approach, the developers play and rule the virtual world as high-ranking player characters built into the fiction<sup>xxxix</sup>. For example, a virtual world set in ancient Greece might have the god Zeus role-played by a member of the development team – it's gods playing gods. This idea was first tried in the early virtual world Gods<sup>xl</sup>, the concept becoming later modified with an ascent component<sup>xli</sup> such that regular players could aspire to the position themselves through what amounted to a process of apotheosis – the gods turned the players into demi-gods. Overall, descent is not a popular conceit among players because it's basically gods pretending to be players when everyone knows they're gods; it essentially collapses back into case 1 (direct rule by fiat). It gives an impression of paternalism at best and of arrogance at worst<sup>xlii</sup>.
4. Abrogation. The idea here is for the gods to become the servants of the players. They hand over control to an in-world government and make whatever physics changes are asked of them. It was most famously tried by LambdaMOO<sup>xliii</sup>, but that experiment failed; the immediate cause was the players' inability to decide what form their government should take, but the root cause was that the power they were given was illusory. Ultimately, the developers still had a choice as to what they should implement, whether they wanted such a choice or not. The modern virtual world A Tale in the Desert takes a hybrid approach: players have a great degree of independence and self-

determination, but the developer is up front about its power of veto. A deity with a parliament is still a deity.

There is also a fifth possibility, which as yet has not been tried on any major scale:

5. Co-operative of gods. The players are the developers. The virtual world is run as a co-operative. Players vote for their gods (as opposed to voting against them by changing their allegiance to some other virtual world). Real-world contract law is used to frame the electoral system, its appeals procedures and so on, giving it an effective written constitution. This approach could conceivably work<sup>xliv</sup>; it's more likely to do so in a social world than a game-like one, though, because they're not competitive (although having a governing council with god-like powers would make them so<sup>xlv</sup>). The main problem is that without a coherent artistic vision there is a lack of integrity and continuity: governments aren't about art or craft, but there is both in virtual world design – enough that developers of single-player games who have switched to developing virtual worlds have repeatedly made mistakes through their lack of understanding how these things function<sup>xlvi</sup>. Players all believe they can be designers, but they can't all be quality designers. Another problem is that the system is vulnerable to abuse. Gods – even elected gods – are still gods. What's to stop them from changing the physics of the world such that opposition groups are driven off? An organised invasion of griefers could probably accomplish this relatively easily, wrecking a virtual world for fun then leaving the remaining players to pick up the pieces. The “constitution” would kick in far too late: physics is instant, but the law takes time.

Real-world governments can impose real-world laws on developers to make them do any of the above. They could decide to do it because of some general policy they might have (“glorifying murder is bad”), or as a result of listening to petitions from interested parties (“we don’t like people killing our characters in this virtual world”), or through conviction (“video games cause people to kill people in real life”); they might do it for any number of reasons. If they do order that a virtual world’s physics be changed to accommodate their real-world requirements, does this therefore mean that they are usurping the virtual world’s gods? Disregarding what the developers intended and overriding best design practices certainly opens up the possibility for some major screw-ups, because governments aren’t virtual world designers (and neither are the players that elect them); ill-conceived laws could wreck gameplay<sup>xlvi</sup>. That’s a separate issue, though. In terms of governance, how far can a real-world government go before it assumes the mantle of virtual world god for itself?

The tipping point is the moment that a government determines what physics a virtual world must contain. In that instant, the creative link between designer and virtual world is broken. When the link is broken, the world is effectively dead. Developers understand this – it’s why they cede creative control to designers. Players understand it – it’s why they frequently use the terms developer and designer interchangeably. Do governments understand it?

It’s not that designers (as gods) must be free to create whatever they like, because quite clearly every god must work within the restrictions imposed by their own reality. As mentioned earlier, one consequence of real-world physics is that a designer can’t put in arbitrary time travel; likewise, real-world child protection laws may restrict a designer’s ability to show certain images in virtual worlds targeted at minors<sup>xlvi</sup>. Such restrictions could be heavy enough to stifle

creativity considerably, but nevertheless they don't break the creative link between designer and virtual world. The creative link becomes broken only when designers lose their veto over what physics they don't want in their virtual world. When they have to put in physics entirely determined by others, they cease to be gods; instead, they become the instruments of gods.

