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The Legal Framework for the Regulation of Avatars in the Virtual Reality Space: the Balance between Protection and Innovation⁴

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Abstract

This article discusses the issues related to the avatar of a real person in metaspaces and game universes. The article discusses potential risks and gaps in the legal regulation of gaming and meta-avatars. Thus, questions are already arising regarding the legal status of characters (avatars) in multiplayer computer games and virtual worlds. The article briefly discusses other potential legal issues in gaming and metaspaces. The issue of finding a unified principle of legal regulation of this matter is actualized. The authors also conduct a comprehensive analysis of the process of regulating this matter in accordance with the user agreements of gaming networks. The authors also consider the issue of the qualification of transactions that exist at the intersection of the virtual and real worlds. Based on all of the above, the authors provide recommendations for all of the aforementioned issues, including the possibility of legislative remedies and judicial interpretation to address torts related to virtual assets. The authors substantiate the need to develop a unified approach to regulating such legal relations.

Keywords: avatars, metaverse, cyberspace, legal regulation, intellectual property, personal rights and freedoms, virtual reality, in-game space, legislation.

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Ramowy system prawny regulacji awatarów w przestrzeni rzeczywistości wirtualnej: równowaga między ochroną a innowacją⁵

Streszczenie

Artykuł porusza zagadnienia dotyczące awatarów realnych osób w metaprzestrzeni (metawersum) i uniwersach gier. W tekście omówiono potencjalne zagrożenia oraz luki w prawie regulującym funkcjonowanie domeny gier i meta-awatarów. Pojawiają się pytania dotyczące statusu prawnego postaci (awatarów) w wieloosobowych grach komputerowych (tzw. multiplayer) i wirtualnych światach. W artykule omówiono skrótowo także inne potencjalne kwestie prawne mające związek z grami i metaprzestrzenią. Podjęto zagadnienie konieczności wypracowania jednolitych zasad w obszarze regulacji prawnej tej materii. Autorki dokonują także kompleksowej analizy procesu uregulowania tej kwestii w świetle umów użytkowników sieci gamingowych. Analiza ta obejmuje również kwestię kwalifikacji prawnej transakcji, które zachodzą na styku świata wirtualnego i realnego. Na podstawie powyższych rozważań autorki przedstawiają szereg rekomendacji dotyczących wskazanych zagadnień w tym możliwości zastosowania konkretnych środków legislacyjnych i interpretacji sądowej w celu rozstrzygnięcia spraw, których przedmiotem są aktywa wirtualne. Autorki uzasadniają konieczność opracowania jednolitego podejścia do regulowania tego typu stosunków prawnych.

Słowa kluczowe: awatary, metawersum, cyberprzestrzeń, regulacje prawne, własność intelektualna, prawa i wolności osobiste, rzeczywistość wirtualna, przestrzeń gry, ustawodawstwo.

⁵ Badania wykorzystane w artykule nie zostały sfinansowane przez żadną instytucję.

Introduction

Over the past few decades, the computer games and metaverse industry has seen a tremendous growth, becoming one of the fastest-expanding and most profitable sectors worldwide. The soaring popularity of virtual reality has highlighted the need for establishing proper legal regulations in this field. However, due to the specific nature of computer games and the metaverse compared to other forms of intellectual property, determining the most appropriate legal framework for them has become challenging.

The virtual space encompasses various constituent elements. On the one hand, it may seem that computer games cannot take advantage of copyright protection as it typically excludes the safeguarding of ideas, concepts, systems, and methods – and the metaverse is based precisely on these elements.

Each year, the number of disputes over rights infringement in the virtual realm continues to rise. The absence of clear legal regulations makes it increasingly difficult to resolve practical issues within this domain. Consequently, conducting theoretical research to substantiate the position of computer games and the metaverse within the existing intellectual property system, as well as practical investigations to address law enforcement problems, have become highly relevant.

