

MORE THAN JUST A GAME: USER EXPECTATIONS V OPERATOR INTERESTS

by

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Trade in virtual goods is currently governed by social conventions. This has resulted in a complex network of social contracts being established outside the formal legal system. The size of informal secondary markets has transformed virtual environments from games into transaction spaces. This has been encouraged by operators and their marketing strategies. The design of virtual environments leads users to expect that virtual property will reflect the real world property system. Although users speak about ownership, the law may not authorise them to alienate virtual goods through the secondary markets. Therefore, transactions are carried out in the context of legitimate expectations based on implicit social conventions. Property law theorists tell us that the law develops by recognising and formalising social conventions. An analysis of those social conventions and contracts can therefore indicate how and to what extent formal law should be adopted in virtual environments and what categories of (property) law can best address these new challenges.

KEYWORDS

Virtual property, virtual economy, virtual goods, virtual environments, social conventions, social contracts

1. INTRODUCTION

Virtual environments¹ represent a new online business model with indispensable economic potential. It is no longer sustainable to see virtual worlds and social platforms as mere games or places for socialising. Clearly, they

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¹ Virtual environment is a online computer system where users can interact through their avatars. The best known examples of virtual environments are distributed simulations, 3D multiplayer games that allow for collaboration and interaction of many participants that may be separated by large distances. World of Warcraft and Second Life are two of the most popular and populated virtual environments. Historically, commercial MMORPGs gained early acceptance in the late 1980s and early 1990s when computer game developers applied the idea of multiple players engaging in playing simultaneously to the video and computer game genre. More information is available for example at Wikipedia, Virtual World http://en.wikipedia.org/wiki/Virtual_world [Accessed 30 October 2009].

have become more than extra-legal spheres of community and fun.² The unique characteristics and design of virtual environments will have to be acknowledged by law makers and courts, in order to formalise virtual economies and to establish an appropriate legal framework for virtual environments. This article will explore some of the unique legal issues of this new sphere of economic activity.

The scale of economic activity in this new marketplace is sufficient to warrant serious attention. "Virtual worlds are not games: they are transaction spaces," says David Birch.³ Based on the research of Edward Castronova,⁴ Birch estimates that since about \$400 million was traded in Asian virtual worlds last year, their GDP is already around \$8 billion.⁵ To illustrate, Blizzard Entertainment announced that the virtual world now hosts more than 2 million subscribers in Europe, more than 2.5 million in North America and approximately 5.5 million in Asia where in peak hours 600,000 are online at any one time.⁶ The monetization of virtual environments has resulted in a powerful marketplace with advanced mechanisms for virtual goods purchases. The challenge will be to adapt existing regulation to encompass this new sphere of economic activity.

2. VIRTUAL GOODS

More and more people go online and spend time, effort and money on building their virtual identities. They do not hesitate to purchase virtual goods to achieve their objectives. Virtual goods are non-physical objects existing online – in a game, virtual world or social platform. They have no intrinsic value and, by definition, are intangible.⁷ Yet thousands of people spend real money every day on virtual gifts such as those provided by Facebook⁸ or enhancement for their avatars in virtual worlds. Jeremy Liew explains the motivation behind such behaviour:

² Hertz, E. 2008, 'Virtual Property - Real-World Problem', The MTLR Blog, <http://blog.mtlr.org/search?q=Virtual+Property+Protection%3A+Continue+the+Experiment+> [Accessed 8 October 2009].

³ Birch, D. 2007, 'Virtual Worlds: Regulating virtual worlds: current and future issues', *E-Commerce Law & Policy*, vol. 9, no. 1, http://www.e-comlaw.com/lp/details_results.asp?ID=1170&Search=Yes [Accessed 26 November 2009].

⁴ Castronova, E. 2001, 'Virtual Worlds: A First-Hand Account of Market and Society on the Cyberian Frontier', SSRN, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=294828 [Accessed 15 October 2008].

⁵ Birch, op cit note 3 above.

⁶ Gamasutra News Online 2008, World of Warcraft Hits 10 Million Subscribers, http://www.gamasutra.com/php-bin/news_index.php?story=17062 [Accessed 4 December 2009].

⁷ Wu, S. 2007, 'Virtual Goods: the next big business model', TechCrunch, <http://www.techcrunch.com/2007/06/20/virtual-goods-the-next-big-business-model/> [Accessed 4 December 2009].

