

THEFT IN THE DIGITAL: CAN YOU STEAL VIRTUAL PROPERTY?

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I. INTRODUCTION

This article explores issues arising around the theft of virtual property. It first explains a number of perhaps counter intuitive concepts vital to the understanding of the importance of extending 'real world' criminal law and criminal liability to conduct inside virtual worlds such as World of Warcraft or Second Life. This article focuses on theft of virtual property and explores how other jurisdictions are developing responses to this issue. It then develops an analysis of the operation of 'real world' New Zealand criminal law rules around theft, in the context of the evolution of virtual property.

II. UNDERSTANDING VIRTUAL WORLDS

At first glance the virtual world universe, with its multitude of virtual realms, may seem like nothing but a place for virtual play, a place to which our teenage sons and daughters disappear when they should be cleaning their room. Online multiplayer computer simulated environments have come along way since Habitat was launched in 1988, on the Commodore 64 platform running through the online service QuantumLink.¹ Today these worlds are interactive 3D or 2D virtual environments, which provide social spaces accessed via the Internet and accommodate millions of human users. Users interact in this world through avatars, which are computer generated representations, and acquire virtual property of one sort or another through their avatars. The number, complexity and diversity of these worlds continue to develop at a steadily increasing pace. There are still many uncertainties in the development of virtual worlds, however what is certain is that they will continue to grow and absorb aspects of our social interaction on the web. The virtual universe is moving away from its strictly console-based videogame ancestors to a less structured realm. It is no longer made up merely of individual gamers, whose virtual world conduct has no impact on the non-gaming public. Many experts in the field believe that current virtual world technology will soon merge with the search functions and other capabilities of the Internet to create a three-dimensional World Wide Web.² We are

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1 This is arguably the first online metaworld with the familiar elements we see today, including avatars that can talk and gesture, its own geography, and token-based internal economy. QuantumLink was to become America Online. See Robert Rossney "Metaworlds: Avatars could be the next interactive revolution. Just don't let them steal your head" (June 1996) 4(6) WIRED <www.wired.com/wired/archive/4.06/avatar_pr.html>.

2 Giles Hogben (ed) *Virtual Worlds: Real Money* (European Network and Information Security Agency, Heraklion , 2008) at 11.

already seeing virtual worlds absorbing social networking functions, email, VoIP telephony, web browsing, virtual commerce and, slowly, e-commerce. There is a move to integrate our virtual and real lives with the development of worlds like ‘FarmVille’ which sits within the Facebook interface, and blends both virtual and real lives on one page. Your virtual life can text or email you to keep you up to date while disconnected, or you can use an iPhone app to carry on virtual activity while logged off.³ This integration of real and virtual lives will be hastened by the move to digitise much of our life and property, and to upload these through cloud technologies.⁴

Virtual worlds use a simulated physical context as a means of presenting large amounts of information very quickly. This technology has the potential to augment our lives in the real world.⁵ In addition to entertainment, this power to present information within a three dimensional context is being used in medical, political, educational and commercial settings.⁶ Virtual property is already being categorized under a number of legal categories: as objects of taxation;⁷ as relationship property subject to division on dissolution;⁸ as estate property on death,⁹ as being the subject of intellectual property and contract, and as a facet of matters of civil settlement. Fairfield argues the on-going benefits to our real lives will not be fully realised, however, without full protection of rights in virtual property, which includes the possible prosecution for theft of virtual property.¹⁰

For many it may be hard to conceptualise the loss of a World of Warcraft DragonBone ring that had no physical existence outside the virtual world as actionable theft. However it is not hard to imagine in the near future a virtual world that would store your digital assets, such as your photos, emails (including attachments), documents, books, music, movies, phone messages, banking details, financial materials, social networking interactions and online accounts. These assets may have no external physical existence. If you imagine someone breaking into this environment and taking and removing your photos of the birth of your child from your account, it may be easier for people to view this as theft. How the courts deal with the intentional removal of the DragonBone ring, therefore, may have much wider implications for the protection of our present and future digital assets. As claims of theft of virtual property come before the courts in an increasing number of jurisdictions, it is only a matter of time before the New Zealand courts will be presented with a virtual theft case. It is therefore important to consider if

3 Joshua Fairfield “Avatar Experimentation: Human Subjects Research in Virtual Worlds” (2011) U C Irvine Law Review, Symposium Issue, 2011; Washington & Lee Legal Studies Paper No. 2010-14 Available at SSRN: <<http://ssrn.com/abstract=1717057>>, at 6-7.

4 Janna Quintney and Lee Rainie *The Future of Cloud Computing* (Pew Research Center, Washington 2010).

5 Joshua Fairfield “Virtual Property” (2005) 85 B U L Rev 1047, at 1062-1063.

6 *Ibid*, at 1059.

7 Scott Wisniewski “Taxation and Virtual Assets” (2008) Duke L & Tech Rev 5.

8 Sally Richardson “Classifying Virtual Property in Community Property Regimes: Are My Facebook Friends Considered Earnings, Profits, Increases in Value, or Goodwill?” (2011) 85 Tulane Law Review 717.

9 Michael Walker and Victoria Blachly “Virtual Assets” (2011) 36 Tax Management Estates, Gifts and Trust Journal 253.

10 Fairfield above n 5, at 1063.

the current New Zealand criminal law of theft can protect virtual property assets, that is, those that have no physical existence outside the virtual world in which they reside. This discussion will take into consideration the case of *Police v Davies*, which held that theft of intangible property in the form of Internet access was possible.¹¹

III. VIRTUAL WORLDS REVIEWED

Virtual worlds are computer-simulated environments and, in one form or another, have been around since the 1970s. They began life in the realm of text based games.¹² As personal computers, software and network technology developed these environments became more sophisticated and complex. Many of these worlds drew on role-playing board games based in fantasy worlds. More recent virtual worlds are constructs accessible through the Internet by a massive number of players and designed to mimic or fantasise the real world.¹³ Users interact in these environments through the use of an avatar. Avatars are customisable software representations of the user. Although there is no requirement that an avatar has any resemblance to the person, users tend to create a digital identity that looks close to Western ideals: leaner, younger, more fashionable versions of themselves.¹⁴ These representations can be changed with a few commands and users can easily change their physical appearance gender or even species.¹⁵ However there is recent research showing a strong correlation between the avatar and the user. Most users will develop avatars that reflect their own gender and ethnic profile.¹⁶

Avatars provide the vantage point from which the user interacts with the virtual world and other users. Access and control of a user's avatar is protected in a similar way to other secure online accounts.¹⁷ Avatars generally change and develop with use, and much of this development or change is through the use of virtual artefacts that are earned, brought, traded or made within the that virtual world's environment. These artefacts can be anything from a change in hairstyle or shoes to a whole planet with various terrains and its own ecosystem.

11 *New Zealand Police v Daniel Davies* [2007] DCR 147 and *Davies v Police* (2007) 23 CRNZ 818.

12 Richard Bartle *Designing Virtual Worlds* (New Riders, Indianapolis, 2004) at 3-5.

13 Jeff LeBlanc "The Pursuit of Virtual Life , Liberty, and Happiness and its Economic and Legal Recognition in the Real world." (2008) 9 Fla Coastal L Rev 255 at 262.

