Computer Games vs Law: Virtualization and Transformation of Political and Legal Institutions

Anton A. Vasiliev¹, Vladislav V. Arkhipov², Nikolai Yu. Andreev³, Yulia V. Pechatnova⁴

¹ Altai State University, 68 Sotsialistichesky Prospect, Barnaul 656049, Russia,
² Saint Petersburg State University, 7/22 Liniya V. O., Saint Petersburg 199106, Russia,
³ Voronezh State University, 1 Universitetskaya Place, Voronezh 394018, Russia
⁴ Altai State University, 68 Sotsialistichesky Prospect, Barnaul 656049, Russia,
¹ anton_vasiliev@mail.ru
² v.arhipov@spbu.ru
³ andreev@yufm.pro
⁴ jp_0707@mail.ru

Abstract

The paper provides an analysis of virtual reality as a subject of regulation while underlining the similarity of principles in gaming and regulatory activities as the elements of virtual reality. A deeper insight into the relationships between regulatory and gaming activities allows to make a statement that gaming provides a tool for situational analysis to identify the most rational action among the available alternatives thus offering a way to construct a legal reality. Assuming that people will make decisions by weighing costs and benefits to maximize the “utility”, and will interact with others by balancing preferences and constraints, the immersion into the gaming environment and observation of the process of rational decision-making will allow to construct predictive and explanatory models for public authorities to organize a relatively efficient law-making process. Moreover, the reciprocal influence of the gaming and legal environment has been persistently ignored by the law enforcement practices, only to result in legal gaps. A careful and comprehensive study of gaming as a legal phenomenon is thus a prerequisite of balanced and adequate lawmaking as well as enforcement. Therefore, this study purports to examine the points of contact between the gaming and the legal reality, and assess the existing legal gaps.
and prospects of creating and eventually applying “virtual” law. The methodology of the study includes general philosophic and scholar methods (analysis, synthesis, logical and systemic methods), specific research and legal methods (including formal legal analysis). The authors propose to make a definition of virtual law and to identify the levels of virtual environment. In analyzing the virtual environment, the authors conclude that it needs to be viewed through the lens of legal regulation since the virtual nature of computer games gives rise to socially important and potentially controversial interactions between players, platforms and developers that need to be mediated. The authors finally conclude that superficial and skeptical attitude of jurisprudence towards the gaming industry is unacceptable while regulatory problems have to be addressed both in science and law. Internationally, the legal systems are already developing a set of provisions — virtual law, Internet law — designed to regulate socially important aspects of computer games.

**Keywords**

computer games, law, virtual reality, virtual law, virtual environment, legal regulation, virtual state.

**Acknowledgments:** The paper was drafted with financial support of the Russian Science Foundation as part of the Computer Gaming Industry Project: Searching For A Legal Model, No. 22-28-00433, [https://rscf.ru/project/22-28-00433/](https://rscf.ru/project/22-28-00433/)

The paper is published within the project of supporting the publications of the authors of Russian educational and research organizations in the Higher School of Economics academic publications.


**Introduction**

The question of relationships between gaming and regulatory activities is something that strikes as odd, so much these things appear to be incompatible in terms of aims and methods at first sight.

Thus, while gaming is aimed at the process, regulatory activities target the outcome; gaming methods normally assume improvisation and simulation while regulatory activities involve the imperative and discretionary approach to legal regulation.

At the same time, if we regard gaming and law generally as phenomena based on communication between agents (and even more so, if we regard both phenomena in evolution), the case for such relationships is quite justified.
On the one hand, comparing law and gaming will oppose the seriousness and realism of law to the non-serious and “virtual” nature of computer games.

On the other hand, the realism of law is only manifested at the stage of enforcement, final stage of the regulatory mechanism, when the reality of social relationships will make the law an objective reality rather than abstract one.

As such, legal provisions exist exclusively in the abstract form containing subjective ideas, emotions and feelings [Baitin I.M., 2005] inseparable from the consciousness and thus inhabiting an exclusively virtual world.

Therefore, law as a phenomenon of social, mental and psychological life is shaped and exercised by the individual and collective consciousness [Sorokin V.V., 2007].

In being associated with the intellect, law is focused on what should be rather than what is. Thus, law does not describe the existing social arrangements but an ideal model.

