PART I INTRODUCTION



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Commercial Transactions in the Virtual World: Introduction

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1. Background and Definitions

This book is about the impact of virtual world activities and transactions on commercial law. It is also an interdisciplinary look at issues arising out of the intersection of technology or IT law, commercial law, and business law as evidenced by the growing trend in virtual commercial transactions.

Virtual worlds may be defined as "digitally constructed 3D environments where users can interact with each other through a virtual user, called avatar." An avatar is an online persona

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¹ Dominik Schrank, 'A Trustful Payment System for Virtual Worlds: Design and Implementation of a Payment System for Virtual Worlds' (Master's Thesis, Graz University of Technology September 2009) 5 (citing Yesha Sivan, 'Real Virtual Worlds SOS (State of Standards) Q3–2008' (2008) 1(2) *Journal of Virtual Worlds Research*: Consumer Behavior in Virtual Worlds 11 http://journals.tdl.org/jvwr/index.php/jvwr/article/view/359/271 accessed December 3, 2013; See also Adam Chodorow, 'Tracing Basis through Virtual Spaces' (2010) 95 Cornell L. Rev. 283, 288 (defining virtual worlds as "online spaces that permit people to interact with one another through characters they create, often called avatars.").

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that represents the real person and, in the context of a game environment, plays the online game from within that role.² Within non-scripted virtual worlds such as Second Life®, the avatar is an artificial 3D construction of the real person who may not look like the real person at all but whose actions in the virtual world are controlled by the real person. Virtual worlds have three primary characteristics. First, virtual worlds are interactive, meaning that while the virtual world may exist on one computer or one server, it can be accessed remotely, by a large number of people, with "command inputs from one person affecting the command results of other people." Second, virtual worlds provide a level of physicality that simulates the real world. In other words, people in the real world can access a virtual world program through an interface which provides a "first-person physical environment on their computer screen... [an] environment [that] is generally ruled by the natural laws of Earth and is characterized by scarcity of resources." The third important feature of virtual worlds is persistence, the ability for the virtual world program to continue running regardless of whether anyone is using it at any given point in time. The programme recalls the location of people and ownership of objects as well as the actions of the avatars.

² Bryan T. Camp, 'Play's the Thing: A Theory of Taxing Virtual Worlds' (2008) 59 Hastings L.J. 1, 3.

³ Edward Castronova, 'Virtual Worlds: A First-Hand Account of Market and Society in the Cyberian Frontier' (CESifo Working Paper Series No. 618, December 2001) 12 http://papers.ssrn.com/sol3/papers.cfm?abstract_id=294828 accessed December 3, 2013; See also Edward Castronova, 'On Virtual Economies' (CESifo Working Paper Series No. 752, July 2002) 7 http://papers.ssrn.com/sol3/papers.cfm?abstract_id=338500 accessed December 3, 2013; Edward Castronova, 'Theory of the Avatar' (CESifo Working Paper Series No. 863, February 2003) 2 http://papers.ssrn.com/sol3/papers.cfm?abstract_id=385103 accessed December 3, 2013; Edward Castronova, *Synthetic Worlds: The Business and Culture of Online Games (University of Chicago Press 2006) 11.

⁴ Castronova, 'Virtual Worlds: A First-Hand Account of Market and Society in the Cyberian Frontier' (n 3) 12.

⁵ ibid.

Virtual worlds are generally categorized as scripted and unscripted.⁶ A scripted virtual world, represented by the wellknown massively multi-player online role playing games (MMORPGs) such as World of Warcraft, Everquest, City of Heroes, The Sims Online, and Dark Age of Camelot, is "any virtual environment where a user customizes and creates an avatar for participation inside a computer game,"7 with the eventual goal of character advancement.8 In scripted virtual worlds, the game developers and creators provide a pre-scripted environment including scenery, plotlines, preset roles, rules for interaction, and rewards.9 The defining characteristic of scripted game worlds is that "players must feel that they are advancing, that the advancement is worthwhile, and that there are some definite goals that indicate they have 'won'." 10 Players in MMORPGs are simply navigating the virtual world using the tools provided by the game developers. Players then make decisions on the paths the avatar will take within the confines of the game's pre-designed restrictions and rewards.

