

# Legal Institutions and Virtual Worlds<sup>1</sup>

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**Abstract.** Social complexity of virtual worlds of MMO games causes emergence of institutional normative orders within them. Their advanced economic systems and high degree of freedom of players to participate in the game the way they prefer are the main factors that influence normative orders' creation. The project aims to describe those orders in terms of social ontology and Institutional Theory of Law. The main research question is to which extent normative orders of MMO games resemble legal institutions of real life. Current research in the subject of MMO games indicates that they are not completely distinct from the real life, and the boundaries between those two realities are blurred. Because of that, relations between players are not artificial, but real and do not differ from those rooted in everyday life. This motivates players to cooperate and create more sophisticated social organizations, which need complex normative orders to function properly. If the answer for the research question will be that those orders are indeed similar to legal institutions, it would open the venue for further research in both practical and theoretical aspects of legal knowledge.

**Keywords:** Institutional Theory of Law, normative orders, social ontology, massive multiplayer online games.

## 1 Research question and its aims

The main question of the presented PhD project is how closely and in what respect the normative orders emerging from social institutions that function within virtual worlds of MMORPG games resemble real world normative orders – especially legal orders. The main thesis of the dissertation is that virtual normative orders bear close resemblance to the real-life (further referred to as “RL”) ones.

Such games derive from cRPG (computer role playing game) genre, the main principle of which being enabling the player to play a given role (often with a custom-made player character, called an “avatar”) to the fullest in an imaginary, usually fantasy world. Computer role playing games are an attempt to transpose a pen-and-

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paper RPG model to computer entertainment, in which players are limited only by their imagination in acting as their character. However, such games have their limitations and do not offer as wide a choice to the players, who typically have to follow a scripted path prescribed by the authors. It is because of the issue of rewriting some imaginary reality into computer code. Players' freedom is most often limited to choose within the constraints of their preferred gaming style or selecting specific dialogue options in their interactions with non-player-characters (NPCs) controlled by computer algorithms. MMO games, on the other hand, implement the RPG model into a virtual world designed to host hundreds or thousands of players at the same time. This approach gives the players the ability to personalize their character by defining its appearance, sex, profession, etc., as well as to interact with other players in multiple ways, such as trade, combat, completing quests, joining guilds or corporations, etc. As a result, MMO games give the players significantly more freedom than single-player cRPGs.

In order to state main thesis of the dissertation, it also assumes that a properly designed MMO game is an environment which fosters the establishment of orderly normative system by the players, which regulates the actions of in-game player community. The study focuses on the assessment of the current level of organization within player communities in games such as *World of Warcraft* and *Eve Online*, as well as the developmental tendencies of the codes that are currently followed. This aim will be achieved by providing a detailed description of the ways players organize the rules within virtual worlds by means of analyzing the sources related to relevant activity (internet forums and game encyclopedias, participation in the games in order to confront written word with actual in-game experience), and studying literature on legal theory, with a particular insight into the establishment of legal systems as well as the necessary and sufficient conditions thereof. The second part of the research proposed will play a fundamental role in the assessment of the presented thesis. The first part, focused more on the social aspects of MMO games, will compliment the second part while remaining a necessary element in outlining the conceptual network and thoroughly describing the social relations within virtual worlds.

## **2 Aims of the project**

The main aim of the project is a descriptive analysis of social institutions, especially normative orders, within MMOGs. It shall be achieved by applying combined legal theory (i.e. Institutional Theory of Law), social studies and social ontology perspectives to the reality of "virtual" normative orders. This is based on the assumption, extensively researched e.g. by T.L. Taylor (2006) or E. Castronova (2005), according to which virtual worlds of this particular type are environments where groups of players create their own culture that was not programmed or designed by the game authors. Players adjust to the game world to find effective and easier ways to play. They often form groups in order to meet high-end goals. Those groups can count from just a few to thousands of players. Within them, numerous institutions emerge, including normative orders. They can be specific to the game

world and unknown in the real world. Teleportation services in the early years of the game EverQuest serve as a good example (Taylor, 2006). Players who could cast specific teleportation spells helped others to reach a given destination for a fee. Some made it a basic way for them to earn money. Apart from that, institutions within virtual worlds can also be, and often are, known from the real world – a good example here is emergence of transportation services within EVE Online, where some people earn money by moving goods between different star systems, which can often take hours. Groen (2015) describes a corporation in early days of the game, which based its wealth on logistics and goods production. Some of those services also provide insurance policies.