Note that it's the physics level that is important, not the object level. If some bizarre government edict insisted that all virtual worlds contained a representation of a lamb, a designer could create within that framework in the same way that an oil-painter could under similar circumstances. They wouldn't like it, but they could do it. An edict that imposed a virtual world's physics, however, would be like an edict that imposed an oil-painting's composition – completely intolerable. The craft remains, but the art is gone.

Why does this matter to players? It matters because with a virtual world, the physics determines all else. Whosoever controls the physics is the god of that world. If such control is seized by an uncaring god (such as a government), the art of virtual world creation dies in that moment of seizure. Other art will remain (the creation of entities within the context of the physics, for example) but the art of virtual world creation is gone. Godless, the virtual world loses its soul.

That's why it matters to players: without gods of its own, the virtual world becomes just another part of the real world. Where's the fun in that?

## Conclusion

Gods work within the physics of their own reality to create new realities that have new physics. Governments apply the physics of their own reality to moderate the behaviour of those who share that reality. For gods to be governments, they would have to be of the reality they

moderate; however, as gods, the reality they moderate is of they themselves. These two conditions are mutually incompatible: if the world has sprung from my mind, how can I ever be a part of it? It's a part of me!

Virtual world designers need to be considered gods, not governments, because that's what virtual world designers are.

## Illustrations

Figure 1: Gods, Governments and Citizens

Figure 2: The Real World and the Virtual World

---

<sup>i</sup> MMORPG: "Massively Multiplayer Online Role-Playing Game"; MMOG: "Massively Multiplayer Online Game"; MUD: "Multi-User Dungeon"; PSW: "Persistent State World". There are at least a dozen more in common currency.

<sup>ii</sup> Developers are organisations. Sony Online Entertainment, for example, is the developer of several virtual worlds including EverQuest and Star Wars: Galaxies. Each individual virtual world is conceived in all its detail by a small team of designers, headed up by a lead designer (referred to as "the designer") who enjoys creative primacy just as a director does for a movie. Raph Koster, for example, is the designer of several virtual worlds including Ultima Online and Star Wars: Galaxies. The developer is usually assumed to be conforming to the wishes of the designer in the creation and subsequent operation of any given virtual world, and therefore the terms "developer" and "designer" are often used interchangeably when discussing "who's in charge". As we shall see later, this is not an insignificant point.

<sup>iii</sup> There is an argument that virtual worlds can "live on" after their demise, in histories, ethnographies, reconstructions, communities and player memories. The sad truth is, however, that these are mere echoes of what once was, reflecting the sound of a world that no longer exists. Players may run from Reality, but they can't hide from it because they are *part* of it.

<sup>iv</sup> These forms of government and the legal systems they employ do not have to reflect in any way those of the real world. Indeed, from a legal scholar's point of view, it may be more instructive if they don't. Grimmelmann, J. (2005). Virtual Worlds as Comparative Law. New York Law School Review 49:1. <http://www.nyls.edu/pdfs/v49n1p147-184.pdf>

<sup>v</sup> Lessig, L. (1999). Code and Other Laws of Cyberspace. New York: Basic Books.

<sup>vi</sup> Burke, T. (2004). Play of State: Sovereignty and Governance in MMOGs. <http://www.swarthmore.edu/SocSci/tburke1/The%20MMOG%20State.pdf>

<sup>vii</sup> Peter S. Jenkins, for example, argues that virtual world developers take on so many of the attributes of government that they should also take on the responsibilities of government. Jenkins, P. S. (2004). The Virtual World as a Company Town – Freedom of Speech in Massively Multiplayer On-Line Role-Playing Games. Journal of Internet Law 8:1. [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=565181](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=565181)

<sup>viii</sup> For example:

- Taylor, T. L. (2002). "Whose Game Is This Anyway?": Negotiating Corporate Ownership in a Virtual World. In Mäyrä, F. (ed). Computer Games and Digital Cultures Conference Proceedings. Tampere, Finland: Tampere University Press. <http://www.itu.dk/~taylor/papers/Taylor-CGDC.pdf>

- Humphreys, S. (2004). Commodifying Culture – it's not just about the virtual sword. In proceedings of Other Players, Copenhagen, Denmark.  
<http://www.itu.dk/op/papers/humphreys.pdf>

<sup>ix</sup> See the now-classic paper on how real and virtual laws may interact: Lastowka, F. G. & Hunter, D. (2004). The Laws of the Virtual Worlds. California Law Review 92:1.  
[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=402860](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=402860)

<sup>x</sup> The concept of “fun” in virtual worlds is ambiguous, amorphous and usually particular to individuals, yet apparently understood implicitly by all players. Any explanation is therefore too deep to detail here, but the interested reader is directed to:

- Koster, R. (2004). A Theory of Fun for Game Design. Scottsdale AZ: Paraglyph Press.
- Bartle, R. A. (2005). Virtual Worlds: Why People Play. In Alexander, T. (ed). Massively Multiplayer Game Development 2. Hingham MA: Charles River Media.

