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# Virtual Worlds in Legal Studies

An Inquiry into the Subject of Research

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## ABSTRACT

The interest in virtual worlds as a field of research at the intersection of law, science and technology is increasingly growing. However, while there are a variety of papers by economists, sociologists and some other researchers, the topic is far from being elaborated in the discourse of philosophy and sociology of law. Yet, virtual worlds offer this research opportunity as well. This paper suggests an updated definition of the concept of virtual world in context of other related technology phenomena, while the particular emphasis is made on reconstruction of social reality and internal point of view as the features which allow to interpret virtual worlds as models of society with inherent internal elements, including without limitation legal system. The argumentation for presence of law (or some kind of quasi-law at least) in virtual worlds is based on the sound statement that those virtual worlds which constitute suitable objects of legal research have functional economies. Besides the model approach, virtual worlds may also be viewed as a platform for social experiment, something which could hardly be allowed in the real world. With attention to further implications, the paper offers a case study of World of Warcraft as one of the most popular modern virtual worlds.

**Key words:** law, philosophy of law, economics, virtual world, model of society, social experiment, World of Warcraft

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## Introduction

“Large games are social science supercolliders”,<sup>1</sup> said Edward Castronova, one of the pioneers of the virtual worlds research, while speaking about massive online role-playing games and making a parallel to the impressive tool which physicists use for modeling and experiment.

One particular feature which makes many of the scholars so enthusiastic about virtual worlds is that the system of social interactions between players or users (the name may depend on whether a virtual world is game-like or not, although “player” is quite conventional in any case) is real, while the space where such interactions exist is virtual and in many instances has an insignificant or indirect impact on the real world. Thus, economists, sociologists and many other representatives of social science find a lot of research opportunities in the field of virtual worlds.

However, a legal philosopher or a legal sociologist may find himself left out of this widely shared research joy. Virtual worlds recently entered into the focused attention of even the legal practitioners, as such kind of online communities implies a huge variety of practical legal issues. But the old-age questions of the philosophy and sociology of law, including, for instance, the nature of law, the way the law evolves in the society from the most vague customary rules to explicit legislation and other similar questions, are in fact still far from being discussed to conclusion. This is also may be considered as a good excuse for the author of this paper for the minimum of specific legal theory, philosophy and sociology sources stated in the list of references. Nevertheless, it is apparent that social science supercolliders cannot omit these questions, in particular because they do not omit economical problems, fundamental in a similar way.

This paper represents an attempt to make up for what appears to be a research gap. It is not possible to give a comprehensive and detailed analysis within the limits of this paper. The aim is to make an inquiry into the subject of research and to make an outline of the direction to follow. This will require an update of the definition of virtual worlds in context, a comparison with associated phenomena, a brief account of precedent setting research materials, with all of this then resulting in a case study opportunity.

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<sup>1</sup> Edward Castronova, ‘On the Research Value of Large Games: Natural Experiments in Norrath and Camelot’, p. 16, available online at: [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=875571](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=875571) (last visited 14 February 2011). Norrath and Camelot are fictional worlds of such massive online multiplayer games as *EverQuest 1 & 2* and *The Dark Age of Camelot* respectively.

## Virtual Worlds and Associated Phenomena

### *Definition of Virtual Worlds in Context*

The word “virtual” is very popular both in academic papers and in mass culture. Oxford online dictionaries suggest several meanings of this word, and two of them are relevant: (1) “almost or nearly as described, but not completely or according to strict definition”; (2) “computing not physically existing as such but made by software to appear to do so”.<sup>2</sup> The second meaning is of particular importance for this paper. If we go further into the dictionary, we come to the related term “virtual reality” which is interpreted as follows: “The computer-generated simulation of a three-dimensional image or environment that can be interacted with in a seemingly real or physical way by a person using special electronic equipment, such as a helmet with a screen inside or gloves fitted with sensors”.<sup>3</sup>

Apparently, virtual worlds are something which exists in virtual reality, but if so, the last definition of the virtual reality is too narrow because of two points. First of all, it is limited to a three-dimensional image or environment, then it requires some electronic equipment which is additional to a standard computer to be present. What may be the grounds for criticism here?

If we take induction as a research methodology and have in mind some vague notion of what is commonly called a “virtual world” the picture will most likely not be limited to any software which requires specific equipment, for example a helmet with screens. Of course, there are certain examples of virtual reality in this sense, but their significance is nowadays mostly connected to specific professional fields and art. It is highly probable that someday, perhaps even in the close future, specific virtual reality equipment will be widespread and an assumption in question will become outdated, but right now it is not commercially viable, and thus has less social significance.