The secondary aims of the project are to:

- 1) Verify the hypothesis that normative orders emerging within virtual worlds of MMOGs can be fruitfully described with the use of the Institutional Theory of Law. The positive effect of such verification would make it possible to open new perspectives for legal theory. The socially imposed normative orders in MMOGs, if treated like law, could be an interesting source of information on many issues in the field of legal theory.
- 2) Define the social limits between MMO games and the real world, and thus determine the role they play in the lives of the players – to which degree online worlds are considered fictional or similar to the real world by the players (in terms of e.g. earning money or making acquaintances). Defining the aforementioned limits is a necessary base for further questions, as achieving it will make it possible to clearly categorize the elements of both orders presented and outlining the relationships between them;
- 3) Discern the player-made rules from the overall rules of virtual realities and analyze the interplay of the two with the rules in effect in the real world;
- 4) Analyze said rules with regards to particular theoretical legal concepts in order to determine the degree to which they resemble precepts (mainly in accordance with Institutional Theory of Law presented by N. MacCormick, 2007). The research will thus be essentially descriptive.

### **3 Current state of knowledge**

The discussion on play element and games in today's understanding of the idea was initiated by Johan Huizinga (Huizinga, 1985). This discipline of humanities is commonly referred to as ludology. The formal conditions for categorizing a particular activity as a game in the aforementioned book is thus a starting point in the analysis of research published to date, related to the proposed problem. The concept of 'play' was interpreted by Huizinga in a broad sense, incorporating all instances of human

activity which: 1) remain outside all the other forms of thinking, 2) are initiated voluntarily, being entirely free or expressing freedom, 3) are distinct from 'ordinary' life and the processes of direct fulfillment of needs related to it, 4) are distinct from 'ordinary' life in terms of duration and locality (the so-called 'magic circle'), 5) are regulated with a set of specific, unconditional rules which the players obey, 6) are related to absolute selflessness by attributing meaning to the game itself with no regards to the outside world 7) are based on repetitive, intermittent behavior, the recurrences of which result in tension, which is relieved by the end of the game in form of an intensive emotional reaction (such as excitement, anger, joy, etc.).

It is possible to note at this point that not only children's games or various board games fit this category – it also encompasses the rituals and traditions of primitive tribes, in which the concept of game was not clearly distinct in the conceptual sense from other human activities. It is essential to observe that Huizinga perceives play as the source of culture. It does not mean that culture is play or that play develops into culture, but rather that culture develops as part of play, retaining particular ludic elements while not being correspondent to it. It is noteworthy that Huizinga presented the ludic roots of a court trial. In many indigenous and ancient cultures a legal dispute was not a way of resolving a conflict in accordance with the legal norms in force, but as a way to determine the 'winner' in a way associated rather with play than law in today's sense. A custom practiced in Inuit tribes might serve as an example – a person accusing someone else of any misconduct was able to challenge the accused to an insult contest. The point of it was to humiliate the opponent rather than resolve the legal conflict in a just way. This leads to a substantial question about the relationships between instances of ludism and the law in its current sense.