Therefore, the objective of this article is to determine the most suitable legal framework for the phenomena that exist solely within the virtual realm. Consequently, issues regarding the legal status of characters (avatars) in multiplayer computer games and virtual worlds have already begun to emerge. On the one hand, avatars are an integral part of virtual worlds and can be considered as subjects of legal relations in intellectual property, restrictions on information dissemination, regulation of communication services, and the boundaries of legal regulation in in-game relationships. However, from another perspective, avatars serve as a means of self-presentation for users, expressing their identity – or even constituting part of their “digital body” in the philosophical sense. This correlation allows us to link avatars with categories such as personal data and intangible goods.

The author’s hypothesis is that the legal framework for regulating avatars in the virtual reality space is inadequate, and a unified approach to balancing protection and innovation is necessary to ensure the safety and security of users, while also promoting the growth and development of the metaverse. This hypothesis is supported by the following points from the article:

1. The article highlights the potential risks and gaps in the legal regulation of gaming and meta-avatars, which suggests that the current legal framework is inadequate.
2. The article notes that avatars are a way of self-presentation for users, an expression of their identity, or even part of the “digital body” in the philosophical sense, which raises concerns about personal data and intangible goods.
3. The article examines the mechanism of legal regulation of avatars in different countries, including the USA, Japan, China, South Korea, and the EU, which suggests that there is no unified approach to regulating this matter.
4. The article highlights the need for a comprehensive analysis of the process of regulating this matter in accordance with user agreements of gaming networks and the qualification of transactions that exist at the intersection of the virtual and real worlds.

The hypothesis in question can be tested by conducting further research on the legal framework for regulating avatars in the virtual reality space, analysing the effectiveness of existing regulations and identifying best practices for balancing protection and innovation in this area.

Main body

In the physical world, the concepts of ownership and possession of personal property have been well-established over centuries. However, in the virtual world, these rules must be expanded or modified to accommodate the unique attributes of virtual avatars. Laws are already required to protect virtual avatars from theft, loss, or destruction, and to establish clear procedures for recovering or replacing stolen or lost avatars. The term “avatar,” derived from Sanskrit, meaning “the descent of a deity in mortal form”,⁶ refers to the digital or virtual representation of a player in a multiplayer computer game or metaverse. Avatar technology has rapidly advanced from basic 2D images to immersive 3D creations with intricate facial expressions and natural movement. However, the development of avatar technology has also given rise to new legal and ethical issues concerning privacy, intellectual property, and the safeguarding of personal rights.

Legislators will face a challenging task in establishing legal frameworks for such relationships since no country currently has a comprehensive approach to regulating virtual avatars. In contemporary legal literature, the regulation of these

⁶ J. Lochtefeld, “Avatar” in *The Illustrated Encyclopedia of Hinduism, Vol. 1: A-M*, Rosen Publishing, 2002, pp. 72–73.

objects is examined at the intersection of copyright, protection of personal rights, and property rights. Furthermore, the objects existing in virtual spaces hold economic value due to people's willingness to spend real money on them. Some games have even developed their own economic systems, such as Second Life, where the total market for virtual objects reached \$3.2 billion over a span of ten years.⁷ These new opportunities inevitably give rise to disputes over in-game content, particularly regarding the ownership of specific items.

In Ukraine, similar to other countries, the regulation of the digital space is marked by a limited level of legal oversight. However, in recent years, countries with high internet usage have implemented new regulations to govern various aspects, such as e-commerce, technology-related crimes, consumer rights to digital content, and the liability framework for internet service providers. For instance, Japan has been at the forefront of legal regulation concerning virtual assets in the metaverse since 2016.⁸ The Virtual Currency Exchange Act in Japan mandates that virtual asset exchanges must register and acquire a license from the Japan Financial Services Agency (FSA) before commencing operations in the country. The law also requires these exchanges to maintain adequate reserves to fulfil user obligations and implement measures to prevent money laundering and terrorist financing. South Korea currently has the Information and Communication Networks Promotion and Information Protection Act, known as the Information Promotion Act, which includes provisions on virtual assets. This legislation recognises virtual assets as a form of property that can be inherited and transferred upon the owner's death.⁹

Within the European Union, legal regulation of virtual assets in the metaverse, including game avatars, has been introduced through the E-Commerce Directive.¹⁰ This directive mandates that online platforms must obtain user consent before collecting personal data, including information used to create avatars in online games. Furthermore, it requires online platforms to provide users with information about how their personal data will be utilised, as well as granting users the right to access and delete their personal information. Poland's legal framework deserves a particular mention here as one evolving rapidly. Thus, in Poland, a fictional character

⁷ W. Kramer, *What Is a Game?*, "The Game Journal" 2000, 2.

