

What Virtual Worlds Can Do for Property Law

Juliet M. Moringiello

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WHAT VIRTUAL WORLDS CAN DO FOR PROPERTY LAW

*Juliet M. Moringiello**

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I. INTRODUCTION

Disputes over virtual world items, such as virtual money, Second Life islands, and even “sex beds,” can inform property law generally. Rights in these virtual world items, such as rights in software and many other intangible assets, are transferred by standard form agreements that are often designated as licenses. Other intangible assets,¹ such as internet domain names, are likewise transferred by standard form

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1. In this Article, I use the term “intangible asset” to refer to all assets that cannot be transferred manually. *See infra* notes 15–17 and accompanying text.

agreements that convey ambiguous property rights. In this Article, I suggest that a study of virtual world assets and the agreements used in their transfer can help us to better understand property law as applied to intangible assets. This better understanding of property law can, in turn, assist us in interpreting the contracts that purport to define property rights in intangible assets.

A virtual world is an online environment in which thousands of people can interact with one another on a persistent basis through their online personae known as avatars.² For many readers of this Article, virtual worlds need no explanation; it has been hard to read a major newspaper in the past several years without encountering an article about them. For example, in the past several years, *Second Life*³ and other virtual worlds were featured in numerous articles in major American newspapers, including *The New York Times*,⁴ *The Washington Post*,⁵ and *The Wall Street Journal*.⁶

Virtual worlds have captured the attention of legal and other scholars. The legal literature tends to focus on the application of “real world” laws to the virtual environment.⁷ Some have discussed how our

2. EDWARD CASTRONOVA, *SYNTHETIC WORLDS: THE BUSINESS AND CULTURE OF ONLINE GAMES 1* (University of Chicago Press 2005).

3. *Second Life*, <http://secondlife.com> (last visited Nov. 5, 2009).

4. Shira Boss, *Even in a Virtual World, ‘Stuff’ Matters*, N.Y. TIMES, Sept. 9, 2007, at 3.1, available at 2007 WLNR 17584091; Sara Corbett, *Portrait of an Artist as an Avatar*, N.Y. TIMES MAG., Mar. 8, 2009, at 22; Katie Hafner, *At Sundance, A Second Life Sweatshop is Art*, N.Y. TIMES, Jan. 28, 2008, at C5, available at 2008 WLNR 1658028; Stefanie Olsen, *Storefronts in Virtual Worlds Bringing in Real Money*, N.Y. TIMES, Dec. 8, 2008, at B6, available at 2008 WLNR 23546553; Louise Story, *Coke Promotes Itself in a New Virtual World*, N.Y. TIMES, Dec. 7, 2007, at C8, available at 2007 WLNR 24188664.

5. Daniel Greenberg, *Hate Those Pesky Security Lines? Seeing the ‘World’ the Digital Way on Second Life*, WASH. POST, Jan. 6, 2008, at P1; Robert O’Harrow Jr., *Spies’ Battleground Turns Virtual: Intelligence Officials See 3-D Online Worlds as Havens for Criminals*, WASH. POST, Feb. 6, 2008, at D1; Alan Sipress, *Where Real Money Meets Virtual Reality, The Jury Is Still Out*, WASH. POST, Dec. 26, 2006, at A1.

6. Alexandra Alter, *My Virtual Summer Job*, WALL ST. J., May 16, 2008, at W1; Anjali Athavaley, *A Job Interview You Don’t Have to Show Up For: Microsoft, Verizon, Others Use Virtual Worlds to Recruit; Dressing Avatars for Success*, WALL ST. J., June 20, 2007, at D1; Robin Sidel, *Cheer Up, Ben: Your Economy Isn’t As Bad as This One—In the Make-Believe World Of ‘Second Life,’ Banks Are Really Collapsing*, WALL ST. J., Jan. 23, 2008, at A1; Emily Steel, *Avatars at the Office: More Companies Move Into Virtual World ‘Second Life’; Ugly Bosses Can Be Models*, WALL ST. J., Nov. 13, 2006, at B1.