In contrast, an unscripted virtual world, most notably represented by Linden Lab Inc.'s 2003 creation called Second Life[®], ¹¹ is an environment where not only do users create their own avatars, the avatars' activities greatly simulate real world activities and thus have unprecedented real world commercial

⁶ See e.g., Leandra Lederman, "Stranger than Fiction": Taxing Virtual Worlds' (20007) 82 N.Y.U. L. Rev. 1620, 1628-1631 (using the terms "game world" and "unscripted world"); cf Camp (n 2) 4-8 (using the terms "structured" and "unstructured" for virtual world categories). In this article, I use the terms "scripted" (game world) and "unscripted" (unstructured world).

⁷ William E. Arnold IV, 'Tax Enforcement in Virtual Worlds - Virtually Impossible?'(2012) 40 Syracuse J. Int'l. L. & Com. 187, 190-191.

⁸ Richard A. Bartle, 'Virtual Worldliness: What the Imaginary Asks of the Real' (20005) 49 N.Y.L. Sch. L. Rev. 19, 30.

⁹ Chodorow (n 1) 288.

¹⁰ Bartle (n 8) 30-31.

¹¹ The SimsTM also falls under the category of an unscripted virtual world.

implications.¹² Unscripted virtual worlds do not contain preset storylines or activities. Users of unscripted virtual worlds create their own story lines and activities which simulate real world activities such as creating, selling, and buying virtual products for their avatars,¹³ engaging in real estate and property acquisition (virtual land acquisition),¹⁴ "invite[ing] others to their virtual homes, embark[ing] on career paths, attend[ing] concerts, or go[ing] to parties."¹⁵ Most notably, in Second Life®, these transactions are facilitated through purchases using real money through Second Life's exchange system, which converts real money into Second Life's own currency, called Linden Dollars.¹⁶ In addition, players using Linden Dollars "can convert or cash out their Linden Dollars for US dollars, similar to the way a casino works."¹⁷

The result of the advancements in the design and use of unscripted virtual worlds represents a significant blurring of the lines between the real world and virtual worlds such that the overall transaction values of virtual world activities are generating a new virtual economy, ¹⁸ complete with real currency exchange

¹² Arnold IV (n 7) 192-193

¹³ Arnold IV (n 7) 195; See also Chodorow (n 1) 288-289 (describing unscripted virtual worlds and their virtual economies).

¹⁴ Arnold IV (n 7) 195-196

¹⁵ Arnold IV (n 7) 192 (referring to activities that are possible in The SimsTM).

¹⁶ Arnold IV (n 7) 195

¹⁷ Arnold IV (n 7) 195

¹⁸ Arnold IV (n 7) 193; See also Chodorow (n 1) 288; Castronova, 'Virtual Worlds: A First-Hand Account of Market and Society in the Cyberian Frontier' (n 3); Vili Lehdonvirta, 'Real-Money Trade of Virtual Assets: New Strategies for Virtual World Operators' in Mary Ipe, Virtual Worlds (Icfai University Press, Hyderabad, India 2008) 113–137 http://ssrn.com/abstract=1351782 accessed December 3, 2013; David A Bray and Benn Konsynski, 'Virtual Worlds, Virtual Economies, Virtual Institutions' (Virtual Worlds and New Realities Conference, Emory University February 2008) http://papers.ssrn.com/sol3/papers.cfm?abstract_id=962501 accessed December 3, 2013.

rates, online financial services providers, and real millionaires.¹⁹ Despite the fact that there may be some key differences between real world and virtual economies,²⁰ these virtual economies²¹ have proven to be very profitable for real world persons and have significant real world implications for commercial transactions and commercial law.²² Therefore, the investigation into the issues and opportunities presented by commercial transactions in the virtual world remains an area ripe for research and legal reform.