14 Nicolas Ducheneaut, Ming-Hui "Don" Wen , Nicholas Yee and Greg Wadley "Body and Mind: A Study of Avatar Personalization" In Proceedings of CHI 2009: New Media Experiences 1152 at 1151-1160.

15 Although this freedom to create avatars in whatever form one choses may not extent to characters covered by existing copyright, see Andrea Louie "Designing Avatars in Virtual Worlds: How Free are we to Play Superman?" (2007) 11(5) J Internet L 3 at 3-11.

16 Ian Warren and Darren Plamer " Crime Risks of Three-dimensional Virtual Environments" (Australian Institute of Criminology 2010) at 2.

17 Greg Lastowka "User Generated Content and Virtual Worlds" (2008) 10 VNJETL 893 at 904.

There are many different types of virtual worlds, however, according to the *Virtual Worlds Review*, there are six features all of them have in common:

1. Shared Space: the world allows many users to participate at once and to interact with each other.
2. Graphical User Interface: the world depicts space visually, ranging in style from 2D “cartoon” imagery to more immersive 3D environments.
3. Immediacy: the interaction between avatars takes place in real time.
4. Interactivity: the world allows users to alter, develop, build, or submit customized content.
5. Persistence: the world’s existence continues regardless of whether individual users are logged in.
6. Socialization/Community: the world allows and encourages the formation of in-world social groups like teams, guilds, clubs, cliques, housemates, neighbourhoods, or friends.¹⁸

There are hundreds of virtual worlds and the number of virtual world is rapidly growing with over a hundred more in development.¹⁹ Virtual worlds have been created for a number of different purposes. Many worlds are structured game environments based on fantasy themes like World of Warcraft²⁰ and Everquest,²¹ or unstructured social worlds like There,²² Second Life²³ and Blue Mars,²⁴ others worlds fall somewhere in between like Eve Online.²⁵ Users can number in the tens of millions for any particular world and it was reported that in October 2010 that there were over one billion user accounts in Virtual Worlds.²⁶

Virtual worlds are appealing because these are primarily social spaces, and, like offline social spaces, the accumulation of property (in this case virtual) increases status, position, power and opportunity. The nature of virtual worlds as interactive spaces with persistence of both avatar and virtual property creates complex economies where artefacts are acquired, exchanged and consumed.²⁷

18 “What is a Virtual World” *Virtual World Review* <<http://www.virtualworldsreview.com/info/whatis.shtml>>

19 mmorpg.com list 476 games either release or in production in categories such as: fantasy; historical; horror; real-life; Sci-Fi; sports and superhero. <<http://www.mmorpg.com/gamelist.cfm/show/all/sCol/geneUC/sOrder/asc>>. However this number depends on you definition of Virtual worlds as KZero only recognize 175 active virtual worlds, see <www.kzero.co.uk/>.

20 <<http://us.battle.net/wow/en/?>>.

21 <www.everquest.com/>.

22 <www.there.com/>.

23 < <http://secondlife.com/>>.

24 < www.bluemars.com/>.

25 <www.eveonline.com/>.

26 Gus Mastrapa “Study Says Virtual World Accounts Number 1 Billion” (1 October 2010) Wired <www.wired.com/gamelifelife/2010/10/virtual-world-accounts/>.

27 Lastowka, above n 17, at 906. Persistence relies on paying the required subscription.

Many of the transactions of virtual goods in virtual worlds relate to accessories for avatars, such as clothing, hair and other personal augmentations, but also include other types of property such as cars, houses/apartments, virtual land or a particular sword or weapon. In some virtual worlds inhabitants can restrict access to their property and therefore charge access fees to a club, hotel, art gallery, holiday spot or even a classroom.²⁸ Other enterprising avatars may offer services, which may range from advice or telling your fortune to all imaginable adult services.²⁹ Second Life for example has two versions, a teen version and a R18 version where virtual sex is big business. Offerings ranging from pornography to virtual sex toys, paraphernalia and costumes, and include sex clubs and brothels.³⁰ Yes, R18 avatars can have sex (if you buy the right modifications and use a lot of imagination). Depending on the world your avatar inhabits, you can buy just about anything in virtual worlds that you can buy in the real world, and even a few things that do not have a real world equivalent. However it needs to be kept in mind that all of these goods only exist through software in the virtual world and have no external physical existence.

IV. VALUE OF THE VIRTUAL: THE VIRTUAL WORLD ECONOMY IS BOOMING!

In most virtual worlds there is some form of commerce beyond the monthly subscription fees members pay. Virtual commerce can be in the form of barter of items that are found or won in-world or through the purchase of in-world currencies (or experience). Most of in-world trade is from virtual goods or services created or modified by the avatar inhabitants of that world. In 2007 the global sale of virtual goods was estimated at nearly \$2 billion (US)³¹ and by June 2010 this had increased to \$5 billion (US).³² A recent World Bank report estimates that the gross revenue of third-party gaming services, external to the in-world economy, is approximately \$3 billion (US). Most of this external economy is captured by developing countries. It is estimated that 100,000 young workers in countries like China and Vietnam earn their income by harvesting virtual resources for sale and providing “player for hire services (known as “powerleveling”) to inhabitants of virtual worlds.”³³

28 See for example Janette Grenfell and Ian Warren “Virtual Worlds to Enhance Student Engagement” (2006) 6:1 *The International Journal of Technology, Knowledge and Society* 22 at 25-44. Both the School of Education and the discipline of Criminology at Deakin University have been using the 3-dimensional virtual environment Second Life to deliver curriculum content and to engage students with each other and with teaching staff.

29 T Taylor, “Living Digitally: Embodiment in Virtual Worlds” in Ralph Schroeder (ed) *Social Life of Avatars* (Springer, London 2002) 40 at 49-51.

30 Mitch Wagner “Sex in Second Life” *Information Week* (26 May 2007) <<http://www.informationweek.com/news/199701944>>

31 Hogben, above n 2, at 9.

32 Nic Mitham. “Virtual Goods: Good for Business” (2010) 2(4) *Journal of Virtual World Research* at 4-7 and update on blog (2010). “Virtual Goods: Good for Business?” <<http://www.kzero.co.uk/blog/?p=3624#more-3624>>.

33 Vili Lehdonvirta and Mirko Ernkvist *Knowledge Map of the Virtual Economy* (The World Bank, Washington, April 2011) at 9-21. Users of Virtual worlds instead of using time and skill to acquire virtual goods or currency they are can buy these for real money form the

It may seem counterintuitive, but much of virtual property does have a real world monetary value. A number of worlds have their own in-world exchanges such as Second Life's LindenX³⁴ or Entopia's PED card,³⁵ which make exchanges between in-world virtual currency and real-world currency which then can be deposited into a normal bank account. There are also a number of multi-virtual currency exchanges, which not only allow exchanges between virtual and real currencies but also across a number of different virtual currencies.³⁶ There has even been an attempt to standardise the currency across a number of worlds with the development of the Open Metaverse Cent (OM¢), increasing the potential commerce across participating worlds.³⁷ Some virtual worlds have tried to ban real money trades (RMT) of virtual property and in-world currency. However, even Blizzard, who have been one of the most vigorous in actively pursuing such a ban in relation to their World of Warcraft virtual world,³⁸ have recently introduced a tradable pet.³⁹ There are also number of unofficial sites which facilitate the buying, selling and auctioning of in-world currencies, virtual goods, virtual accounts and even skills, experience and powerleveling services.⁴⁰

The extent of these in-world economies means that users are able to supplement their real world incomes with earnings from their virtual businesses. In 2006 Anshe Chung (aka Ailin Graef in real life) graced the cover of *BusinessWeek* as Second Life's first real world millionaire (that is real US \$), which she earned from profits made entirely from the sale of virtual goods.⁴¹ Graef has now expanded her business across a number of virtual worlds and currently employs over a 100 staff.⁴² In 2009 there were over 15,000 business owners operating within one virtual world Second Life

third party-services. Powerleveling is where a professional player takes control of a users character for a set time (hours, days or even weeks) and builds up that character in terms of skills or assets for a fee.