Leaving aside the electronic equipment issue, there has been another attribute mentioned, i.e. three-dimensional (or just 3D for short) simulation. One definite fact may make a correction to this attribute as well. There is a tradition in online role-playing games (most of which fall within the broad definition of virtual worlds) which is called “MUDs”. In spite of the fact that this abbreviation is usually explicated as “Multi User Dimension” or “Multi User Dungeon”, it is currently associated with the online role-playing games with a text interface. Users receive information about the virtual worlds in the form of text, in many cases written by professional writers, and interact with the

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<sup>2</sup> ‘Virtual’ in Oxford Dictionaries Online at

[http://oxforddictionaries.com/view/entry/m\\_en\\_gb0930170#m\\_en\\_gb0930170](http://oxforddictionaries.com/view/entry/m_en_gb0930170#m_en_gb0930170) (last visited 14 February 2011).

<sup>3</sup> ‘Virtual Reality’ in Oxford Dictionaries Online at

[http://oxforddictionaries.com/view/entry/m\\_en\\_gb0930220#DWS-M\\_EN\\_GB-052982](http://oxforddictionaries.com/view/entry/m_en_gb0930220#DWS-M_EN_GB-052982) (last visited 14 February 2011).

world and each other by means of text commands (“go north”, “eat from plate”, “say “Hello!” and so on). Being persistent multi-user environments, MUDs are perceived by the users as full-fledged virtual worlds. As a good illustrative example the MUDs operated by *Iron Realms Entertainment* may be offered to the reader.<sup>4</sup>

As unusual as it notion may seem, the virtual reality being a reality simulated with special software, has the final “image”, as it follows from the example of text-based virtual worlds, projected to different media which will include the specific electronic equipment on the one side, and the human brain on the other. When a person perceives the text describing a certain “physical” place, the image of this place is reproduced through the text in the mind of the user. Somewhere in between are two-dimensional (or 2D for short) virtual worlds which usually represent a “physical” reality in a highly simplified manner taking a view from above, usually with an isometric element like in *Tibia*,<sup>5</sup> or side view. This simplified but yet graphical representation constitutes a kind of crude suggestion to the user’s mind of what virtual reality is, but this picture is definitely not enough to make anyone “believe” in this reality as depicted. However, at this stage it should become apparent that we are still concentrating at something not really crucial to what may be called “virtual worlds”, rather to some technical aspect of it which may vary greatly without significant impact on the core. What do we miss?

The first thought here may be that we miss communication and interaction. However, this assumption may be somewhat discouraged, and not without grounds, if we take into account such widespread means of electronic communication as e-mail, chats and instant messenger programs (for instance, ICQ or QIP). Definitely, users hardly download virtual world software just for communication, as there are much less cryptic tools for this. On the other hand, if a user would like to be engaged in some virtual adventures or simulation, such as for instance flight simulations used, in particular, in the education of pilots, there is no need for such a user to get acquainted with various communication tools. Yet, virtual worlds include both of the elements in discussion: means of communication between users represented by in-game *personae* (called in virtual worlds discourse as “avatars”, a word deriving from Hinduism which means a god’s manifestation on Earth), and virtual reality which resembles a “physical” one either through direct graphical images or by means of the written words, and this sum of two is not purely mechanical.

An idea here which may be worth the modern theory of systems is that in virtual worlds the combination of communication between users represented by their avatars in virtual reality adds something of unexpected quality, and this phenomena may be called **virtual social reality**. Indeed, most (but not all, of course) of the papers on virtual worlds

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<sup>4</sup> See Iron Realms Entertainment Website at <http://www.ironrealms.com/> (last visited 14 February 2011).

<sup>5</sup> See Tibia Website at <http://www.tibia.com/mmorpg/free-multiplayer-online-role-playing-game.php> (last visited 14 February 2011).

are written by technicians (economists at best) which is, for sure, not a negative fact, but they tend to concentrate on the technical side of the problem. A good multi-user environment in virtual “physical” reality results, above all, in a virtual reconstruction of the network of social relationships. This is what differs a “true” virtual world, at the top of the long scale, from what is in fact a single-user virtual environment with multi-user access capability, at the bottom. To be just, not every virtual world (in a broader definition) always implies virtual social reality, some of the virtual worlds may be qualified as having it only at certain periods of time and to certain limits – as far as the user-base is concerned about it either explicitly or implicitly.