⁸ Snyder, C. 2008, 'What is the Value of Virtual Gift?', Wired, <http://www.wired.com/epicenter/2008/12/virtual-gifts/> [Accessed 13 December 2009].

“My theory is that people buy digital goods for the same reason that they buy goods in the real world; (i) to be able to do more, (ii) to build relationships, and (iii) to establish identity.”⁹

Sales of virtual goods can be divided into three categories: sales of currency; sales of items, such as weapons, gifts, houses or land; and sales of accounts – the password and login information controlling a specific avatar.¹⁰ Land and currency are under the direct control of operators, and appear to be the most regulated categories in Terms of Service. Currency is limited by a license available for purchase or free distribution and the operator has the absolute right to manage, regulate, control, modify and/or eliminate it.¹¹ Land is often a prerequisite for advancement through both the game and in virtual social structures. A user can choose from developed or undeveloped land of many types. The amount, accessibility and quality¹² of land are determined by operators.

Social conventions applied in-world result from the unique nature of each virtual environment. In competitive environments, users play to rules set by the operator, and so might expect the operator to have unlimited and absolute control over the virtual property,¹³ whereas social platforms consist mostly of user-generated content (apart from the basic infrastructure) which might lead to different conventions on property. In some cases, environments are designed with an in-built property model, which encourages users to trade virtual goods in internal markets; other environments do not have such a model. While internal markets may be set up in virtual environments by their operators, this is not the case for external markets. These informal secondary markets have developed in order to trade virtual goods directly for real money. Often the design and structure of virtual environments lead users to trade virtual goods amongst themselves and these trades become part of the complex network of social contracts.

⁹ Liew, J. 2009, ‘Why do People Buy Virtual Goods?’, WSJ.com, <http://online.wsj.com/article/SB123395867963658435.html> [Accessed 30 December 2009].

¹⁰ Glushko, R. 2007, ‘Tales of the (Virtual) City: Governing Property Disputes in Virtual Worlds’, Berkley Technology Law Journal, Vol. 22, No. 507, <http://ssrn.com/abstract=1458547> [Accessed 15 November 2009].

¹¹ Terms of Service are available at Second Life, <http://secondlife.com/corporate/tos.php> [Accessed 10 October 2009].

¹² Operators usually decide about adding new areas, worlds or galaxies. They also determine their design and if they are accessible to all social groups and individuals or to a selected class.

¹³ Virtual property is perceived as persistent, interconnected, and rivalrous. Defining virtual property has been the subject of intensive academic debate. For more information see for example Fairfield, J.A.T. 2005, ‘Virtual Property’, Boston University Law Review vol. 85, pp. 1047 - 1049.

3. ENTREPRENEURIAL ENVIRONMENTS

Some of the virtual environments such as Star Wars Galaxies are based on collaborative scenarios of entirely entrepreneurial characters. Yee¹⁴ has conducted a psychological research on the participants in virtual environments examining some aspects of motivation, relationships and problematic usage. In his work, he describes the mechanisms of goods production and trading in Star Wars Galaxies. All non-basic goods available in the environment, such as housing, fashion, etc are produced by users. He says: "All transactions, and the resulting supply, demand, and pricing of specific goods, are user-driven. The environment has mechanisms allowing users to survey for resources, harvest those resources, research schematics for assembling resources into sub-components, construct factories to mass-produce finished goods, and market those goods to the public. The process is so complex, time-consuming, and distributed over several skill sets that users typically specialize as resource brokers, manufacturers, or retailers, and typically form quasi-business entities with other users to facilitate that process. These entities have to communicate effectively, develop a coherent product strategy, assess market competition, and ensure the production chain is running smoothly. Many users comment that being part of such entities feels like having a second job."¹⁵

A substantial part of virtual economies is the trade in virtual goods. In addition there are institutions such as exchange brokers or currency trading houses, which provide trade within virtual environments, either with or without the explicit approval of the operators. These economies operate on a similar basis to real world ones. In the past, Sony Online has occasionally suspended the accounts of players caught trading items for money. But realising the economic potential, the company has provided an internal trading service. Sony facilitates trade between players, but does not sell items directly. Sony Online president John Smedley has commented on this: "[t]he unsanctioned secondary market for online games is rapidly growing and more and more of our players are taking part in it. Not only are we answering the demands of a sizable portion of our subscriber base, but we are also set on establishing the standard for online game sales."¹⁶

¹⁴ Yee, N. 2006, 'The Psychology of Massively Multi-User Online Role-Playing Games: Motivations, Emotional Investment, Relationships and Problematic Usage', in Schroeder, R., Axelsson, A. S., 'Avatars at Work and Play: Collaboration and Interaction in Shared Virtual Environments', Springer, Netherlands, Chapter 9.

