

CAN ELVISH GOLD PIECES EVER BECOME REAL MONEY?
THE NUMISMATIC QUALITIES OF VIRTUAL CURRENCY
UNDER THE LAW

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WORKING DRAFT

Summary

This essay addresses whether *virtual currency*, the medium of exchange used in the economies of massive multiplayer online games, can ever be imputed to be real money under American law. Part I defines the basic concepts surrounding virtual property and virtual currency. Part II focuses on the application of American commercial law to virtual currency, examines whether virtual currency should be construed by courts to be real money, and looks at public policy concerns of making such a determination. Part III examines virtual currency under existing Federal criminal law and focuses specifically on how the Money Laundering Control Act, 18 U.S.C.A. 1956, applies to virtual currency. Finally this essay summarizes the arguments presented and concludes that in specific situations, virtual currency should be imputed to be real money under the law.

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Introduction

Does *virtual currency*, the “play money” used in massive multiplayer online games, ever become "real money" under law? Should the American legal community even care?

Should the law care about a billion dollar industry that consists of electronic financial transactions? The secondary market for virtual property is a real market using real money conservatively estimated at \$540 million¹. The worldwide massive multiplayer online game (MMOG) Gross Domestic Product has recently been calculated at \$7.29 billion.² Virtual currency is the most liquid virtual property type because it is the economic medium of exchange in its game of origin.

Should the law care if that same industry was unregulated; lacked transparency; its transactions were completed off shore using encrypted servers; and could be used to launder money? Through the use of unregulated offshore virtual currency exchanges, it is currently possible to hide the origin of real funds by purchasing virtual currency with real money and transferring it all over the world through encrypted transactions without ever reporting to a government agency.³

Should the law care that recently a murder was committed by a vigilante because a foreign court failed to recognize ownership rights in a new type of property? Recently in China, a person was murdered when a virtual property transaction went sour. The court

¹ Dibbell, Julian, *MMO GDP, QED (WTF?) It's Estonia, Basically. Or Maybe Cote D'Ivoire. OK, Malta*, at http://terranova.blogs.com/terra_nova/2005/04/h1mmo_gdp_qed_w.html last visited April 24, 2005

² Id.

³ See “Part III. Virtual Currency Crimes,” Of this paper *Infra*.

failed to recognize the harmed party's right to remedy for their virtual property loss. The related murder was vigilantism.

The numismatic qualities of virtual currency are of concern to the American legal community. MMOG's are a growing social phenomenon in which millions of Americans participate. Each MMOG has its own "virtual currency" or medium of exchange. The status of virtual currency under the existing law has not yet been addressed by an American court. Although virtual currency is clearly not legal tender, analysis of it under American law should conclude that it is legally-- or "real"-- money when it used in certain types of transactions. Determining the threshold for when virtual currencies become real money is entirely novel to the court system. If American legal system determines that virtual currency becomes "real money" under existing law when it is being used as real money, then the legal system can evade the need to create a new set of laws and regulations to address related harms.

This essay addresses whether virtual currency can ever be imputed to be real money under American law. *Part I* defines the basic concepts surrounding virtual property and virtual currency. *Part II* Focuses on the application of American commercial law to virtual currency, examines whether virtual currency should be construed by courts to be real money, and looks at public policy concerns of making such a determination. *Part III* examines virtual currency under existing Federal criminal law, and focuses specifically on how the Money Laundering Control Act, 18 U.S.C.A. 1956, applies to virtual currency. Finally this essay summarizes the arguments presented and

concludes that in specific situations virtual currency should be determined to be real money under the law.

Topics Not Covered

This paper addresses whether virtual currency can ever be imputed to be real money under the law of the United States. However, there are many other legal concerns surrounding virtual property. These topics deserve their own study, but are outside the scope of this paper. Specifically, this essay will not address the address the following topics:

The Existence of Virtual Property Rights under Current Law

For the purposes of this paper, I am assuming that virtual world users have real world property interests in their virtual property. Although virtual property rights have been recognized to a limited extent in some international forums⁴, currently debate exists in the legal community as to whether virtual property is recognizable as real property interests under American law. Dan Hunter and Greg Lawaska address the legal status of virtual property in their seminal legal treatise, *Laws of Virtual Worlds*. They make convincing arguments that such rights should exist under American law.⁵

The Intellectual Property Rights of Players and Game Companies in Virtual Property

I am not addressing intellectual property arguments surrounding the ownership of virtual property. In *Determining Ownership in Virtual Worlds: Copyright and License Agreements*, Daniel Miller addresses the concerns of game companies in the granting of real property interests to massive multiplayer online game players who possess virtual

⁴ See Public policy discussion under Part II of this essey, supra.

⁵ Daniel Hunter and Greg Lawaska, *Laws of Virtual Worlds*, 92 Cal. L. Rev. 1, 5-11 (2004).

property.⁶ He makes several strong arguments including against the granting of players ownership in virtual property, based on intellectual property concerns of the game programmers. Note, however, such ownership rights are being granted by some MMOG game companies.⁷

Ownership Rights of Players to Virtual Property under EULA's and Terms of Usage

Most if not all MMOG companies require both End User Licensing Agreements (EULA) and Terms of Usage Agreements from their players. These EULAs and Terms of Usage Agreements often severely limit the player's usage of their virtual properties. Many companies forbid the participation by players in secondary markets. This paper does not address contract rights of between the players and the game companies. Whether or not these EULAs and Terms of Usage Agreements are binding on the player's alienability of their virtual property, is very much in contention.⁸

The Legal Status of Other Types of Virtual Property Transactions under Commodity and Securities Laws

Several different types of virtual property transactions occur within MMOG's and through third party exchanges. For example, players transact using virtual goods, swords, real estate, characters, and even their game accounts. Clearly, these transactions deserve analysis under securities laws and commodity laws to determine if either of those sets of

⁶ Daniel C. Miller, *Determining Ownership in Virtual Worlds: Copyright and License Agreements*, 22 Rev. Litig. 435 (2003)

⁷ Cory Ondrejka, *Escaping the Gilded Cage: User-Created Content and Building the Metaverse*, 49 N.Y. L. Sch. L. Rev. 81 (2004)

⁸ Nicolas Gervassis, *In Search of the Value of Online Electronic Personae: Commercial MMORPGs and the Terms of Participation in Virtual Communities*, (arguing that EULA's are severely limited in their enforceability due to the unequal bargaining positions of licensees,) cite format requested by author: Gervassis, 'In Search of the Value of Online Electronic Personae: Commercial MMORPGs and the Terms of Participation in Virtual Communities', 2004 (3) *The Journal of Information, Law and Technology (JILT)*. <http://www2.warwick.ac.uk/fac/soc/law/elj/jilt/2004_3/gervassis/>

regulations applies. This paper makes no claim as to how those laws and regulations would apply.

Part I. Virtual Property Concepts

Virtual Concepts

In order to understand the legal significance of *virtual currency*, one must first have a conceptual understanding of *MMOG's*, *virtual property*, *virtual economies* and *virtual currency*.

Massive Multi Player Online Game (“MMOG”)

A *massive multiplayer online game* ("MMOG") is a type of computer game that enables hundreds or thousands of players to simultaneously interact in a game world they are connected to via the Internet. Typically this kind of game is played in an online, multiplayer-only persistent world.⁹

Types of MMOGs

There are several types of massively multiplayer online games. This paper will focus on the massive multiplayer online role-playing games, known as "MMORPGs". The MMORPG is perhaps the most famous type of MMOG.¹⁰ This paper focuses on the MMORPG because the MMORPG is where virtual economies--the topic of this paper--are derived from. This paper will use the term generic term MMOG as reference to the MMORPG.

⁹For a complete list of MMOG variants see *Massively multiplayer online game*, wikipedia.org (2005), at <http://en.wikipedia.org/wiki/MMOG> (last visited on March 15, 2005).

¹⁰ See <http://en.wikipedia.org/wiki/MMOG> for a complete list of different types of MMOGs.

History of the MMOG

The first type of MMOG was the MMORPG. MMORPGs themselves trace their roots to MUDs, BBS games, and browser-based games. As computer game developers applied MMO ideas to other computer and video game genres, new acronyms started to develop, such as MMORTS (Massive Multiplayer Online Real Time Shooter). MMOG emerged as a generic term to cover this growing class of games.¹¹

Virtual Economy

In general, a *virtual economy* (or sometimes synthetic economy) is an emergent economy existing in a virtual persistent world, usually in the context of an internet game.¹² People enter these virtual economies recreationally rather than by necessity. Some people do interact with them for "real" economic benefit, as described later.