In summary of the discussion on the definition of virtual worlds and their attributes, the following definition may be drawn. Paying respect to the predecessors, the author of this paper explicitly disavows his authorship of the definition, which, being connected with the discussion above, was in fact forged by the effort of many before him. So, a virtual world can be defined as a computer-based simulated environment designed to be populated by users represented by *personae*-like images called avatars which allows for communication between users. Speaking about the definition of virtual worlds, one can hardly avoid citing here crucial points, partly overlapping with this definition, as outlined by Benjamin T. Duranske, author of ‘Virtual Law. Navigating the Legal Landscape of Virtual Worlds’, currently the most comprehensive book on the topic in part related to legal practice issues, who says that virtual worlds: “All are computer-based simulated environments. All are designed to be populated by “avatars”. All allow for communication between users. Most offer persistence of user-created content. Many offer functional economies”.<sup>6</sup>

Before coming to the next paragraph, I should draw your attention to the fact that the definition of virtual worlds praised above lacks the notion of virtual social reality which may seem to be of particular importance. It is. But being a decisive factor for selecting a virtual world as an subject of general social and legal research, it is (perhaps, sadly) a non-essential feature of the concept. However, it is still important, and to clarify this problem, an analogy from moral and legal philosophy may be drawn upon. Lon L. Fuller started his famous “Morality of Law” by describing the difference between the morality of duty and the morality of aspiration. The morality of duty imposes the requirements for the violation of which a person should be punished, while not be awarded for abiding by them. The morality of aspiration offers, and not imposes, the requirements for the achievement of which a person should be awarded, but should not be punished for their breach. For instance, morality of duty may be exemplified in the commandment “Thou shalt not kill”, while an example of the morality of aspiration may be the ideal of mutual love. In terms of virtual worlds, representation of virtual reality

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<sup>6</sup> Benjamin T. Duranske, ‘Virtual Law. Navigating the Legal Landscape of Virtual Worlds’ (Chicago: ABA Publishing, 2008), p. 2.

and availability of means of communication and simulated interaction for users-avatars is the morality of duty, while state of virtual social reality is the morality of aspiration which is not always attained.

However, it is the **state of virtual social reality** which is the test for suitability of a virtual world in whole or in part for the legal philosophy research. The reason is that to serve as a model of what we call a “reality”, the object must resemble it, and as far as it concerns the “social reality” it is not enough to simply reproduce such technical prerequisites as the availability of parties to communication and means of communication themselves: there should be some synergy.

### *Virtual Worlds, Social Networks and Computer Games*

Virtual worlds, social networks (in the narrow sense) and computer games, usually understood as associated yet separate phenomena may also be interpreted as different qualifications of one software product which all may coexist. Therefore, in order to determine the direction of social and legal research in this field, it would be beneficial to compare these qualifications. Before the comparison is started, it would be worthy to mention that each of the concepts, except for a part of completely single-player computer games, fall within a general category of **virtual community**. The term was invented and popularized by the United States writer, critic and lecturer at Stanford University and U.C. Berkeley’s School of Information Howard Rheingold in his book *The Virtual Community: Homesteading on the Electronic Frontier*, 1993.<sup>7</sup> Usually, the most common definition suggests that virtual community is a social network (in the broad sense) of individuals who interact through specific media, potentially crossing geographical and political boundaries in order to pursue mutual interests or goals.<sup>8</sup> In terms of social science, the virtual community may be interpreted as virtual or online social group.

The term social network has been just mentioned in two senses: the narrow and the broad. In the broad sense, a social network is a very vague term not necessarily connected with the Internet and computers. However, this interpretation is not of much interest in this paper. In the modern and narrow sense, a social network is an online service, platform or site that focuses on building and reflecting of social networks (in a broad sense) or the social relations among people.<sup>9</sup> The most popular *international* resources usually considered as social networks in the narrow sense are the currently well-known

<sup>7</sup> Howard Rheingold, ‘The Virtual Community: Homesteading on the Electronic Frontier’ (1993), failable online at: <http://www.rheingold.com/vc/book/intro.html> (last visited 15 February 2011).

<sup>8</sup> Such conventional definition, deriving from many scholarly observations in this field, is reflected in the relevant Wikipedia article: ‘Virtual Community’ in Wikipedia at [http://en.wikipedia.org/wiki/Virtual\\_community#cite\\_note-0](http://en.wikipedia.org/wiki/Virtual_community#cite_note-0) (last visited 15 February 2011). Hereinafter, the references to this online resource are given as shortcuts for the sake of convenience, but the author assures that they were subject to the investigation and verification in other sources, considered as more reliable.

<sup>9</sup> A conventional definition can also be found at Wikipedia: [http://en.wikipedia.org/wiki/Social\\_networking\\_service](http://en.wikipedia.org/wiki/Social_networking_service) (last visited 15 February 2011).

*Facebook*<sup>10</sup> and *Twitter*.<sup>11</sup> They use different principles in the organization of information, i.e. something which may be called a kind of “classic” social network interface in the case of Facebook, and “microblogging” (i.e. the user is continuously creating a set of short messages) in the case of Twitter. Social networks begin to gain much importance in terms of law and government, as officials start to use these tools as official means of communication.