⁸ H. Kanda, S. Fukuda, S. Inoue (eds.), *Report from Study Group on Virtual Currency Exchange Services*, Tokyo 2018. Available from: <https://www.fsa.go.jp/en/refer/councils/virtual-currency/20181221-1.pdf>

⁹ Korea Communications Commission, *Act on Promotion of Information and Communication Network Utilization and Information Protection*, 2009, p. 8.

¹⁰ A. de Streel, M. Husovec (eds.), *The e-commerce Directive as the cornerstone of the Internal Market: Assessment and options for reform. Study for the Committee on Internal Market and Consumer Protection*, Policy Department for Economic, Scientific and Quality of Life Policies, European Parliament, Luxembourg 2020, PE 648.797. Available from: [https://www.europarl.europa.eu/RegData/etudes/STUD/2020/648797/IPOL_STU\(2020\)648797_EN.pdf648797_EN.pdf648797_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2020/648797/IPOL_STU(2020)648797_EN.pdf648797_EN.pdf648797_EN.pdf)

may be recognised as an object of copyright protection under the conditions stipulated in Article 1 of the Polish Law of 4 February 1994 on Copyright and Related Rights. K. Grzybczyk emphasises that when analysing a fictional character from the point of view of the abovementioned provision, a fictional character can be distinguished as: 1) an integral part of the work and 2) the character itself, “detached from the work, the plot and content”.¹¹

The government of the People’s Republic of China (PRC) has implemented a similar model of legal regulation for virtual assets in the metaverse, including game avatars, through the Data Protection Law enacted in 2017 and the more recent Personal Information Protection Law (PIPL) of 2021. However, their efforts don’t stop there. The PRC is currently working on the development of an independent virtual law. In Taiwan (Republic of China), virtual property already holds legal status.¹² According to an analytical commentary by Chinese lawyer Sarah Xuan, the Republic of Korea, Taiwan, and Hong Kong have enacted laws that impose criminal penalties for infringing upon the virtual property of third parties. For instance, in 2011, Taiwan’s Ministry of Justice issued a decree stating that virtual objects and user accounts in online games should be considered as “electromagnetic records” existing on servers. In cases involving fraud and theft, these objects should be treated as movable property, equivalent to private property.¹³ In the United States, limited legal regulation of virtual assets in the metaverse, including game avatars, exists at the state level. For instance, the state of New York has introduced the BitLicense, which requires operators of virtual currencies to register and obtain a license from the New York State Department of Financial Services before conducting operations within the state.¹⁴ However, in most countries around the world, the legal status of these objects remains uncertain. This uncertainty negatively affects relationships in both civil and tax law, leading to complexities in taxation and civil transactions.

Gaming platforms, which face daily challenges regarding avatar usage, offer their own approaches to addressing this issue. One example of legal regulation of virtual avatars in the virtual realm is the decision made by the Fortnite team.¹⁵ The

¹¹ K. Grzybczyk, *Dzieło reklamowe i jego twórca*, Warszawa 1999, p. 39 and p. 42. The publication uses the example of judicial decisions issued by American courts, according to which a fictional character is protected when it is the centrepiece of a work, a so-called “compositional dominant feature, i.e. it draws others’ attention to itself, regardless of the events it takes part in, and sometimes even beyond them”.

¹² Z. Mingkai, W. Wenjing, *Criminal law protection of virtual property in China*, [in:] *Artificial Intelligence and the Law*, Routledge 2020, p. 1.