<sup>xi</sup> Virtual worlds are not all the same, and the law should therefore be careful about treating them as if they were all the same. See: Balkin, J. M. (2005). Law and Liberty in Virtual Worlds. New York Law School Review 49:1.  
<http://www.nyls.edu/pdfs/v49n1p63-80.pdf>

<sup>xii</sup> From a semi-official newbie help guide, written as a story:

“For our Lord British hath decreed that attacks upon the citizenry is [sic] forbidden. It is a crime; a crime punishable by death without trial”.

Elowan of Wind (2002). The Way of the Warrior.

<http://uo.stratics.com/content/professions/warrior/wow01.shtml>

(Story begins at: <http://uo.stratics.com/content/professions/warrior/wow.shtml>).

<sup>xiii</sup> From the in-game support manager of World of Warcraft, 11<sup>th</sup> March 2005:

“Over the recent weeks we have been investigating the activities of certain individuals who have been farming gold in order to sell it in exchange for real world currency. After researching the situation, we have issued permanent suspensions to over one thousand accounts that have been engaging in this practice.”.

<http://forums.worldofwarcraft.com/thread.aspx?fn=wow-general&t=1912793&p=1&tmp=1#post1912793>

<sup>xiv</sup> Peter Ludlow, editor of The Alphaville Herald (a newspaper for players of The Sims Online), claims his account was cancelled as a result of his criticism of the game's management.

Harmon, A. (2004). A Real-Life Debate on Free Expression in a Cyberspace City. New York Times, January 15<sup>th</sup> 2004.

<http://www.nytimes.com/2004/01/15/technology/15SIMS.html>

<sup>xv</sup> Reynolds, R. (2003). Hands off MY Avatar! Issues with Claims of Virtual Property and Identity.

<http://www.ren-reynolds.com/downloads/HandsOffMYavatar.doc>

<sup>xvi</sup> Zarsky, T. Z. (2005). Information Privacy in Virtual Worlds: Identifying Unique Concerns Beyond the Online and Offline worlds. New York Law School Review 49:1.

<http://www.nyls.edu/pdfs/v49n1p231-270.pdf>

<sup>xvii</sup> Bartle, R. A. (2005). Virtual Worldliness: What the Imaginary Asks of the Real. New York Law School Review 49:1.

<http://www.nyls.edu/pdfs/v49n1p19-44.pdf>

<sup>xviii</sup> Lawrie, M. (1991). Confessions of an Arch-Wizard.

<http://lorry.org/arch-wizard/confessions.html>

<sup>xix</sup> “A state is a human community that (successfully) claims the monopoly of the legitimate use of physical force within a given territory”.

Weber, M. (1918). Politics as a Vocation.

[http://www.braungardt.com/Philosophy/Weber/politics\\_as\\_a\\_vocation.htm](http://www.braungardt.com/Philosophy/Weber/politics_as_a_vocation.htm)

<sup>xx</sup> The peculiarities of virtual worlds are such that enforcement of passive rules is rarely easy. Players use their capacity to create multiple identities to evade code-level sanctions levelled at their characters. See: Mnookin, J. L. (1996). Bodies, Rest & Motion: Law and Identity in LambdaMOO. In proceedings of Virtue and Virtuality: Gender, Law, and Cyberspace, Cambridge MA.

<http://web.mit.edu/womens-studies/www/archive/virtue&virtuality.pdf> (pp22-30).

<sup>xxi</sup> The virtual world There, for example, has a community of around 300 players who lost their home in Uru when the latter was shut down. They recreated a facsimile of Uru in There. See Celia Pearce's presentation at State of Play 2, blogged at [http://terranova.blogs.com/terra\\_nova/2004/10/state\\_of\\_play\\_2.html](http://terranova.blogs.com/terra_nova/2004/10/state_of_play_2.html).