The largest virtual economies are currently found in MMORPGs, such as *EverQuest*, *Ultima Online*, *Dark Age of Camelot*, and *Lineage*. Virtual economies also exist in life simulation games such as *The Sims Online*. An economy will emerge in a game world with the following characteristics:

Persistence -- The software maintains a record of the state of the world and the resource possessions of the players, regardless of whether or not the game is "in session" for any user.

Scarcity-- Users must expend "real" resources such as time and money to obtain goods and/or services in the synthetic world.

¹¹ Julian Dibbell's "*Play Money*" website, available at http://www.juliandibbell.com/playmoney/2003_06_01_playmoney_archive.html#20043288

¹² *Virtual Economy*, wikipedia.org (2005), at http://en.wikipedia.org/wiki/Virtual_economy, (last visited March 15, 2005).

Specialization-- Availability to players of the resources must vary. For example, a participant whose character has metal smith skills could have the ability to make swords, while other players would have to purchase them. Because this results in comparative advantage, complex trade relationships and a division of labor result.

Trade-- Users must be able to transfer goods and services to and from other users.

Property Rights --The world must record which goods and services belong to which user identity, and the code must allow that user to dispose of the good or service according to whim.

These conditions of scarcity, specialization, and comparative advantage will create an economic system with properties similar to those seen in contemporary economies. Therefore, economic theory is often used to study these virtual worlds.¹³

Player Goals: Leveling and Experience

The general objective of MMOG players is to develop more powerful characters through the process of *leveling*. A player's level is the state at which a player's character can operate and function within the game. Beginning characters have lower levels than more experienced players because characters gain levels by gathering experience points. For, example, in a Tolken-esque MMOG, a first level beginning warrior character would be far less powerful than a level 40 wizard who had been playing the game for several

¹³ See generally, Edward Castronova, *Virtual Worlds: A First-Hand Account of Market and Society on the Cyberian Frontier*, available at [http:// papers.ssrn.com/sol3/papers.cfm?abstract_id=294828](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=294828) (Dec. 2001) (the first economic study of virtual property transactions.)

months. The wizard character would be able to access more game areas and have better skills as a result of her experience level.

Characters progress through "levels" by completing different tasks, quests, missions, and objectives throughout the game. For example, our low level warrior may be assigned a task to slay a rabid dog. By slaying the dog, the warrior will gather experience points that will progress him toward reaching a new level. Subsequent MMOG quests require a character to have more experience or power to complete than earlier lower level quests.

Collecting "Booty": the Acquisition of Virtual Property

As a MMOG player completes quests, they often are rewarded with treasure in the form of game tools and objects. For example, a warrior character might be awarded a sword for slaying a dragon, or a wizard might be awarded a new spell. Often character quests require the player to use such game tools to complete additional quests. For example, a key may be rewarded to in one quest that opens a door in future quest. It is important to note that in many games, these tools are under the complete domain of the player once they are awarded. The tools are placed in the inventory of the player, and the player can use the items or delete them at their will. For example, the sword our warrior was awarded, can be used by the warrior to slay additional monsters, sold to a vender for better equipment, or discarded to make room in the warrior's inventory for additional items. These tools in essence become the personal property of the character within the MMOG's virtual world. Hence, these tools are the *virtual property* of the character.

Generally, scarcity is programmed into the virtual property schemes of most MMOGs. More powerful items tend to be awarded with less frequency than less powerful items. This results in a hierarchy of value among the different pieces of virtual property throughout a MMOG. For example, an enchanted double handed sword of flaming death will have far more value than a common eating utensil.

Types of Virtual Property

In attempt to make virtual worlds more immersive for players to interact in, MMOG developers have created several different types of virtual property to fill out their created worlds. Virtual property has been created to mimic nearly all types of real world personal property. Within many MMOGs, a character can acquire clothes, furniture, hair products, undergarments, vehicles, jewelry, magic wands, assault rifles, armor, capes, masks, and even alcoholic beverages. Some MMOGs allow their characters to acquire virtual real estate. For example, the medieval fantasy MMOG *Asheron's Call* allows experienced characters to pool their resources and purchase castles. Some types of virtual property are building blocks that can be combined with different pieces of virtual property to create completely new items. For example, in Lucas Arts' science fiction themed MMOG, *Star Wars Galaxies*, a player can combine raw materials to craft a light saber.

Virtual Property Rights

MMOG developers have developed differing schemes when assigning property rights to its players. These rights differ in transferability and usability.

Some MMOG tools can only be possessed by the character who finds the items, and that player is restricted from assigning that tool to any other player. For example, a unique item acquired on quest might not be tradable, because it is only usable by the player on the quest while they are completing the quest. This prevents players from "cheating" and collecting items required for a quest without having faced the challenges assigned by the MMOG developer in order to earn the item.

Even if a piece of virtual property is assignable to other players, the item might be limited in its usability. For example, in Blizzard Entertainment's Fantasy MMOG *World of War Craft*, a character might find a sword with several different type of usability limitations. The sword might "bind" to the character on acquisition, meaning the sword can *only* be used by the player who found it, thus rendering the sword is useless to all other players. The sword might bind on first use, thus allowing the sword to be traded between players until it is used for the first time, which would trigger the termination of the item's usability to all other characters. The sword might only be usable by a player of a certain experience level or class of player.

Virtual Property Transactions

As MMOGs developed virtual property, they also developed processes for players to transact trades with the virtual property in their possession. Two key factors in virtual property transactions are (1) *who* the player transacts with, and (2) *what* the player transacts for.

Trading With Whom: *Player to Player* and *Player to NPC*

A player may either transact with *non-player character* ("NPC") merchants, or other players. NPC merchants are artificially intelligent robots programmed into the MMOG with the sole purpose of allowing players to exchange their virtual property. Most MMOGs have some form of NPC merchants. For example, in the MMOG *World of War Craft*, a warrior character looking to acquire a new scimitar might go into a sword shop and interact with a NPC merchant sitting behind a desk. The NPC merchant looks like a character in the world, but is an element of the MMOG's programming. The prices the NPC merchant offers are fixed by the MMOG programmers, so there is no room for negotiation of price.

In alternative, a player might trade virtual property directly with other players. These trades are often referred to as "player to player" trades. Most MMOGs have trading protocols imbedded into them which allow players to trade property back and forth, so long as the item of virtual property has been programmed with trade rights. Players are free to negotiate prices with other players and determine the fair market value within the game. Within the game, Players communicate through messaging systems built into the MMOG's and through email.

Trading For What: *Barter* and *Virtual Currency Transactions*

Virtual property trades occur predominantly through two basic types of transactions: *barter* and *virtual currency transactions*.

Barter

Barter for virtual property is essentially the same transaction as barter in the real world-- it occurs when a player exchanges one item of virtual property directly for different a virtual property item. For example, in Sony's fantasy themed MMOG *EverQuest*, a player might trade leather pelts directly for a chain mail vest. Virtual property bartering tends to occur exclusively through player to player transactions because it requires bargaining. Each player has different pricing levels on the goods they trade based on their own needs and concerns and. For example, iron ore has more value to a character with blacksmithing ability, and then it has for a leatherworking character.

Virtual Currency

Virtual property can also be exchanged for *virtual currency*. Virtual currency is defined as the money equivalent unit of trade that MMOG players can trade for goods and services. Each MMOG economy has its own unique virtual currency¹⁴. For example, the super heroes in the comic book themed MMOG *City of Heroes* trade in “Influence” units¹⁵ while the Elves and Dwarves of *Ultima Online* trade in units of “Gold.”¹⁶ Virtual currencies are used in many different types of transactions. Within each MMOG, virtual

¹⁴ Some MMOG economies break up their virtual currencies into units of different valued sub unit, just as the United States does with its currency (i.e., a single dollar is worth four US quarter s or 100 pennies.)For example, within a in a MMOG, A single “gold piece” may be worth four “silver pieces” or sixteen “copper pieces.” Most virtual currency exchanges however, only trade in a single unit of currency from each game, usually being each game’s most valuable unit for the purposes of trade efficiency.