7. See generally Bryan T. Camp, *The Play’s the Thing: A Theory of Taxing Virtual Worlds*, 59 HASTINGS L.J. 1 (2007) (discussing the application of the Internal Revenue Code to virtual world transactions); Leandra Lederman, *“Stranger Than Fiction”: Taxing Virtual Worlds*, 82 N.Y.U. L. REV. 1620 (2007) (discussing the application of U.S. tax laws to transactions in both scripted and unscripted virtual worlds); Erez Reuveni, *On Virtual Worlds: Copyright and Contract Law at the Dawn of the Virtual Age*, 82 IND. L.J. 261 (2007) (arguing that copyright law should apply to virtual world creations).

property laws should apply in virtual worlds;⁸ others have questioned whether virtual worlds need their own governance institutions.⁹

On the other hand, some scholars in disciplines other than law have sought to eradicate the distinction between the “real world” and the “virtual world.” Economist Edward Castronova labels virtual worlds “synthetic worlds,” which he defines as “crafted places inside computers that are designed to accommodate large numbers of people.”¹⁰ Rather than looking from the outside in to determine whether “real world” rules should apply in these synthetic worlds, Castronova argues that the true significance of synthetic worlds lies in the effects that “in world” activity will have on the outside, or “real” world.¹¹ Anthropologist Thomas Malaby goes a step further, eschewing the term “virtual” in favor of Castronova’s “synthetic” because the former term “founders on the very distinction that animates it: the *real* and the *virtual*.”¹²

In this Article, I take another approach. Rather than asking whether real world laws can or should apply to virtual worlds, I discuss the ways in which the study of virtual worlds can contribute to real world law.¹³ Specifically, I explain what the study of virtual world assets can do for property law. As I have discussed in previous articles, lawmaking institutions have difficulty properly classifying rights in intangible assets.¹⁴ Several years ago, Joshua Fairfield identified some significant characteristics of “virtual property,” explaining that such property can be experienced in ways that mimic the experiences that people have

8. See generally Joshua A.T. Fairfield, *Virtual Property*, 85 B.U. L. REV. 1047 (2005) (proposing a theory of virtual property).

9. See generally Jack M. Balkin, *Virtual Liberty: Freedom to Design and Freedom to Play in Virtual Worlds*, 90 VA. L. REV. 2043 (2004) (arguing that legal regulation of virtual worlds is inevitable); F. Gregory Lastowka & Dan Hunter, *The Laws of the Virtual Worlds*, 92 CAL. L. REV. 1 (2004) (arguing that virtual worlds are jurisdictions separate from tangible world jurisdictions).

10. CASTRONOVA, *supra* note 2, at 4.

11. CASTRONOVA, *supra* note 2, at 7.

12. Thomas Malaby, *Parlaying Value: Capital in and Beyond Virtual Worlds*, 1 GAMES & CULTURE 141, 144 (2006).

13. Two scholars have suggested that virtual worlds might provide a testing ground for legal rules and that this use of virtual worlds would be desirable because of the difficulty of testing legal rules in the field. Caroline Bradley & A. Michael Froomkin, *Virtual Worlds, Real Rules*, 49 N.Y.L. SCH. L. REV. 103, 104 (2004).

14. Juliet M. Moringiello, *False Categories in Commercial Law: The (Ir)Relevance of (In)Tangibility*, 35 FLA. ST. U. L. REV. 119, 119–20 (2007) [hereinafter Moringiello, *False Categories*]; Juliet M. Moringiello, *Seizing Domain Names to Enforce Judgments: Looking Back to Look to the Future*, 72 U. CIN. L. REV. 95, 136–37 (2003) [hereinafter Moringiello, *Seizing Domain Names*]; Juliet M. Moringiello, *Towards a System of Estates in Virtual Property*, in CYBERLAW, SECURITY & PRIVACY 399, 400 (Sylvia Mercado Kierkegaard ed., 2007) [hereinafter Moringiello, *Towards a System of Estates*].

with tangible assets.¹⁵ In this Article, I argue that because of these unique characteristics, virtual world assets can help us understand the nature of property rights generally and rights in intangible assets in particular.¹⁶ This understanding can help lawmaking institutions fashion better rules governing transfers of rights in intangible assets. In this Article, I use the term “intangible assets” to include all personal property that cannot be transferred manually, such as intellectual property, Internet domain names, and electronically-delivered software.