In real life, the delinquent’s duty to assume a punishment is not strictly determined by cause-effect relationships due to the essential difference between what is and what should be. Failures and errors of law enforcement agencies to find a perpetrator, active repentance, conditional sentences etc. do not allow to suggest any strict relationships of cause and effect.

Thus, the above considerations on the nature of law suggest that law as an element of conscious life is a product of virtual reality.

In fact, the evolution of legal institutions suggests that gaming was the main method of constructing virtual reality and of founding the human culture as it evolved across history. It thus played a key role in the genesis and evolution of law.

Emerging as a game, the law has partially preserved its gaming nature. Thus, J. Huizinga rightly noted the gaming nature of justice by stressing:

- adversariality (competition, according to Huizinga, is a core feature of gaming);
- place and time-bound justice (special environment for proceedings);
- roles and ritual rules in the legal process;
- reality opposed to sanctity and otherworldliness of justice as a way of correcting reality.
Following Huizinga’s logic, the evolution of law as a system of rules and procedures is essentially interrelated with gaming.

One will find the attributes of gaming not only in justice but also in law-making, such as roles/masks of the parties to the public process, clear rules and procedures for public presentation and discussion of drafts, procedures separated from reality in place and time etc. It is not accidental that simulation and gaming (simulated processes, legislative hearings etc.) have long been part of the legal education.

Thus, the profound similarity between law and gaming manifests itself, in our view, in the fact that both come from virtual worlds.

**The Relationships between Law and Computer Gaming**

Gaming, especially computer ones, are undoubtedly related to workings of human imagination and creation of virtual reality. In this regard, the ideas of J. Huizinga and R. Caillios on outwardly, fictitious and irreal nature of games are echoed by computer gaming.

The fictitious nature of video games reaches its climax when technology creates a new and detailed reality.

For jurisprudence such goal setting might appear strange at the very least because law is always associated with something pragmatic and existential.

However, a deeper insight into the nature of law in light of the modern concepts of social construction of reality along the lines of Thomas Luckmann and Peter Berger redefined in today’s environment suggests that law is a variety of virtual worlds [Berger P., Luckmann T., 1995] in the wider meaning (we intentionally depart from the understanding of virtual world in the sense of IT technologies):

- law creates a model or image of what should be and what is outside of the real while the process of making behavioral rules a reality is rather complex and by far not always achievable;
- legal regulation widely uses fiction — recognition or negation of facts (not) existing in reality.

Thus, the fiction of legal person allows to introduce a civil law concept of collective agent which does not exist as a physical reality but is necessary
for limiting the liability of the founders and for pooling of capital, reputation and labor.

An even more evident fiction is where the court declares someone as dead based on indirect facts in absence of direct evidence: failure to report within a certain period or in the situation of war, information on the disappearance under life threatening circumstances.

As a tool for constructing a reality, the law, in our view, always resorts to fiction as a second, complementary reality which affects the true reality in order to correct it via the behavior and communication between people.

One is tempted to conclude that the law exists as an imaginary political and legal condition shared by agents in the form of a system of rules, ideas, constructions as a model of social reality (zero crime, welfare state etc.); fictions help to shape a different and fictitious reality to achieve specific socially important objectives, with a new, simulated reality in place (recognition of someone as legally competent before the age of 18 as a result of contracting a marriage, engaging into business, finding an employment; recognition of space objects and aircraft as real estate etc.); gap between reality and legal form is manifest, no matter how efficient a regulatory system is; finally, there are widely used computer games for creating experimental social worlds with operating legal institutions (to assess the effectiveness of the provisions to be introduced).

Law and computer gaming are the tools for constructing a social reality. Both make a wide use of abstraction, fiction and simulation to bring a certain social order — one real, the other virtual — but in the third possible case where they deal with socially important matters of social relationships, there is in fact no difference between the social order in a game and social order in life.

Regulatory activities as well as games create a haven of order, stability and predictability as opposed to the chaos and non-predictability of reality.

Law could be thus regarded as a tool for reconciling indefinite and non-structured “objective” reality with the human strife for certainty including for achieving specific outcomes through teamwork.