34 <<http://secondlife.wikia.com/wiki/LindeX>>

35 < <http://account.entropiauniverse.com/account/deposits/>>.

36 See for example First Meta Exchange <<http://firstmetaexchange.com/exchange/quotes>>, and Virtual World exchange <<https://www.virwox.com/terminals.php>>. This increases the possibility of the virtual worlds being used for money laundering as in-world and intra-world transactions do not require the same regulations as real world large money transactions.

37 <<https://www.virwox.com/omc-open-metaverse-currency.php>>.

38 "So now that it's out in the open.. Blizzard Going After Paypal" (21 January 2011) <www.rmtguru.com/tag/wow/>

39 http://us.battle.net/wow/en/blog/3665632/Sneak_Peek_Guardian_Cub_Tradable_Pet-10_10_2011

40 See Danny Vincent " China used Prisoners in Lucrative Internet Gaming Work" *Guardian* (UK 25 May 2011) for an example of gold farming to generate currency in worlds that do not have exchanges and see Player Auctions <www.playerauctions.com/> , as an example of an unofficial trading site.

41 Robert Hof " My Virtual Life" *BusinessWeek* (May 2006).

42 Matt Robinson " Second Life: Reality intrudes on Virtual Reality" *BusinessWeek* (June 2010).

with a combined daily turnover of \$1.3 million (US).⁴³ In 2006 the top 10 individual entrepreneurs within Second Life were earning an average of approximately \$200,000 (US) per year.⁴⁴

While many of the virtual property transactions are of relatively low value, say, under a few hundred dollars, this is not true of all. Some notable transactions were: in December 2004 David Storey of Sydney purchased a virtual island complete with beaches and an abandoned castle for \$45,000 (NZ);⁴⁵ in 2005 an anonymous Australian user purchased virtual real estate for \$28,600 (NZ) in the virtual world Project Entropia;⁴⁶ and in 2010 a man brought a space station in the Entropia Universe for \$445,000 (NZ).⁴⁷ These purchases were not acts of whimsy but rather business decisions made with the expectation of turning a profit. Further, Cisco and IBM have both set up set up private islands in Second Life and are using these for conferences and international meetings.⁴⁸

Not only are businesses setting up in virtual worlds but so are embassies, not-for-profit organisations, religious groups, real estate agents, and governmental agencies. Education providers and especially the tertiary sector have seen the potential of virtual reality with many universities offering courses in virtual classrooms.⁴⁹ There is much more than just games going on in these rich and diverse virtual environments. Virtual worlds have a billion people engaging in social interaction, love, sex, entertainment and mix in 5 billion dollars worth of commerce. Inevitably, criminal activity will follow. As pointed out in the European Network and Information Security Agency report, criminals are quick to follow the money and they are increasingly targeting cross-over points between virtual and real world economies.⁵⁰

V. WHAT IS VIRTUAL PROPERTY?

Many things could be described as digital assets, things such as manuscripts created in word processing programmes or artworks created using graphic design software. These are in digital form and this may be the only form in which they exist. Existing law can protect these sorts of digitized items.⁵¹ The type of virtual goods which are the focus of this article

43 Glenn Chapman "Second Life Finding New Life" (Physorg.com, 14 March 2009) <www.physorg.com/news156269282.html>.

44 Maxim Kelly "Get a Second Life" (ENN, Dublin, 2006) <<http://213.168.232.3/story/show/9853686>>

45 Hannah Lim "Virtual World, Virtual Land but Real Property" 2010 Sing JLS 304 at 305-106.

46 Allen Chein "A Practical Look at Virtual Property" 2006 80 St John's L Rev 1059 at 1067.

47 Victor Kegan "Virtual Worlds: Is this where real Life is heading?" *The Observer* (United Kingdom, 22 August 2010).

48 See Social Media: Virtual Reality in B2B" (B2B Marketing, 5 April 2010) <www.b2bmarketing.net/knowledgebank/social-media-marketing/features/social-media-virtual-reality-b2b> and Shruti Gandhi "IBM dives into Second Life" (IBM, 19 January 2010) <www.ibm.com/developerworks/opensource/library/os-social-secondlife/?ca=drs->>.

49 Charles Wankel and Jan Kingsley *Higher Education in Virtual Worlds* (Emerald Group Publishing, Bingley, 2009).

50 Hogben, above n 2, at 10.

51 Michael Meehan "Virtual Property: Protecting bits in Context" (2006) 13 Rich JL& Tech 1 at [7].

are those which are created within a virtual world and which do not have an external existence outside of that environment.⁵² This means that these digital items are not stored on your computer but rather exist on the servers that maintain the virtual environment. A person's virtual world content can be distributed across a number of servers, and these servers may be located in a different jurisdiction or even in multiple jurisdictions.⁵³

The virtual assets that I argue should be given the protection of the criminal law more closely resemble chattels than intellectual property, in that they fit the five main characteristics of chattels. This is especially true in virtual worlds, which create a persistent environment with persistent virtual goods.⁵⁴ The five characteristics of chattels are:

1. Possession or the right to possess, within an environment. If a user has possession of a virtual item then other people (or their avatars) can not possess the same goods at the same time. These goods need to be non-replicable without cost within the rules of the End User Licence and existing law.⁵⁵
2. A user has use or enjoyment of the goods. In this respect a user has right to manage how and by whom the property will be used, this includes a right to consume, waste or destroy an item.
3. A user can freely transfer the virtual goods to other users or through an exchange. The users should enjoy the income and profit from the use, exploitation or transfer of that property without limitation. These virtual goods must be tradable to have some external value in order to trigger the sentencing requirements of the theft provisions in the Crimes Act.⁵⁶
4. A user can exclude others from their property and have immunity from involuntary transfer and expropriation.
5. There is no durational limit to possession, as long as the necessary fees are paid.⁵⁷

52 Ibid, at [8].

53 See generally John Barrus, Richard Waters, and David Anderson, (1996) "Locales: Supporting Large Multiuser Virtual Environments," 16(6) *IEEE Computer Graphics and Applications* 50.

54 By persistent goods I am referring to the goods that exist and continue to exist whether or not owner is online and therefore a user's goods will be accessible when the user logs on again (as long as no-one has stolen them).

55 Meehan, above n 51, at [8-11]. There are ways to replicate virtual goods, this will almost without exception breach the End User Licence of the virtual world. Many forms of replication will be illegal under computer misuse offences, as they will require interfering with a computer system (s250 Crime s Act 1961) and possessing software for committing a crime (s251 Crimes Act 1961). Replication could also be a cause of action under civil law see *Eros v John Doe aka Volkov Catteneo aka Aaron Long Case 8:07-cv 01158-SCB-TGW* (District Court, Middle District of Florida, Tampa Division).