¹⁵ Note: The names of the different virtual currencies can be found on virtual currency exchanges. In general, see <http://www.ige.com>. (last visited April 3, 2005)

¹⁶ In the Virtual Currency lexicon, the terms “Gold” or “Gold Piece” should not be confused with real gold coins or currency. Many different MMOGs use the term “Gold” for their virtual currency unit. For example, *Shadow Bane* and *Ultima Online*, two different and unrelated MMOGs, both use the term “Gold” for their respective currencies. While both virtual currencies have the name “gold”, It is important to note that *Shadow Bane* gold is not interchangeable or equal in value to *Ultima Online* gold. This is Analogous to real world currencies. For example, American dollars and Canadian Dollars, that are named the same thing but are totally independent currencies of on another. 3rd party virtual exchanges distinguish the different gold currencies by listing them with their corresponding MMOG origin. For example, see third party exchange, <http://www.mysupersales.com> (last visited 10/15/2004)

currencies are used to assign value to different objects controlled by the players.¹⁷ Virtual currencies are also used and to buy and sell in game assets just as real money is used to purchase real goods and services.

Off Server Transactions Using Virtual Currency

Transactions involving virtual currencies are not limited to their games of origin. Using third party exchanges and auction sites, players can trade one virtual currency for a different virtual currencies and virtual assets in different MMOGs. Players can also trade their virtual currency for real money using these third party exchanges.

Secondary Markets for Virtual Property

Virtual property transactions are not limited to the games of their origin. Soon after their inception, MMOG players developed secondary markets for virtual property, where players could sell their virtual property for real money. These secondary markets developed for several reasons.

First, players in possession of scarce virtual property often could not find suitable buyers within their origin MMOG servers because early MMOG's had no common exchange mechanism for players to auction their virtual property. For example, consider the following hypothetical situation: Within a MMOG, a high level wizard finds an extremely rare and powerful sword after defeating a dragon. Despite the sword's high level and clear value, the sword is unusable to the wizard because within the MMOG, wizard characters do not have the right to use swords. Thus, the sword is useless to the wizard as a tool. However, the sword still might have value to the wizard as a sword

¹⁷For example, In *Ultima Online*, a Powerful sword might be worth 1 million *Ultima Online* Gold Pieces, while a weak dagger, might be worth far less.

might not find a suitable buyer of his merchandise while the wizard was logged into the server. Within the MMOG, the wizard had two options for to sell the sword. First, the wizard could sell the sword to a NPC merchant for a stagnant price set by the MMOG designers. This amount might be for far less virtual currency than the wizard feels the sword was worth. Second, the wizard might sell the sword to another player who can use the sword. The wizard might have a difficult time finding a buyer within the game, because the wizard can only announce the sale of the good while logged onto the server, and such players might not be logged in during the time the sword's sale, or might be logged in but not reading the wizard's advertisements. In addition, the time and energy required to sell the sword within the game, take away from the wizard's enjoyment of the game fulfilling quests.

Second, players in search of scarce virtual property could not find the goods they required. For example, a high level warrior who might have be able to use the wizard's sword and might have the virtual currency to purchase the sword, might not be logged on to find out about its sale, because the warrior logs on to the MMOG during different hours. The warrior does not want to waste all gaming time looking for a seller of the goods because it takes away from the fulfillment of quests. Thus, even though there is a willing buyer and seller, the transaction does not occur.

Online Virtual Property Auctions

In 1997, "real" economic transactions began to occur using virtual property. Enterprising MMOG players began to use EBay and other web based auction sites to auction their virtual property for real money. Since then virtual property has been bought and sold on online auction sites.

These exchanges transact like all other online auctions: a seller posts the item for auction, and a buyer bids on it. After a bidder wins the auction, the buyer and seller agree to "meet" within the game, where the seller will deliver the virtual property¹⁸.

Size of Virtual Goods Markets

Today, the secondary markets for virtual property are well established and involve large sums of real money. For example, during the two-week period ending April 14 2004, the market volume of virtual goods from the MMOG *Ultima Online* traded on eBay was \$156,857. That number accounts for only one virtual world on one auction site. At the time of this writing, a search of eBay's category of "internet games" found 22,245 items for sale.¹⁹ *PlayerAuctions.com*, which only deals in virtual objects (mainly from *Ever Quest*), receives over two million hits a day; *ItemBay.com*, the dominant virtual object trading site for the Korean market (out of over 130 such sites), is rumored to have a turnover greater than that of the combined virtual worlds it services.²⁰

The reaction of game companies to the secondary markets of virtual property has been mixed. Some companies, such as Sony and Microsoft, are very concerned with the effects of virtual property auctions on their intellectual property rights in their respective MMOG's. Both Sony and Microsoft sent cease and desist letters to eBay, alleging that eBay was contributing to MMOG player's copyright infringement by allowing secondary

¹⁸ Edward Castronova, the economist who is most widely quoted on the subject of 2ndary markets for virtual property, has described the actual process of trading virtual goods through auction at <http://mypage.iu.edu/~castro/VirtualItemTrading.html>, (Last visited January 15, 2005.)

¹⁹ <http://www.ebay.com> search term "internet games". Last visited April 24, 2005.

²⁰ Richard Bartle, *Pitfalls of virtual property*, Themis Group, Dr. Richard (2004), at <http://www.themis-group.com/uploads/Pitfalls%20of%20Virtual%20Property.pdf>, (last visited Sunday, April 03, 2005.)

trading in MMOG virtual property. eBay reacted by banning trade of virtual property from the Sony and Microsoft games, but not all virtual property.²¹

Other companies have maintained a neutral standing toward secondary marketing of their games virtual property. Some MMOGs, like *Ultima Online*, forbid the transactions in their EULA's but have made no actual efforts to enforce those agreements, or thwart the players who engage in secondary marketing of their virtual property goods.

Finally, some companies have embraced these secondary markets as a significant boon to their game's utility to players, and have integrated them into their business models. For example, the MMOG *SecondLife* actually runs its own virtual property commodity exchange and grants players the virtual property ownership rights in their EULA and licensing agreements. *SecondLife* charges a transaction fee for each virtual property trade made by players.²²

Virtual Currency Exchanges

Several companies have set up exchanges exclusively dedicated to virtual property and currency transactions in an attempt to capitalize on this growing secondary market for virtual goods. For example the largest of these exchanges is *Internet Gaming Exchange, (IGE.com)*. The core business of *IGE.com* is the making of secondary markets for the buying and selling of the virtual currencies and property used by players of multiplayer online games. In addition to making markets for the purchase and sale of virtual currency and property, *IGE.com* has developed and operates the “*Virtual*

²¹ Note that as of this writing, Sony is planning on launching its own online auction site for virtual property within its proprietary MMOGs and Microsoft is planning to sell virtual property for its X box games.

²² <http://www.gamingopenmarket.com> ,(last visited April 24, 2005).

Currency Exchange”, an internet-based platform to facilitate players' direct exchange of MMORPG currency from one game into the virtual currency of other multiplayer games. *IGE.com* recently acquired *PlayerAuctions.com* (www.playerauctions.com), the industry-leading auction exchange site for virtual currency and property.²³

²³ <http://www.ige.com> (last visited March 15, 2005).

Part II. Virtual Currency and Commercial Transactional Law

The “Ragnar “Hypothetical

Ragnar the Bloody—slaughterer of demons, blight of the dark elves, scourge of the haunted sea—folded his bronzed arms across his muscular chest and awaited the stranger with growing ambivalence. Things were not going well.

Earlier that week, the “Service” had sent Ragnar a message that the deal had been struck. Through an intermediary, Ragnar had paid a large sum of money to a stranger. In return, Ragnar was to receive a fortune in platinum bars. The message had to Ragnar to wait at the east corner of the bazaar square at noon. There he would be approached by a wizened old mage known as “Alfonse the Strange” who would give Ragnar the platinum.

Ragnar’s brow furrowed. Alfonse was 20 minutes late. Something had gone sour with the deal. He sent a message to the service asking what had happened. An hour passed. No response came. Ragnar contacted the constabulary who told him no person named “Alfonse the Strange” existed within the city.

“By the beards of the seven prophets!” screamed Ragnar, as rage filled him. Ragnar had been conned out of money. Reaching for his sword, Ragnar made an oath to the Gods of Revenge. Ragnar immediately began plotting. What would he do? Behead the members of the service? Disembowel their families and livestock? No, those actions were too soft for such an offence against him.

Ragnar brooded. Ragnar thought. Finally, Ragnar reached a solution. “I’ll sue them in the real world!”

