

On the Digital Singularity: Recognising Virtual Property Through the Eyes of New Jurisprudence Over the Conflicts of Digital Goods

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ABSTRACT

The present paper focuses on the analysis of bibliography, jurisprudence, and case studies internationally such as *Bragg v Linden Labs*, forming an analysis of the obstacles for the recognition of virtual property as well as providing arguments for its acknowledgment on a multitude of legal systems internationally, all the while incentivizing the debate for its implementation with the use of a set of doctrines and directives. For this purpose, we will make comparisons of the different concepts of property on an international scale through the analysis of a host of different doctrines and jurisprudence from the United States, Europe, Russia, and Brazil, aiming to demonstrate the resilience or acceptance of this concept of property. Finally, we will present at the end of this article the directives that will serve to guide future discussions and implementations of virtual property.

Keywords: Digital Law, NFT, Virtual Worlds, Virtual Property, Contracts of Adhesion

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1. INTRODUCTION

Bragg v Linden labs³ was one of the biggest breakthrough cases for the virtual world⁴, contemplating the idea of ownership of virtual pieces of land, that much like actual real estate, had its own value and raised the question if what is owned in virtual worlds is an actual piece or property of the users, or if it's a mere hologram environment where a company benefits from its entertainment.

It was through this case that the debate about virtual property first started in the United States, although it couldn't be considered the first one to delve into the concept of ownership of virtual entities. However, with the awe of a new era of digital goods such as NTFs, it becomes necessary to re-evaluate the possibility of virtual property and how to define, regulate and implement it.

It is therefore the aim of this article to demonstrate what virtual ownership of goods is, how to properly define it, demonstrate its acceptance not just by consumers, but by those who take action to benefit from it, all the while displaying the consequences of resistance to these new ideas while contrasting it to the advantages offered by taking part in this new virtual market.

For our more specific goals, we shall demonstrate through the comparative analysis of not only Bragg v Linden Labs (*Bragg v. Linden Research, Inc.*, 2007), but also the use of practical cases and international jurisprudence and laws from Russia and Brazil to demonstrate the existence of a concept of virtual property, all the while illustrating the issues of the current way it's perceived as, how changing that perspective could positively impact not just the users of these virtual worlds, but the companies that host them as well.

The importance of this discussion evinces itself due to:

1. The new digital market of NFT showing its prevalence with the support of not only bands like Kings of Leon but the NBA itself, needing therefore a demand for regulation to protect and safeguard its users' new digital goods.
2. The advancement proposed by such a system, offering a new way to benefit artists, users, and all content creators alike, all the while evolving the way we interact with intellectual property on the web.

³ Bragg v. Linden Research, Inc., 487 F. Supp. 2d 593 (United States District Court, E.D. Pennsylvania, May, 30, 2007) <https://opencasebook.org/documents/1552/>

⁴ Horowitz, S. J. (2006). Competing Lockean claims to virtual property. *Harv. JL & Tech.*, 20, 443.

Hence, the problem posed by this article is a gap about the regulation of virtual goods under the light of new virtual worlds, more specifically, of virtual property inside of virtual worlds. With this we ascertain that the hypothesis of this research is to:

1. Perform a comparative analysis of different concepts of property to understand how the concept of virtual property may already exist and be easily integrated under current legal systems;
2. Analyze its acceptance internationally, all the while investigating through the use of international jurisprudence and different forms of a common law and civil law system the possibility of its practical application under a virtual environment;
3. Resolve and pacify any questions and fears that may relate to the recognition of virtual property, demonstrating current uses of these concepts with the example of practical cases not only in the United States, but in Russia as well.
4. Promote the recognition of this new concept of property while simultaneously demonstrating its advantages and theorising its future uses and applications to promote the debate about virtual goods under the new virtual market.

In short, our objective is the demonstration of new concepts that already fit into current legislation, while concurrently stimulating the discussion and promotion of new forms of regulation for virtual property.

2. PROPERTY IN THE 21ST CENTURY

According to the Brazilian author and supreme federal court minister, Marcos Aurélio de Mello, property is defined as “[...] the power of lordship that one person exerts over a thing, excluding any impedance of a third party”⁵.