¹³ Z. Tingting, *Legislation Proposed to Protect Virtual Property*, China Internet Information Center, 2004, p. 1.

¹⁴ J. Simmons, *BitLicense Licensing Backlog Creates BTC Stagnation in New York State*, NewsBTC, 2016, p. 1.

¹⁵ T. Ara, M. Radcliffe, M. Fluhr, K. Imp, *Exploring the Metaverse: What Laws Will Apply?*, [in:] *Chambers TMT 2022 – Trends & Developments*. DLA Piper LLP (USA), 2022. Available from: <https://www.dlapiper.com/en/france/insights/publications/2022/02/exploring-the-metaverse>

popular game enables players to create and customise virtual avatars known as “skins,” some of which hold real-world value, with certain skins being sold for thousands of dollars on third-party markets. However, the game’s terms of use prohibit the sale and transfer of these skins. Despite this prohibition, a black market has emerged where many players sell their skins for real money. This has created a legal dilemma as players are not permitted to sell their skins under the game’s terms of service, yet Epic Games, the developer of Fortnite, lacks sufficient legal means to take action against those who do. In response to this issue, Epic Games has adopted a unique approach to legal regulation. They have established their own skin market within Fortnite, allowing players to buy and sell skins using “V-Bucks,” the game’s virtual currency. This initiative has helped reduce the prevalence of the black market and has created a safe and regulated environment for players to sell or trade their skins.

Yet, before delving into the legal framework surrounding avatars in general, it is crucial to understand not only what they are, but also to analyse their constituent elements. Let’s examine the components that constitute a human meta-prosthesis and explore how each of these components can be legally protected. According to research literature dealing with the matter,¹⁶ game avatars encompass several main groups of elements:

- a) audio elements, including voice recordings and sound effects of animations. The textual storyline of game characters falls into this category as well;
- b) visual elements, such as body positions, movement animations, and facial expressions. It seems reasonable to stress that when an avatar is modeled after a real person, particularly a celebrity, the preservation of distinctive physical features becomes especially valuable;
- c) computer code, referring to the software that processes data and creates an avatar model.

However, the mere existence of these elements does not automatically grant them legal protection. They must meet certain criteria for protectability, which can vary depending on the applicable law. Therefore, from the point of view of intellectual property considerations, the question arises as to whether an avatar qualifies as an author’s work eligible for copyright protection. Copyright grants the owner exclusive rights to reproduce, distribute, and publicly display the work. However, determining whether an avatar possesses sufficient originality to warrant copyright protection requires careful analysis. In addressing this matter, it becomes

¹⁶ C. Crawford, *The Art of Computer Game Design*, Osborne/McGraw Hill, 2000, p. 13.

crucial to strike a balance between the interests of copyright holders and the rights of players to access and utilise avatars for their own creative purposes. This tension is particularly relevant in the realm of multiplayer computer games and metaspaces, where developers often aim to control avatar access and usage, while players desire the ability to customise and express themselves through their avatars.

Since intellectual property laws pertain to the intangible aspects (*corpus mysticum*) of both physical and virtual objects, it is essential for metaspaces creators to respect the rights of inventors, designers, and owners of avatars and other assets. Consequently, the holders of rights can exercise their intellectual property rights within the metaverse, including aspects like the appearance and backstory chosen for a digital avatar.

The Berne Convention for the Protection of Literary and Artistic Works, currently ratified by 181 nations, mandates that contracting parties grant writers exclusive rights over their works, irrespective of their nature or form. Subsequently, the Berne Convention underwent modifications through additional international agreements, including the WIPO Copyright Treaty, ratified in 1996, to adapt to the digital environment. This treaty explicitly recognises that storing protected works in digital format on electronic media constitutes reproduction, necessitating prior authorisation from the copyright owner.¹⁷ From the perspective of personality rights, the question arises as to whether using an avatar to represent a person in a multiplayer computer game or metaspaces violates their personality rights. Personality rights refer to the rights individuals have regarding the use of their names, images, or likenesses. These rights aim to prevent individuals from being used as mere “advertising vehicles” without their consent.