Ragnar’s name wasn’t really “Ragnar” in the real world, nor was the platinum he purchased really platinum. He was in fact an overworked lawyer who played a fantasy based MMOG in his very sparse spare time. He didn’t have the time to log in the hundreds of hours required to find high quality virtual equipment for his character “Ragnar.” Instead, Ragnar purchased items and virtual currency from “gold farmers” on eBay or on one of the numerous virtual commodities exchange using real money. The platinum was the currency of the game. The service Ragnar had purchased the platinum from was a third party virtual commodities exchange based in China and had charged him \$50 dollars.

Introduction to Commercial Transactions Involving Virtual Currency

As novel as it seems, events similar to the “Ragnar” hypothetical occur on a regular basis. It is estimated that the world wide secondary markets for MMOG virtual property is in the billions of dollars²⁴. Since Edward Castronova’s ground breaking article *Economics of Virtual Worlds*, academia has begun to examine the real economic markets that have developed around these virtual worlds. However, since it is a relatively new phenomenon, very little legal study completed to date inquiring into to legal status of virtual property when exchanged in secondary markets. The reason is simple. No American case law has determined as of yet the legal status of virtual property, nor has any legislation been written that specifically addresses the surrounding virtual currency

²⁴Dibbell, Julian, *MMO GDP, QED (WTF?)*, Blogs.terranova.com at <http://www.typepad.com/t/trackback/2329980> last visited 4/24/2005

issues. The following section addresses the legal status of virtual currency in commercial transactions. Considering this hypo, what is the legal status of the Platinum under American law?

The Status of Virtual Currency under Commercial Law

The legal definition of “money” must first be understood before to the legal status of virtual currency can be determined under that definition.

Part One: Statement of the Law

Constitutional Power to Regulate Money

What is money? According to the United States Constitution, “money” is whatever Congress determines it to be. *Article I Section 8 clause 15* specifically grants Congress the power to coin money and to regulate the value of United States money and foreign coin. The purpose of this provision is to provide the same currency, having a uniform legal value, in all of the states.²⁵ To achieve this Constitutional purpose, the Federal courts have determined that the power to coin money necessarily carries with it the power to declare *what money is*.²⁶

To facilitate this determination, the courts have held that Congress has the power to establish a uniform national currency, declare of what it shall consist, endow that currency with the character and qualities of money having a defined legal value by requiring its acceptance at its face value as legal tender in the discharge of all debts, and

²⁵ Scott K. Zesch, *What Constitutes Money and Legal Tender*, 53A Am. Jur. 2d Money § 26 (2004).

²⁶ Nixon v Phillipoff (ND Ind) 615 F Supp 890, affd without op (CA7 Ind) 787 F2d 596.

regulate the value of such money, unless by so doing property is taken without due process of law.²⁷

"Money" Under the UCC and Case Law

In legal discussions, the term "money" can have either a narrow or a broad meaning. This definitional breadth under the law varies depending on which area of the law is being applied²⁸.

Uniform Commercial Code

As used in the Uniform Commercial Code (UCC) in relation to contract, "money" refers to a medium of exchange authorized or adopted by a domestic or foreign government as part of its currency. This narrow definition includes a monetary unit of account established by an intergovernmental organization or by agreement between two or more nations.²⁹ The UCC definition of "money" does not include the right to receive money, but rather is limited to currency³⁰ Under American law, parties can opt out from coverage of the UCC by drafting that intent into the terms of their contract.

Money in American Case Law

In American case law, courts have held "money" to both a literal and broad interpretation.³¹ Literally, "money" means *cash*³² --that is, something that is coined or

²⁷ Zesch, at § 26.

²⁸ For example, the Term "money" or "moneys" in will as including real property,(76 A.L.R. 3d 1254.) differs from What constitutes "money" within coverage or exclusion of theft or other crime policy, (68 A.L.R. 3d 1179).

²⁹ UCC § 1-201(24), and *what constitutes "money" within meaning of Uniform Commercial Code*, 40 A.L.R. 4th 346 (2004).

³⁰ Zesch, citing Christison v United States (CA7 Ill) 960 F2d 613 (1992)

³¹ Laura Dietz, et al., *SPECIFIC EXCLUSIONS FOR DEFINITIONS OF "GOODS"*,67 Am. Jur. 2d Sales § 45 (2004).

³² People v Clark, 256 Ill 14, 99 NE 866, (1912) Appeal of Jacobs, 140 Pa 268, 21 A 318 (1891).

stamped by public authority and has its value fixed by government.³³ In its broader sense, "money" designates the entire medium of exchange recognized by the custom of merchants and the laws of a country.³⁴ In other words, it encompasses wealth, capital, property,³⁵ and anything else that is transferable in commerce.³⁶ Thus, many things that are neither coin nor paper money have been classified or treated as money.³⁷ When used in its broad sense, "money" covers everything that by common consent represents property³⁸ and passes as such currently from hand to hand³⁹. The ordinary definition of "monetary" is "pertaining to the coinage or currency" or "having to do with money."⁴⁰

Part Two: Analysis under the Law

Narrow Definition of "Money" under the Uniform Commercial Code

The UCC is a uniform law that governs commercial transactions, including sales of goods, secured transactions, and negotiable instruments.⁴¹ The UCC has been adopted in some form by every state in the union.

"Money" As used in *UCC § 1-201(24)*, refers to a medium of exchange authorized or adopted by a domestic or foreign government as part of its currency. This

³³ Kennedy v Briere, 45 Tex 305; Paul v Ball, 31 Tex 10; Ferrell v State, 68 Tex Crim 487140 Pa 268, 21 A 318, 152 SW 901.

"Money" includes "currency," consisting of coins, government notes, and bank notes. Manufacturers' Nat'l Bank v United States Fidelity & Guaranty Co., 218 App Div 455, 218 NYS 332, revd on other grounds 245 NY 55, 156 NE 94, (1927).

³⁴ State v Finnegean, 127 Iowa 286, 103 NW 155; Vick v Howard, 136 Va 101, 116 SE 465, 31 ALR 240.

³⁵ In re Robinson's Estate, 175 Misc 433, 23 NYS2d 905; Fleck v Harmstad, 304 Pa 302, 155 A 875, 77 ALR 874.

³⁶ Leslie v Reynolds, 179 Kan 422, 295 P2d 1076.

³⁷ Vick v Howard, 136 Va 101, 116 SE 465, 31 ALR 240; State v McFetridge, 84 Wis 473, 54 NW 1, reh den 84 Wis 530, 54 NW 998.

³⁸ People v Clark, 256 Ill 14, 99 NE 866; Vick v Howard, 136 Va 101, 116 SE 465, 31 ALR 240.

³⁹ State v Finnegean, 127 Iowa 286, 103 NW 155; Losana Corp. v Porterfield, 14 Ohio St 2d 42, 43 Ohio Ops 2d 112, 236 NE2d 535.

⁴⁰ In re Kipp's Will (Sur) 37 NYS2d 541.

⁴¹ *Uniform Commercial Code*, Black's Law Dictionary, 8th ed. (2004).

narrow definition includes a monetary unit of account established by an intergovernmental organization or by agreement between two or more nations. The UCC definition of "money" does not include the right to receive money, but rather is limited to currency.⁴² Virtual currency does not appear to fulfill all the elements required to be deemed "Money" under the UCC analysis.

Medium of Exchange

Within each MMOG, a virtual currency is clearly a "*medium of exchange*." Within each MMOG virtual currency is used as a standard medium of exchange by players to buy and sell virtual items to merchants. Prices are listed within MMOGs based on virtual currencies. Virtual currencies are used within MMOG's between players as an exchange medium for goods and services. It is unclear, however that virtual currencies are a medium of exchange on the secondary markets. For example, on both eBay and IGE.com, virtual currencies are listed for purchase or sale under real currencies, i.e. dollars. While it is possible on IGE to barter or exchange one virtual currency for a different virtual currency, no one virtual currency is used universally as a medium of exchange. Rather, virtual currency exchanges are set up like foreign currency exchanges, where the currencies are marked as commodities.⁴³

At least one secondary market uses virtual currency as a medium of exchange. *GameingOpenMarket.com*, allows players to buy and sell virtual property in

⁴² Zesch, *UNIFORM COMMERCIAL CODE DEFINITION OF MONEY*, 53A Am. Jur. 2d Money § 2 (2002).

⁴³ See "Virtual Currency Exchanges" section of this paper, *supra*.

the MMOG *SecondLife*, using *linden dollars*.⁴⁴ *GamingOpenMarket.com*, however, requires that all parties who trade have real American dollars within their accounts to secure their transactions.⁴⁵ As such, it is hard to impute that linden dollars are actually used the medium of exchange, but rather is used as place holder or token for real American currency.