In contrast to Russian law, property is seen as corporeal and intangible objects of civil rights, which can be alienated and transferred from one person to another, as seen from this article of the Russian Civil Code:

⁵ VIANA, M. A. S. (1996). Curso de direito civil. *Belo Horizonte: Del Rey*, 5.

“Art. 128 Objects of civil rights include things, including money and securities, other property, including property rights; works and services; protected results of intellectual activity and equated means of individualization (intellectual property); intangible goods.”⁶

This however is not a fixed list and the court can recognise other kinds of property under Russian Law. It’s also defined as “[...] a complex of contractual relations which have a real value with participation of a known party”⁷.

Moreover, the definition set forward by Brazilian and Russian Law shares a similarity to the point of view shared by traditionalists in U.S. Law such as Sir William Blackstone, which define property as the ability to possess a property without the involvement of a third party⁸.

This position, while still defended today, is now contested by the idea of legal realism⁹, which identifies that property simply denotes a bundle of rights defined by law and social policy (Merril, 2010). Whatever these rights may be will only be dependent on the policy that is implemented.

This brings us to the new debate amongst users of social media platforms like YouTube¹⁰ and virtual worlds such as that of VRChat¹¹ and Second Life¹². That is, the debate about User Generated Content being recognized or not as virtual property.

3. THE HISTORY OF VIRTUAL PROPERTY

To this extent, we must first understand where this concept had first arisen. The history of virtual propriety starts with the games of the MMORPG¹³ genre around the 2000’s. This initially started with a subscription system which would give access to players to the virtual world for around a week or even a month.

⁶ Civil Code of the Russian Federation, Art. 128 (1994). Retrieved on the 3rd of January, 2022 from: http://www.consultant.ru/document/cons_doc_LAW_5142/f7871578ce9b026c450f64790704bd48c7d94bcb/

⁷ Shershenevich, G. F. (1995). Textbook on Russian Civil Law (based on an edition from 1907)., *Spark.*, 95.

⁸ Penner, J. E. (1997). The idea of property in law. *Oxford University Press.*

⁹ Merrill, T. W., & Smith, H. E. (2010). *The Oxford Introduction to US Law: Property.*

¹⁰ YouTube is a video sharing service where users can watch, like, share, comment and upload their own videos. The video service can be accessed on PCs, laptops, tablets and via mobile phones. Youtube can be found on the Internet at <https://www.youtube.com/>.

¹¹ VRChat is a free-to-play massively multiplayer online virtual reality social platform created by Graham Gaylor and Jesse Joudrey. It allows players to interact with others as 3D character models. VRChat can be found on the Internet at <https://hello.vrchat.com/>.

¹² Second Life is an online virtual world, or metaverse, developed and owned by the San Francisco-based firm Linden Lab and launched on June 23, 2003. Second Life can be found on the Internet at <http://www.secondlife.com>.

¹³ MMORPG’s are massively multiplayer online role-playing games that combines aspects of a role-playing video game and a massively multiplayer online game.

Since then, the popularity of games increased and concepts changed, and with that, developers decided to opt for a new model of what it's currently called Free-to-Play Games¹⁴, where the game itself is free, but the most powerful weapons and other items are sold in the game for real money, completely abandoning the subscription service model.

With these changes of concepts, a new debate would start about the idea of User Generated Content inside these virtual worlds, that is, content made by the community of that game or platform and that would add value to that virtual world. The idea of UGC's (User Generated Content) was first coined by the article "Web 2.0 and User-Generated Content: Legal Challenges in the new frontier"¹⁵ and with that article came the debate about the value of these UGC's and how to properly regulate them.

At the time, the foremost concern was that of the lack of control over the content which is produced by users on websites. One of the examples of that case was none other than YouTube itself, which, at the time, suffered from constant DMCA strikes¹⁶ directed at their platform by companies such as Viacom¹⁷.

The suggested course of action then was to push the responsibility of the stolen content onto the users via some sort of internal policing method. That would then come to inspire what is currently known as the current YouTube Content ID system¹⁸, which has proven itself able to take the target away from the company and onto its users.

During the same year, content creators¹⁹ were getting introduced into the YouTube Partnership Program (YPP), a program aimed at getting users paid for the videos published by them, opening new ventures in creative video making as a career to incentivize the production of UGC's in the YouTube platform, and thus, maintaining the platform through its users' creations.