2. Real World Implications to Commercial Transactions in the Virtual World

One must appreciate and understand the commercial implications of virtual world economies in order to determine to what extent

¹⁹ Rob Hof, 'Second Life's First Millionaire' (*Bloomberg Businessweek*, November 26, 2006) <www.businessweek.com/the_thread/techbeat/archives/2006/11/second_lifes_fi.html> accessed December 3, 2013; 'Anshe Chung Becomes First Virtual World Millionaire' <www.anshechung.com/include/press/press_release251106. html> accessed December 3, 2013.

²⁰ Schrank (n 1) 24 (discussing the difference between real world and virtual economies as articulated by Castronova (2001) and Lehdonvirta (2005) as having the following attributes: "[1] No basic needs exist in virtual worlds; [2] Scarcity of goods; [3] No marginal costs of production in virtual worlds; [4] Negative effect of economic growth in virtual worlds; [5] No unemployment in virtual worlds.")

²¹ Schrank (n 1) 23-24 (describing virtual economies as economies based on the trading of virtual goods and objects, which may be categorized as: a) collectible objects; b) consumable objects; and c) customizable objects).

²² United States Congress Joint Economic Committee, 'Press Release # 109–98: Virtual Economies Need Clarification, Not More Taxation (October 17, 2006) www.jec.senate.gov/republicans/public/?a=Files.Serve&File_id=08e6fa84-ee4f-4267-9f47-ad0ad33a072d accessed December 3, 2013 (stating, inter alia, that "The population of these online worlds has been estimated to exceed 10 million people worldwide....Clearly, virtual economies represent an area where technology has outpaced the law."); See also Robert Bond, 'Business Trends in Virtual Worlds and Social Networks—An Overview of the Legal and Regulatory Issues Relating to Intellectual Property and Money Transactions' (2009) 20(4) Entertainment Law Review 121 (discussing how Facebook, MySpace, and Second Life, etc. bring new legal challenges and relationships).

existing laws in business, technology, and commercial transactions are deficient or effective.

In a 2001 article, Professor Edward Castranova described the economy of Norrath, a scripted virtual world in the online game called Everquest, as one that "...produce[s] a GNP per capita somewhere between that of Russia and Bulgaria... virtual worlds are making money—with annual revenues expected to top USD 1.5 billion by 2004." Gartner Research, Inc.'s 2009 report and analysis showed that in 2006, nearly 30 million people regularly participated in online virtual world and that by 2011, nearly 80% of online users would be active participants in virtual worlds. In the first quarter of 2009, Second Life, users spent more than 120 million dollars on virtual goods and services. In 2011, the World Bank Virtual Economy Report stated that the virtual economy was valued at an estimated three billion dollars.

In addition to the trading of virtual goods and services, virtual worlds also account for a significant trend in real money trading (RMT), defined as "the sale of virtual property or virtual currency for real world currency, such as World of Warcraft gold for US dollars." While such cross-border RMT transactions may have significant implications for international tax systems, RMT

²³ Castronova, 'Virtual Worlds: A First-Hand Account of Market and Society in the Cyberian Frontier' (n 3) 1.

²⁴ Schrank (n 1) 7 (citing Gartner, Inc., 'Gartner Says 80% of Active Internet Users Will Have A "Second Life" in the Virtual World by the End of 2011' (Gartner.com April 24 2007) <www.gartner.com/newsroom/id/503861> accessed December 3, 2013; See also Gartner, Inc., 'Gartner Says 90% of Corporate Virtual World Projects Fail within 18 Months" (Gartner.com May 15 2008) <www.gartner.com/newsroom/id/670507> accessed December 3, 2013.

²⁵ Schrank (n 1) 29.

²⁶ Dr. Vili Lehdonvirta, 'World Bank Virtual Economy Report: Secondary Markets Worth \$3 Billion,' (Virtual Econ. Res. Network [VERN] April 7, 2011) http://virtual-economy_org/2011/04/07/world_bank_virtual_economy_rep/ accessed December 3, 2013.