Law is a virtual convention. While the actual relationships to be covered by law surpass legal abstractions, no socially important relationships could ever be structured without such abstractions.

Finally, the medial turn in philosophy has proposed the analogies between law and gaming via their links with the language, with law regarded as a game of language (H. Hart, A. Ross).
Thus, law can be metaphorically regarded as a zero sum language game, with the rules established by its semantic constraints.

Law and games are similar not only in their genesis, ludology (rules and procedures), fiction and simulation but also in their points of contact with social reality.

A common perception of serious law as opposed to non-serious nature of games turns out to be wrong in the light of an obvious interaction between legal systems and gaming practices.

A rule established by the Civil Code of Russia (hereinafter CCR) whereby claims associated with games and bets are not subject to legal remedies (part 1, Article 1062 of CCR) has resulted in a position that law recognizes only those games in which one can win or lose while the outcome itself is pecuniary (gambling) [Kovtun E.V., 2009].

Thus, Russian courts will dismiss claims associated with computer games as a general rule. The Russian justice refused to protect the pecuniary interests of players in relation with computer games in a number of disputes.

The Moscow City Court has dismissed V.V. Bulanov’s claim against Mail. Ru LLC to collect 1 million rubles and remove the restrictions of access to an online game imposed for violation of the established rules: use of the “black market”, “misrepresentations”. At that, the game used a virtual currency to be exchanged for real money.

In dismissing Bulanov’s claim, the Court argued that no legal remedies were applicable to these interests and that gaming rules had a priority in this case. Other courts assume a similar stance in such cases while referring to legal provisions.

The relationships involved in the organization and holding of gambling, betting, sweepstakes and lotteries are in fact subject to fairly detailed regulation in the Russian law.

This area is covered by Federal Law No. 244-FZ of 29 December 2006 “On State Regulation of Gambling and on Amending Specific Provisions of the Russian Federation”.

---

1 Moscow City Court Civil Chamber appellation decision of 20 May 2019. Available at: URL: https://mos-gorsud.ru/mgs/services/cases/appeal-civil/details/0de6b77e-95c8-4707-8921-f762e36dd67d (accessed: 30.11.2020)
The said law defines gambling as a risk-based agreement on gain between two or more parties thereto, or else with the gambling organizer under the rules established by the latter. Under the Russian law, a number of gambling games (gambling industry) can be organized in special gambling zones, with licensing and taxation requirements established for gambling businesses, sweepstakes and betting offices.

Gambling as an industry is associated with those activities which thrive on people’s addiction to games and make money on this perversity. It is no accident that the gambling business is restricted to only 4 constituent territories of the Russian Federation.

Even with this fairly superficial look it is clear that regulation covers the following games as the general measurement of human culture: gambling games and gambling business [Shevtsov V.V., 2005]; athletic games [Kovalenko Е.Yu. et al., 2021]; computer games from a perspective of intellectual property regimes and allowable information from a perspective of the interests of minors etc.

Meanwhile, it is worth stressing a principal difference between these three phenomena.

Thus, gambling is not so much a game as a specific term to define a sort of agreement between the parties on the outcome of an event.

Athletic games are primarily a contest between people, with virtual reality as a context being in a sense secondary albeit important (with both physical facilities and computer games serving in this case only as tools to organize the contest).

Computer games (both single player and multi-player) are largely devoid of the aforementioned attributes and constitute a different phenomenon based on the reconstruction and immersion into a virtual world with interaction between players in the digital environment free of cause-effect relationships of the real world. At the same time, certain gambling and athletic games (cybersport alias computer sport) can be organized through the use of computer games.

Thus, a deeper insight into the relationships between the world of law and that of computer games reveals multiple links between these social

---

2 Collected Laws of Russia, Article 7, No. 1 (part 1). 01.01.2007.
3 Tax Code of Russia, part 2, 05.08.2000, Law No. 117-FZ // Collected Laws of Russia, Article 3340, No. 32, 07.08.2000.
institutions (in this part of the research, computer games are understood precisely as a social communication phenomenon, something that allows to speak of the institutional aspect).

The thing is not only that the law and computer games are similar in terms of their genesis, formal analogy as a system of rules, their role for constructing social reality, but also that the world of computer gaming gives rise to a whole set of legal issues and problems which are quite real.