¹⁵ Yee, op cit note 14 above.

¹⁶ Fox News 2005, Sony Letting Everquest Players Buy, Sell Virtual Items, <http://www.foxnews.com/story/0,2933,154206,00.html> [Accessed 4 December 2009].

Operators are not the only ones who are showing interest in regulating virtual economies. Governments have adopted different regulatory approaches. The UK and USA opt for *laissez-faire* while Asia-Pacific legal systems tend to be more paternalistic and choose immediate legislation.¹⁷ For example, the South Korean government has adopted strict measures to regulate this new sphere of economic activity. David Birch reports that they have decided to pass a bill banning transactions between the real and virtual worlds. If the proposed 'Amendment for Game Industry Promoting Law' is passed by the National Assembly, then all kinds of businesses brokering between virtual money and real money could be fined. This clause is added to the bill prohibiting virtual world trading.¹⁸

Kane concludes that: "...the commercialization of virtual environments will result in the online industry being subjected to real world laws and regulations as users seek to monetize the value in virtual property".¹⁹ It is, after all, the authorities who define what is and what is not considered property, especially for tax reasons. From the perspective of a state, anything a person owns in a broad sense that has a value is property for taxing purposes.²⁰ Law makers, courts and scholars have been turning their attention to virtual environments and the growing economic activity, exactly because of its economic potential. Currently, these transactions are not recognised by formal legal rules and are governed on an informal level through social conventions.

4. SOCIAL CONVENTIONS IN VIRTUAL ENVIRONMENTS

Social conventions and rules are a fundamental precondition for the stability, efficiency, and inner coherence of a social system. They are normative rules of conduct which are based on implicit ethical imperatives. Group or community members accept these rules even if they have the opportunity to behave differently. Social conventions not only determine what behaviour is desirable, but they also tell us what behaviour is anti-social. These rules can be articulated by explicit agreements, or even laws, which have been established by institutions or responsible persons. However, more often, social

¹⁷ Birch, D. 2007, 'Virtual Money: Money laundering in virtual worlds: risks and reality', *E-Commerce Law & Policy*, vol. 9, no. 5, http://www.e-comlaw.com/lp/details_results.asp?ID=1216&Search=Yes [Accessed 26 November 2009].

¹⁸ Birch, op cit note 17 above.

¹⁹ Kane, S. F. 2007, 'Virtual Worlds: 'Passporting' of avatars and property between virtual Worlds', *E-Commerce Law & Policy*, vol. 9, no. 12, http://www.e-comlaw.com/lp/details_results.asp?ID=1300&Search=Yes [Accessed 26 November 2009]

²⁰ Miller, D. 2008, 'Economics of Virtual Worlds: Virtual Inheritance', <http://economicsofvirtualworlds.blogspot.com/2008/09/virtual-inheritance.html> [Accessed 13 December 2009].

conventions are implicit. They determine the behaviour of members of a social system without being codified or formulated.²¹

There are such implicit rules in virtual environments and they take various forms. Some rules are general guidelines on social interaction between users, e.g. greetings, group interaction or respecting privacy. Some are detailed policies regulating specific area of community life. It is the interaction between players that makes virtual environments so attractive. Therefore users participate in some sort of organisation, such as tribes, factions, guilds, clans, and racial (or species) groupings. These organisations represent different types of collaboration, for example combat groups (temporary collaborations between a few users), guilds (persistent user-created membership organizations), and ideological alliances (agreements between guilds or “racial” groups).²² Avatars can “marry” or have children. Eventually, they can also experience something akin to death – an avatar cannot die in the virtual environment, but usually he would be teleported to his home base or return to the beginning of the game and would be forced to start all over again.²³ These situations may have various implications. For example, in the case of “virtual” death caused in combat, the virtual property of the deceased is taken by the winning party. World of Warcraft encourages guild leaders to use an elaborate Guild Distribution Loot System. Choosing the right distribution loot system in end game raids is one of crucial decision they have to make to sustain a smoothly and effectively running organisation.²⁴ What happens with the virtual assets once a player dies in the real world? Some operators have decided to allow residents of virtual worlds to draw up wills to allocate rights to the deceased’s virtual assets. This development is hardly unexpected as it is another way for them to increase revenues. MindArk Chief Marketing Officer Carl Uggla says: “There is land in the game of considerable value which if the player would die is uncertain who would claim [it].”²⁵