In a previous article, I argued that “intangible” is not a significant property category for the purpose of creditors’ rights laws.¹⁷ In this Article, I expand my earlier analysis by arguing that virtual world assets graphically illustrate the different rights that persons can hold in an intangible asset. Once we see that intangible assets encompass the very same rights that are embodied in tangible assets, we can understand that the law should not permit the unfettered customization of property rights in intangible assets by standard form agreements, just as the law does not permit the unlimited customization of property rights in tangible assets and real property. My thesis is that a study of virtual world assets can help us understand why the *numerus clausus* principle should be more rigorously applied to rights in intangible assets and that the *numerus clausus* principle can, in turn, assist us in interpreting the standard form agreements that convey rights in intangible assets.

To frame the discussions in this Article, I use two disputes involving Second Life assets, *Bragg v. Linden Research*¹⁸ and *Eros, LLC v. Simon*.¹⁹ Although both disputes ended in settlements,²⁰ they provide an excellent framework within which to discuss property rights. These cases illustrate that treating “virtual world assets” as a discrete and novel legal category is misleading, because the same property rights that

15. Fairfield, *supra* note 8, at 1049–50. Fairfield uses the term “virtual property” to describe all intangible assets that are rivalrous and mimic tangible assets. *Id.*

16. At least one professor has used virtual worlds as a teaching tool in a first year Property class. See Elizabeth Townsend Gard & Rachel Goda, *The Fizzy Experiment: Second Life, Virtual Property and a 1L Property Course*, 24 SANTA CLARA COMPUTER & HIGH TECH. L. J. 915, 916–19 (2008).

17. Moringiello, *False Categories*, *supra* note 14, at 120.

18. Complaint, *Bragg v. Linden Research, Inc.*, 487 F. Supp. 2d 593 (E.D. Pa. 2007) (No. 06CV4925), available at http://www.lawy-ers.com/BraggvLinden_Complaint.pdf [hereinafter *Bragg* Complaint]. The complaint was originally filed in the Chester County, Pennsylvania Court of Common Pleas.

19. Complaint, *Eros, LLC v. Simon*, No. 1:07CV4447 (E.D.N.Y. Oct. 24, 2007), available at <http://www.citmedialaw.org/sites/citmedialaw.org/files/2007-10-24-Eros%20Complaint.pdf> [hereinafter *Eros* Complaint].

20. There are several reports of the *Bragg* settlement. See, e.g., Second Life Lawsuit, Law Spot Virtual Worlds Law Library, <http://www.lawspotonline.com/lawspot/vwlaw/liti/bragg.jsp> (last visited Nov. 5, 2009). For the *Eros* settlement, see Judgment by Consent as to Defendant Thomas Simon, *Eros*, No. 1:07CV4447 [hereinafter *Eros* Settlement].

exist in tangible, or “real” world assets exist in virtual world assets. Because these cases involve two distinct property issues, they can also illustrate why a study of virtual worlds can help us better understand property rights in intangible assets.

In Part II, I briefly describe the disputes in *Bragg* and *Eros*. In Part III, I explain virtual worlds and then parse the Second Life Terms of Service to illustrate the ambiguous nature of the rights granted by virtual world operators to participants in those worlds. In Part IV, I explore a traditional property principle, the *numerus clausus* principle, and explain why that principle, which prescribes a standard set of property forms, is a particularly useful tool for defining rights in intangible assets. In Part V, I discuss the pervasiveness of licenses today as well as the attempts by legislatures and courts to reclassify ambiguous or novel property grants. I conclude that an understanding of intangible assets, aided by an appreciation of virtual world creations, will assist us in interpreting the ambiguous property grants that many licenses currently convey.