Computer games are the most specific phenomena of the aforementioned, as many of them now share traits of virtual communities, and some of them are incarnated in the form of virtual worlds. But it is only a part of computer games, though. This kind of interactive entertainment appeared much earlier than computer networks themselves, and as such are not necessarily online even today. Computer games are also called “video games” and from one of the first patents in the field we can get a definition which includes such features as: (1) being a game in traditional sense, like a board game or a table role-playing game; (2) involving special user interface; (3) such a user interface should generate visual feedback.<sup>12</sup> Nowadays the term “video games” as used as a general category seems outdated, for there are, for example, audio games<sup>13</sup> which use audio and not video input/output system. Audio games may offer different game experience, but they have also other beneficial social effects as they may offer a form of entertainment for people with limited sight capabilities. In essence, computer games are a kind of games (either of luck or of skill, and mostly of skill, unless they virtually reproduce traditional board gambling) which involve special computer device, be it a personal computer or a special gaming console.

Let us compare virtual worlds, social networks (in the narrow sense) and computer games to define overlaps which can show us the right direction for a social and legal research. The following table of criteria which include the features of virtual worlds as determined in the previous paragraph and some additional features is offered. Please note that “virtual worlds”, “social networks” and “computer games” in terms of the comparison in question should not be treated as separate and completely different phenomena, but rather as different states or qualifications which in some cases may all be applicable to one computer program.

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<sup>10</sup> See Facebook Website at <http://www.facebook.com/> (last visited 15 February 2011).

<sup>11</sup> See Twitter Website at: <http://twitter.com/> (last visited 15 February 2011).

<sup>12</sup> See “Television Gaming Apparatus and Method” and dated 25 April 1972 at <http://www.freepatentsonline.com/3659285.html> (last visited 15 February 2011).

<sup>13</sup> See Audiogames Website at <http://www.audiogames.net/> (last visited 15 February 2011).

*Table I. Qualification of a Product as a Virtual World, Social Network and/or Computer Game*

No.	Criterion	Virtual Worlds	Social Networks	Computer Games
<b>Technical (Software and Hardware) Requirements</b>				
1.	Necessity of computer or similar device	+	+	+
2.	Access to the Internet	+	+	+/-
3.	Multi-user platform	+	+	+/-
<b>Virtual Worlds Features</b>				
4.	Computer-based simulated environment	+	-	+/-
5.	User(s) acting through avatars	+	-	+/-
6.	Communication between users	+	+	+/-
7.	Functional economy	+/-	-	+/-
<b>Advanced Features Beneficial for Social and Legal Research</b>				
8.	Community-shared virtual goals	+/-	+/-	+/-
9.	Virtual social reality	+/-	-	+/-

The table intentionally misses persistence of user-created content, and this fact is connected to the direction of research suggested, i.e. a research from a general social and jurisprudence standpoint. Legal demise of persistent user-created content is of specific interest for legal practice, but, besides that, it seems to be much less important in general research.

Hopefully, this table gives certain insight on what the qualifications of an entertainment and/or communication software products may be. Wherever there is the “+/-” sign it means that a particular product may or may not have such a feature. The limits of this paper allow just to one general conclusion deriving from the comparison given above and the general context of this paper.

The conclusion is that, in order to be a suitable object of general social and legal research, a product (note that we used before and will use in future more specific term “virtual world” instead of more general term “product” even in the precise context), it should meet each of the criteria given in the lines 1-9 above with a particular stress on community-shared **virtual goals** (like overcoming some challenge or establishing effective virtual organisation) **and virtual social reality**. If we consider the columns in connection with the lines, the following becomes clear: a proper object of research in question will be a **virtual world, which most likely will share the qualification of computer game and less likely will qualify as a social network**. The reason for that is that if we omit users acting through avatars in computer-based simulation environment

which are the common traits of virtual worlds and many of the computer games, the virtual social reality state will not be attainable too.

## Virtual Worlds in Social and Legal Studies

Still being quite innovative subject to study, research of virtual worlds social aspects is being carried out for as long as the virtual worlds themselves exist which means that this general direction of study is more than 20 years old. The limitations of this paper do not allow to perform a precise and detailed account, so let us stop by the papers which can be argued to be most representative.

### *“The Lessons of Lucasfilm’s Habitat”*

Perhaps, one of the first attempts to make a comprehensive virtual world research was a paper by Chip Morningstar and F. Randall Farmer, ‘The Lessons of Lucasfilm’s Habitat’,<sup>14</sup> delivered at The First International Conference on Cyberspace held in May 1990 at the University of Texas at Austin and published in the book ‘Cyberspace: First Steps’.<sup>15</sup> As short as this article may seem, it embraces many facets of one of the first persistent virtual worlds which was run on the home personal computer system Commodore 64 and called “Habitat” (now almost forgotten by the general public) from the standpoint of game designers and programmers, and even contains a reference to a kind of social experiment in a virtual world. This experiment by far exceeds the limits of just one particular virtual world and does have certain legal implications.