Authorization or Adoption by a Domestic or Foreign Government as Part of Its Currency

No virtual currency has yet been adopted by a foreign or domestic government as part of its currency. A philosophical argument can be made however, that MMOG's should be viewed as sovereign nations unto themselves. John Perry Barlow argued in his *Cyberspace Declaration of Independence* that the internet fell under the sovereignty of no government and was thus naturally independent⁴⁶. Similarly, might a MMOG, which takes on many if not all the theoretical functions of a government to players while they are logged on within a game, be construed itself a sovereign nation?

Within the boundaries of each MMOG, MMOG programmers take on many of the characteristics of a central authority whose commands MMOG players must obey. MMOG programmers maintain the power to mint their own currencies and to maintain economies. For example, each game program controls the price in game vendors sell their goods, and have the power to control currency flows. MMOG's maintain police powers.

⁴⁴ *Frequently Asked Questions*, available at <http://www.gamingopenmarket.com> (last visited March 15, 2005.)

⁴⁵ *Instructions*, <http://www.gamingopenmarket.com/instructions.php>. (last visited March 15, 2005.)

⁴⁶ Barlow, *Cyberspace Declaration of Independence*, [www.eff.org/~ Barlow/declaration-final.html](http://www.eff.org/~Barlow/declaration-final.html) (1996) (taken from but don't know if I have to cite Ku, *Cyberspace Law: Cases and Materials*, Aspen Law and Business, (2002), at 18.

Each game regulates the communications between players, and banishes, or punishes players who break rules. The fact that MMOG's only exist on computer servers do not necessarily prevent them from being viewed as sovereign nations. Actual physical sovereignty over a country is not required to be deemed "sovereign" under American law.⁴⁷ Rather sovereignty can be established by an intergovernmental organization, such as the United Nations or the World Bank. The UCC definition of money includes a monetary unit of account established by an intergovernmental organization or by agreement between two or more nations.⁴⁸

If MMOG's could establish sovereignty then an argument can be made that virtual currencies should be viewed as foreign currency under American law. New York case law has held that a currency is "Money" in the country where it is current is both a measure of value and a medium of exchange. In other countries it is a commodity bought and sold in the market, and its value fluctuates in the market like that of other commodities. [Richard v American Union Bank, 253 NY 166, 170 NE 532, 69 ALR 667.](#) Under the Richard holding, virtual currency could be viewed as foreign currency.⁴⁹

Legal Definition of a Sovereign State

The legal definition of sovereignty is tautological. To qualify for recognition as a state, an entity must have the attributes of a state. Under international law, a "state" is an entity that has a defined territory and a permanent population, under control of its own

⁴⁷ [Richard v. American Union Bank](#), Supra.

⁴⁸ UCC § 1-201(24). *What constitutes "money" within meaning of Uniform Commercial Code*, (40 A.L.R. 4th 346.)

⁴⁹ Note, however that foreign currency is a commodity and the UCC definition does not include money that is treated as a commodity rather than as a medium of exchange, such as coins of purely numismatic value. see [In re Midas Coin Co.](#) (ED Mo) 264 F Supp 193, 4 UCCRS 220, affd (CA8 Mo) 387 F2d 118, 4 UCCRS 908.

government, that engages in, or has capacity to engage in, formal relations with such other entities.⁵⁰ Under this legal definition, a MMOG is not a sovereign state.

Conceptually, each MMOG has a defined territory, under its domain although not a physical or tangible one. Within each MMOG, a bounded territory exists where its citizens interact. There are boundaries, governed borders, passable only through password protection. The MMOG's defined territory exists completely within electronic memory and is accessible only through internet access. Its borders are made up of information and code. There is however, no requirement that a state's territory exist physically. Under the law, international organizations, such as the United Nations and the World Bank are granted sovereign status even though they possess on defined physical territory.

However, MMOG's do not have permanent populations. Although some players do believe they are citizens of their online worlds,⁵¹ the population of a MMOG is made up of players who for contract for access to the MMOG server for limited times. When a player is not logged in, they are not part of the MMOG and cannot be considered to exist within the MMOG. In addition, a player may terminate their subscription within a MMOG at any time, and thus sever their relationship with the MMOG, and thus exiting the MMOG's population.

MMOG operators cannot be in control of their own governments because they do not claim sovereignty. MMOG operators purposely suborn themselves to other

⁵⁰ Restatement (Third) § 201; accord Klinghoffer, 937 F.2d at 47; National Petrochemical Co. of Iran v. M/T Stolt Sheaf, 860 F.2d 551, 553 (2d Cir.1988)

⁵¹ See in general, Castronova, article.

governments. For example, each MMOG is controlled by a real corporation, who is required to be chartered by an existing state or nation. Through this process of charter, MMOG operators agree to be bound by the laws of the chartering state, in exchange for the protections of that state. Although many MMOG operators determine the outcome of disputes between MMOG players that exist within the game, MMOG operators routinely include state forum clauses in their EULA's.⁵² Finally, no MMOG engages in, or has capacity to engage in, formal relations with sovereignty. No MMOG sends diplomats to other countries or signs treaties.

Clearly, it is unlikely Congress would view MMOG's as sovereign nations. Arguments that virtual currency is money under the UCC are at best tenuous. No MMOG actually is a sovereign nation. They all are owned and operated by private companies or corporations, which are incorporated under existing governmental charter.

Currency Defined

Under the UCC, currency is defined as something that is coined or stamped by public authority and has its value fixed by government⁵³. Virtual currency is not recognized as legal tender by any government. A virtual currency has never been adopted or authorized by any existing sovereign nation as part of its currency. Virtual

⁵²For example, Sony's *EverQuest* EULA specifically states "This Agreement is governed in all respects by the laws of the State of California as such laws are applied to agreements entered into and to be performed entirely within California between California residents. The UN Convention on Contracts for the International Sale of Goods is expressly disclaimed. Both parties submit to personal jurisdiction in California and further agree that any cause of action relating to this Agreement shall be brought in the County of San Diego, State of California (if under State law) or the Southern District of California (if under Federal law)." At http://eqlive.station.sony.com/support/customer_service/cs_EULA.jsp (last visited March 29, 2005)

⁵³ *Currency*. Black's Law Dictionary, 8th ed. (2004).

currency is clearly not coined or stamped by a public authority because MMOG's are virtual worlds where the physical act of stamping and coining is impossible.

Even if virtual coining or stamping were considered an acceptable form of coinage under the UCC definition of money, MMOGs and the companies that run them are not public authorities. The game companies are either publicly or privately held corporations that require chartering under state law. As such, it is unlikely that any real world government is going to determine that a virtual world service provider is a public authority. Virtual currency is Analogous to a game token at best.⁵⁴

Virtual currencies do not have their value fixed by any government. Indeed, it is arguable that virtual currencies valuation is not fixed at all since the secondary market valuation of each virtual currency changes on a daily basis. Thus, virtual currency cannot under considered *Currency* under the UCC analysis because : (1) it is not literally currency, (2) has no value fixed by a government, and (3) is not used, guaranteed, or even recognized by any government at this point..

The Broad Definition of “Money” Under Case Law

In American case law, courts have held “money” to both literal and broad interpretation.⁵⁵ Literally, "money" means *cash*⁵⁶ --that is, something that is coined or stamped by public authority and has its value fixed by government.⁵⁷ Clearly virtual currency fails to be money under this definition, because it is not literally coined or

⁵⁴ http://terranova.blogs.com/terra_nova/2004/04/vcurrency_emone.html (Last visited

⁵⁵ Zesch, 53A Am. Jur. 2d Money § 1.

⁵⁶ People v Clark, 256 Ill 14, 99 NE 866; Appeal of Jacobs, 140 Pa 268, 21 A 318

⁵⁷ Kennedy v Briere, 45 Tex 305; Paul v Ball, 31 Tex 10; Ferrell v State, 68 Tex Crim 487, 152 SW 901.

"Money" includes "currency," consisting of coins, government notes, and bank notes. Manufacturers' Nat'l Bank v United States Fidelity & Guaranty Co., 218 App Div 455, 218 NYS 332, revd on other grounds 245 NY 55, 156 NE 94.

cash.⁵⁸ This positivist definition of money often contrasted with the notion of justice in practice, specifically when a party relied on an item being money to their detriment. In response, courts have developed a much broader legal definition of money through case law. For example, In re Robinson's Estate 175 Misc. 433, 23 N.Y.S.2d 905 (1940), held the word "money" is frequently used, not only in wills but in contracts and other forms of agreement, to include securities, stocks, personal property, and money in bank when the context and all the circumstances which are rightfully considered indicate such to be the intention of the testator.⁵⁹ Under the broad legal definition courts have the broad discretion to determine virtual currency constitutes money under the law.