II. BRAGG AND EROS: DISPUTES IN VIRTUAL PROPERTY

A. Bragg v. Linden Research: *Does Virtual Land Come in Fee Simple?*

Marc Bragg is a lawyer in West Chester, Pennsylvania.²¹ In late 2005, he joined Second Life, the virtual world developed by Linden Research (Linden).²² In order to join Second Life, Bragg was required to signify his agreement to the Second Life Terms of Service by clicking an “I accept” icon.²³ Bragg was an active participant in Second Life, and according to the complaint that he filed against Linden in the Chester County Court of Common Pleas in October 2006, he was interested in developing Second Life “real estate” because of his prior interest in land development.²⁴

Of course, land in Second Life is not land as we know it in the tangible world, but it looks and acts a lot like tangible world land. The parties in *Bragg* defined the asset known as virtual land very differently in their court filings.²⁵ Bragg, relying on Linden’s public representations,²⁶ conceded that the land was made up of Linden’s computer code, but claimed that he received “title and ownership rights

21. Law Offices of Marc S. Bragg, <http://www.chescolawyers.com> (last visited Nov. 5, 2009).

22. *Bragg* Complaint, *supra* note 18, at 16.

23. *Bragg v. Linden Research, Inc.*, 487 F. Supp. 2d 593, 603 (E.D. Pa. 2007).

24. *Bragg* Complaint, *supra* note 18, at 16.

25. *Bragg* Complaint, *supra* note 18, at 8–11, 15–16.

26. On the Second Life website, Linden tells members that they can “own” land. *See infra* notes 102–06 and accompanying text.

in that property separate and apart from the code itself.”²⁷ His complaint further distinguished the property right from its material manifestation by claiming that members’ valuables in Second Life are “stored as electromagnetic records” on Linden’s servers.²⁸

On the other hand, in its answer, Linden focused on the material making up the land.²⁹ Linden denied conveying title to anything, instead describing its grant to Bragg as “a license to access Linden’s proprietary server software, storage space, and computational power that enabled the experience of the ‘virtual land’ in Second Life.”³⁰

There are several ways to acquire land in Second Life; the method at issue in *Bragg* was the auction.³¹ Linden periodically creates new parcels of this land and auctions them to Second Life members.³² Bragg acquired numerous parcels of land—the list of parcels attached to his complaint is three and one-half pages long.³³

To buy land and other items in Second Life, Bragg acquired Lindens, Second Life’s currency. Bragg purchased his Second Life’s currency with U.S. dollars. Second Life members can maintain in-world accounts of their money and before the events that precipitated Bragg’s lawsuit, his in-world Linden account held the equivalent of 2000 U.S. dollars.³⁴

Bragg bought one of his parcels, Taessot, by taking advantage of an exploit in the Second Life system that allowed him to acquire the parcel cheaply.³⁵ He did so by obtaining access, without authorization, to a page on the Second Life auction website that enabled him to purchase land not yet released for auction.³⁶ This act violated the Second Life Terms of Service.³⁷ Because of this breach of contract, Linden froze Bragg’s account and removed Bragg’s name from all of the virtual land that he had acquired, thereby depriving Bragg of his Lindens and all of his land.³⁸ Linden later sold this land to other Second Life members.

Bragg’s complaint against Linden alleged several causes of action.³⁹

27. *Bragg Complaint*, *supra* note 18, at 2.

28. *Bragg Complaint*, *supra* note 18, at 13.

29. Defendants Linden Research, Inc. and Philip Rosedale’s Answer to Complaint and Linden Research, Inc.’s Counterclaims Against Plaintiff Marc Bragg at 15, *Bragg*, 487 F. Supp. 2d 593 (No. 06CV4925) [hereinafter Linden Answer].

30. *Id.*

31. *Bragg Complaint*, *supra* note 18. I explain the other methods in the next Part of this Article. *See infra* Part III.