Thus, for example, the legislation has failed to answer the question what screenplays, audiovisual plots and characters of computer games stand for and whether they are independent or derivative creations.

Apparently, each case of using a creation in another creation should be treated individually.

In establishing fact of violating the rights to a character as independent creation, the standard of proof should be adaptable depending on how strong the character’s distinctive individual features are. 4

Under that rule, the more recognizable is a character, the more there is reason to believe it can be used separately from the computer game and make up an independent creation.

In this regard, to establish a violation, it will be enough to prove in some cases that the assumed infringer uses only the character’s name while in other cases the use of not only the character’s name but also image does not constitute a violation of the rights because the character does not exhibit clearly distinctive individual features.

Thus, to establish that the exclusive right to a character as an independent creation was violated, it is enough to prove the use of distinctive features (major and recognizable) which trigger associations in the user’s mind.

Meanwhile, one should be aware of the problems involved in examining disputes of this sort since a character as such cannot make up, strictly speaking, an independent creation because an objective form is required for protection of independent creations. However, a character, like a system of characters, lacks an objective form — such form is provided by the computer game in which it is actualized.

---

Apart from characters, other parts of a computer game — audiovisual plots, screenplays etc. — give rise to similar problems of legal assessment.

Moreover, many legal issues arising in the course of gaming tournaments are yet to be adequately addressed — for instance, whether a player violating the implicit code of virtual conduct can assume delictual liability. This question can be important if virtual actions of a player have discredited the developers of the computer game.

Another difficult legal controversy will arise if experienced players take money from less experienced players to help raise their ratings by accessing the game under their account names. This method of raising one’s rating is normally treated as sham, with the player’s account to be blocked.

Meanwhile, this sanction — legitimate on the one hand — is inadmissible on the other hand.

On the one hand, these actions can be qualified as paid services, in which case both players will be outside the gaming world and subject to the law of the real world where blocking of an account will constitute an unlawful restriction of the player’s rights.

On the other hand, player ratings provide guidance for gaming companies. In this regard, where a company has decided to contract a player based on his rating, the “magical circle” will be broken and such contract may be considered to be made on largely fraudulent basis and, therefore null and void.

It is noteworthy that scaling of computer games increasingly results in the “magical circle” being broken and in the virtual world directly affecting that of real things.

Thus, the gaming industry is now one of the fastest growing and profitable high technology sectors.

However, there are few legal studies of this sector, primarily because legal regulation of the gaming industry is still not treated as “serious” research. As a result, it is only recently that computer gaming law is being studied as a specific branch of jurisprudence.

Meanwhile, the above examples of enforcement issues arising in the process of regulating social relationships in the troubled context of virtual reality vividly demonstrate a need to study virtual reality as a standalone and independent subject of jurisprudence.
So, a new virtual reality engendered by the achievements of information society has long prompted a need for regulation in view of its social importance [Duranske B., 2008: 2]. Over the last two decades, legal systems across the globe have witnessed the emergence of comprehensive provisions regulating the interactions of people in the virtual environment [Rassolov I. M., 2003]; [Azizov R.F., 2020]; [Lastowka G., 2011].

In international legal literature, the regulatory domain applicable to virtual worlds is sometimes called the “virtual law” [Kane S., Duranske B., 2008: 9]. Ironically, the law governing virtual worlds is called the “virtual law”, only to mean, if we follow the logic of legal fiction proposed above, virtual worlds are regulated through the use of legal fiction, with virtual, fictitious phenomenon providing a regulatory tool for another non-real environment. It is not accidental that the rules of virtual games and worlds and their technical code are actually identical with specific legal provisions.

If we conventionally use the term “virtual law” based on the pioneering studies of this domain, it should be compared with a set of legal provisions of a different sectoral nature that purport to regulate the relationships emerging in virtual worlds. Moreover, in this example from international jurisprudence, two regulatory levels of the virtual environment are distinguished:

- comprehensive institution of law for regulating a variety of relations in virtual worlds (such as evidential force of e-evidence, information dissemination rules in the virtual world, procedure for protection of rights against violation in the course of virtual interactions, protection of rights of game developers etc.);

- rules and provisions created in virtual worlds themselves and recognized as binding by official public agencies under certain conditions. Virtual law is in fact those rules that are developed by the virtual community [Lastowka G., 2011].