Courts have held the term "money" designates the entire medium of exchange recognized by the custom of merchants and the laws of a country.⁶⁰ In other words, it encompasses wealth, capital, property,⁶¹ and anything else that is transferable in commerce.⁶² Thus, many things that are neither coin nor paper money have been classified or treated as money.⁶³ When used in its broad sense, "money" covers everything that by common consent represents property⁶⁴ and passes as such currently

⁵⁸ See Sovereignty and Currency sections of this paper Supra.

⁵⁹ In re Robinson's Estate, at 907.

⁶⁰ State v Finnegean, 127 Iowa 286, 103 NW 155; Vick v Howard, 136 Va 101, 116 SE 465, 31 ALR 240.

⁶¹ In re Robinson's Estate, 175 Misc 433, 23 NYS2d 905; Fleck v Harmstad, 304 Pa 302, 155 A 875, 77 ALR 874.

⁶² Leslie v Reynolds, 179 Kan 422, 295 P2d 1076.

⁶³ Vick v Howard, 136 Va 101, 116 SE 465, 31 ALR 240; (Commercial Bank Notes were deemed money) State v McFetridge, 84 Wis 473, 54 NW 1, reh den 84 Wis 530, 54 NW 998. (Interest owed on bonds by a state treasurer was deemed money.)

⁶⁴ People v Clark, 256 Ill 14, 99 NE 866; Vick v Howard, 136 Va 101, 116 SE 465, 31 ALR 240.

from hand to hand⁶⁵. Some courts have used the ordinary definition of "monetary" is "pertaining to the coinage or currency" or "having to do with money."⁶⁶

Public Policy for Determining that Virtual Currency Is Real Money

Under this broad definition of money, a court has the discretion to find that virtual currency is legally money. Two key public policy concerns surrounding virtual currency transactions, *Freedom to contract* and *detrimental reliance*, might require a court to determine virtual property is real money.

Under contract law, parties have a general freedom to contract. This freedom includes the right of parties to determine the terms of their contract, provided those terms do not violate public policy or violate notions of justice. Thus, two contracting parties might determine that virtual currency is real money within the meaning of their contract's terms. If a court were to review such a contract, it is likely that court would rule virtual currency is real money under the terms of their contract because the parties agreed to that meaning under the contract. Thus, virtual currency might be deemed money by a court on the theory that the parties bargained for and agreed to the terms in their contract,

There is a public policy concern when a contracting party relies to their detriment on property rights that are not recognized by the courts. This concern applies to all virtual property transactions since the American legal system has not yet addressed the existence virtual property rights. If the court system chooses not recognize the right of a virtual property ownership when the participants contract around such reliance, the contracting

⁶⁵ State v Finnegean, 127 Iowa 286, 103 NW 155; Losana Corp. v Porterfield, 14 Ohio St 2d 42, 43 Ohio Ops 2d 112, 236 NE2d 535.

⁶⁶ In re Kipp's Will (Sur) 37 NYS2d 541.

parties might take the law into their own hands cases of breach. Parties tend to seek self help when the law does not address their harms. When there is no recognized system for arbitrating disputes, there can be no determined remedy, and the parties will take matters into their own hands. As Tomas A. Lipinski noted, “reliance on the ‘last frontier’ model of cyberspace leads to an environment in which any arbitration is metered out, like in the days of the Old West by vigilante justice. Those with the fastest gun were usually correct, as those who opposed them were not around to ask questions.”⁶⁷

American courts have yet to address these virtual property concerns. However, two recent court cases involving virtual property in China address the problems surrounding detrimental reliance. In the first case, the Chinese court determined a property right in virtual property existed. In the second case, the court recognized no such right, and one of the parties sought self help.

Case One: Judicial Recognition in Equitable Remedy

Consider the following case:

On December 20, 2003, In a first, Beijing's Chaoyang District People's Court in China has ruled that theft of virtual assets in an online gaming world are just as real as theft of real assets in the real world. In the case, the plaintiff Li Hongchen, 24, said that he had spent two years and 10,000 yuan (US\$1,210) buying pay-as-you-go cards to play, amassing weapons, powers and victories in the online computer game Hongyue or Red Moon, before his weapons were stolen. He said that his assets were stolen by another player who hacked into his account. Individual players have their own accounts, where they keep their weapons, powers and identity, which they assume when they go online. Li Hongchen accused the defendant, Beijing Arctic Ice Technology Development Co., developer and host of Red Moon, of not keeping his assets secure, and allowing another player to steal his assets. The defendant argued that the assets were virtual, and were only piles of data.

⁶⁷ Tomas A. Lipinski, *THE DEVELOPING LEGAL INFRASTRUCTURE AND THE GLOBALIZATION OF INFORMATION: CONSTRUCTING A FRAMEWORK FOR CRITICAL CHOICES IN THE NEW MILLENNIUM INTERNET --CHARACTER, CONTENT AND CONFUSION*, 6 Rich. J.L. & Tech. 19,(2000), 58.

By siding with the plaintiff, the Beijing court agreed with Chen that he had spent real time, wisdom, money and belongings, and that the company should make restitution.

Security is a major issue for all software companies, and hackers are especially prevalent in the Chinese online gaming world. Because online gaming has taken off so quickly in China, none of the distributors have had time to make their games secure, and hackers frequently break into the accounts of players to steal their assets. The court decision places the onus on the game makers and hosts to make their games secure, which any way one looks at it, will be a massive undertaking.⁶⁸

Case Two: Non Recognition and Vigilantism

The second case from China shows an example of significant problem when the does not recognize rights that the parties who contract do, and the parties seek extra legal remedies.

On March 30, 2005, A Shanghai online game player stabbed to death a competitor who sold his cyber-sword, creating a dilemma in China where no law exists for the ownership of virtual weapons. Qiu Chengwei, 41, stabbed competitor Zhu Caoyuan repeatedly in the chest after he was told Zhu had sold his "dragon saber," used in the popular online game, *Legend of Mir 3*.

Legend of Mir 3 features heroes and villains, sorcerers and warriors, many of whom wield enormous swords. Qiu and a friend jointly won their weapon, and lent it to Zhu who then sold it for 7,200 yuan (US\$870). Qui went to the police to report the "theft" but was told the weapon was not real property protected by law. Zhu promised to hand over the cash but an angry Qui lost patience and attacked Zhu at his home, stabbing him in the left chest with great force and killing him.⁶⁹

Although the previous example is of the utmost extreme, it does show the tendency of parties when the law does not recognize their property rights. Self help in the face of lack of recognition of legal rights to virtual property can lead to instances of

⁶⁸ Paul Denlinger, *Beijing Court Rules That Virtual Theft Is Real Theft*, China Business Strategy, Dec. 20, 2003. at <http://www.china-ready.com/news/Dec2003/BeijingCourtRulesThatVirtualTheftIsRealTheft122003.html> (last visited March 30, 2005.) On File with Author.

⁶⁹ Reuters, *Online Gamer Stabbed for Selling Cyber-Saber*, (Beijing) Mar 30, 2005.

vigilantism. For the purposes of maintaining a just and civil society, American courts should recognize virtual property rights in contract transactions.

Part III. Virtual Currency Crimes

The “Saul” Hypothetical

Saul the Saboteur was up to no good. But the no good Saul had planned required moving large amounts of currency from Columbia into the United States without any government agency knowing about it. Instead of smuggling hard currency across physical borders, or engaging in traditional banking scams, Saul decided to use Massive Multiplayer Online Video Games to launder his funds.

Saul’s devious plan was as follows:

First, Saul opened an Ultima Online Account based in Colombia. Then Saul opened an Ever Quest account based in America. Each account was opened using different financial information and credentials that Saul had created using identities he had stolen.

Next, Saul went online to a third party Virtual Currency exchange and proceeded to buy \$1000 worth of Ultima Currency using real dollars, which were delivered to a character Saul had created using his Ultima Online Account. Saul then exchanged his Ultima Online virtual currency for Ever Quest currency through a different 3rd party exchange. He had the Ever Quest virtual currency delivered to a character created American based Ever Quest account. Once Saul received his Ever Quest currency, he then sold it through a yet another online virtual property exchange for real dollars and had the proceeds sent to an American based PayPal account.