32. Second Life, Purchasing Land, <http://secondlife.com/land/purchasing.php> (last visited Nov. 5, 2009).

33. *Bragg Complaint*, *supra* note 18, at Exhibit 1.

34. *Bragg Complaint*, *supra* note 18, at 22.

35. Linden Answer, *supra* note 29, at 20.

36. Linden Answer, *supra* note 29, at 20.

37. *Bragg*, 487 F. Supp. 2d at 597.

38. *Id.*

39. *Bragg Complaint*, *supra* note 18, at 33–39.

Most importantly for this Article, Bragg claimed that Linden converted his property.⁴⁰ Conversion is defined in the *Restatement (Second) of Torts* as “an intentional exercise of dominion or control over a chattel which so seriously interferes with the right of another to control it that the actor may justly be required to pay the other the full value of the chattel.”⁴¹ In order to hold Linden liable for conversion, a court would have to find that Bragg had property rights in these Second Life assets.⁴²

In October 2007, the parties in *Bragg* settled their dispute.⁴³ There was one published opinion in the case, in which the court held that one provision in the Terms of Service, the arbitration clause, was unconscionable.⁴⁴ The court never had the chance to analyze the rights granted to Bragg by the Terms of Service.⁴⁵

B. *Eros, LLC v. Simon: An Intellectual Property Dispute*

The plaintiffs in *Eros, LLC v. Simon* are described in the complaint as some of the most successful merchants in Second Life.⁴⁶ Kevin Alderman, the principal of the lead plaintiff, Eros, built the first in-world sex bed⁴⁷ and sells a host of adult-themed items.⁴⁸ The other plaintiffs sell items such as virtual clothing,⁴⁹ virtual furniture,⁵⁰ and avatar skins.⁵¹ According to the complaint, the items sold by the plaintiffs are protected by trademark and copyright laws.⁵²

Defendant, Thomas Simon, was a Second Life entrepreneur of a different sort. Rather than develop the animation programs, clothing,

40. *Bragg* Complaint, *supra* note 18, at 39–40.

41. RESTATEMENT (SECOND) OF TORTS § 222A (1965).

42. *See Kremen v. Cohen*, 337 F.3d 1024, 1029 (9th Cir. 2003) (addressing the conversion of an Internet domain name, the court noted that “[t]he preliminary question, . . . is whether registrants have property rights in their domain names”).

43. *See Second Life Lawsuit*, *supra* note 20.

44. *Bragg v. Linden Research, Inc.*, 487 F. Supp. 2d 593, 605–11 (E.D. Pa. 2007).

45. *Id.* I explain the rights granted by the Terms of Service in Part III of this Article. *See infra* Part III.B.

46. *Eros* Complaint, *supra* note 19, at 1.

47. *Id.* at 4. A “sex bed” is “a digital bed with built-in sex position animations.” Regina Lynn, *Stroker Serpentine, Second Life’s Porn Mogul, Speaks*, WIRED, Mar. 30, 2007, available at http://www.wired.com/culture/lifestyle/commentary/sexdrive/2007/03/sex_drive0330. Stroker Serpentine is Kevin Alderman’s alter ego. *Id.*; *see also Eros* Complaint *supra* note 19, at 4.

48. *Eros* Complaint, *supra* note 19, at 4.

49. Plaintiffs DE Designs, Kasi Lewis, and Teasa Copprue are described in the complaint as the sellers of some of the best selling avatar clothing and shoes in Second Life. *Eros* Complaint, *supra* note 19, at 6, 9, 12.

50. According to the *Eros* Complaint, plaintiff Linda Baca has sold thousands of items of virtual furniture to Second Life members around the world. *Eros* Complaint, *supra* note 19, at 7–8.

51. The *Eros* Complaint describes plaintiff Shannon Grei as the seller of some of the best-selling avatar skin designs in Second Life. *Eros* Complaint, *supra* note 19, at 10–11.