Alongside technological development and thus also the development of ludic forms, ludology began to focus on the problem of the so-called digital games, which can be played with electronic devices, such as computers, consoles, and mobile telephones. MMOGs fit this category. Up to this point, however, the designated subject of this research has not been directly or broadly discussed among academics. Game studies, on the other hand, are an increasingly popular discipline of social reflection. It is worth mentioning the definition of a game by J. Juul, which contributed greatly to the developments of this discipline of knowledge. He recognizes 6 features of games: 1) rules; 2) variable, quantifiable results; 3) value assigned to possible outcomes; 4) player effort; 5) player attached to outcome; 6) negotiable consequences. Those features explain various aspects of a game – as a formal system, its relation to player and relation to the rest of the world (Juul, 2003). One of the precursors of research in virtual worlds with regards to in-game economic relationships was E. Castronova. He pointed out that the freedom of choice in terms of player character customization (which represents a given player's avatar in the game world) and the role it plays in a given reality creates a valid foundation for the establishment of an economic system similar to those of real world (Castronova, 2002). The importance of a virtual market increases if it interacts with the real-world economy. The reason for this is that people are eager to pay real money to buy items (e.g. swords), which exist only within the virtual world. This convergence results in the possibility to measure the value of virtual items with real currency, the example of

which might be space battles waged by *Eve Online* players, with the losses amounting to hundreds of thousands of dollars (Pitcher, 2014).

The aforementioned overlapping of economic systems indicates that the boundaries between virtual and real worlds are beginning to blur. The fact that MMO games make it possible for hundreds or thousands of players from different parts of the world to play simultaneously results in the social aspect being the most important aspect of gameplay. The natural consequence of it is the creation of a specific form of social life, based on the rules of a particular game implemented by the authors. Castronova, however, does not find it impossible to draw a comparison between in-game and real-life social relationships despite of the differences in their functioning. By assuming that an institution is a certain rule, or a set of rules which enable the players to reach their goals in accordance with them (Baron & Ferejohn, 1989), he does not distinguish the institutions in terms of their belonging to real or virtual world, treating them as equal to one another. The example provided by Castronova is the institution of the United States Constitution, which outlines the rules regarding the Congressional Appointment. It corresponds to, in terms of quality, or does not differ from the rules of a particular game which specify how to achieve a given goal (Castronova, 2005). This approach seems to support Huizinga's idea that culture develops as part of play. Moreover, though many players are not substantially engaged in the life of the virtual world to which their avatar belongs, many players find it so engaging that they move large portions of their real social life into virtual worlds or (due to the aforementioned trading of virtual items) treat their virtual activity as a source of income in real life (Szeja, 2006). Said convergence of the two realities underlines the importance of studying the phenomena occurring in virtual worlds as they play an increasingly important role in the lives of growing numbers of people. They also interact with the economic systems of real nations due to the common practice of trading virtual items for real money (Rekies, Źarski, 2013).

Considering the fact, that it is a standard in MMO games for the players to form groups in order to achieve their common objectives due to the increasing complexity of challenges they are facing, they are forced to rationally and effectively organize the ways of defining social relations in a given group. Such organization is not possible without a certain framework, in line with which the members of a group are supposed to behave (depending on the game, such group can be referred to as a guild or corporation, which in itself implies a sort of institutionalized community) (Bomba, 2016). It is crucial at this point to differentiate between clearly separate rules functioning in MMO games. The basic constraint of players' actions is the game code, thus the game itself, which determines the limits of player's actions. It is impossible for the players to modify the game code by themselves. If, for example, a game does not give the players the ability to fight, dance, or chat with others, the players will not be able to do it (without imitating said actions by whatever means given, i.e. by rhythmically tapping movement keys in order to represent their character's dance). These rules can thus be treated in a similar way to the laws of nature, which everyone has to necessarily obey, regardless of their character's abilities. Moreover, modifying game rules by anyone else than the authors is prohibited and treated as breaking the license agreement. Such modifications of the rules are thus not to be considered as an