In particular, “Habitat”, as many of the contemporary virtual worlds do, allowed users to perform two actions considered as crimes in reality: (1) murder of other avatars with a gun; (2) theft by snatching an object from its owner’s hand and running away with it. As it follows from the article cited, the debate arose further to the opportunities of committing these alleged crimes: do such actions be the crimes as they are in real life or they are part of “just a game”? It is interesting, that the answers divided in half: 50% of users qualified them as crimes, while other 50% asserted that such actions are part of the normal game process. The developers started to experiment when they divided the virtual world into two zones: inside the city where violence is prohibited by program code, and outside the city where everyone is free to do what he likes (a game designer decision which is quite popular now). Meanwhile, a user who was a Greed Orthodox priest in real life established a virtual church to speak in opposition of carrying weapons, stealing or participating in violence of any kind. He gained popularity and some followers appeared.

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<sup>14</sup> Chip Morningstar and F. Randall Farmer, ‘The Lessons of Lucasfilm’s Habitat’ (1990), available online at <http://www.fudco.com/chip/lessons.html> (last visited 14 February 2011).

<sup>15</sup> Michael Benedikt (ed.), ‘Cyberspace: First Steps’ (Cambridge, Mass.: MIT Press, 1991).

Some time later there was formed a community of users who were bothered by the risk of violence in wilderness outside the city. The developers continued with the experiment and implemented an in-game voting system. Some of the users volunteered to hold the elections, and thus the virtual world in question obtained a Sheriff. A user holding this post gained certain moral authority, but he lacked in-game mechanisms to execute his powers. Unfortunately, there was no further development of this experiment, but what should be noted is that the game designers themselves witness that they faced the questions of what the powers of the Sheriff should be, should there be virtual courts, law and lawyers and so on. The version of the system where these events took place was shut down, as the authors write, but we can assert that the questions remain.<sup>16</sup>

In fact these questions relate to the grounds of legal system, i.e. the primary rules (as Herbert L.A. Hart put it) and similar issues – all to be implemented in one way or another in an open-ended virtual world.

### *The Economical Analysis of Virtual Worlds*

While speaking about virtual worlds as a subject of social studies, it is impossible not to mention at least briefly the analysis of virtual economy which is being made by one of the most recognized scholars in this field, an associate Professor of Telecommunications at Indiana University, Edward Castronova already mentioned in this paper.<sup>17</sup> In essence, the most cited works by this author are concentrated on the analysis of the economy of virtual worlds and its comparison to the real-world economies. The results may seem surprising to anyone: according to the analysis the gaming activity has a gross economic impact equivalent to the GDP of the Southern African state of Namibia. As modest as it can seem on the real-world scale, this is by no means an insignificant fact for the virtual community in general.<sup>18</sup>

It is not possible to make further explication of his calculations and argument in this paper, but a variety of currently as much as twenty of his works can be found at SSRN – Social Science Research Network.<sup>19</sup> To name but a few papers with quite self-representing names: ‘Virtual Worlds: A First-Hand Account of Market and Society on the Cyberian Frontier’,<sup>20</sup> ‘On Virtual Economies’,<sup>21</sup> ‘The Price of ‘Man’ and ‘Woman’: A

<sup>16</sup> Chip Morningstar and F. Randall Farmer, ‘The Lessons of Lucasfilm’s Habitat’ (1990), available online at <http://www.fudco.com/chip/lessons.html> (last visited 14 February 2011).

<sup>17</sup> See his profile at Edward Castronova personal page: <http://mypage.iu.edu/~castro/> (last visited 15 February 2011).

<sup>18</sup> This conclusion is shortcut from a BBC News article (this source of citation also may attract attention): <http://news.bbc.co.uk/2/hi/technology/3570224.stm> (last visited 15 February 2011).

<sup>19</sup> See the list of his papers at: <http://papers.ssrn.com/sol3/results.cfm?RequestTimeout=5000000> (last visited 15 February 2011).

<sup>20</sup> See Edward Castronova, ‘Virtual Worlds: A First-Hand Account of Market and Society on the Cyberian Frontier’, available online at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=294828](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=294828) (last visited 15 February 2011).

<sup>21</sup> See Edward Castronova, ‘On Virtual Economies’, available online at: [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=338500](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=338500) (last visited 15 February 2011).

Hedonic Pricing Model of Avatar Attributes in a Synthetic World',<sup>22</sup> 'Real Products in Imaginary Worlds',<sup>23</sup> 'Dragon Kill Points: A Summary Whitepaper',<sup>24</sup> (Joshua Fairfield, another recognized virtual world researcher, as a co-author of the latter) et al.