Virtual environments can have authorities that exercise police powers, and different games could include different rules limiting the freedom of ac-

²¹ Becker, B., Mark, G. 2004, ‘Social Conventions in Collaborative Virtual Environments’, Stanford University, <http://www.stanford.edu/dept/HPS/154/Workshop/Becker%20Social%20Conventions%20in%20Collaborative%20Virtual%20Environments.pdf> [Accessed 13 December 2009].

²² Yee, op cit note 14 above.

²³ Pompilio, N. 2008, ‘Death in Second Life’, *Obit Magazine*, <http://obit-mag.com/articles/death-in-second-life> [Accessed 13 December 2009].

²⁴ World of Warcraft Forum, Guild Loot Distribution System, <http://forums.worldofwarcraft.com/thread.html?topicId=14733001&sid=1> [Accessed 18 December 2009].

²⁵ Entropia Forum, Article about Virtual Wills in Entropia, <http://www.entropiaforum.com/forums/general-discussion/125367-article-about-virtual-wills-entropia.html> [Accessed 18 December 2009].

tion of the policing authorities.²⁶ For example, LambdaMOO implemented a petition mechanism in 1993, allowing the community to propose and vote on new policies and other administrative actions. A petition may be created by anyone eligible to participate in politics.²⁷

Whereas Terms of Service²⁸ govern only relationships between operators and users, social conventions refer to a wider range of relationships. They are the informal framework that backs up the virtual economies.

5. FORMALISING SOCIAL CONTRACTS

In his book *The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else*,²⁹ the Peruvian economist Hernando De Soto explains that lack of assets in poor, post communist countries does not prevent capitalism from flourishing. He sees the real problem in the lack of a formalised property system. In order to make capitalism flourish, it is necessary to establish and normalize the invisible network of laws that turns dead assets into liquid capital. He believes such a change can be achieved focusing upon building a legally integrated property system that can convert people's work and savings into capital. He says that property rights precede money. In order to earn on borrowed money, a person can loan or secure against it some kind of property document that establishes his legal title. To summarise, money cannot be earned without established and formalised property rights.³⁰

During his extensive research in various countries he found out that people still engage in accumulating wealth, trading and building new houses. There is a whole separate world of underground trade, services and building industry existing outside the formal legal system. He acknowledges these activities as a complex network of social contracts. Their existence is easily explained – they accommodate the needs of people, because the rigid formal system does not have appropriate and functional tools to address them. De Soto suggests that governments must find the real social contracts on property that can be subsequently integrated into the official

²⁶ Bradley, C. M., Froomkin, A. M. 2004, 'Virtual Worlds, Real Rules', *New York Law School Law Review*, vol. 49, no. 2008-22, <http://ssrn.com/abstract=1127722> [Accessed 14 December 2009].

²⁷ Wikipedia, LambdaMOO, <http://en.wikipedia.org/wiki/LambdaMOO> [Accessed 30 December 2009].

²⁸ They are contracts stipulating terms and conditions of using the virtual environment. They are known as End User License Agreements (EULA) or Terms of Service (TOS).

²⁹ De Soto, H. 2000, 'Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else', Basic Books, New York.

³⁰ De Soto, op cit note 29 above, p 64.

law. No reform can be entirely successful and efficient without encompassing the network of social contracts.³¹

His theory is based on the evolution of property rights in North America and over several generations. Harold Berman commented on the development of property rights in the following way. "The systematization of law within various communities ... was possible only because there had previously developed an informal structure of legal relations in those communities... The Western legal tradition grew - in the past - out of the structure of social and economic interrelationships within and among groups on the ground. All property rights spring from social recognition of a claim's legitimacy. Behavioural patterns of interrelationship acquired normative dimensions: usages were transformed into custom and custom into law."³²

If De Soto and Berman are correct, then an analysis of the social conventions and contracts in virtual environments may tell us how to adapt real world property law, in order to apply it on virtual property.