¹⁴ Free-to-play (F2P or FtP) video games are games that give players access to a significant portion of their content without paying or don't require paying to continue playing. Free-to-play is distinct from traditional commercial software, which requires a payment before using the game or service. It is also separate from free games, usually referred to as freeware, which are entirely costless.

¹⁵ George, C. E., & Scerri, J. (2007). Web 2.0 and User-Generated Content: legal challenges in the new frontier. *Journal of Information, Law and Technology*, 2.

¹⁶ For YouTube to retain DMCA safe harbor protection, it must respond to copyright infringement claims with a notice and take-down process. YouTube's own practice is to issue a "YouTube copyright strike" on the user accused of copyright infringement. More info on DMCA Takedowns and the Youtube Strike system can be found on the internet at <https://www.eff.org/issues/intellectual-property/guide-to-youtube-removals>

¹⁷ ViacomCBS Inc. is an American diversified multinational mass media and entertainment conglomerate corporation formed through the merger of the second incarnation of CBS Corporation and the second incarnation of Viacom on December 4, 2019.

¹⁸ Content ID is YouTube's automated, scalable system that enables copyright owners to identify YouTube videos that include content they own. More info on the Content ID system can be found on the internet at https://www.youtube.com/watch?v=9g2U12SsRns&ab_channel=YouTubeCreators.

¹⁹ Content creation is the contribution of information to any media and most especially to digital media for an end-user/audience in specific contexts.

Meanwhile, the first real case about virtual property would be decided in *Bragg v Linden Lab (Bragg v. Linden Research, Inc., 2007)* in 2007, involving a virtual real estate property inside the virtual world of Second Life, a virtual game that simulated reality, creating a virtual ecosystem where UGC's would thrive with its own market, including property taxes and events hosted by big banks such as Wells Fargo.

These events have all culminated into an ever-growing example of how virtual property and UGC's have already become a part of society and how it's already accepted not just by consumers, but companies as well. However, there is still the elephant in the room to be addressed: Virtual Property is still being seen as Intellectual Property.

4. THE CURRENT CHALLENGES OF VIRTUAL PROPERTY

The biggest issues with Virtual Property can be separated in two questions:

1. How to define the regime for Virtual Property?
2. Is there value in Virtual Property?

While the value of Virtual Property today can be exemplified with cases such as *Bragg v Linden Labs (Bragg v. Linden Research, Inc., 2007)* we still, currently, lack a proper regime for Virtual Property. This in turn can give into leeway for interpretations and assumptions for companies and developers of Virtual Worlds and Virtual Platforms.

As a result, these rights-holders, preoccupied with maintaining their intellectual property rights, have come to see that all content on their platform as part of their Intellectual Property, even if it was generated by its users, consequently creating an obstacle for the debate about Virtual Property.

That is, the issue for companies is the preservation of their intellectual property, the software and game developers, the protection of their company's logo, image, designs, and ideas, much like to prevent what happened with *Warcraft 3*, *Bragg v Linden Lab (Bragg v. Linden Research, Inc., 2007)* and with YouTube.

Nevertheless, before we address why these issues are important, we must first answer the first two questions previously mentioned. That is, how to recognize virtual property and how we can identify its value.

5. THE RECOGNITION OF VIRTUAL PROPERTY

A virtual object can be described as an intangible object of the virtual World which consists of binary code²⁰. A program (a computer) outputs this code as something with a form and appearance.

However, even though they exist in the virtual world, these objects do not really exist in the real world. In some cases, as we've seen before, being treated as intellectual property and not as property attained by users. Be it because of jurisprudence or a disinterest of legislative assemblies internationally which acts as obstacles that hinders the recognition of virtual property as an object of ownership outside of virtual worlds. And because it is not officially recognised, its value becomes questionable.

This however results in consequences under different branches of law. Take the case of theft or robbery for example: the thief can at best be banned from that virtual world, which in most cases won't be a effective form of deterrent for the thief, since he or she may be able to just create another account and continue to perform illicit acts under a unregulated, and yet profitable, virtual world.

Those and other issues arise because of the unclear regime of Virtual Property, and for the solution of this issue we must look at the doctrine of Russian Civil Law²¹, which itself identifies different approaches to a virtual property.