A brief conclusion to the contents of these works may sound like that: many virtual worlds, especially most popular ones (including, and probably at the first place) those virtual worlds which are the games at the same time, have real-world resembling internal economy, which also has impact on real economy as many of the virtual items are traded for real money. By the way, this real-money transactions also pose different problem which is the preservation of virtual worlds as means of entertainment or even legitimate escapism therapy from being consumed by real economy. This issue is dealt with by Castronova in other article, and not without intellectual grace, namely 'The Right to Play'.<sup>25</sup> The author suggests that a legislative effort must be made to divide the virtual worlds which merge with real-world economy from those virtual worlds which can be considered as the forms of interactive art and entertainment, and to legally protect the latter from the invasion of the real economy.

There is also a plenty of other authors interested in virtual worlds economy, and there is even a special Virtual Economy Research Network which, in particular, has a list of notable papers in this field.<sup>26</sup>

Now, what may it all mean for the general social and legal research of virtual worlds, apart from the aforementioned suggestion of protective legislative effort which clearly falls within the subject of legal practice and legislative studies? **Many virtual worlds have internal, apart-from-the-real-world economies** which exist in those virtual worlds. Sometimes they may be connected with real economy, in other cases not. But definitely, in the representative cases (including such exemplary virtual worlds as *World of Warcraft*, *EverQuest 1*, *EverQuest 2* and others) there are functional economic systems. A legal philosopher and sociologist must not necessarily be a Marxist to assert that where the economy is, a legal system should be, and such a legal system should involve institutionalization of the rules governing resource allocation at least. This paragraph serves to confirm the idea that there is something legal in virtual worlds, and that it is something worth of research. It gives the sense of direction.

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<sup>22</sup> See Edward Castronova, 'The Price of 'Man' and 'Woman': A Hedonic Pricing Model of Avatar Attributes in a Synthetic World', available online at: [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=415043](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=415043) (last visited 15 February 2011).

<sup>23</sup> See Edward Castronova, 'Real Products in Imaginary Worlds', available online at: [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=759924](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=759924) (last visited 15 February 2011).

<sup>24</sup> See Edward Castronova and Joshua Fairfield, 'Dragon Kill Points: A Summary Whitepaper', available online at: [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=958945](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=958945) (last visited 15 February 2011).

<sup>25</sup> See Edward Castronova, 'The Right to Play', available online at: [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=733486](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=733486) (last visited 15 February 2011). This article was also published in: *New York Law School Law Review*, Vol. 49, No. 1, pp. 185-210, 2004.

<sup>26</sup> See Virtual Economy Research Network at <http://virtual-economy.org/bibliography> (last visited 15 February 2011).

### *Virtual Law*

Besides economic analysis of virtual worlds, a new field of research is emerging, mainly of the interest for practicing lawyers. However, as most of the issues of legal practice may be put into the hierarchy on the top of which the most common jurisprudence notions and patterns will reside, many of the practical virtual law issues may also be of interest within the topic of this paper. As it has been noted earlier, the pioneer practicing lawyer who made a comprehensive account of virtual law issues is Benjamin T. Duranske. It would be good to give a general account of what this author deems interesting for a lawyer.

His book is divided into several chapters, each dedicated to certain aspect of virtual law, and they include a vast variety of branches, each worth to mention: evidence, governance, property law, contract law, intellectual property law, civil procedure, tort law, criminal law, privacy law, securities law and tax law, not to mention other more particular issues mentioned within these chapters and in general chapters. The fact that almost each area of legal practice has certain impact on virtual worlds may seem surprising, and it is. Most probably, virtual worlds practice will become a commonplace to the law firms worldwide in the nearest future. However, in the context of this general research direction suggested in this paper, the reader should be aware how the author defines the term “virtual law” itself: “Virtual law is like “Internet law”, in that it refers to a wide body of generally preexisting la that is applied to somewhat differently in a new context... In sum, virtual law is the statutory and case law that impacts virtual worlds and the application of the law to these spaces. It also refers to the internal governance structures that are beginning to appear in some virtual worlds... to the degree that those mimic, draw on, and sometimes interact with “real-world” law”.<sup>27</sup> As illuminating as this definition may be, it is essentially **positivistic** in its nature, and this deserves a special consideration.

In the context of virtual worlds research, the meaning of the term “positivism” is extended to the limit when it includes not only the focus on the state-created and enforced law, but on the law created and enforced by the **real** states and (or) other public bodies. However, in many virtual worlds is currently being institutionalizing a very specific set of rules created in the social interaction and communication of users themselves which has much resemblance to many forms of spontaneous social law and customary law. The positivistic approach, in most cases good for legal practice, must be used with care when one steps at the grounds of general jurisprudence, as these rules are only applicable to the relations between avatars which in this context means a user-operated *persona* existing in the virtual world (in this sense, avatars are very close to companies, especially limited

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<sup>27</sup> Benjamin T. Duranske, ‘Virtual Law. Navigating the Legal Landscape of Virtual Worlds’ (Chicago: ABA Publishing, 2008), p. 14.