²⁷ Michael Druckman-Church, Taxing a Galaxy Far, Far Away: How Virtual Property Challenges International Tax Systems, 51 Colum. J. Transnat'l L. 479, 485 (2013).

transactions also result in "annual trade estimates valued in billions of dollars." ²⁸

In addition to RMT transactions, gold farming is another phenomenon or cottage industry emerging out of virtual worlds. Gold farmers meet the demand for rare items and other valuable goods of MMORPGs by providing such items and services on the virtual market.²⁹ Gold farming is particularly prevalent in developing worlds, such as China.³⁰ In 2008, it was estimated that the annual revenues from gold farming were between USD200 million and 1 billion.³¹

Finally, it is reasonable to conclude that the virtual economy is the future of e-commerce and transcends Web 2.0 to create a new, sophisticated Web 3.0 environment ³² that has tremendous potential and implications for commercial transactions and the development of commercial law. In addition to everyday people engaging in the virtual world, businesses and organizations are reaping the benefits of the virtual world. Today, over 200 real

²⁸ See e.g., Vili Lehdonvirta and Mirko Ernkvist, Converting the Virtual Economy into Development Potential: Knowledge Map of the Virtual Economy 11–15 (2011), available at <www.infodev.org/en/Document.1056.pdf.> accessed at December 3, 2013; Maggie Shiels, 'The US Virtual Economy is Set to Make Billions' (BBC News, December 29 2009), http://news.bbc.co.uk/2/hi/technology/8425623.stm accessed December 3, 2013; Joshua Fairfield, 'Virtual Property' (2005) 85 B.U. L. Rev. 1047, 1050.

²⁹ Arnold IV (n 7) 197-198.

³⁰ Richard Heeks, 'Current Analysis and Future Research Agenda on "Gold Farming": Real-World Production in Developing Countries for the Virtual Economics of Online Games' 6–7 (University of Manchester, Institute for Development Policy and Management, IDPM Working Paper No. 32, 2008) <www.sed.manchester. ac.uk/idpm/research/publications/wp/di/documents/di_wp32.pdf> accessed December 3, 2013.

³¹ Heeks (n 30) 10.

³² Schrank (n 1) 16 (citing Gary Hayes, 'The Virtual Worlds Hype Cycle for 2009' (2009) <www.muvedesign.com/the-virtual-worlds-hype-cycle-for-2009/> accessed December 3 2013). Hayes analyses and articulates the three developmental stages of the Internet, with Web 3.0 representing a real-time, co-creative web environment with 3D portals and avatars.

world brands, such as Sun, IBM, Dell, Adidas, Nissan, Coca Cola, and some law firms, ³³ have created a presence in Second Life[®]. The aim of these virtual companies is to provide goods and services through in-world transactions as well as translate these in-world sales and the virtual world experience into the virtual world avatar making real purchases from the same company, thus increasing brand impact and brand recognition. Combined together, these virtual companies "employ over 3,000 people globally with estimated annual sales of \$60 million according to Linden Lab." In addition to well-known brands, politicians, ³⁵ educational institutions, ³⁶ and governments³⁷ have entered the virtual world, more specifically Second Life[®], for brand reinforcement, business development, and as a way to connect with the greater public.

The opportunities present in unscripted virtual worlds, in particular, also give rise to both legal and business challenges

³³ Bond, 'Business Trends in Virtual Worlds and Social Networks—An Overview of the Legal and Regulatory Issues Relating to Intellectual Property and Money Transactions' (n 22) 124.

³⁴ ibid.

³⁵ Bond, 'Business Trends in Virtual Worlds and Social Networks—An Overview of the Legal and Regulatory Issues Relating to Intellectual Property and Money Transactions' (n 22) 122-123 (discussing the use of Second Life by politicians such as France's former president Nicolas Sarkozy and U.S. President Barack Obama).

³⁶ Bond, 'Business Trends in Virtual Worlds and Social Networks —An Overview of the Legal and Regulatory Issues Relating to Intellectual Property and Money Transactions' (n 22) 123.