in-game norm-creating activity. The authors of a game become somewhat godlike this way, remaining outside the game world, 'transcendent' in a way towards player's avatars and other elements of the game. The rules established by the players as part of their in-game communities, in turn, resemble social rules as they refer to their behavior and have no influence on the world game or the other associated players whatsoever. First of all, players create these rules from the beginning (or the rules arise by themselves, in the way of practice), fulfilling certain initially stated assumptions regarding the division of roles in a given structure. Secondly, said rules are subject to modification depending on the players' needs, independently from the game authors' will. Thirdly, players who are subject to such laws have a choice whether to obey or disobey them. Finally, if the rules are broken, the perpetrators may face consequences – whether it happens or not depends not on the game authors or the virtual world rules, but the authorities of a given group. It is worth mentioning that the less limitations in the game world are imposed by the authors, the more freedom players have in terms of setting the rules in player communities. In such cases, the best area of research proposed in this application are games such as *Eve Online*, in which the authors have adapted a Laissez-faire approach when designing the game in order to restrict the players to the least extent by the in-game rules (de Zwart, Humphreys, 2014). The list of characteristics of social rules in virtual worlds might be successfully complemented in more detail, in an attempt to determine the existence of normative orders within virtual realities by comparing the collections of rules in force within player communities with the necessary conditions for establishing law introduced by Herbert Hart (1998). According to Hart, law in modern nations should incorporate the rule of recognition, which allows one to discover what the primary rules of a given society are, what rules govern change, which in turn describes the ways to change the existing law and include a specialized authority capable of exacting this law. However it seems that the player-based organizations follow the first two rules (they have clearly specified authorities, which determine the rules in a particular way), they do not have specialized authorities for exacting the laws, such as courts.

The problem of law functioning in virtual worlds is not something completely unknown to the legal studies. It was brought up by Jack M. Balkin (2004), who addressed the issue of analyzing the freedom of design and freedom of play in the virtual worlds, or F.H. Lastowka and D. Hunter (2004), who tried to recognize autonomic legal institutions known from everyday life (which are at the juncture of property right and personal rights of the avatar respectively, both independent from the player). Both these papers indicate that recognizing instances of law in MMO games is not extraordinary. They are, however, treating the problem of law in connection with the legal system functioning outside the game. The subject of the research should thus be considering the issue of existence of systematized normative orders only in terms of virtual world.

## 4 Research problems

Because of substantial analogies illustrated by Castronova with an example from constitutional law, it seemed valid to ask if a normative order may arise in terms of social relations within a virtual world. As the study presented above shows, virtual worlds cross the boundaries of ‘play’ and ‘real life’. It is thus possible to study the elements of virtual culture which assume a practical approach to reality (that is to say, are oriented towards changing the latter or benefiting from it). When a given activity adapts a nature of behavior that is no longer self-directed, it leads to a situation in which it becomes a part of everyday life for an individual. Therefore, if there is a group of players who do not treat MMO games solely as an escapist form of entertainment, it would mean that they are ready to treat reality as equally or even less important than virtual world (Castronova, 2005). In such cases, they refer to all social institutions, relationships, and standards created by virtual means, including the in-game normative systems, the same way they refer to their real-life equivalents.

Another research problem is further analysis of relations between game rules and rules created by players. A theory that can contribute a lot to the analysis is the Institutional Theory of Law. Fundamental for this approach is differentiation between brute and institutional facts (J. Hage, 2009). As described above, this classification, unambiguous in the RL, is blurred. Rules encoded into MMOGs by their authors are an interesting hybrid of brute facts – resembling laws of physics (from the perspective of avatars) and institutional facts – that are possible to change (from the perspective of the authors and the player community). It seems best to approach the issue through the analysis undertaken on two levels – from the perspective of the avatar, and from the perspective of player community and authors of the game respectively. Avatars live in a changing world but are unable to implement changes themselves. For them, the changing laws of ‘nature’ seem to resemble a projection of a God-like entity. From the RL perspective, people living outside the game see changes made to the rules not only as something that modifies the gameplay, but also as a opportunity in line with their interests – e.g. ‘buffing’ the characters of a particular class will be encouraged by the players that play as those characters. Postulates of the players are not unimportant for the game developers, as they have interest in satisfying their customers. On the other hand, they have to care for the game for it to be well-balanced and fun for all participants. This ‘political’ aspect of changing the game’s rules is officially recognized by CCP Games, creators of *EVE Online*, who established a democratically elected Council of Stellar Management, where players can choose their representatives to consult further development of the game with its authors (de Zwart, Humphreys, 2014).