5.1 Virtual property as real property

According to the position of English philosopher John Locke, any person can be the owner of the result of his work as physical and mental efforts were put in²², which results in a favourable position for virtual property, meaning that it does not matter if the item in question is an NFT or an virtual item of any sort, as long as the user has to exert effort to achieve it in any shape or form, it is his property.

This position is already supported by other countries, for example, in 2011 the Taiwan Ministry of Justice released an official Notation No. 039030 (90) where objects of virtual property were equaled to the real objects and valuables²³.

European countries also made a lot of progress on the recognition of virtual property. In 2007, in the Netherlands, a group of people used violence and threats to make another player send them virtual

²⁰ Erlank, W. (2012). Property in virtual worlds. Available at SSRN 2216481.

²¹ Arkhipov, V. V. (2019). The Internet Law. *Urait*, 211.

²² Locke, J. (1988) The Works of John Locke. *Thoughts*, 277-280.

²³ Fairfield, J. A. (2005). Virtual property. *BUL Rev.*, 85, 1047.

items from his account to theirs, resulting in a decision from 2012 of the Supreme Court of the Netherlands²⁴ saying the following:

“1) those items have value because the player spends time and real money to obtain it”

“2) those items were owned by the only one player who could use it as he wanted to”

“3) when those objects were transferred to the criminals, they got an opportunity to use it and the previous owner lost a status of ownership”

With this, the Supreme Court of the Netherlands sentenced the criminals for robbery, resulting in one of the first European countries which recognized virtual property through a court decision, further showing how this concept and its value is already recognized on at least an international level.

With these questions answered, there still remains the question about the user influence on these virtual worlds, and more importantly, if these UGC’s can add value to not just the experience of being inside the virtual world, but also to the value of the items obtained or created by users.

6. USER IMPORTANCE ON VIRTUAL WORLDS

Way before the current pandemic, these virtual worlds were already a big part of the international market, with the market of virtual worlds such as that of online games in 2008 being expected to bring over \$556 million dollars in revenue²⁵.

While it can be said that Second Life was the predecessor of these virtual world markets, with its application of taxes on virtual land²⁶ and of its UGC market, a better example is found by looking at the virtual market created by Steam, giving its name “Steam Community Market”²⁷, with news articles of

²⁴ Hoge Raad der Nederlanden, LJN BQ9251, Supreme, J. 10/00101, January 31st, 2021. Retrieved on the 6th of October, 2021 from: <http://uitspraken.rechtspraak.nl/inziendocument?id=ECLI:NL:HR:2012:BQ9251>.

²⁵ Alemi, F. (2007). An avatar’s day in court: A proposal for obtaining relief and resolving disputes in virtual world games. *UCLA JL & TECH.*, 2007, 6.

²⁶ Chein, A. (2006). A practical look at virtual property. *John’s L. Rev.*, 80, 1059.

²⁷ The Steam Community Market is a digital marketplace that allows users to buy and sell certain in-game items, in addition to digital trading cards, emotes, profile wallpapers, and other things that are designed for use with Steam. It can be accessed on <https://steamcommunity.com/market>.

2017 reporting over \$5 billion dollars²⁸ being wagered in the videogame cosmetics we've come to know as *skins*.

More importantly, these environments also offer an ability for users to contribute with their UGC's in order to have their creation selected and distributed in that virtual marketplace, receiving some of those earnings back as compensation for their work not just for the community, but for the market itself (Grubb, 2021). This can be better exemplified with the case of Warframe²⁹ *Tennogen* cosmetics³⁰.

The importance of UGC is arguably the biggest key-feature of virtual worlds nowadays, with developers today having to recognize users not just as consumers, but as a potential boost for their product, that is, their virtual world.

This can come in the form of mods that aim to modify or enhance the experience originally provided by the virtual world, bringing a breath of fresh air in the form of new content to that virtual world and further expanding it at no cost to developers, other than supervising these creations.

Moreover, rather than limiting transactions so they only happen between the company and a user, these companies could further broaden their ability to receive a financial return from their community engagement by actively recognizing the contents attained by users and sold to other users with real world value, retaining some of the resold value as a "tax" for providing the ability to trade virtual properties.