³⁷ Arnold IV (n 7) 192–193 (discussion how several governments have opened embassies in the virtual world); 'Maldives Unveils World's First Virtual Embassy' (The Sunday Times Online, May 27, 2007) <www.sundaytimes.lk/070527/ FinancialTimes/ft328.html> accessed December 3, 2013; Cari Simmons, 'Sweden Opens Virtual Embassy 3D-Style' (Sweden.se, May 30 2007) <www.sweden.se/ eng/Home/Lifestyle/Reading/Second-Life/> accessed December 3 2013; 'Estonia launches embassy in virtual world Second Life' (The Sydney Morning Herald smh.com.au, December 5, 2007) <www.smh.com.au/news/Technology/Estonia-launches-embassy-in-virtual-world-Second-Life/2007/12/05/1196530704693.html> accessed December 3, 2013.

which have yet to be mastered by practitioners and academics. These challenges include, but are not limited to, issues of taxation,³⁸ property recognition and rights,³⁹ money laundering,⁴⁰ terrorism financing,⁴¹ online and virtual financial services providers,⁴² cross-border virtual exchange rates and virtual currencies,⁴³ virtual banking and money lending,⁴⁴ and resolution of virtual disputes.

This book aims at providing a more detailed analysis and investigation of the issues and topics most directly attributed to and impacting the field of commercial law as articulated by the texts of eminent scholars such as Goode as well as Sealy and Hooley. Many of these topics eventually overlap with the interdisciplinary challenges discussed above.

³⁸ See e.g., Arnold IV (n 7); Eric G. Roscoe, 'Taxing Virtual Worlds: Can the IRS Own You?; (2011) 12 U. Pitt. J. Tech. L. & Pol'y 1.

³⁹ See e.g., Passman, 'Transactions of Virtual Items in Virtual Worlds' (2008) 18 Alb. L. J. Sci. & Tech. 259; John William Nelson, 'The Virtual Property Problem: What Property Rights in Virtual Resources Might Look Like, How They Might Work, and Why They are a Bad Idea' (2010) 41 McGeorge L. Rev. 281.

⁴⁰ See e.g., Angela S.M. Irwin, Jill Slay, Kim-Kwang Raymond Choo, and Lin Liu, 'Are the financial transactions conducted inside virtual environments truly anonymous? An experimental research from an Australian perspective' (2013) 16(1) *Journal of Money Laundering Control* 6–40.

⁴¹ See e.g., Stephen I. Landman, 'Funding Bin Laden's Avatar: A Proposal for the Regulation of Virtual Hawalas' (2009) *35 Wm. Mitchell L. Rev.* 5159; Irwin et al, 'Are the financial transactions conducted inside virtual environments truly anonymous? An experimental research from an Australian perspective' (n 40).

⁴² See e.g., Schrank (n 1).

⁴³ See e.g., Druckman-Church, 'Taxing a Galaxy Far, Far Away: How Virtual Property Challenges International Tax Systems' (n 27); Takashi Nakazaki, 'Real World Excessive Regulations Might Kill Economic Transactions in Virtual Worlds' (2011) 14(12) J. Internet L. 3.

⁴⁴ See e.g., Andrew Abraham, 'The Regulation of Virtual Banks: A Study of the Hong Kong Perspective' (2007) 10(12) *J. Internet* L. 3.

3. The Contribution of this Book to Advancing the Field of Commercial Law

Professor Roy Goode, one of the most eminent scholars in the field, has stated that commercial law goes beyond just a collection of the various fields of law and represents the "branch of law which is concerned with the rights and duties arising from the supply of goods and services in the way of trade." Specifically, Goode sees commercial law as encompassing "the totality of the law's response to mercantile disputes...[including] all those principles, rules and statutory provisions, of whatever kind and from whatever source, which bear on the private law rights and obligations of parties to commercial transactions, whether between themselves or in their relationship with others."

This definition encompasses everything from the definition and nature of personal property and property rights all the way to security interests and financial transactions. In this wide continuum that represents commercial law principles and practices, this book makes several contributions to advancing the field of commercial law.