Overall, the following main regulatory models for computer games have emerged over the last few years.

The first model assumes computer games are socially harmful, especially for minors, as they result in an addiction, loss of control and prodigality in case of adults since they involve manipulative practices (immersion, complications along the way, excitement etc.).

This assumption envisages significant limitation and prohibition of access to computer games for specific categories of users, primarily, children under 16. This strategy was approved in China and South Korea which limit gaming time and amount of resources to be spent.
This model assumes a licensing type of regulation based on the principle of “prohibiting everything except what is permitted”.

The second regulatory model involves a number of premises:

balanced, reserved and non-emotional approach to games accounting for their pros and cons;

recognition of social value and utility in assessing gaming practices;

understanding computer games above all as incompatible with any state control and formalization and intended for free participation of players;

interventions into the gaming world aimed exclusively at bringing order to relationships and defusing possible conflicts.

The second, so-called “liberal” regulatory model allows to use the so-called general licensing type of regulation based on the principle of “permitting everything except what is prohibited”. In this case, prohibitions concern specific actions in the gaming world, with player behavior being otherwise discretionary.

Thus, two radically opposed approaches to regulation of computer games have emerged today:

concept of non-intervention by the authorities in legal regulation of virtual reality, except for prohibition of some virtual actions which may entail harmful social implications [Smirnova E.O., Sokolova M.V., 2013: 5–10].

recognition that regulation of virtual reality is important and that social relationships arising in the virtual domain are legally relevant.

In light of the above examples of real legal issues arising in virtual reality, one can conclude that the modern state is forced to adopt the second strategy of regulating cyber relationships.

Interestingly, the construction of legal provisions is governed by the rules of formal logic that makes them similar to algorithms. In technical terms, they can be expressed as a software code and thus become analogous to the rules of a game.

A software code may determine the physics of the game (relationships of players to the external environment) and the virtual rules as such (relationships between players). Anyway, one can make a point that at a certain high level of theoretical generalization there is no major difference between legal provisions and gaming rules as formalized systems of the rules of con-
duct. Like games, the law will create a conventional virtual reality while expecting from community members to comply with the relevant rules of conduct.

A critically skeptical attitude towards computer games among the public at large and the research community determines the choice of restrictive legal tools in respect of the computer gaming industry.

We believe that the assessment of the computer gaming world should be more objective and balanced to account for not just drawbacks of games but also of their merits. It is not so much games as such but human nature that creates an addiction to games that can amount to the loss of control, something that was brilliantly demonstrated by Fyodor Dostoyevsky in his novel *The Player*.

That the knowledge of psychological aspects of the gaming machinery and various triggers of addictive behavior can be used by the gaming industry is another story.

Moreover, it is critically important to realize that the word combination “computer game” encompasses a wide range of phenomena. Intrinsically, games are above all a variety of modern media.

Games do not necessarily need an excitement in the legally relevant sense of the word; they can take the form of a creative environment devoid of negative passions — an environment for communication — convey certain narratives and generally (on a higher technological level with a multidimensional interactive machinery added) perform in the modern society the same role as other already familiar media including books, cinema and television (it should be specifically underlined that many games actually bring together different media — and can at the same time contain, for example, large amounts of artistic texts of high value written by professional authors, graphic art etc. These elements may organically make up a single multimedia interactive creation) [Galkin D.V., 2007: 62].

The idea of building “virtual states” as the basic plot of modern computer games has already become especially popular.

On the one hand, virtual states are a game, the idea of which is that any action is imagined by players, only to make the outcome unknown. Players are free to build any form of political entity.

On the other hand, it is a political and legal experiment which allows to introduce certain regulatory models, assess the quality and efficiency
of their legal implementation, exclude legal risks and arrive at an optimal regulatory option worthy of being adopted in the real society.

Since the physical borders become blurred, such feature as real territory is losing its past importance, only to assume that virtual states will sooner or later be on the same footing with traditional states.

Thus, computer game players, in order to become citizens or guests, can have citizenship, passport (or other personal identification document), acquire knighthood, earlship or dukedom, as well as buy the “national” currency of a virtual country already now.