52. *Eros* Complaint, *supra* note 19, 7–13.

furniture, and skins himself, he simply copied them and sold the copies to Second Life members.⁵³ All of the objects that he copied were marked “no copy” or “no transfer.”⁵⁴ These markings make copying theoretically impossible, but there are security flaws in Second Life that enable copying of such objects.⁵⁵ Because he copied the items without the plaintiffs’ authorization, the plaintiffs sued him for, among other things, trademark and copyright infringement.⁵⁶ Simon did not raise much of a defense; he was quoted in *The New York Post* as saying “[plaintiffs] can say whatever they want to say[.] It’s a video game.”⁵⁷

In January 2008, the court entered a judgment by consent against Simon.⁵⁸ The judgment required him to pay the plaintiffs \$525 in restitution and to make all of his Second Life transaction records available to the plaintiffs.⁵⁹

C. Why Bragg and Eros Matter

If someone takes my bicycle from me without my permission, there is no question that the taker has committed conversion. My bicycle is tangible and historically, only property that could be lost and found, i.e. tangible property, could be converted.⁶⁰ Whether intangible assets such as domain names and electronic business records can be converted is a question that has vexed several courts in the last decade.⁶¹ In those cases, the courts have framed the issues before them broadly, asking whether *intangible property* can be converted.⁶² As I discussed in a previous article, classifying intangibles as a discrete category often leads to results of questionable value to the development of the law.⁶³

53. *Eros Complaint*, *supra* note 19, 7–13.

54. Benjamin Duranske, *Six Major Second Life Content Creators Sue Alleged Copyright Infringer in NY Federal District Court*, VIRTUALLY BLIND, Oct. 27, 2007, <http://virtuallyblind.com/2007/10/27/content-creators-sue-rase-kenzo/>.

55. *Id.*

56. *Eros Complaint*, *supra* note 19, at 15–21.

57. Kathianne Boniello, *Unreality Byte\$*, N.Y. POST, Oct. 28, 2007, at 9, *available at* 2007 WLNR 21381896.

58. *Eros Settlement*, *supra* note 20, at 1.

59. *Eros Settlement*, *supra* note 20, at 1–2.

60. W. PAGE KEETON ET AL., PROSSER AND KEETON ON TORTS § 15, at 90 (5th ed. 1984).

61. *See, e.g.*, *Kremen v. Cohen*, 337 F.3d 1024, 1030–34 (9th Cir. 2003) (holding that a domain name could be converted because it was merged in a document, the domain name system); *Thyroff v. Nationwide Mut. Ins. Co.*, 864 N.E.2d 1272, 1278 (N.Y. 2007) (holding that conversion applies to electronic business records because “it generally is not the physical nature of a document that determines its worth, it is the information memorialized in the document that has intrinsic value”).

62. *Kremen*, 337 F.3d at 1030–31; *Thyroff*, 864 N.E.2d at 1276.

63. *See generally* Moringiello, *False Categories*, *supra* note 14, at 120 (noting that “[c]lassifying property according to its tangibility or intangibility creates false categories [that] hinder the ability of commercial law to expand to adequately accommodate electronic assets.”).

Virtual world disputes give us a unique opportunity. Because virtual world property looks like tangible property (a virtual bicycle is represented in Second Life as a three-dimensional version of a bicycle), and behaves like tangible property (an avatar can ride a virtual bicycle, and if the avatar is doing so, no one else can ride the virtual bicycle),⁶⁴ virtual property might help us understand the nature of property rights in intangible assets in ways that disputes involving other intangible assets, such as domain names, cannot. The *Bragg* and *Eros* disputes illustrate why this is so.