Viola! Saul's dirty Columbian money first became virtual currency and then real money America. Each transaction to move the funds to the US was protected by different encryption protocols, making it hard to track. The more MMOGs Saul funneled the currency through, the more difficult it became to trace the transaction.

Saul repeated the process several times, each time getting more sophisticated in his malfeasance. Saul realized that he could even throw larger complications in to confuse regulators: Saul created several Ever Quest accounts and transfer the money in small amounts to each of them before exchanging it for real currency.

Introduction to Crimes Involving Virtual Currency

The following analysis will consider the hypothetical facts above, to explore whether virtual currency transactions can be the subject of Federal criminal law.

Criminal Acts Involving Money

Just as Congress has the power to issue and regulate money under the Constitution, Congress has the power to create criminal laws in the practice of that regulation. Congress has always been acutely aware of the problems that unreported money transactions have created in s to collecting taxes, funding criminal enterprises, and corruption. Recently, the new threat of funding terrorism has become a pressing issue. To address all these issues Congress has created a series of criminal statutes.

Federal Money Laundering Control Act

The *Federal Money Laundering Control Act, 18 USCA § 1956*, (“the Act”) imposes criminal sanctions, as well as civil penalties, upon anyone who transports, transmits, or transfers a monetary instrument or funds from a place in the United States to

or through a place outside the United States, or to a place in the United States from or through a place outside the United States, or who attempts to do so, if any of the following conditions are met:

(1) The person has the intent to promote the carrying on of a specified unlawful activity;

(2) The person knows that the monetary instrument or funds represent the proceeds of some form of unlawful activity and knows that the transportation, transmission, or transfer is designed, in whole or in part, to conceal or disguise the nature, location, source, ownership, or control of the proceeds of a specified unlawful activity; or

(3) The person knows that the monetary instrument or funds represent the proceeds of some form of unlawful activity and knows that the transportation, transmission, or transfer is designed, in whole or in part, to prevent a transaction reporting requirement under state or Federal law.⁷⁰

Before determining whether or not Saul's hypothetical actions violate this statute, jurisdiction must be established and statute's terms must be defined.

Determining Jurisdiction Application of the Statute in Virtual Currency Transactions

In the hypothetical, Saul is currently physically in the country Columbia, so personal jurisdiction becomes difficult to claim. For the law to apply to Saul, extraterritorial jurisdiction must exist.

⁷⁰ Zesch, *Money Laundering Control Act*, 53A Am. Jur. 2d, Money § 61. (2004).

Extraterritorial jurisdiction exists under this statute if the prohibited conduct is by a United States citizen or occurs in part in the United States and the transaction (or series of related transactions) involves funds or monetary instruments exceeding \$10,000.⁷¹

Courts have concluded that the money-laundering statute was intended to address a separate crime distinct from, and occurring after the completion of, the underlying criminal activity that generated the money.⁷²

In hypothetical, Saul's citizenship is unstated. If Saul were a United States citizen, then the statute would clearly grant the United States jurisdiction over him. This is important because it stands for the notion that if the Federal Money Laundering Control Act is applicable to virtual currency transactions, then any United States citizen engaging in third party virtual currency transactions will be subject to criminal prosecution—regardless of where they physically are located—if virtual currency is being used in furtherance of specified prohibited conduct. Hypothetically, this would also apply to United States corporations that set up offshore entities that engaged in third party virtual currency market making, since United States corporations are viewed as United States citizens under the law. In addition, the bedrock doctrine might impute the actions of the offshore subsidiary to the United States based parent company.

If however, Saul were not a United States citizen, then jurisdiction would not apply unless (1) the transactions occurred in part in the United States and (2) the transactions or series of related transactions involved funds or monetary instruments

⁷¹ Id.

⁷² Id.

exceeding \$10,000. Saul might argue that the transactions did not occur within the United States at all because all transactions occurred in cyberspace or within the MMOGs. This gambit would not prevent the finding of jurisdiction because Saul's transactions occurred at least in part in the United States since the end result of his stated action was to place real money within a United States based bank account through PayPal. Even if the funds did not ultimately end up in a United States based bank account, jurisdiction might still exist because Saul's transactions were electronic and as such were routed through servers. Because it is likely that at some point one of those servers was physically located within the United States, a court could find that some part of Saul's transaction occurred there.⁷³

Applying the Definition of "Monetary Instrument" to Virtual Currency

Technical Definition

For purposes of the Act, "monetary instrument" means coin or currency of the United States or of any other country, travelers' checks, personal checks, bank checks, money orders, and investment securities or negotiable instruments, in bearer form or otherwise in such form that title thereto passes upon delivery.⁷⁴

Under this definition, virtual currency is not a monetary instrument. Virtual currency is clearly not a coin or currency of the United States or any other country, as it is not issued by any government for the purposes of legal tender or backed by the full

⁷³ Insert Cyberlaw case that States the deal with JX and server locations, not sure whether to quote to Ku or not.

⁷⁴ The Money Laundering Control Act, 18 U.S.C.A. §1956 (c)(5), states the term "monetary instruments" means "(i) coin or currency of the United States or of any other country, travelers' checks, personal checks, bank checks, and money orders, or (ii) investment securities or negotiable instruments, in bearer form or otherwise in such form that title thereto passes upon delivery."

faith and credit of a sovereign nation.⁷⁵ Nor is virtual currency equivalent to a travelers' check, personal check, bank check, or money order, because each of those devices is created as direct vehicle for the transfer of real currency, held by a bank or financial institution. Virtual currency's value is not based directly on its ability to connect with a real currency, nor can it be directly redeemed for real currency. Rather a virtual currency's value is based on its ability to be traded at an exchange as a commodity.

In theory an argument can be made that virtual currency is an investment security under the act because it can be bought and sold through a virtual currency exchange much like investment securities are. However, the technical definition of an *investment security* is the ownership share of publicly held company registered with a stock exchange. Virtual currency does not fit under this definition of a security because it does not represent ownership of in a publicly held company.⁷⁶

Finally, virtual currency is not a negotiable instrument. A negotiable instrument is a written instrument that (1) is signed by the maker or drawer, (2) includes an unconditional promise or order to pay a specified sum of money, (3) is payable on demand or at a definite time, and (4) is payable to order or to bearer.⁷⁷ Assuming that virtual currency is a written instrument, it is not signed by the maker or drawer. Virtual currency is not payable on demand at a definite time; rather it is a unit of value only in the game of its origin. Finally, the bearer of virtual currency has no claim of payment based on its possession, and thus is in nonbearer form.

⁷⁵ See MMOG sovereignty section of this paper, *infra*.

⁷⁶ An argument can be made that virtual currencies are commodities, because they are traded on virtual currency exchanges much like foreign currency exchanges are. Under the law, foreign currency is treated as a commodity, when traded within the United States. This argument merits further study.

⁷⁷ *Negotiable Instrument*, Black's Law Dictionary, (8th ed. 2004).

Imputed Financial Transaction

Although virtual currency may not technically be a monetary instrument, Saul's use of it may still violate the Act. A defendant need not use a monetary instrument to violate 18 U.S.C.A. § 1956. In United States v Arditti 955 F.2d 331, (CA5 Tex, 1992)⁷⁸, the Court held that conviction under 18 U.S.C.A. § 1956 does not require that the defendant have used a "monetary instrument" as that term is defined in the statute in the offense. The court noted that cashier's checks in nonbearer form are not "monetary instruments" under § 1956(c)(5), which provides that, "The term 'monetary instruments' means (i) coin or currency...., travelers' checks, personal checks, bank checks, and money orders, or (ii) investment securities or negotiable instruments in bearer form or otherwise in such form that title thereto passes upon delivery."⁷⁹ However, the court stated, that a "financial transaction" for the purposes of the statute is "[1] a transaction involving the movement of funds by wire or other means or [2] involving.... monetary instruments.... or [3] involving the use of a financial institution which is engaged in, or the activities of which affect, interstate or foreign commerce in any way or degree." In addition, the court stated that although cashier's checks were the means through which the conspirators were to launder the funds, the objective of the conspiracy was to launder the cash that an undercover government agent claimed to have obtained through his drug wholesaling activities; cash, of course, is a monetary instrument.

Under the Arditti reasoning, Saul's virtual currency transactions would be deemed a financial transaction for the purposes of the statute. Ultimately the virtual currency

⁷⁸ United States v. Arditti, 955 F.2d 331 (5th Cir.), cert. denied, 506 U.S. 998, 113 S.Ct. 597, 121 L.Ed.2d 534 (1992).