A significant problem of the research which solution would bear an important practical weight, is the following: to which extent virtual normative orders of MMOGs resemble those known from the RL. If the main thesis of the dissertation would be verified, that would make it possible to treat them as a simplistic models of legal interactions. Such models would serve the purposes of testing the practical changes in legal regulations, as Bradley and Froomkin (2004) wanted, it would still be difficult, however, mostly due to the autonomous character of player-made normative

orders. It seems that treating normative orders described here as models would be more fruitful in verifying the theoretical legal concepts, because of their abstract form, which makes it possible to apply them to different situations. An interesting area of research here is to test the propositions of G. Sileno, A. Boer and T. van Engers (2013, 2014, 2018) to represent basic legal concepts in the form of Logic Programming Petri Nets (LPPNs). Clarity of their approach makes it possible to precisely describe different aspects of various legal transactions. Moreover, simulative character of the MMOGs makes them easier to analyze, as there are less factors to take into consideration when assessing the results. Approach of Sileno, Boer and van Engers is particularly appealing for the presented project, as it tries to represent the institutions in a formalized manner, underlining their dynamic character. Such attitude is adequate for researching virtual worlds, in which normative orders created by the players are not given top-down, so the institutional approach suits the analysis best.

## **5 Methodology and Development of the project**

The methodology used in the research will be combination of methods used in social studies, philosophy and legal theory. Research concerning the emergent social institutions in the new environments has to be firmly based on empirical facts. This is why the methods used in social studies, especially the qualitative ones, will play an important role in the process. As an exploratory research that will provide important input about the specific character of virtual world societies, necessary for further research, ethnographic method with predominant use of participant observation will be applied. It will be analyzed in the context of the latest literature on game studies concerning virtual worlds' player activity and societies, with the addition of classical works on this topic. This part will be concluded with a presentation of contemporary ideas concerning social institutions. Ethnography methods can be successfully applied to virtual worlds, which are in fact real human communities (Boelstorff et al., 2012).

Following the presentation of the outline of social institutions in MMOGs, they will be analyzed beginning mainly with classical works of J. Searle (1969, 1983), followed by further research within the field of social ontology. In this part, basic characteristics of social institutions will be outlined. After the general delineation, research will focus on the assessment regarding the applicable categories of institutions functioning within MMOGs. This approach will make it possible to present the core of the doctoral project in a credible way, namely which legal theory perspective applies in the case of MMOGs institutions.

The mentioned part will mostly be based on the Institutional Theory of Law by N. MacCormick and O. Weinberger (1992). The theory makes it possible to reasonably solve the problem occurring in the discussion between legal normativism and realism. Legal normativists claim that law can be understood only through abstract reasoning on norms. According to legal realist views on the other hand, law can be perceived solely as a social phenomenon, where norms are just a façade for the real contents of law. Relying solely on norm-based reasoning makes it impossible to accurately predict the solution in a given case. The Institutional Theory of Law, rooted in legal



positivism, also derives the existence of law from social conventions. However, it does not state that there is no place for normative analysis in legal theory. It is so thanks to presenting law as a set of interconnected social institutions that help regulate various areas of human life. Because of the fact that institutions themselves are sets of rules, created because of repetitive social conventions, they can be subject to abstract normative reasoning. MacCormick and Weinberger's proposal could be very useful for the analysis of institutions within complex MMOGs worlds. Bearing strong sociological inclinations, it also makes it possible to differentiate between legal institutions and other types of social institutions as well as present them in an appropriate way. Because of that, identifying even a few institutions within virtual worlds that could bear close resemblance to real-world legal institutions would allow a valuable analysis in light of this theory. This part will also contain references to the up-to-date literature on the topic, such as the publication L. Burazin, K.E. Himma and C. Roversi (2018).