In the context of multiplayer computer games and metaspaces, the use of avatars can potentially create conflicts between individual rights and the interests of developers and publishers in creating realistic and captivating gaming experiences. On the one hand, avatars enhance player immersion and make the game more engaging; on the other, concerns arise regarding the accuracy, authenticity, and potential invasion of privacy associated with portraying individuals through avatars. It can be argued that avatars enhance the gaming experience by providing a more immersive and personalized environment. However, developers and publishers must consider the ethical and legal implications related to avatars and ensure the protection of users’ privacy and rights.

One significant issue is that involving so-called “virtual identity theft”. Virtual identity theft occurs when a user creates an avatar with the intention of impersonating

¹⁷ World Intellectual Property Organization, *The Berne Convention for the Protection of Literary and Artistic Works*, 1982.

nating another user or person in an unethical manner or for financial gain. Virtual identity theft can have severe consequences for the impersonated user, including damage to their reputation, financial loss, and emotional distress. For instance, in the computer game (mobile application) *Clothes Forever – Styling Game* (clothing designer-stylist), the computer-generated images bear a resemblance to numerous famous artists. However, legal proceedings revealed that the application developers did not obtain consent to use the images of celebrities. As a result, singer Selena Gomez filed a lawsuit against the developer of the mobile application for using her image without permission. In some cases, the character within the application completely replicates the singer's appearance and clothing.¹⁸

To tackle this issue, game developers and publishers need to implement mechanisms that allow players to report and flag incidents of virtual identity theft. They should also establish procedures to promptly and effectively investigate and address such reports. An important aspect to consider here is that the rules regarding the protection of image rights differ when photographs of individuals are used to create an image without their consent or with their consent. For example, in the United States, using other people's photographs on commercial websites is possible without specific permission from the author/rights holder. This falls under the fair use doctrine, which allows for free use without profit.¹⁹

Another pressing concern is the use of virtual currencies and microtransactions in multiplayer computer games and metanetworks. These virtual currencies and microtransactions enable players to purchase in-game items or virtual goods using real money, which can create opportunities for predatory practices. Notably, the theft of a digital avatar called the Bored Ape Yacht Club on the Ethereum blockchain stands as one of the most prominent instances of theft in the metanetwork. The stolen personalised avatar, which had gained popularity and attracted fans, was monetised, and the hacker made off with assets valued at \$3 million.²⁰ Similar avatar thefts are also frequent occurrences in the popular video game *Fortnite*, where hundreds of thousands of dollars' worth of assets, including in-game currency and skins, were stolen in 2019.²¹ These examples underscore the increasing risks of theft and fraud in the metaverse. To address this issue, game developers and

¹⁸ J. Zerbo, *Selena Gomez is Suing Developers for Using Her Likeness to Promote Fashion Game Without Her Permission*, *The Fashion Law*, 2020. Available from: <https://www.thefashionlaw.com>

¹⁹ P. Julie Zerbo, *Reclaiming Fair Use: How to Put Balance Back in Copyright*, Chicago 2011, pp. 10–11.

²⁰ S. Andersson, *The Theft of 'Bored Ape Yacht Club' NFTs Worth \$13.5 Million*, *The Coin Republic*, 2022. Available from: <https://www.thecoinrepublic.com>

²¹ Henderson J., *Fortnite Video Game Maker Epic Games to Pay More Than Half a Billion Dollars over FTC Allegations of Privacy Violations and Unwanted Charges*, *Federal Trade Commission* 2022. Available from: <https://www.ftc.gov/news-events/news/press-releases/2024/12/ftc-sends-refund-payments-consumers-impacted-epic-games-unlawful-billing-practices>

publishers must make sure that the use of virtual currencies and microtransactions is transparent and fair. They should prevent an environment where players who spend more money gain an unfair advantage over others based on the “pay to win” principle.