56 Crimes Act 1961 s223. While the theft provisions in the Crimes Act are silent as to the requirement of value, the High Court has confirmed the common law position that the thing should have some economic value. The prosecution must show that the property had some value they need not prove the precise value as long as they prove the value exceeds the relevant threshold in s 223. See *Davies v Police* (2007) 23 CRNZ 818 at [29-30].

57 For further discussion see Andrea Arias "Life Liberty and the Pursuit of Swords and Amor: Regulating the Theft of Virtual Goods" (2008) 57 *Emory LJ* 1301at 1309-1318.

This would exclude simple single player and multi-player games where virtual goods cannot be traded. It would also exclude virtual goods that can be replaced at no or limited cost. It is in the area of chattel-like virtual property that there may be gaps in our thinking and in our law.

VI. THEFT

The protection of private property by legal construction is fundamental for all modern societies.⁵⁸ This protection of property interests (private, corporate and those of the state) is achieved through a complex blend of civil and criminal law. There have already been a number of virtual property cases brought in different areas of civil law, that is, copyright and trademark infringement,⁵⁹ breach of contract/end user license⁶⁰ and breach of consumer protection legislation.⁶¹ However the criminal law is an attractive means to protect virtual property despite the possibility of a civil remedy.

One of the major criminal protections of property interests is the offence of theft (and its derivative offences). Theft and stealing offences have a long history in responding to new forms of property that mirror changes in social relations and technological developments. In 1999 the New Zealand Law Commission suggested that in a knowledge economy [digital] information, “may justify redefinition ... as a property right for both civil criminal law purposes.”⁶² Tigar argues that there has been a general shift in the focus of theft law from the protection of possession towards the protection of the right of property.⁶³ The property right is not really a single right but a bundle of rights drawn from private law and economic practicalities.⁶⁴ This bundle of rights can accommodate differing conceptions of ownership and interests in both tangible and intangible property. Virtual property may well be a challenge to traditional notions of possession, but reflects social and economic changes in conceptions of property that will extend their impact well beyond the limits of the current virtual worlds.

Many of the Law Commissions arguments in their 1999 report *Computer Misuse* are still applicable to support the criminalisation of virtual theft:

- There is an essential public interest in the use of computers and computer technology, “it is necessary to facilitate the use of computer technology (including barriers from its use) and to provide strong sanctions against reprehensible conduct which if left unchecked, is likely to inhibit the use of computers.”⁶⁵

58 Armen Alchian and Harald Demsetz “Property Rights Paradigm” (1973) 33(1) *The Journal of Economic History* 16 at 16-17.

59 See Christopher Varas “Virtual Protection: applying Trademark law within Virtual Worlds such as Second Life” (2008) 19(1) *Ent L R* 5-11 and *Eros* above n 55.

60 See Blake Sorenson “Crafting the Laws of a Virtual World” (2010) 7(1) *ABA SciTech Law* 10-12.

61 *Bragg v Linden Research, Inc* 487 F Supp 2d 593 (E.D.Pa 2007).

62 Law Commission *Computer Misuse* (NZLC E31AO 1999) at 13-14.

63 See generally Michael Tigar “The Right of Property and the Law of Theft” (1984) 62 *Texas Law Review* 1443 at 1475.

64 Armen Alchian and Harold Demsetz “The Property Right Paradigm” (1973) 33(1) *The Journal of Economic History* 16 at 18.

65 Law Commission *Computer Misuse* (NZLC E31AO 1999) at 13 [34].

- It is necessary for New Zealand law to develop in line with international developments and imperatives, given the trans-border nature and jurisdictional nature of computer use.⁶⁶ As will be discussed later a number of jurisdictions have criminalised virtual theft via new legislation or adapting existing legislation and New Zealand should develop in line with it geographical and trading neighbours.
- The criminal law has a role to play in setting appropriate standards of computer use in general and that of the Internet in particular.⁶⁷ The criminal law has a strong normative nature, which is a major driver in the process in which social norms are accepted and integrated into the society.⁶⁸ This is especially important in areas such as virtual worlds and the Internet more generally where the lack of regulation, anonymity and the online disinhibition effect can result in online behaviours that a person would not undertake in the real world.⁶⁹ The criminal law achieves this through criminalisation, punishment and at least partial deterrence.⁷⁰

In addition to these arguments the criminal law also:

- Ensures that litigation is not dependent on the resources of the plaintiff or the value of the loss, in relation to the cost of the trial, taking into account evidential or public interest considerations.
- Avoids frivolous cases that are not in the public interest through the standard of proof required for a criminal prosecution and the prosecutorial discretion inherent in the criminal system.⁷¹

The 2003 changes to New Zealand's "Crimes against Rights of Property" in the Crimes Act 1961 were a direct response to uncertainties in the application of property offences, in light of rapidly developing computer and networked technologies.⁷² While this amendment did introduce a number of new computer related offences⁷³ it also updated the traditional property offences in reaction to these technological advances.⁷⁴ The most significant change to the offence of theft was the change to what could be stolen. Prior to 2003, in order for a thing to be capable of being stolen it was required to have a physical tangible nature in order for it to be moved

66 Ibid, at 14 [37].

67 Ibid, at [39].

68 Bostjan Zupancic "Criminal Law and its Influence upon Normative Integration" (1974) 7 *Acta Criminologica* 53 at 55-57.

69 John Suler "The Online Disinhibition Effect" (2004) *CyberPsychology and Behavior*, 7, 321-326

70 Andrew Simester and Warren Brookbanks *Principles of Criminal Law* (3rd ed, Thomsons Brookers, Wellington, 2007) at 3-8.

71 Crown Law *Prosecution Guidelines* (Crown Law, Wellington, 1 January 2010).

72 Crimes Amendment Act 2003 s15, which repealed and replaced the whole of Part X Crimes against Right of Property" of the Crimes Act 1961, see also Law and Order Committee "Crimes Amendment (No 6) Bill 1999 Select Committee Report" [1999-2002] IX AJHR at 974-975.

73 Crimes Act 1961 ss 248-254 to address 'hacker' offences.

74 (5 October 1999) 580 NZPD 19732.

or made moveable.⁷⁵ The inadequacy of this requirement was highlighted in the 1998 case of *Wilkinson*, where the transfer of the electronic money was excluded from the definition of “things capable of being stolen”. This resulted in a quashing of the relevant counts in the Court of Appeal and a plea for reform of the area:⁷⁶

Whether a sensible definition in modern times or not, it must be accepted that the section as drafted is directed at tangible property capable of being moved in the conventionally understood sense. While Judges cannot abdicate their responsibility to keep the law abreast of current developments, certain changes in the law are more appropriately made by Parliament. ... What is required is a more comprehensive amendment relating to the advances in electronic and information technology which have occurred and which may yet be contemplated. ... In all, it is clearly preferable that the necessary changes derive from Parliament.

This began the four year path of the Crimes Amendment Bill (No 6) which would eventually lead to the 2003 amendments. Those amendments opened the door in New Zealand to prosecution of theft of intangible property. Before further discussing our situation in New Zealand, it is worthwhile to survey the situation around virtual property theft in other jurisdictions.