The work will be based also on the concept presented in *Legality* by Scott Shapiro (2011). He develops a classic positivistic theory, thanks to which he makes it more flexible, as well as changes some of its important assumptions, making it possible to grasp the typical features of law in a more complete way. He seeks human law-creating inclinations in the ability to plan their actions rationally in order to achieve the expected result (regarding those inclinations, see Bratman, 1999). According to Shapiro's assumption, basic legal institutions are in fact plans, thanks to which stabilization of the legal system and facilitation of legal trading is possible because of the fact that substantial part of the issues that could be a cause of doubts, as it would be possible to regulate them in plenty of ways, are settled in an arbitrary way, thus leaving no doubts. This allows for the undertaking of complex initiatives, without wasting time and energy on analyzing fundamental issues from the beginning every time. As it is possible to observe that normative orders within MMOGs emerge from plans, this theory should lay sufficient groundwork to analyze them properly.

## **6 Contribution and innovative character of the project**

Because of its seminal character, the research can contribute greatly to the development of the discipline: firstly, it would contribute to implementing considerations already made in American research to Poland; secondly, it will approach the issue of law in games from a new perspective. However, the hypothesis that law is able to emerge in the virtual worlds is not put forward, instead of which a weaker assumption about the possibility of creating a normative order specific for MMO games is adopted, the cited papers by Balkin and Lastowka can help in forming some comparisons between law and rule sets that are interesting from the perspective of research aims.

Verification of the main hypothesis of the Project could allow for the assessment of the question whether games of this type could be a useful model for studying legal systems. The experimental direction of future research could be particularly interesting, for example in terms of introducing new legislative solutions in order to

assess their functioning before they produce potentially negative results (Bradley, Froomkin, 2004). However, in the cited work, the authors consider only the possibility of changing the legal rules by means of changing the game code, which would force the players to obey said rules blindly. In case of approaching the normative environment created by the players as satisfyingly similar to law, also in the issue of it lacking absolute enforceability, it is possible that similar experiments could be made more reliable. At this moment, however, it is only a postulate and the rudimentary aim of the research is an answer to the question if a normative order can emerge in an MMO game.

The conducted research will make it possible to draw an analogy towards the increasingly pressing issues of soft law regulations, which do not possess the mechanisms of state coercion, and still regulate interpersonal relations in a satisfying way at times, in some cases even better than law itself. A good example is the way that dealers from the New York Diamond Dealer's Club solve their disputes, which are mostly solved through the club's internal arbitration court (Bernstein 1992). Based on previous analysis of the commented issues, it seems that whichever two of the Hart's triad elements necessary for developing a full-scale legal systems are met, player's organizations existing inside virtual world do not possess organs specialized in executing obedience to law (which was pointed out previously). Because of that, according to the works from the *soft law* field, the question will be concerned with the coercion sanction and organs designated to impose it, which are indeed necessary to create what we shall call law. If the research will lead to the conclusion that lack of means of coercion is in fact the only serious difference between law and rules created by players, the argument that soft law can be treated as law will be a valuable source of data for analysis of virtual worlds.

To conclude, the project is innovative because it assumes focusing on a topic which has not been addressed in Polish academic literature. Applying the game studies aspects of philosophy of law will allow to achieve original results, which may significantly improve our understanding of this area of human activity. This approach, which combines the two aforementioned disciplines of social studies, focuses on this area specifically. Despite of the increasing popularity of online gaming, little research has been conducted in that matter and it has still not been thoroughly studied and understood. It also creates a previously unknown form of culture, understood not only in terms of an audiovisual medium, but also a social domain. The confirmation of the main hypothesis would make it possible to draw a conclusion that people, if they form a larger community requiring a proper organizational level, naturally tend to form a regulated system of norms. It would also be a starting point for new questions, for example if the creation of such system in a virtual world, somewhat in front of our eyes, advocates more positivist or natural law concepts, or that this type of proceeding to legal considerations would be invalid. Can studying virtual, player-made societies tell us something more about the origins of law, can it prove or disprove any of the theoretical concepts proposed throughout the ages?

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