First, Goode recognized as early as 1998 that the evolution of commercial law in the next millennium will depend greatly as much on meeting the legitimate needs of the changing marketplace as the impact of technology on commercial law and

⁴⁵ Roy Goode, *Commercial Law* (3rd edn, LexisNexis Butterworths 2004); See also Bryan A. Garner (ed), *Black's Law Dictionary* (9th edn, Thomas Reuters 2009) 305 (defining commercial law as "The substantive law dealing with the sale and distribution of goods, the financing of credit transactions on the security of goods sold, and negotiable instruments."); Jonathan A. Eddy and Peter Winship, *Commercial Transactions: Text, Cases, and Problems* (1985) 1 ("In American law...synonymous with the legal rules contained in the Uniform Commercial Code.").

⁴⁶ Roy Goode, *Commercial Law in the Next Millennium* (Sweet & Maxwell, London 1998) 8.

regulation.⁴⁷ It is argued that this is all the more applicable in the case of virtual worlds and commercial transactions in the virtual world. While some real world laws may plausibly be applicable to virtual worlds, the very nature of a dynamic, flexible, and new virtual economy means that existing commercial law may not be entirely applicable. This book makes a significant contribution to the advancement of commercial law by addressing the most significant technological change, to date, which will impact the whole of commercial law as well as its discrete bodies of law. To date, while academics and practitioners have begun to analyze issues of taxation, property rights, virtual currency exchanges, and online financial services providers, other important areas such as goods and services contractual relationships, transfer of property and risks, security interests, money lending, alternative dispute resolution processes, and consumer protection within virtual worlds have not been fully explored. In addition, while real world laws may arguably apply to some aspects of virtual world commercial transactions, other laws and regulations will need reform to keep pace with the technological advancements presented by virtual worlds. This book addresses these topics as well as many others from a variety of perspectives.

Second, this book advances the field of commercial law by adopting the spirit of comparative analysis with respect to the issues of virtual commercial transactions. Countries such as the United States, China, Japan, Korea, and Taiwan have begun to generate case law specifically on virtual world issues as well as developed certain laws and regulations governing these transactions. These insights are valuable to other jurisdictions, such as Hong Kong, in developing a more clear and comprehensive jurisprudence surrounding commercial transactions in the virtual world.

⁴⁷ Goode, Commercial Law in the Next Millennium, (n 46) 37, 96–98.

Finally, this book advances the field of commercial law by proposing solutions, where possible, to the myriad of issues which are, as yet, unresolved in terms of dealing with commercial transactions in the virtual world. In so doing, this book also raises areas of further research and investigation, thus establishing a rich and complex framework from which future commercial law students, practitioners and academics can draw for inspiration, further study, and research.

4. Contents of This Book

This book is divided into 11 sections, including this introduction. Each section of the book contains chapters in the form of an article(s) that aims to take an in-depth look at the opportunities, challenges, and solutions presented by virtual worlds as related to the particular area of commercial law. In addition, a comparative analysis of other jurisdictions is advanced in hopes that through this comparative, multi-disciplinary analysis, better and more effective solutions can be found to advance the field of commercial law in these respective areas.

With the introduction presented in section 1 of the book, section 2 of the book analyses virtual worlds from an industry perspective and highlights issues, challenges, and opportunities in greater detail. The chapters in section 2 are important to answering the central question of whether virtual worlds open new marketplaces, the legal and practical implications which arise out of this new marketplace, and what challenges a virtual world industry places on commercial law as well as related areas of law such as intellectual property law.

Section 3 of the book deals with the nature and definition of goods in the virtual world and whether this impacts the validity of virtual world contracts. In general, each jurisdiction has some form of Hong Kong's Sale of Goods Ordinance, which not only

defines what trade goods are but also regulates the entire sale of goods contract. Because commercial law would not exist but for trading of goods and services, understanding whether virtual objects and items are considered "goods" or "services" to which law can be applied is extremely important. Nearly all virtual world developers and operators, except for Second Life®, refuse to recognize a user's right to property in the virtual goods they purchase. However, virtual world disputes and related case law in some jurisdictions appear to show a reverse trend in favor of such recognition. The contributing chapters in this section analyze these issues from the perspective of the theories of property rights in goods and services as well as ways in which various jurisdictions have dealt with the nature of property rights in virtual goods.