6. BRAGG V LINDEN CASE

This case illustrates how informal conventions and contracts may be turned into formal law. The dispute centred on two things – were the Terms of Service enforceable and if virtual goods acquired in virtual environments can be interpreted as virtual property. The law-suit resulted from confiscation of virtual property owned by Marc Bragg in Second Life. In October 2006, Marc Bragg filed a lawsuit to recover the value of land, account funds, small business products and personal objects that were allegedly wrongfully confiscated by Linden Lab, the defendant. It was undisputed that Bragg owned the property when it was taken.³³ Bragg appeared to have a strong case especially because Linden Lab and the company's representatives encouraged users to believe that a purchase of virtual land and other items resulted in acquiring ownership.

Bragg participated in Second Life from 2005 until his account was terminated in May 2006 due to alleged fraud. The alleged fraud took place on the 30th April 2006, when Bragg purchased a region of virtual land through an unpublished (and unauthorized) auction. This type of auction was considered a platform exploit, of which Bragg was aware. The standard procedure was to participate in a public auction authorised by Linden Lab with a minimum bid of \$1,000.00 for a land region. Bragg, with the help of other

³¹ De Soto, op cit note 29 above, p 152.

³² Berman, H. J. 1983, 'Law and Revolution: The Formation of the Western Legal Tradition', Cambridge, MA: Harvard University Press, pp. 555-556.

³³ Glushko, op cit note 10 above.

players, took place in an unauthorized auction of an unreleased land region. The starting bid was \$0 and Bragg won the auction with a bid of \$300.01. Participation in the unauthorized auction constituted violation of the rules of the game. This resulted in suspension of Bragg's account, which was subsequently terminated. Pursuant to its Terms of Service, Linden Lab did not refund any of Bragg's money.³⁴

Firstly, the court invalidated the arbitration clause in Linden Lab's Terms of Service as unconscionable. As a result, Bragg was permitted to sue Linden Lab in federal court, which eventually led Linden Lab to settle the case. This suggests they strongly believed the court would not enforce the other contractual terms. Secondly, the judges appeared to be inclined to treat the case as a virtual property dispute - not as a contract dispute. This is apparent from their statement that reads: "[t]his case is about virtual property maintained on a virtual world on the Internet."³⁵

Based on the material evidence, Linden Lab's position was weakened by the controversy between their public statements and formal contractual terms. "We believe our new policy recognizes the fact that persistent world users are making significant contributions to building these worlds and should be able to both own the content they create and share in the value that is created. The preservation of users' property rights is a necessary step toward the emergence of genuinely real online worlds."³⁶ "Land ownership feels important and tangible. It's a real piece of the future."³⁷

The license agreement grants the right to confiscate and sell property owned by a player, and this, in light of its public statements, would likely run contrary to player expectations.³⁸ Users were encouraged to accumulate property, which ultimately resulted in rise of new markets and transaction spaces. As a consequence, Linden Lab has changed its position regarding property and now offers the following description: "When you have land in Second Life, you're actually renting storage/server space at Linden Lab. Each piece of land takes up a certain amount of dedicated storage space -

³⁴ Dougherty, C. 2007, 'Virtual Worlds: Bragg v Linden: virtual property rights litigation', *E-Commerce Law & Policy*, vol. 9, no. 7, http://www.e-comlaw.com/lp/details_results.asp?ID=1236&Search=Yes [Accessed 26 November 2009].

³⁵ MARC BRAGG, Plaintiff, v. LINDEN RESEARCH, INC. and PHILIP ROSEDALE, Defendants. CIVIL ACTION NO. 06-4925. 2007 U.S. Dist. LEXIS 39516.

³⁶ Linden Lab 2003, Linden Lab Preserves Real World Intellectual Property Rights of Users of its Second Life Online Services, http://lindenlab.com/pressroom/releases/03_11_14 [Accessed 18 November 2009].

³⁷ Learmonth, M. 2004, 'Virtual Real Estate Boom Draws Real Dollars', *USA Today*, http://www.usatoday.com/tech/webguide/internetlife/2004-06-03-virtual-realty_x.htm [Accessed 12 December 2009].

³⁸ Glushko, op cit note 10 above.

the more land, the more space. So, it's like renting a hard drive."³⁹ Their position has shifted considerably. Linden Lab has realised the legal implications of their statements and the possibility that courts would acknowledge users' rights in virtual property. This would inevitably lead to their losing their exclusive control over the environment and the rise of new liabilities.