VII. VIRTUAL THEFT – OTHER JURISDICTIONS

The European Network and Information Security Agency and the Australian Institute of Criminology have both produced recent issue papers which consider crime in virtual worlds. These reports recommend the clarification of legal provisions relating to virtual crimes.⁷⁷ Theft of virtual property of this type, which has external value, is persistent and non-replicable falls within the Australian Institute of Criminology’s “inter real-virtual world harm”. The report suggests that formal criminal intervention would only be warranted if there was an appreciable and measurable effect on the real world victim. The report also suggests that if the virtual property is of limited value or can be easily replaced it should be dealt with by some form of internal regulation in the environment and not the criminal law.⁷⁸ The European Network and Information Security Agency have called for legal clarification in terms of the prosecution of crimes committed in relation to virtual assets:⁷⁹

Legal clarification is an important component in addressing the increasing prevalence of cyber-attacks on virtual assets and the impact of a loss of such assets on end-users. Clarification is needed to provide a solid basis for the resolution of disputes and the prosecution of crimes committed in relation to virtual assets. ... The work should be

75 Crimes Act 1961 s 217. Things capable of being stolen (in force (1 January 1962 to 30 September 2003)

Every inanimate thing whatsoever, and every thing growing out of the earth, which is the property of any person, and either is or may be made moveable, is capable of being stolen as soon as it becomes moveable, although it is made moveable in order to steal it.

76 See generally *R v Wilkinson* (1998) 16 CRNZ 179, and especially at 191.

77 *Ibid*, at 51 and Warren and Palmer, above n 16, at 4-5.

78 Warren and Palmer, above n 16, at 4.

79 Hogben, above n 2, at 52.

carried out in a partnership between [virtual world] service providers and government policy makers or lawyers to produce guidelines on the interpretation of existing legislation and policy in the domain of [virtual worlds].

Where the criminal behaviour extends beyond the virtual and into the real world, it is already clear that the criminal law can apply. This is illustrated in the case of a 41 year old Chinese man, Qui Chengwei, who was a player in the virtual world of Legend of Mir II. He had earned a particularly rare weapon, a Dragon Sabre, in an online quest, he subsequently loaned this weapon to another man Zhu Caoyuan, who without permission sold the weapon for approximately the equivalent of \$1000 (NZ).⁸⁰ If the Dragon Sabre had been a physical item, Caoyuan would have been liable of by theft by conversion.⁸¹ However, when the injured individual initially sought the assistance of the police, he was told that the theft was not a crime, since virtual property is not covered as a protectable asset under the then current law.⁸² Thereafter, Chengwei attacked the alleged thief at his residence, stabbing the 26-year-old Caoyuan several times and killing him.⁸³ Even though Chengwei was sentenced to death for a very real murder, the case is important in the area of virtual theft for two reasons.⁸⁴ The first is that it illustrates one of the ways that theft can occur inside a virtual world. A user (or their avatar) can gain possession of another user's virtual goods, either with restricted permission or by subterfuge.⁸⁵ While in these cases the possession itself would not constitute theft, if the goods are used or dealt with in a way that contravenes the rights of the owner, the offence of theft could theoretically apply.⁸⁶ The other significant impact of this sensational case is that it focused both political and public attention on the matter of legal protection of virtual property.

Following the Chengwei case, and in the wake of an increasing number of cases of virtual theft, China's criminal law actively began to protect virtual property. This led to two seventeen-year-old boys being sentenced for virtual property theft in 2005, and to the Chengdu police being tasked with investigating the theft of virtual equipment worth approximately \$11,700 (NZ).⁸⁷ In light of this general increase in the occurrence of virtual property theft in China, the country's Public Security Ministry published an advisory letter regarding virtual property theft in order to assist police with punishing

80 Chein, above n 46, at 1059-1060.

81 In a New Zealand context this would be theft by using and dealing under the definition of theft and stealing in s219 of the Crimes Act 1961.

82 BBC News "Game Theft led to fatal Attack" (31 March 2005) <<http://news.bbc.co.uk/go/pr/ft/-/2/hi/technology/4397159.stm>>.

83 Cao Li "Death Sentence for Online Gamer" *China Daily* (China, 6 August 2005) at 3."

84 BBC News "Chinese Gamer Sentenced to Death" (8 June 2005) <<http://news.bbc.co.uk/2/hi/technology/4072704.stm>>. Note also that the sentence was commuted to life in prison.

85 Restricted permission could include the use of the goods for a limited time or purpose, to deal with the goods in a certain way and account for the proceeds, and to hold or transfer the goods.

86 This would be theft by conversion or theft by use and dealing under s 219(1) (b) Crime Act 1961.

87 Fairfield, above n 5, at 1085.

such crimes.⁸⁸ Although successful prosecutions have occurred, there is still considerable uncertainty and there are on-going calls for the enactment of a specific law to protect virtual property.⁸⁹

The Taiwanese government has dealt with the issue under the Taiwanese Criminal Code, in which virtual objects are considered property if they possess characteristics such as “rivalrousness”,⁹⁰ are alienable and are transferable. On November 23, 2001, the Taiwanese Ministry of Justice declared that “virtual objects are property, ... [and] that actions on such objects or accounts sound in property, ... [including] theft of such property[, are] fully punishable under criminal law.”⁹¹

The account and valuables of Online games are stored as electromagnetic records in the game server. The owner of the account is entitled to control the account and valuables’ electromagnetic record, to freely sell or transfer it. Although the above accounts and valuables are virtual, they are valuable property in the real world. The players can auction or transfer them online. The accounts and valuables are the same as the property in the real world. Therefore there is no reason not to take the [virtual property] to be the subject to be protected by the larceny or fraud in criminal law.⁹²

Following this declaration, Taiwan has developed an extensive jurisprudence, numbering in the hundreds of cases, involving the protection of personal virtual property through the use of such offenses as criminal theft, fraud, and robbery offences.⁹³ The maximum penalty in Taiwan for offences relating to virtual property is three years’ imprisonment.⁹⁴

South Korea is arguably the most Internet connected country in the world, and one with one of the highest levels of virtual world participation. According to the Korean Cyber Terror Response Centre, an estimated seventy per cent of teenage crime is in someway related to virtual property.⁹⁵ South Korea has vigorously utilised its existing criminal laws to regulate virtual property theft. In South Korea the number of virtual property offences has risen from 675 in 2000 to 10,187 in 2003.⁹⁶ This continues to rise with South Korean police receiving 22,000 cybercrime complaints related to virtual property theft in 2004.⁹⁷

Developments in the prosecution of virtual theft have not been restricted to Asia. There have been two cases in the Netherlands where the courts have held that taking virtual property was theft under existing Dutch law. In 2008 the Court of Leeuwarden convicted two teenagers of “theft” for forcing

88 Susan Abramovitch and David Cummings “Virtual Property, Real law: The Regulation of Property in Video Games” (2007) 6:2 CJLT 73 at 78.

89 Ibid.

90 Rivalrousness is when the consumption or use of a good diminishes the opportunity of other individuals. For example if one virtual world user has a piece of original art hanging in their virtual home, another user can not have or use that same pieces of art at the same time.