Section 4 of the book deals with contracts related to the sale of goods and/or services in the virtual world. The central question in this section is to what extent transactions in the virtual world mirror real world contracts for the sale of goods, sale of services, or sale of goods and services. To the extent that these transactions mirror the core elements of contract law, one can argue that real world laws, such as the Hong Kong Sale of Goods Ordinance, may apply. Contracts for the sale of goods or services generally implicate a transfer of rights, benefits, and remedies. However, if virtual goods are not "property" and do not confer property rights in the buyer, are these transactions considered contracts subject to standard contractual rights and remedies? These and other related questions are addressed by the chapters in this section.

Section 5 of the book deals with the transfer of property and risk arising out of contracts for sale of goods or services in the virtual world. The transfer of property and risk is central to the commercial transaction. Once a buyer purchases goods or services from the seller, depending on the nature of the transaction, possession, interest, ownership, or title to the goods transfers to

the buyer. Once transfer of goods and services has taken place, certain rights and risks are also conferred along with remedies for the buyer or seller should issues arise with the goods or services. This involves both the intention of the parties as well as explicit contractual provisions. Given that most contractual relations between virtual world developers and users are governed by enduser license agreements (EULAs), the key question in virtual transactions is to what degree there is or should be a transfer of property and how this translates to rights and remedies for the buyer and seller, especially given the industry is now a multibillion dollar industry.

Section 6 of the book deals with various payment methods and issues arising in virtual world transactions. Payment methods deal with the ways by which a buyer might pay for goods and services under a contract. Traditionally recognized payment methods include cash, cheques, credit cards, bank transfers, debit cards, and some forms of electronic payment. The advent of the virtual world has given rise to new methods of payment, including the use of virtual currencies such as Second Life®'s Linden Dollars, Cyworld's acorns, World of Warcraft's virtual gold, and Cyber Agent's "Ame Gold," and BitCoin. In addition, virtual payment platforms such as PayPal®, PlaySpan, Facebook Credits, and Boku are increasingly playing an important role in facilitating virtual payments. Given the nature of virtual world transactions, payment methods inevitably lead to questions of taxable income and jurisdictional issues.

Section 7 of the book deals with the remedies for buyers and sellers arising out of commercial transactions in the virtual world. In real world commercial transactions, both buyers and sellers may be entitled to remedies in the event of breach of contract. While the debate over whether sale of virtual goods can give rise to property in those goods and thus remedies for breach, an analysis of the need for potential remedies in the event that such a right is recognized is important. Remedies may include action for

price, damages for non-delivery or non-acceptance, and specific performance. While the dollar values for a single virtual world purchase may be small, these single purchase values may increase as more and more businesses and organizations enter the virtual world. In addition, these values may be significantly large over time. The chapters in this section deal with the lack of regulations surrounding virtual world remedies and whether real world laws and regulations can serve as a solid foundation for commercial transactions in the virtual world.

Section 8 of the book deals with applicability of the law of security in virtual world transactions, both for real and quasi security. The law of security deals with using real or personal property as an asset against which one can obtain an interest in money or other goods. Security is essential to facilitating largescale commercial transactions. Specifically, security is "...created where a person (the 'creditor') to whom an obligation is owed by another ('the debtor') by statute or contract, in addition to the personal promise of the debtor to discharge the obligation, obtains rights exercisable against some property in which debtor has an interest in order to enforce the discharge of the debtor's obligation to the creditor." 48 Security can take the form of real security (e.g., pledge, mortgage, lien, or charge) or quasi-security (e.g., guarantee, indemnity, performance bond, or retention of title). The chapters in this section investigate the possibility of applying the law of security to virtual world transactions and whether existing real world laws are sufficient to accommodate the needs of the virtual marketplace.