⁷⁹ 18 U.S.C.A. § 1956(c)(5),

transactions involved the movement of funds by wire or other means, because they began and ended with the use of real currency via PayPal accounts. Pay Pal is a financial institution that specializes in the electronic funds via the internet both domestically and internationally. Thus, Saul engaged in “transactions involving the movement of funds by wire or other means.” As such, the “financial transaction” element of the Act would be satisfied.

Intent to Commit a Specified Unlawful Activity

Violation of the Act requires a person to have the intent to promote the carrying on of a specified unlawful activity. The Act latches itself to the specific unlawful activity. The list of specified unlawful activities under the act is extremely vast. A "specified unlawful activity" includes, among numerous other things, the manufacture or distribution of a controlled substance, kidnapping, robbery, extortion, fraud by or against a foreign bank, and environmental crimes.⁸⁰

In the hypothetical, Saul’s stated intent is to transfer money into the United States for the purposes of conducting an unnamed bad act. Because that bad act is not named, it cannot be identified as specified unlawful activity. However, although the ultimate purpose of Saul’s transactions was unspecified, several of Saul’s stated actions would satisfy the Act’s intent requirement.⁸¹

⁸⁰ 18 U.S.C.A § 1956(c)(7).

⁸¹ Saul might try to argue that he could not have the prerequisite intent to commit a money laundering offence under the gambit that no virtual currency case has ever been undertaken by the courts, and as such, he could not know the legal status of his actions. Note however, Proof of knowledge of illegality of structured transactions was not required in order to sustain conviction under money laundering provision of 18 U.S.C.A. § 1957, since willfulness is not element. U.S. v. Sokolow, 91 F.3d 396, 44 (3d Cir. 1996).

Identity Theft as a Specified Unlawful Activity under the Act

Saul's use of stolen identities to create both his MMOG accounts and PayPal Accounts would constitute the intent to commit a specified unlawful activity under the Act. Identity theft is an act or activity constituting an "racketeering activity" offense listed in 18 U.S.C.A. § 1961⁸². §1961 defines several different offenses which would qualify as specific unlawful activity under the Act. Specifically, § 1961 refers to fraud and related activity in connection with identification documents, listed under 18 U.S.C.A. § 1028.⁸³

Saul use of the stolen identities information in order to set up the initial bank accounts and MMOG accounts required that Saul knowingly transfer an identification document, authentication feature, or a false identification document knowing that such document or feature was stolen or produced without lawful authority⁸⁴ Thus, Saul's known actions would constitute the specified unlawful activity under the Act.

Additional Specified Unlawful Activity under the Act in relation to Virtual Property.

Saul's scheme entailed several different actions that required different intentions. These different acts qualify as the intent to carry out unlawful activity specified in the Act.⁸⁵ Since Saul's main purpose was to deliver funds into the United States without the government knowing, his conduct would clearly show intent to commit an offense under section 152 of the because it related to concealment of assets. Because Saul would be

⁸² Specified unlawful activity under the act includes "any act or activity constituting an offense listed in section 1961(1) of this title except an act which is indictable under subchapter II of chapter 53 of title 31". 18 U.S.C.A. § 1956(c)(7) (A).

⁸³ 18 U.S.C.A. § 1028 criminalizes fraud and related activity in connection with identification documents, authentication features, and information.

⁸⁴ 18 U.S.C.A. §1028 (a) (2).

⁸⁵ 18 U.S.C.A § 1956(c)(7)(D).

required to use credit cards to set up the MMOG Accounts, Saul's actions would show intent to commit a crime under section 657, relating to lending, credit, and insurance institutions, would apply. Saul's transactions involved identity theft and the use of the internet. The internet and its banking infrastructure are significantly funded by Federal funding. As such, Saul's acts might show intent to violate section 666, relating to theft or bribery concerning programs receiving Federal funds. Saul's acts could be seen as intent to violate the following Federal Criminal Code sections specified under the Act: section 1005 (relating to fraudulent bank entries), (relating to fraudulent Federal credit institution entries), 1007 (relating to fraudulent Federal Deposit Insurance transactions), and section 1014 (relating to fraudulent loan or credit applications).

Additionally, because of the undefined property status of virtual currency under the law, Saul's transactions might qualify as intent in novel ways under the statute. If virtual currency were determined to be a commercial good under the law, then Saul might have the intent to commit a crime under Section 545, relating to smuggling goods into the United States. If virtual currency were deemed merely the sum of its programming with no property rights, then Saul's acts could be construed under the law as an intent to violate section 1030, relating to computer fraud and abuse. Finally, and most intriguing, if the law determined that virtual currency was property in that it was the intellectual property of the MMOG in which it originated, and Saul's actions by selling it and buying it on secondary markets was a violation of the MMOG's copyright, then, Saul's actions might be seen as intent to violate section 2319 relating to copyright infringement.

“Proceeds” Under the Act

"Proceeds" as used in the Act is not limited to cash or money, but includes anything that results or accrues from the transaction.⁸⁶ As such, the virtual currency that Saul purchased is clearly would qualify as proceeds under the act, because the virtual currency came into his possession as a result of the transaction with the required criminal intent. This is crucial for application of the forfeiture rule, described below.

Property Considered “Involved In” a Money Laundering Offense Subject to Forfeiture

An important tool in the government's battle against crime is that of forfeiture. As part of The Money Laundering Control Act of 1986, Congress enacted both civil and criminal forfeiture statutes. 18 U.S.C.A. §§ 981-82. These statutes, as amended, permit forfeiture of property which is "involved in" a transaction or attempted transaction in violation of the money laundering statutes or an offense against those statutes for which a conviction has been obtained. Although § 981(a)(1) makes separate provision for forfeiture of the proceeds of unlawful transactions, under §982(a)(1), property may be "involved in" such transactions whether it was the subject of the offense or merely the proceeds of the offense. Thus, it is central to forfeiture proceeding to determine when property is "involved in" a prohibited activity so as to be subject to forfeiture.⁸⁷

Civil and criminal forfeiture of property involved in unlawful activity is a central tool in the government's continuing efforts against crime and particularly operations involving controlled substances and money laundering. Under both civil and criminal forfeiture statutes, 18 U.S.C.A. § 981(a)(1)(A) and 982(a)(1), property which is involved

⁸⁶U.S.C.A § 1956(c)(1).

⁸⁷ Chamberlin, 135 A.L.R. Fed. 367, (2004.)

in a transaction or attempted transaction or offense in violation of the money laundering statutes is subject to forfeiture to the government. The court in United States v All Inventories of Businesses Known as Khalife Bros. Jewelry (1992, ED Mich) 806 F Supp 648, 135 ALR Fed 775, has interpreted the phrase "involved in" to extend to property which facilitates a violation of the money laundering statutes, thus permitting forfeiture of such property.⁸⁸

Assuming in that Saul has been found guilty of committing money laundering, then the virtual currency he used to would be subject to forfeiture under both criminal and civil forfeiture statutes, because it is property which is involved in a transaction in violation of the money laundering statutes. In addition, each MMOG account Saul used to complete his surreptitious virtual property transactions would be subject to forfeiture as well, as would the PayPal accounts connected to them, and any bank accounts connected to those PayPal accounts.

⁸⁸ Id.

Conclusion

Current American law is inconclusive as to the numismatic qualities of virtual currency. Neither statute nor case law has ever directly addressed this issue. It appears however that the determination of whether this “play money” is legally “real money” depends on the totality of the circumstances in which it is used.

Virtual currency doesn't qualify as real money under commercial statute but might be imputed real money under case law. Even though virtual currency is a medium of exchange, it does not qualify as “money” under the UCC because it is not coined, minted, or currently recognized as legitimate medium of exchange by a sovereign state. Because both Federal and State courts have broad discretion under existing case law to determine whether or not an item can be construed to be money under the law, a court might hold that virtual currency is legally money when (1) the parties contract under that assumption, and (2) when making such a ruling would prevent injustice in cases of one party's detrimental reliance.

Under *Federal Money Laundering Control Act*, virtual currency does not fulfill the definition of “monetary instrument” because it is not coin or currency of the United States or of any other country, nor travelers' check, personal check, bank check, money order, and investment securities or negotiable instrument, in bearer form or otherwise in such form that title thereto passes upon delivery. However, because virtual currency can be used in crimes involving money and take on many of the characteristics of a financial instrument, it can be (1) imputed by the court to be a financial instrument for the

purposes of the Act, (2) might require reporting as such, and (3) is subject to seizure as such under the Act.