liability companies, while virtual law is an analogy of corporate law). In fact, a very new question of legal theory arises here: **can we assert that there is a virtual jurisdiction where specific virtual law is established and applied, and where avatars are a kind of legal entities?** The validity of this question may be grounded in the idea that such rules which players or users create throughout their communication are not the rules of the game. The rules of the game determine game mechanics (for example, no avatar can visit particular end-game territory until he or she reaches certain formal level of experience), while the “virtual law” in specific non-positivistic sense as discussed in these particular lines, **governs the behaviour of anyone who “lives” in a virtual worlds.**

### Case Study: World of Warcraft

In one of his early writings Lon L. Fuller offered an illuminating metaphor of law. He asked the reader to imagine a group of people who found themselves on a workable ship without crew. They had a common goal – to reach the shore, and each of them could do one specific thing to keep the team alive and help to reach the aforementioned goal. One of those people could do a navigator’s tasks, other – manage technical systems of the ship, the third one was a cook etc. Fuller argued that soon a set of unarticulated rules will emerge in their small community, provided that they all have the ability of reasonable thinking. Such a set of rules, as the author supposed, was very similar to law (if it is not law at all), and such a metaphor in general, probably proceeding from the notable comparison of a human society to the ship and its crew made much earlier by Aquinas, could be very enlightening to anyone who is interested in legal philosophy.

Recent developments in technology, in particular in the fields of, computers, remote communication and interactive entertainment make this metaphor literally go live and offer an opportunity to reformulate the idea referred to above in the following question (as naïve as it may sound): **“Can a party consisting of a human warrior, night elf priest, gnome rogue and other fantasy heroes contribute to a research in legal field?”** Even this modest reference to the terms designating races and classes of fictional characters may seem a bit out of discourse at least, and probably somewhat insolent and ignorant at worst, but yet the author of this paper dares to argue that such team can and actually does contribute to such a research.

Those of the readers who have certain interest in modern forms of interactive entertainment might have already recognized the names common to such MMORPG (Massively Multiplayer Online Role-Playing Game) as *World of Warcraft*. While this paper is being written, *World of Warcraft* is the most popular of such kind of games, at least in the West. The “most popular” means that, according to the statistics, its virtual community exceeds 12 million subscribers worldwide, while the game itself is available

in eight languages.<sup>28</sup> A side-message here may be that the phenomena of virtual worlds cannot be denied in any social science due to rising scale and the effect it has on culture, education and other fields of humane activity.

Being a virtual world, World of Warcraft is not just a game like any ordinary single-player computer game (as, for instance, such products of *Bioware* studio like *Fallout* or *Baldur's Gate*). It is a persistent computer-based simulated environment, a kind of world in parallel reality which is supported by the developers and providers in such a way that you can visit it using your computer, leave for a while, and then come back. Some things may change, some may not, but in any case you will be sure that the world is the same. The crucial point is that **you are not alone**: thousands of users visit the same virtual world in the time, which constitutes a community acting in a reality which has all the rights and titles to be called virtual.

As a game, World of Warcraft imposes certain goals to the users which they should attain in order to be considered as “successful players”, obtain the feeling of accomplishment and gain in-game benefits. Due to the fact that this game is a multiplayer one and that promotion of its multiplayer status is beneficial for the developers, World of Warcraft contains a lot of challenges which are made intentionally so hard, that it is impossible to overcome them alone. People should cooperate to achieve these goals. When the challenge is defeated, players face the new issue: as a general rule, there is limited amount of rewards, and the amount of players who contributed to the victory is by far exceeding the rewards obtained. Apparently, this represents the core (at least from the standpoint of some theories) problem of economics, i.e. effective allocation of limited resources, which has always had tight connection with social philosophy and law.

Thus, the two key point of a game which is also a virtual world just designated are: (1) cooperation between players, and (2) allocation of limited resources. But one may suggest that quite the same problems face the players of “traditional” games, including sport games like football. For example, the players, and during the match player substitutions are made. The difference is that such kinds of games as football are **not persistent**. Each “battle” is, so to say, internally a one-time game. Several matches may be connected between themselves externally, but they are completely separate if one looks from the internal standpoint of each game. Furthermore, those virtual worlds which are also games, although impose certain goals which can be achieved by team only, do not usually insist that attaining these goals is the primary objective for the players. In fact, there are many players who choose exploration, communication or roleplaying (the latter usually resembles a kind of dramatic improvisation for the joy of the participants,

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<sup>28</sup> Blizzard Entertainment. Press Release of 07 Oct 2010. “Blizzard Entertainment Subscriber Base Reaches 12 Million Worldwide”, <http://eu.blizzard.com/en-gb/company/press/pressreleases.html?101007> (last visited 14 February 2011).

and not the spectators) above achievements of these goals. To leave team in the middle of the national championship is something which a football player simply cannot allow.