Attempts to create virtual states have been made long before the creation and dissemination of the Internet as a worldwide web.

Thus, although there were attempts to create unofficial virtual states (such as Westarctica, Christiania, etc.), before the emergence of the Internet all of them had some territorial claims and were therefore associated with a territory.

The world’s first virtual state in the strict sense was Wirtland, established in 2008 as a civil society initiative.  

It is worth noting that this has gone far beyond the computer game. Thus, there were reports of meetings, discussions to adopt the constitution, initiatives to purchase a watercraft or land plot for legalizing Wirtland’s territorial borders.

In 2009, Wirtland issued gold and silver coins, the first in the world to be issues by a virtual state.

Meanwhile, there were media reports in 2013 on Wirtland’s willingness to award citizenship to Edward Snowden.

On the one hand, this gesture of support could be regarded as a symbolic media stunt. On the other hand, the award of a virtual country’s citizenship amid a political conflict in the context of cybersecurity was a far more significant step where Wirtland acted as a quasi-state willing to take political decisions of its own and exert political influence upon other countries.

So, Wirtland has become the world’s first attempt to create a virtual state which proved quite popular among users. In auctioning their micro-state in 2019 the founders themselves said their virtual project proved to be more ambitious than they had expected.

---

5 Available at: URL: http://www.wirtland.com/ (accessed: 16.11.2022)
Projects to create virtual states existing exclusively in users’ minds are called micro-states which should be understood as self-proclaimed quasi-state structures.

Micro-state projects appear to be a new field of knowledge and research experiments which possesses an enormous potential for studying the patterns of creation, development and functioning of states of different legal forms.

In light of the above, one can conclude that modern multidisciplinary studies demonstrate the social value and utility of computer games.

The following socially useful merits of computer games are recognized in literature today:

- development of cognitive skills and abilities: imagination, attention, memory, reaction etc.;

- in psychological terms, games produce positive emotions and a feeling of happiness even if the player loses, something that people are often deprived of in normal life;

- computer games are an environment for socialization, development of communication and cooperation between strangers, people of different cultures, ages and mentality, which is useful for real life communication;

- gaming platforms are used for support and crowdfunding to address the problems of human civilization: fight against poverty, attention to those in need;

- gamification practices are penetrating education, business, management to improve the motivation for and outcomes of teamwork;

- computer games offer a virtual social environment for testing specific sociopolitical and economic decisions and for assessing their effect before they are applied to real life.

According to J. McGonigal, game developers pursue the goal of helping to address social problems of mankind, reducing human suffering, finding ways to overcome global crises and eliminating the divide between the two worlds, real and virtual [McGonigal J., 2018: 18].

**Conclusion**

To sum up, one can identify close links between computer games and law. In terms of history, genesis and functioning, games permeate the legal system as a phenomenon of human culture (gaming at the dawn of justice,
gaming themes in lawmaking and other types of regulatory activities). As regarded from the perspective of ludology, law is similar to the rules of a game: it is a system of formalized rules for the exercise of specific actions.

Moreover, at a deeper, existential level, law and computer games make up a variety of virtual worlds which widely use fiction to achieve social and other objectives: creating sustainable and predictable conditions for human life.

Another idea, provocative as it might appear, is that a legal system makes up a likewise virtual reality with its own rules (it seems especially relevant if viewed from the perspective of social constructivism advocated by Peter Berger and Thomas Luckmann), and one would be hard pressed to deny this in light of the above.

Finally, the virtuality of computer games gives rise to socially important and potentially conflictive interactions between players, platforms, developers to be mediated in legal terms. As a consequence, legal systems across the world are putting in place comprehensive provisions — virtual law, Internet law — designed to bring order to socially important aspects of computer games. A “superficial” and “skeptical” attitude of jurisprudence to the computer gaming industry should be overcome in doctrine as well as in legislation.

References


Information about the authors:

A.A. Vasiliev — Doctor of Sciences (Law), Professor.
V. V. Arkhipov — Doctor of Sciences (Law).
N. Yu. Andreev — Candidate of Sciences (Law), Senior Lecturer.
Y.V. Pechatnova — Assistant.

The article was submitted to the editorial office 01.02.2023; approved after reviewing 28.02.2023; accepted for publication 03.03.2023.