Clearly, in the *Bragg v. Linden* case, the defendant, Linden, interfered with the plaintiff's right to use specific things. Those things, land and currency, happened to be intangible, yet they were also rivalrous. Marc Bragg had the right to exclude others from his virtual land,⁶⁵ and he had control over his currency account in the same way as we have control over our bank accounts.⁶⁶ The second case, *Eros, LLC v. Simon*, raises a different property issue, one of intellectual property rights.⁶⁷

Although cited as the first “formal . . . recognition of virtual property by a U.S. court,”⁶⁸ *Eros, LLC v. Simon* seems to be a straightforward trademark and copyright infringement matter.⁶⁹ Certainly the consent judgment recognizes that the plaintiffs had intellectual property rights that the defendant infringed, but it is not clear that it is significant that the rights were appurtenant to virtual world property. To be eligible for copyright protection, a work of authorship must be “fixed in any tangible medium of expression, now known or later developed, from which [it] can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device.”⁷⁰ “Tangible,” for the purpose of the Copyright Act, does not mean only items in paper or sculptural form; it includes works fixed in magnetic form that can be

64. Fairfield, *supra* note 8, at 1052–53.

65. See *infra* text accompanying notes 105–06.

66. See *infra* text accompanying note 115.

67. See generally *Eros* Complaint, *supra* note 19 (including intellectual property claims of violation of the Lanham Act and copyright infringement).

68. Benjamin Duranske, *Second Life Content Creators' Lawsuit Against Thomas Simon (aka Avatar "Rase Kenzo") Settles; Signed Consent Judgment Filed [Updated]*, VIRTUALLY BLIND, Dec. 3, 2007, <http://virtuallyblind.com/2007/12/03/kenzo-simon-settlement/>.

69. It is important to note here that the trademark infringement in *Eros* involved the in-world use of an in-world mark. An in-world use of a mark established outside of the virtual world, such as the use of Coca-Cola's mark on an in-world item that is not only not Coke, but not even a drink, might raise different issues. Candidus Dougherty & Greg Lastowka, *Virtual Trademarks*, 24 SANTA CLARA COMPUTER & HIGH TECH. L. J. 749, 772–76 (2008).

70. See 17 U.S.C. § 102(a) (2006). “[C]opyright . . . vests initially in the author or authors of the work.” *Id.* § 201(a). 1 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT, § 5.01 (2008) (“[T]he person claiming copyright must either himself be the author, or he must have succeeded to the rights of the author.”).

perceived only with a machine.⁷¹ Because the creators' works (the sex beds and other virtual items) clearly are fixed in tangible form under this definition, (much in the same way as a law review article that exists only in the author's computer) the classification of the items as "virtual" should have no significance.

Linden purports to grant certain property rights in its Terms of Service. Marc Bragg certainly relied on this grant in his complaint,⁷² as did the *Eros* plaintiffs.⁷³ It is unclear, however, why the *Eros* plaintiffs believed that they had to rely on such a grant to establish their property rights. They were clearly authors of creative (some might say very creative) works. The Copyright Act grants such persons their intellectual property rights in such creations.⁷⁴ However, using the Terms of Service to define rights in Marc Bragg's land may be justified; after all, people commonly transfer property, particularly land, subject to restrictions. Restrictions on the use of land, however, must take specified forms in order to bind persons other than the parties to the original conveyance.⁷⁵

All items, tangible and intangible, can embody many property rights. Using a bicycle again as an example, a Second Life member, Angie, might own a bicycle in Second Life. Angie is not very creative, so she bought the bicycle from the hypothetical vendor Second Life Cycles, which makes and markets the "SL Wheels" brand of bicycle. Angie, through her avatar, can ride the bicycle, and while she is doing so, no one else can ride the bicycle. If another person, Bill, takes the bicycle, Bill has taken an action similar to that of Linden in the *Bragg* case—he has deprived Angie of her rights to possess and use the bicycle.

If Bill makes copies of the bicycle and sells those copies as SL Wheels bicycles, he violates the property rights of another entity, Second Life Cycles. The rights violated here, however, are analogous to those violated by the defendants in *Eros*—they are intellectual property rights. Intellectual property rights are often the subject of license agreements.⁷⁶ A copyright owner, such as an author, may want to grant the right to distribute her work to another person. The license is a grant

71. NIMMER & NIMMER, *supra* note 70, § 2.03[B][1].

72. *Bragg Complaint*, *supra* note 18, at 3.