91 Fairfield above n 5, at 1086.

92 Taiwan Ministry of Justice Official Notation no 039030 (90) as cited in Joshua Fairfield “Virtual Property” (2005) 85 B U L Rev 1047 at 1086.

93 Fairfield above n 5, at 1087.

94 Abramovitch and Cummings, above n 88, at 78.

95 LeBlanc, above n 13, at 270.

96 Ibid.

97 Gilbert Leong “Virtual Conflicts, Real Problems” *IP Edge* (December 2006) <www.rodyk.com/page/Resources/article/59>.

a 13 year old boy to log into his Runescape account, in order to hand over a virtual mask and amulet.⁹⁸ To achieve this, they used physical force and threatened the boy with a knife. They were charged with the equivalent to s234 Robbery.⁹⁹ The court found the teenagers guilty of theft and held that “these virtual goods are goods (under Dutch Law) so this is theft ... these goods have real-world value, and they ‘belong’ to you inasmuch as it’s a crime to take them from you by force”.¹⁰⁰ The case went to appeal in 2009 and Court of Appeal upheld the finding that virtual property that has value, is owned, and so could be stolen.¹⁰¹ The court went on to add:¹⁰²

A [user] has the factual and exclusive power over the items in his possession. Only the victim could, after logging into Runescape, use the amulet and mask. Because of the theft he no longer has exclusive actual power. The fact that the game Runescape has an owner and/or producer is not relevant. For instance, the owner of a passport is the state, but this passport can be stolen from the citizen to which this passport belongs. ... that as a consequence of the digitalisation of our society a virtual reality cannot in all respects be considered as pure illusion, that would exclude committing of criminal acts.

The second Dutch case involved a group of teenagers charged with theft of virtual furniture from the virtual world Habbo Hotel (now Habbo).¹⁰³ The teenagers had used a “phishing” scam to obtain users’ passwords and then proceeded to access their accounts and transfer virtual furniture worth approximately €4,000, to their own accounts and their own virtual rooms. Following the Runescape case, once transfer and control of valuable (virtual) items was established the judge concluded that theft had occurred and three of the teenagers were convicted.

In 2010 in another Harbo theft, Finnish police began investigating 400 cases of theft of virtual property with individual losses of virtual goods of up to \$1500 (NZ). Again the thieves used a phishing attack to capture the users passwords and then transferred the goods.¹⁰⁴

98 Rechtbank (District Court) Leeuwarden 21 October 2008, LJN BG0939.

99 Actual charge was theft in combination with violence and conducted by more than 1 person (Article 312, subsection 2 under Dutch Penal Code – maximum penalty 12 years).

100 Ben Kuchera “Dutch court imposes real-world punishment for virtual theft” *Ars Technica* (2008) <<http://arstechnica.com/gaming/news/2008/10/dutch-court-imposes-real-world-punishment-for-virtual-theft.ars>>.

101 Gerechtshof (Appeal Court) Leeuwarden 10 November 2009, LJN BK27764 and BK2773. Note that this case is been appealed to the Supreme Court and due to heard near the end of 2011. The Advocate General stated that the economic value of the virtual goods is of particular interest to the question whether there is theft: “Virtual objects can represent an economic value both inside and outside the game. They are also individually distinguishable and transferable.” (as cited in Jas Purewal “The Second Virtual Goods Crime” *Gamer/Law* (4 July 2011) <www.gamerlaw.co.uk/2011/07/second-virtual-currency-crime-is.html>

102 Arno Lodder “The 2009 Dutch Convictions on Virtual Theft Conflict Resolution in Virtual Worlds: General Characteristics” in Kai Cornelius and Dieter Herman (eds) (2010). *Virtual Worlds and Criminality* (Springer, London, 2011) 79 at 91.

103 Rechtbank (District Court) Amsterdam 2 April 2009, LJN BH9789, BH9790, and BH9791.

104 “Police Investigate Habbo Hotel Virtual Furniture Theft” (BBC, 1 June 2010) <www.bbc.co.uk/news/10207486>.

VIII. VIRTUAL THEFT – NEW ZEALAND

In New Zealand, theft of virtual property is probably actionable under the Crimes Act since the 2003 amendment, when the definition of property in relation to theft was amended to include intangible items. Property (in terms of Crimes Act) now includes:¹⁰⁵

... real and personal property, and any estate or interest in any real or personal property, [money, electricity,] and any debt, and any thing in action, and *any other right or interest (emphasis added)*.

In *Police v Davies*, New Zealand courts have already confirmed that a contract which gives access or use to cyberspace is, at the very least, a right or interest in that intangible property.¹⁰⁶ Davies was convicted of the theft of Internet access by downloading pornography and music from an Internet connection at his place of work. On appeal the High Court confirmed that the contractual arrangement giving access and use of the Internet created a property interest satisfying the definition in the Crimes Act. The Court suggested that Internet usage being the transmission of digital data was also a “thing in action” further confirming property rights in the virtual.¹⁰⁷

It is an easy step, in following the reasoning in *Davies*, to move from an Internet access contract which gives a property interest in access to and use of the Internet, to a virtual world end-user licence agreement and subscription which gives the user an *interest* in their avatar and any persistent and unique virtual property. Even if the virtual world end-user licence agreement and subscription were not a “thing in action” it would at the very least create an interest in the virtual property.¹⁰⁸ This interest would be clearest in virtual worlds which had an official exchange between virtual and real-world currency. In these worlds users can trade virtual property for virtual currency and realise that interest in real world cash. Such a pecuniary interest would satisfy the definition of property in the Crimes Act. I would argue that probably even in worlds which forbid real currency trades there would still be an interest in exclusive use of that item for duration of the account, which could be seen as “any other interest”.

IX. OWNERSHIP

In addition to requirement that the thing stolen is property, that property must also be owned. Ownership for the purpose of theft is also statutorily defined. Ownership is satisfied if a person has:

- (a) possession or control of the property; or
- (b) any interest in the property; or

105 Crimes Act 1961 s 2.

106 *New Zealand Police v Daniel Davies* [2007] DCR 147 at 150.

107 *Davies v Police* (2007) 23 CRNZ 818 at [32-34].

108 Lord Fitzgerald defined a thing in action in *Colonial Bank v Whinney* (1886) 11 App Cas 4266, 446 as “incorporeal rights which are not visible or tangible or capable of manual delivery of actual enjoyment in possession in its ordinary sense, and which, if denied, can be enforced only by action or suit”. As cited in *Davies v Police* (2007) 23 CRNZ 818 at [33].

(c) the right to take possession or control of the property.

In all virtual worlds the developer retains some or all ownership rights of user-generated content. There are numerous academic commentaries regarding who “owns” this virtual content.¹⁰⁹ Interesting as these discussions are, a definitive identification of owners is not needed for theft.¹¹⁰ All that is required is that someone, even an unknown person, has a proprietary interest in the property which is violated by the thief.¹¹¹

Put most generally, for the purposes of theft an item is deemed to be ‘owned’ by everyone with any form of proprietary interest in the item, whatever the nature of that interest – ie whether it be a right of ownership or possession or a propriety interest only existing at equity.¹¹²

I would argue that the user of the virtual world has both control of and an interest in their virtual property, and that therefore the requirements of ownership are satisfied. However, even if this is not the case, the developer retains sufficient proprietary interests in that world’s virtual property to satisfy that the property was owned by someone, even if the exact ownership rights are unclear.¹¹³ It is not unusual for someone not to have complete ownership over their property. Consider when you buy a music CD or movie DVD, you have possessionary and use rights but not full ownership rights. The intellectual property rights remain those of the artist (or more usually the production company) and you are restricted in how you can deal with the property. Despite not having absolute ownership, the law considers a music or movie disk as your property which can be stolen from you.