<sup>xxii</sup> Note that it's possible to argue that the hierarchy could be a continuum in both directions. The real world might be a virtual world set within some even-more-real world in which the real world's creator (developer) exists. See: Bostrom, N. (2001). Are You Living in a Computer Simulation? Philosophical Quarterly 53:211.  
<http://www.simulation-argument.com/simulation.html>

<sup>xxiii</sup> It's a matter of state.

<sup>xxiv</sup> More mundanely, real-world physical issues such as processor speed, network lag and latency and the capabilities of graphics cards impose limits on what can and cannot be implemented in a virtual world.

<sup>xxv</sup> It may be, of course, that the developers oblige accidentally by not eliminating *exploits* (design holes that give unintended and undesirable benefits to those who discover them). Indeed, in theory it is possible for players who are accomplished programmers to go one step further and attain deity-level powers independently by hacking a virtual world's server software. In this instance, however, it would be the virtual world's developer that could perhaps be relied upon to appeal to Reality (in the form of its law-enforcement agencies) to come to its aid.

<sup>xxvi</sup> For an example of such offices and how they are incorporated into a specific virtual world (Dark Ages, by Nexon), see:

- Wilson, R. (1999): Politicia Dominica: the Complete Political Lore.  
[http://www.darkages.com/community/lore/Paladine\\_Politica/toc.html](http://www.darkages.com/community/lore/Paladine_Politica/toc.html)
- Kennerly, D. (2000): Dark Ages Politics in Theory and Practice. Imaginary Realities 3:9.  
[http://finegamedesign.com/dark\\_ages\\_politics.html](http://finegamedesign.com/dark_ages_politics.html)

<sup>xxvii</sup> This allows for virtual worlds to be created that implement sets of regulations for experimental purposes, there being no danger that the population might decline to follow them. See: Bradley, C. B. & Froomkin, A. M. (2005). Virtual Worlds, Real Rules. New York Law School Review 49:1.

<http://www.nyls.edu/pdfs/v49n1p103-146.pdf>

<sup>xxviii</sup> Or if there is, we are blind to it: we could not distinguish it from any other physical law, and are not privy to the intentions of its designer (supposing it has one).

<sup>xxix</sup> Note that depending on the form of government, its members may also be citizens themselves. This would be the case in a representative democracy, for example, but not in an absolute monarchy.

<sup>xxx</sup> Players exist in both the real world and the virtual world. In terms of governance, this generally means that real-world sovereignty translates into virtual effect. However, it should be noted that this is a two-way street, and sometimes virtual world sovereignty translates into real-world effect. See: Powers, T. M. (2003). Real Wrongs in Virtual Communities. Ethics and Information Technology 5:4.

<sup>xxxi</sup> There is also the possibility that the players have player characters in more than one virtual world. This doesn't in general affect their relationship to developers, because even if they're playing in two virtual worlds simultaneously it is clear over which player character a developer has authority. Nevertheless, occasionally disputes from distinct but related virtual worlds can spill over if there is a sufficiently large overlap between the player bases. See: Stivale, C. J. (1995). 'Help Manners': Cyber-Democracy and its Vicissitudes.

[http://wwwpub.utdallas.edu/~cynthiah/lingua\\_archive/help\\_manners.html](http://wwwpub.utdallas.edu/~cynthiah/lingua_archive/help_manners.html)

<sup>xxxii</sup> Good designers should not wish to be disinterested anyway.

<sup>xxxiii</sup> MUD1 is the name by which the first virtual world is commonly known, because its actual name (MUD) was appropriated to refer to the whole range of virtual worlds. MUD1 can still be played via:

<http://www.british-legends.com/>

<sup>xxxiv</sup> This right of exit is the only hard reason why developers need ever listen to players. Beyond that, it's all dependent on the gods' emotions and ethics. See (especially the side notes of): Koster, R. (2000). Declaring the Rights of Players.

<http://www.legendmud.org/raph/gaming/playerrights.html>

<sup>xxxv</sup> Or at least if you can switch, you don't get to switch back.