Data privacy is another concern when it comes to the use of avatars in multi-player computer games and metanetworks, as it may involve the collection and processing of data without the user’s knowledge or consent. This could include collecting personal data such as facial features, speech patterns, and other personally identifiable information without adequate consent.²² To address this issue, game developers and publishers must ensure that their games comply with data protection laws and regulations. They should also provide transparency regarding the data they collect and how they use it. Users should be given a realistic opportunity to opt out of data collection and processing.

Special attention should be given to the challenges that arise when the virtual and real worlds intersect. A notable example is the ruling of the Supreme Court of the Netherlands on 31 January 2012, in the RuneScape case.²³ In this case, two schoolchildren coerced a third student to hand over virtual items, a magic mask, and a magic amulet, in the online game RuneScape, using threats and violence. The court initiated proceedings under Article 310 of the Dutch Criminal Code, which pertains to robbery.²⁴ The defense argued that the virtual amulet and mask could not be considered “other goods” as defined by Article 310, as they lacked tangibility and commercial value. The following arguments were presented to support this stance. Firstly, it was claimed that a virtual object does not exist in reality; it is merely lines of code. However, the court rejected this argument by stating that these virtual objects hold real value because players acquire them through time and effort. Additionally, these virtual objects are valuable to the game user as they bring virtual wealth and power to their avatar. The defense further argued based on the game’s objectives, suggesting that the purpose of the game is to weaken the avatar of the “other” player. In response, the court highlighted that the rules of the RuneScape game did not permit the kind of acquisition of virtual objects that occurred in this case. The teenagers’ actions took place outside the context of the game, thus they were not virtual actions within the virtual world, but real actions

²² A. Lipson, *Computer and Video Game Law – Cases, Statutes, Forms, Problems & Materials*, Carolina Academic Press, 2009, p. 54.

²³ J. Olivetti, *Dutch Supreme Court declares RuneScape theft a real-world crime*, Engadget, 2012. Available from: <https://www.engadget.com/2012-01-31-dutch-supreme-court-declares-runescape-theft-a-real-world-crime.html>

²⁴ Netherlands, *The Dutch Penal Code*, Littleton, Colo.: F.B. Rothman 1997, Seria: The American Series of Foreign Penal Codes, nr 30.

that had an impact on the virtual world. To address this particular case and similar ones, it is reasonable to apply the “magic circle” test.²⁵

Conclusions and possible implications

To conclude, it should be noted that despite the existence of certain approaches to solving the problem addressed in the paper, there are still a number of unresolved issues related to the problem of regulating the use of avatars in multiplayer computer games and the meta-network, which raises a number of legal, ethical and privacy-related issues. To enhance the legal framework for regulating relationships in the realm of computer games and the metaverse, it is crucial to consider their fundamental characteristics:

- 1) they function as a form of media, making them a neutral tool for conveying narratives;
- 2) they belong to the realm of “new media,” possessing qualities that define their multidimensional nature. Consequently, virtual reality, as a factual phenomenon, cannot be exclusively categorised under a single legal qualification, such as a specific type of intellectual property or information.

The improvement of the legal framework for governing virtual realms should be pursued within the context of the history of research and resolution of legal conflicts in this domain. It should encompass the key legal classifications of games as intellectual creations, forms of information, means of communication, and, in some cases, unique practices or subjects of a gaming nature. The most promising avenues for developing such a legal framework are linked to conceptualising optimal methods of protecting rights to virtual property as intellectual creations, examining the information and legal aspects of virtual reality, understanding the significance of virtual values concerning personal non-property rights, and striking a balance between the interests of developers, publishers, and the gaming community in the context of the legal environment’s specificities. Consequently, the matter of legally regulating avatar exposure should be regarded as a priority area for the advancement of civil law in the near future. This progress will be facilitated by the expansion of judicial precedents in this field, which will likely lead to the adaptation of legislation to new realities. Additionally, common law jurisdictions

²⁵ J.A.T. Fairfield, *The Magic Circle*, “Vanderbilt Journal of Entertainment and Technology Law” 2012, 14(3), p. 5.

may witness the emergence of new legal precedents that address the issues discussed in this paper.

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