X. TAKING – USING OR DEALING

To complete the actus reus of theft there needs to a “taking” or “use or dealing” with the stolen property. Although the Crimes Act is silent in regards to ‘taking’ of intangible property, Simester and Brookbanks argue that the implications of s219(3) are that acquiring “ownership or control” of an intangible item is enough to constitute a taking.¹¹⁴ At first glance, in *Davies*, the High Court appeared as if it would answer this question under the heading “Was the Internet usage taken ...”¹¹⁵ Although the Court upheld Judge Moore’s decision that theft had occurred, neither decision directly addressed “a taking” and both refer to a “use and dealing” of the intangible property.¹¹⁶ Therefore, for now, the question remains open as to whether

109 See for example: Lastowka, above n 17, at 915-916, Chein, above n 46 at 1084-1090, and Lim, above n 45, at 304-327.

110 *New Zealand Police v Daniel Davies* [2007] DCR 147 at 154.

111 *R v Zacka* CA232/04, 22 September 2004 generally and especially at [12, 14].

112 Simester and Brookbanks, above n 67 at 671.

113 *New Zealand Police v Daniel Davies* [2007] DCR 147 at 154 [35], where the court states that whatever the exact ownership structure was, the fact that the victims had day to day control over the Internet access was enough to satisfy the ownership requirement.

114 Simester and Brookbanks, above n 67 at 682.

115 *Davies v Police* (2007) 23 CRNZ 818 at [35-40].

116 *New Zealand Police v Daniel Davies* [2007] DCR 147.

there can be “a taking” of intangible property. This, however, is not fatal to a charge of theft as taking and use or dealing are alternative actus reus elements of theft.¹¹⁷

As *Davies* demonstrates, one could say that a virtual property thief dishonestly and without claim of right, “uses or deals” with the virtual property with intent to deprive the owner of that property or of any interest in that property after obtaining or control over, the property in whatever manner.¹¹⁸ As the Dutch Court pointed out in the *Runescape* case, a virtual property thief assumes control and perhaps possession of the virtual goods in exclusion of the owner and therefore uses and deals with the property.¹¹⁹

A thief of virtual property may claim that they did not take or use or deal with the virtual property but rather it was their avatar. One could readily adopt the concept of “innocent agency” and therefore imputing the actus reus to the user behind the avatar.¹²⁰ If assigning agency (albeit innocent) to an avatar is just a little too much to bear, then one could view the avatar as a mechanical/digital extension of the thief. The avatar could be seen as being controlled and operated by the thief, much as a thief may use tools to break into a bank.

XI. JURISDICTION

Jurisdiction in criminal matters is governed by s 7 of the Crimes Act:

Place of commission of offence

For the purpose of jurisdiction, where any act or omission forming part of any offence, or any event necessary to the completion of any offence, occurs in New Zealand, the offence shall be deemed to be committed in New Zealand, whether the person charged with the offence was in New Zealand or not at the time of the act, omission, or event.

Virtual worlds are cross jurisdictional in nature and in some cases a both virtual thief and victim may reside in New Zealand and jurisdiction is clear. Our courts have already asserted jurisdiction in cases where someone in New Zealand has remotely used the Internet to cause loss or damage in other jurisdictions.¹²¹ Therefore, there would be no difficulty in asserting jurisdiction over a virtual thief who is here in New Zealand and who steals virtual property from a victim located in another jurisdiction.¹²² In theory, s 7 would also allow jurisdiction over a virtual theft when the victim is in New

117 Crimes Act 1961 s 219(1).

118 Crimes Act 1961 s 219(1)(b).

119 Lodder, above n 102 at 91. Note under existing theft provisions in New Zealand, there could be no action if the person had cloned or copied the item because the item would still be in possession of the person and could therefore not be held to be deprived of it.

120 *R v Paterson* [1976] 2 NZLR 394 (CA).

121 *Timothy Moleno v Police HC Dunedin* CRI-2005-412-44, 19 October 2005, R v Walker HC Hamilton CRI-2008-075-711, 15 July 2008.

122 If the victim of the virtual theft is in another jurisdiction it is likely that the initial complaint would be in that jurisdiction. Both New Zealand and the other jurisdiction may have criminal jurisdiction in the case, however it is likely in most cases (due to the probable value of the virtual property in relation to extradition costs) that the other jurisdiction would pass on evidence and the case would be heard in New Zealand. See for example Martin Biegleman “Identity Theft: Fighting for our Privacy” July /August 2009 23(4) *Fraud Magazine* 32 at 32 discussing the Owen Walker case and the FBI’s and Dutch police involvement.

Zealand and the thief is in another jurisdiction, however the practicalities and costs of extradition would make this unlikely although not impossible. It is more likely that if the jurisdiction is one where virtual theft is actionable that the New Zealand Police would co-operate with the other jurisdiction and any prosecution would occur there.

XII. MENS REA

The proof of the mens rea elements for theft will depend on the facts of any given situation. The first element is dishonesty, which is focused on the absence of belief of consent to carry out the taking or use or dealing with the virtual property from a person entitled to give such consent.¹²³ The second element is that the actions must be done without claim of right or belief that the acts were lawful.¹²⁴ These elements may be easier to prove than appears at first glance. In most cases of virtual theft, the thief would need to use some form of coercion (sometimes physical force) or some form of software alteration, hack or trickery. All of these would leave an evidential trail which could support and absence of honesty or claim of right.¹²⁵ The final mens rea element is an intent to deprive the owner permanently of the property. This would be dependent on the particular circumstances, but similar circumstantial evidence as for real-world theft could be considered.¹²⁶ These considerations could include things such as whether the property has been on-sold or liquidated through one of the exchanges, or whether the property was in use by the thief.

Some commentators have pointed to the fact that a number of virtual worlds allow or even encourage theft of virtual property within their environments (permissive worlds) and have suggested that this creates difficulties for the application of real law to virtual theft (and other in-world criminal activity).¹²⁷ However we are accustomed to viewing the rules of sports games and modifying liability for what would otherwise constitute criminal activity, whether expressly consented to or not.¹²⁸ This modification of criminal liability is adjusted for the specific rules for a particular game. For example what may be acceptable in boxing could well be an assault in rugby. In any case virtual theft in permissive environments where this behaviour is part of the rules of the game will not apply. In a world where virtual theft is part of the game play such as *Eve Online* then it is easy to conceive that by agreeing to the End User Licence, the user (and owner of the virtual property) consents to those rules. Therefore under the Crimes Act:¹²⁹

123 Crimes Act s 217.

124 Crimes Act s 2.

125 Arias, above n 30, at 1305-1308.

126 See Crimes Act s 219 (1) and s 219(2) for special meaning of to 'deprive permanently'.

127 See for example *Eve Online* (<www.eveonline.com/>) which openly acknowledges the existence of criminal activities between players in the world and informs players that the games developer and publisher (CCP games) will not intervene in cases of virtual theft. For further discussion of this point see Orin Kerr "Criminal Law in Virtual Worlds" (2008) U Chi Legal F 415 at 415- 429.