<sup>xxxvi</sup> The way this happened went something like this. To start with, player characters could attack one another with impunity, so if someone misbehaved then they could be brought into line by superior force. However, the victim of the griefer's assault was never happy about it, and players therefore lobbied (successfully) to reduce the penalties for losing a fight. Unfortunately, this also reduced the ability of players to control griefers, because they too suffered reduced penalties for losing a fight. Although the pain of an individual act of grieving was reduced, overall there were more acts of grieving occurring. Players who grouped together for some legitimate purpose would attract unwelcome griefers who would hang around and spoil their fun. They therefore asked for (and got) basic abilities to set up formal groups with powers of collective ownership, private communication channels, officers who could admit or eject new or existing members and so on. This restored to them the ability to enforce group decisions, while

denying griefers the opportunity to use such abilities aggressively. For a longer description of how this kind of feature evolved, see: Sanderson, D. (1999). Online Justice Systems. Game Developer Magazine April 1999  
[http://www.gamasutra.com/features/20000321/sanderson\\_01.htm](http://www.gamasutra.com/features/20000321/sanderson_01.htm)

<sup>xxxvii</sup> Steinkuehler, C. A. (2004). Providing Resources for MMOG Guild Leaders. In proceedings of MUD Developers Conference, San Jose CA.

Powerpoint slides at: <https://myweb.space.wisc.edu/steinkuehler/web/papers/steinkuehlerMUDDEV2004.ppt>

<sup>xxxviii</sup> For a discussion of how this might be done in a gameplay-enhancing manner, see: Mihaly, M. (2000) Constructive Politics in a Massively Multiplayer Online Roleplaying Game.

[http://www.gamasutra.com/features/20000309/mihaly\\_01.htm](http://www.gamasutra.com/features/20000309/mihaly_01.htm)

<sup>xxxix</sup> There are real-world theological issues raised by this. See chapter VII of: Davis, E. (1998). TechGnosis: Myth, Magic + Mysticism in the Age of Information. New York: Harmony Books.

<sup>xl</sup> Gods is described in section 4.2 of: Bartle, R. A. (1990). Interactive Multi-User Computer Games. British Telecom.

<http://mud.co.uk/richard/imucg4.htm#s2>

<sup>xli</sup> Ascent from regular player to administrator-level player had been in virtual worlds since MUD1, but this was external to the virtual world's fiction. Within the virtual world's fiction, players becoming gods was pioneered by the virtual world Avalon.

An early description of MUD1's ascension system is described in Bartle, R. A. (1984). The Finger of Death. Micro Adventurer, October 1984.

<http://mud.co.uk/richard/maoct84.htm>

Avalon is described in section 4.7 of: Bartle, R. A. (1990). Interactive Multi-User Computer Games. British Telecom.

<http://mud.co.uk/richard/imucg4.htm#s7>

<sup>xlii</sup> The player character Lord British is in real life the game designer Richard Garriott, who is responsible for the much-loved Ultima series of computer role-playing games. While Garriott was still at Ultima Online developer Origin Systems, every once in a while he would make an appearance in that virtual world. On one such occasion, his godly presence was challenged by a player character called Rainz, who managed to kill him (in Ultima Online, not in real life). Rainz was subsequently banned by Origin Systems, although officially it was for earlier transgressions rather than the assassination of Lord British. See:

[http://en.wikipedia.org/wiki/Lord\\_British#Assassination\\_of\\_Lord\\_British](http://en.wikipedia.org/wiki/Lord_British#Assassination_of_Lord_British)

<sup>xliii</sup> Mnookin, J. L. (1996). Virtual(ly) Law: The Emergence of Law in LambdaMOO. Journal of Computer-Mediated Communications 2:1.

<http://www.ascusc.org/jcmc/vol2/issue1/lambda.html>

<sup>xliv</sup> For a discussion of how it might do so, see: Shirky, C. (2004). Nomic World: By the Players, For the Players.

<http://www.shirky.com/writings/nomic.html>

<sup>xlv</sup> Virtual worlds with no game-like scoring system can become very competitive when power differentials are possible. See: Raybourn, E. M. (1998). The Quest for Power, Popularity, and Privilege in Cyberspace: Identity Construction in a Text-Based Multi-User Virtual Reality.

<http://www.cs.unm.edu/~raybourn/moo5d~1.htm>

<sup>xlvi</sup> Mulligan, J. & Patrovsky, B. (2003). Developing Online Games: An Insider's Guide. Indianapolis: New Riders.

<sup>xlvii</sup> So can laws expressly designed for the purpose: gameplay can be political. See: Heide Smith, J. (2004). Does Gameplay have Politics?

[http://www.game-research.com/art\\_gameplay\\_politics.asp](http://www.game-research.com/art_gameplay_politics.asp)

<sup>xlviii</sup> For other examples of when real-world constraints on virtual actions might be reasonable, see: Huff, C., Johnson, D. G. & Miller, K. (2003). Virtual Harms and Real Responsibility. IEEE Technology and Society Magazine 23:2.