There is something even more than that, and here we are doing one more step towards legal philosophy and sociology of law. Players in World of Warcraft are generally free to choose the rules of cooperation and allocation of limited resources. In a persistent virtual world this effectively means that players are always involved in the process of institutionalization of the rules of their community, and such rules are nothing else than a kind of living virtual metaphor of real law. The consequence is that, speaking in the language of legal methodology, the virtual worlds may be considered as models of human society and rules which are created by players and which they abide may be considered as a **model of law**. Such wording is quite strong, and one may say that being a persistent phenomena, virtual world is still “just a game”. The counterargument may be evident for everyone who enjoys participation in virtual worlds, but it definitely needs an explication in a paper like this.

Let us appeal to another classic of modern jurisprudence Herbert L.A. Hart. One of the main points of his argument was that legal systems are usually researched from a position which may be called an external point of view, but they can never be fully understood without consideration of the **internal point of view** which is a position of a person who is subject to the rules under investigation. Looking at the legal system through the eyes of such a person, the researcher can discover what actually makes certain legal system effective. The dichotomy of external and internal points of view may be applied to the virtual worlds research as well. When a researcher assumes the external position, the picture may be limited to thousands users sitting around the globe in front of their computers, accidentally hitting the buttons to make pictures on the screen move and communicating through text or voice chat from time to time. Such picture can hardly be interpreted as a model of human society. However, when the internal point of view comes to the foreground, we face the phenomena of re-creation of a virtual world in the minds of the users, so that each or at least most of them act and speak *as if* the virtual world is real. This is true even for the kind of “casual” players who do not *roleplay*, i.e. they do not intentionally act as if they are the fictional characters by which they are represented in a virtual world.

The main idea of this paper is to show the methodological opportunities which virtual worlds may give to those who study law. Internal point of view allows to view user-institutionalized rules as a model of legal system, study of which are the next step towards the metaphors which often appear illuminating in legal research. Furthermore, there are near to no restraints for the controlled social experiments in virtual worlds, and such experiments can be conducted without prior consent of the users being implemented as a part of the game – something that is nearly to impossible and, without any hesitation, undesirable in ethically compliant real social environment.

World of Warcraft referred to in this paragraph may be illustrative and obvious example, but the reader should be aware that there are much more virtual worlds (whether they are games at the same time or not) which can be even more prolific in view of these main points of model research and experiment conduction. To name but a few, widely used as the reference source for many researchers “sandbox” virtual world *Second Life* which is popular among general audience for its open-ended and user-created world, or roleplaying-enforced games of *Iron Realms* developers which go almost without graphics, through text interface, but succeed in construction of virtual network of fictional organizations.

## Conclusion

Virtual worlds provide great opportunities to study live models of the society and they do include certain analogies to legal systems, if not complete virtual legal systems at all. There are many different kinds of virtual worlds, some of them have more freedom provided to the users, some have less, but the shared feature is that in order to be successful they should produce a virtual social reality, and this is the guarantee of research suitability. As Edward Castronova puts it, “...Nor are the dragons “real” in some sense. But the pattern of disjointed competitive teamwork *is* real, and no different in its essence, than the teamwork of the Earth engineers. Competitive, overlapping teamwork is just one of an uncountable number of core phenomena shared by all human societies, and, if a game gets big enough, these phenomena will appear in them with absolute fidelity”.<sup>29</sup>

For example, as regards the philosophy and sociology of law, the goal-oriented game virtual worlds (as opposed to “sandbox”, i.e. completely open-ended virtual worlds, like *Second Life*) may be more beneficial for the research, as players are guided by the in-game shared goals, and are not “distracted” to create **intentionally** a system of rules governing their behaviour in a part vastly exceeding the rules of the game itself. Through goal-oriented interaction and communication in a persistent online world spontaneous forms of law appear and it may constitute a **model of natural development and life of law** to be a subject of study. On the other hand, open-ended and “sandbox” virtual worlds provide more opportunities to design one or another social structure intentionally, inhabit it with player-guided avatars, and track the consequences in the isolated virtual environment which has insignificantly small impact on real life, but can give much insight on the problems of social sciences as the avatars conceal the people with real reason and emotions. Even in case there is no established player-run legal system nor established customary and (or) spontaneous law, such state can be a kind of “negative”

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<sup>29</sup> Edward Castronova, ‘On the Research Value of Large Games: Natural Experiments in Norrath and Camelot’, p. 16, available online at: [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=875571](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=875571) (last visited 14 February 2011).

subject of research which nevertheless may give positive results. Frustration which players feel due to misbehaviour of other is an obvious indication that law has positive value.

As apparent, commonplace and old-aged the aforementioned truth may be, virtual worlds offer a very precise and material argument for it, provided that virtual worlds are treated as models of social life.

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