128 Simester and Brookbanks, above n 67 at 576-578.

129 Crimes Act 1961 s 219(3).

...taking does not include obtaining ownership or possession of, or control over, any property with the consent of the person from whom it is obtained, whether or not consent is obtained by deception.

There can be no taking in such an environment as the owner could reasonably be said to have consented to such actions. However even if virtual theft was charged under use or dealing rather than a taking in a permissive world then there would still be a defence in the mens rea element of dishonesty, which the Crimes Act defines:¹³⁰

... in relation to an act or omission, means done or omitted without a belief that there was express or implied consent to, or authority for, the act or omission from a person entitled to give such consent or authority.

It is a straightforward argument to present that a user (thief) in a permissive world held an honest belief that they had consent. This consent maybe implied consent from the owner of the virtual property by virtue of participation, which requires accepting the End User Licence and rules of the game. It could also be argued that the virtual world developers in establishing the permissive rules gave express consent. Most if not all virtual world developers hold property interests in all virtual property within the environments, at least to the extent that if the subscription fees are not paid then they can cancel the account and freeze, destroy or re-allocate the virtual property associated with that account. It would appear to be a reasonable belief that the virtual world developers did have authority to give consent under s217.

It would be a straightforward matter under prosecutorial discretion to make the distinction between permissive virtual worlds and those that do not allow such actions and therefore prosecute theft that falls out of the rules of the game but not theft that falls within the rules.¹³¹

XIII. THEFT OR CRIMES INVOLVING COMPUTERS?

One may ask if virtual theft would be more appropriately dealt with under the “Crimes Involving Computers” ss249-252 of the Crimes Act.¹³² It may be possible to charge under s 249 “accessing a computer for a dishonest purpose”, which includes “dishonestly or by deception, and without claim of right obtaining any property ... or causing loss to any person.”¹³³ If, as argued above, virtual goods are property and property that has some value, then s249 could apply. Equally s250 could apply, “damaging or interfering with a computer system” which includes “causing any data or software in any

130 Crimes Act s 217.”

131 Edward Castronova “The Right to Play” in Jack Balkin and Beth Noveck (eds) *The State of Play: Law, Games, and Virtual Worlds* (New York University Press, New York, 2006) 68 at 72-74, see also Joshua Fairfield “The Magic Circle” (2008-1009) 11 V and J Ent & Tech L 823, who advocates for a rule of consent; actions in a virtual world should only give rise to legal liability if the exceed the scope of consent given by other users.

132 It should be noted that a charge under s 252 of the Crimes Act 1961, “Accessing a computer system without authorisation” would fail because of s 252(2) excludes anyone authorised to access the computer system (virtual world) but does so for a purpose other than that authorised.

133 Crimes Act 1961, s 249(1).

computer system to be damaged, deleted, modified, or otherwise interfered with or impaired” could apply. These sections carry a maximum sentence of seven year in prison. However, as was noted in *New Zealand Police v Davies*, in relation to theft of intangible property, depending on the value of the property, a liability of imprisonment for seven years may “in the exercise of ordinary prosecutorial discretion ... properly be seen as over charging”.¹³⁴ While it may be the case that in some circumstances a charge under the specific Computer offences ss 249 – 251 may be appropriate, this should not limit the proper exercise of prosecutorial discretion.¹³⁵ In other examples it may not be possible to bring a charge under ss 249 – 251. Imagine, for example, that within World of Warcraft one player willingly gives a rare and valuable weapon to another user for use to complete a specific task and if after that task the user does not return the property but uses it for her own purposes, she then converts that virtual weapon to her own use. In this scenario there could not be a charge under crimes involving computers as there was not dishonest purpose at the time access (to the virtual world) and obtaining the property¹³⁶ nor was the data damaged or lost with the required mens rea.¹³⁷ However a charge under theft or stealing may be possible under s 219(1)(b) where the actus reus of the charge is the “use or dealing” with the property with the required mens rea rather than the acquisition or taking of the property.¹³⁸

XIV. CONCLUSION

In a 2007 article, “The New World,” Kayser posed the question, should legal scholars and courts seriously consider virtual legal issues? His affirmative answer was based on the size of the population of virtual worlds, the range of activities occurring in virtual worlds, the size of the virtually-related economy, and the relationship between the virtual and the real world.¹³⁹ Since 2007 the number, size and complexity of virtual worlds have increased dramatically. Although the criminal law has been somewhat slow to turn its eye to virtual worlds, this has begun to change. The criminal law is one of the many ways to construct social reality, and is itself a human artefact, to be applied to social interaction.¹⁴⁰ Wherever humans gather together in a society, the jurisdiction of the criminal law will follow. Virtual Worlds are places where humans (or their agents in the form of avatars) gather and although there has been much debate of over virtual crimes against the person,¹⁴¹ the crimes that

134 *New Zealand Police v Daniel Davies* [2007] DCR 147 at 151.

135 Ibid.

136 Crimes Act 1961 s 249.

137 Crimes Act 1961 s 250.

138 Crimes Act 1961 s 219(1)(b). Theft or stealing is the act of ...dishonestly and without claim of right, using or dealing with any property with intent to deprive any owner permanently of that property or of any interest in that property after obtaining possession of, or control over, the property in whatever manner.

139 Jamie Kayser “The New World” (2006-2007) 27 Loy LA Ent L Rev 59 at 61-67.

140 Roger Shiner “Theorizing Criminal Law Reform” (2009) 3 Crim Law and Philos 167 at 173.

141 For example see Julian Dibbell “A Rape in Cyberspace” (1999) 38(51) Village Voice, Susan Brenner “Is there Such a Thing as “Virtual Rape?” (2001) 4 Cal Crim L Rev105-111, Tristan Gorrindo and James Groves “Crime and Hate in Virtual Worlds” (2010) 18(2) Harvard

have received the attention of authorities and led to criminal prosecutions have been crimes against users' rights over virtual property. Questions on the nature of virtual property rights and criminal sanctions for breaches of those rights have come before the courts of a number of jurisdictions. Most of the attention on virtual property has been in relation to game-like virtual worlds, however the nature of virtual worlds is rapidly changing, and integrating with our real life through social networking sites like Facebook. With the move to consumer cloud services we will continue to see a virtualization of our lives, where much of what we may have traditionally considered our property will only exist in the digital environment.

It is but a matter of time before New Zealand courts are faced with a case of virtual theft. I argue that our present legislation can accommodate the prosecution of virtual theft following the reasoning in the *Davies* cases. It is probable that early New Zealand virtual theft cases will centre around the present social network virtual worlds, whose content may seem frivolous to many. However, the impact of such decisions will need to be considered and taken seriously, for they will likely have wide-reaching ramifications as we move to more digitised lives.

A final aspect to keep in mind is that commerce in virtual worlds is rapidly changing. As real-world people and businesses, we can observe the advances made in the virtual economies and recognise that such activities within those worlds have an impact far beyond their borders. The participants therein are real people and their actions affect other real people. We all must remember that, no avatar is an island, not even in a virtual world. When millions of people interact and millions of dollars of commerce are traded, the law will follow and legitimately so.