Therefore, incentives brought by UGC's may be the current biggest argument for virtual property to not just incentivise consumption, but also production of content that will further enhance the experience of these virtual worlds, all the while providing royalties to those who helped publish it in a way that couldn't be as easily compensated if done in the real life.

²⁸ Assael, S. H. A. U. N. (2017). Skin in the game. Retrieved on the 31st of October, 2021 from: <https://shaunassael.com/wp-content/uploads/Skin-in-the-Game-Counter-Strike.pdf>.

²⁹ Warframe is a free-to-play action role-playing third-person shooter multiplayer online game developed and published by Digital Extremes. More information on Warframe can be found on: <https://www.warframe.com/>.

³⁰ TennoGen is a collection of community-created content that are selected by Digital Extremes and subsequently implemented in the in-game Market. These contents can only be purchased with bought premium currency on Consoles, and can only be purchased through the Steam client on PC. Revenue generated from the in-game Market will then be split between Digital Extremes and the creator, with the creator getting 30% of the cash revenue. More information on TennoGen cosmetics can be found on: <https://forums.warframe.com/topic/549103-steam-workshop-launch-faq/>.

7. CONCLUSION

As demonstrated, the potential for the recognition of virtual property is immense, bringing benefits for users, creators and even companies, if well understood by all parties, that is giving the ability to trade users' virtual property is a gigantic step against piracy, making these websites useless since these transactions could happen in a safer and more familiar environment, all the while providing a financial return. As seen with situations like what happened to Bragg v Linden Lab's (*Bragg v. Linden Research, Inc.*, 2007), it becomes necessary to point a general direction in which to take this debate. For this, we stipulate the following directives for the progress of Virtual Property and its recognition not just by legal entities, but by companies and users as well. These are:

7.1. Virtual Property is Not Intellectual Property

If this debate is to go forward, it must first be understood that Virtual Property cannot be confused with Intellectual Property, and that includes the rules applied to them. Therefore, Virtual Property should not receive the same protections and rights that intellectual property does, and vice-versa, and therefore, Virtual Property should be seen and interpreted with the lenses of Property Law.

7.2. Future Contracts must take the user's UGC's and Property into consideration

This does not mean that all contracts must immediately recognize virtual property, but that at least, they should start considering the contributions of users as part of their legal and creative team's responsibility to oversee, work with and incentivise, rather than forbidding, limiting or taking advantage of, much like the cases with EULA's.

7.3. Virtual Property Should be Seen as a Benefit, not a Hindrance

Many were the benefits that we've stipulated if virtual property was to be recognized, for users, companies and even content creators, even more if all of it were to be done in a blockchain, where multiple transactions and top-notch cryptographic security could further enhance the monetary gain and control those users and developers would have.

This step should be the easiest to come by and will have the most benefits for developers, possibly incentivising the owners of these virtual worlds to continue experimenting with these new ideas of virtual ownership.

7.4. Virtual World Markets must be sustainable.

Users must work to earn their due. That is, they must prove that they've earned their property, and thus, if this idea is to be recognized, the virtual world economy must be healthy enough for it, otherwise it could have an inflation problem, as it is the case with most MMORPG's³¹.

It is important to understand that just because recognizing it could bring benefits, it does not mean that this should be easy to implement. If a virtual world desires to implement this idea, it must first understand its own economy to apply it. This should be inherent to the previous directive.

7.5.Virtual Property should prevent illegalities, not incentivise them.

While the benefits of recognizing virtual property might be enticing, the steps towards it must be taken with care to prevent the surge of websites outside of the virtual world that could want to benefit from users' property.

This directive is to also be taken in consideration with the two previous ones because of its impact outside of the virtual world. If the virtual world economy begins to fail because of an outside source funnelling or receiving money, we could have situations like that akin to laundering money. It is of utmost importance that developers make this an in-house situation where they can control what happens inside that virtual world.

With these directives, the international understanding and recognition of virtual property throughout the world, the concrete and hard cases presented, we hope to have been able to just show not just the viability of the recognition of this new area of law, but to also have been able to show its benefits and further enhance the debate about its application in the future. We hope that with the aid of the examples provided such as YouTube's Content Creator Program and more recent concrete cases from Europe will be enough to shed some light on this prospect and further continue the debate and improvement for the application of Virtual Property.

³¹ Lahti, N. (2015). Inflation Control in Virtual Economies.

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