Section 9 of the book investigates banking and money lending institutions within the context of virtual world transactions. While banks do, in most cases, provide loans and credit, private money lending institutions are subject to strict, separate regulations

⁴⁸ Bristol Airport plc v Powdrill [1990] Ch 744 at 760.

than banks. For example, in Hong Kong, private money lending institutions are governed by the Money Lenders Ordinance while banks are governed by the Banking Ordinance. The chapters in this section discuss the nature of virtual world financial transactions, the use of virtual banks, and whether existing banking and money lending laws are sufficiently comprehensive to cover virtual world transactions. Given the rise of virtual banking, which is still in its nascent form, this is an area ripe for further research and reform given the extensive regulations which overshadow the banking industry.

Section 10 of the book looks at the availability and effectiveness of consumer protection laws in virtual world transactions. Virtual worlds, which are generally known to be devoid of extensive rules and regulations, are also potentially an ideal place where unfavorable conduct may occur, especially since most virtual worlds are governed by EULAs and Terms of Service that are seen as one-sided agreements in favor of the virtual world developers and owners. In his 2009 article, Aiken discussed potential cases of assault, harassment, and disruptive or harmful social behavior as reported by some virtual world users.⁴⁹ In addition, virtual world users in various jurisdictions around the world have filed cases alleging theft of virtual property. Virtual world transactions may also give rise to misrepresentation, duress, or unconscionable conduct. The chapters in this section look at both in-world and real world ways in which consumers can seek protection and whether existing consumer protection laws are sufficient or deficient in dealing with protection of virtual world

⁴⁹ Claude T. Aiken IV, Sources of Law and Modes of Governance: Ethnography and Theory in Second Life, (2009) 10 Pittsburgh Journal of Technology Law and Policy 9 http://ssrn.com/abstract=1148416 accessed December 3, 2013; See also Benjamin Duranske, 'Reader Roundtable: "Virtual Rape" Claim Brings Belgian Police to Second Life' (Virtually Blind, April 24 2007) http://virtuallyblind.com/2007/04/24/open-roundtable-allegations-of-virtual-rape-bring-belgian-police-to-second-life/ accessed December 3, 2013.

consumers. Given the impending rise in virtual world users and virtual commercial transactions, this is an important area of law which must be solidified and effective if virtual economies are to succeed.

Finally, section 11 of the book explores the mechanisms by which virtual world-related disputes or actual disputes in the virtual world can be resolved. The continuum of dispute resolution includes such well-known processes as negotiation, conciliation, mediation, arbitration, and litigation. Cases involving virtual world creators have, to date, eventually led to litigation although some EULAs contain an arbitration clause compelling the parties to resolve disputes through arbitration. The chapters in this section investigate the extent to which existing dispute resolution process are sufficient to resolve virtual world disputes. In addition, the chapters in this section analyze and explore alternative ways for resolving such disputes, including the integration of online dispute resolution platforms as well as developing new virtual world dispute resolution platforms for resolving disputes within and related to virtual worlds.

5. Conclusion

In conclusion, the rise of commercial transactions in the virtual world means a renewed investigation into the ways in which modern commercial law must evolve to meet the needs of a new marketplace driven by technological advances and real-world, innovative trading demands. The aim of this book is to educate, spark debate, and encourage dialogue about the opportunities, challenges, and solutions that are necessary to support this new, dynamic market.

Students, practitioners, and academics will benefit from the collection of articles in this book. Students will benefit from an introduction to an exciting and emerging new economy that

will continue to challenge business practice, technology usage, and legal regulations as the Internet continues to evolve. In turn, students and future graduates must keep abreast and have a working knowledge of these challenges in order to serve clients well. New and existing practitioners in the fields of business, technology, and law will benefit from a comprehensive and interdisciplinary perspective about virtual worlds that will enhance and challenge their respective fields as well as open up opportunities for further brand recognition and business development. Finally, academics will benefit from finding areas of further research and education in hopes of encouraging greater evolution of modern commercial law as it continually strives "... accommodate the legitimate practices and expectations of the business community in relation to their commercial dealings." 50

⁵⁰ Roy Goode, 'The Codification of Commercial Law' (1988) 14 Mon L R 135, 147-155.