7. TERMS OF SERVICE AND PLAYERS' EXPECTATIONS

The formal governance of virtual environments is based on Terms of Service. The license agreement sets down the basic principles that regulate interactions between operators and users and amongst users themselves. It is common to find clauses regarding ownership of intellectual property, clauses granting immunity to operators against suit and limiting their liability towards users. Frequently, they define prohibited behaviour, such as theft, harassment, or sexist and homophobic speech. The clauses can be more specific and ban "pyramid schemes and chain letters," and "violating any local, state, national, or international laws or regulations."⁴⁰ To summarise, Terms of Service are a tool that allows: "...[operators to] retain an extensive right to control the importation of physical world material into the virtual world and have wide latitude to take action against players in the virtual world, such as suspending service, confiscating property, or terminating accounts"⁴¹.

The utmost interest of operators is to regulate interactions between players to a certain extent. An operator is a necessary authority that can enforce rights between users and intervene in case of an "unlawful" behaviour in the virtual environment. In 2006, an avatar called Cally in the virtual world called EVE Online created the Eve Investment Bank. It was a corporation that took deposits of players' virtual money for safekeeping as this virtual world is designed to be a place most hostile and dangerous. The venture was successful and during nine months took in virtual currency equalling nearly \$125,000. Unfortunately, it was a fraud and Cally disappeared with all the money. Despite the quantity of complaints and general dissatisfaction, the operator refused to delete Cally's account and return the customers' savings.⁴² The EVE Investment Bank scandal shows that users rely on operators as governing authorities and the lack of action on their side to

³⁹ Second Life, Buy Land: Frequently Asked Questions, <http://secondlife.com/land/faq/?lang=en-US> [Accessed 15 November 2009].

⁴⁰ EVE Online, Terms of Service, <http://www.eveonline.com/pnp/terms.asp> [Accessed 29 December 2009].

⁴¹ Glushko, op cit note 10 above.

⁴² Pollack, P. 2006, 'Online 'banker' runs off with cash, avatars cry foul', ARSTECHNICA, <http://arstechnica.com/news.ars/post/20060828-7605.html> [Accessed 11 November 2009].

protect users' virtual property and investments appears to be contradictory to the purpose of Terms of Service.

Operators do not regard it to be in their interest if users acquire property rights enforceable against the operator. The *Bragg v Linden* case leads to this conclusion. Linden Lab publicly promoted ownership and property rights to virtual goods and land, but the Terms of Service granted no such rights. In general, operators' motivation is to attract more users, more subscriptions, higher revenues. In order to make their virtual environment more appealing they can introduce in-world property system, internal trading services or virtual wills. To the contrary, Terms of Service guarantee contractually their position with absolute and ultimate control over the virtual environment and limited liability towards users. The license agreement also serves as a tool to control users' expectations as the cases of Linden Lab, Sony or MindArk illustrate.

The effectiveness of this approach is in question. Users usually do not read through the license agreements in detail. Operators often do not comply with their own terms or public statements. In addition, license agreements are drafted in a rather poor and one-sided way. Operators have a sole discretion to enforce the rights and obligations and they do so with variable outcomes. Due to this inconsistency it is possible that users might still acquire legitimate expectations about property rights enforceable against operators. "Much like in the physical world, acquiring and trading property leads to a need for legal regulation", says Glushko.⁴³

8. CONCLUSION

Virtual environments have proved to be a new sphere of economic activity. They were transformed from mere games and socialising platforms into transaction spaces. Entirely new online business models have been identified. Through the design and marketing strategies users are encouraged to trade and acquire virtual goods. Institution such as brokers, banks and currency trading houses have been established in virtual environments. Together with trading they are the essential parts of virtual economy.

Currently, trading virtual goods and the concept of virtual property is governed by implicit social conventions in virtual environments. With the growing importance of virtual economies, it is crucial that players' legitimate expectations about the alienability, value and inviolability of virtual goods are translated into reality and backed up by formal legal system. Legislation has not kept pace with the development of virtual environments

⁴³ Glushko, *op cit* note 10 above.

and therefore until now the acquisition of virtual goods remains in a legal vacuum. An analysis of these invisible conventions and contracts is essential in order to formalise and integrate them into a formal legal system.

The *Bragg v Linden* case shows a complex triangular relationship between the virtual economy, the Terms of Service governing the virtual environment and users' expectations. Despite limiting their liability and reluctance to enforce users' property, there is a possibility that the law will recognise the informal social contracts and users' expectations by granting them property rights enforceable against operators.