73. *Eros Complaint*, *supra* note 19, at 4; *see also* Eric Sinrod, *Perspective: When Virtual Legal Chickens Come Home to Roost*, CNET NEWS.COM, Nov. 7, 2007, http://news.cnet.com/When-virtual-legal-chickens-come-home-to-roost/2010-1043_3-6217255.html ("Second Life residents are governed by terms of service which specifically allow users to retain all intellectual property rights [that] they create or own in Second Life.")

74. 17 U.S.C. § 201(a) (2006).

75. WILLIAM B. STOEBOCK & DALE A. WHITMAN, *THE LAW OF PROPERTY* §§ 8.14, 8.23 (3d ed. 2000).

76. For further discussion of the relationship between licensing and intellectual property rights, see *infra* notes 148–52 and accompanying text.

of permission to do something that would otherwise result in copyright infringement. Licenses, however, have become ubiquitous on the Internet, and these licenses bear little resemblance to traditional licenses of intellectual property rights. The Second Life Terms of Service are an example of this new breed of Internet licenses that grant property rights that bear little resemblance to known property rights.

III. WHAT IS VIRTUAL PROPERTY AND WHERE DOES IT COME FROM?

A. *Scripted and Non-Scripted Worlds*

Discussions of property in virtual worlds inevitably generate one question: “Isn’t a virtual world just a game?” In some cases, the answer is yes. On the other hand, virtual worlds such as Second Life are not games at all; they are new means of interaction, much as the Internet itself was, not long ago, a new means of interaction. In this Part, I explain the differences between scripted worlds and non-scripted worlds, and then discuss portions of the Second Life Terms of Service in detail.

The general definition of a virtual world is an online environment that is both persistent and dynamic.⁷⁷ It is persistent because it does not cease to exist when the participant turns her computer off; it is dynamic because it is continuously changing.⁷⁸ Within this definition are two separate categories of virtual worlds, scripted and non-scripted.⁷⁹ Games such as World of Warcraft⁸⁰ and social worlds such as Club Penguin⁸¹ fall into the scripted category, while Second Life falls into the non-scripted world. A key difference between the two worlds is the members’ ability to create content. Participants in scripted worlds have no ability to create in-world items.⁸² In non-scripted worlds, however, content is generated and provided by members, who have essentially unfettered ability to create items using raw materials provided by the virtual world developer.⁸³

A participant in a scripted game world acquires in-world items by playing the game.⁸⁴ A player advances by acquiring game objects.⁸⁵

77. F. Gregory Lastowka & Dan Hunter, *Virtual Worlds: A Primer*, in *THE STATE OF PLAY: LAW, GAMES, AND VIRTUAL WORLDS* 13, 15 (Jack M. Balkin & Beth Simone Noveck eds., New York University Press 2006) [hereinafter *STATE OF PLAY*].

78. *Id.*

79. *Id.*

80. World of Warcraft, <http://www.worldofwarcraft.com> (last visited Nov. 5, 2009).

81. Club Penguin, <http://www.clubpenguin.com> (last visited Nov. 5, 2009). Club Penguin is a virtual world designed for children in which children interact through their penguin avatars. Club Penguin, Parent’s Guide, http://www.clubpenguin.com/parents/club_penguin_guide.htm#what (last visited Nov. 5, 2009).

82. Dougherty & Lastowka, *supra* note 69, at 760.

83. *Id.* at 769.

84. Cory Ondrejka, *Escaping the Gilded Cage: User Created Content and Building the*

These game objects grant powers to the player, and the player uses these powers to achieve higher status in the game.⁸⁶ Designers of scripted games tend to eschew commodification of their games. One reason for their position is that the game designers have a great interest in the progression of the game. The gamers themselves have certain expectations as well; if a participant spends hundreds of hours achieving a top player level, that participant does not want someone who bought his status to surpass him in the game. Richard Bartle, a noted game designer, compared the commodification of online games to the ability of any individual to purchase the world high-jump record and be recognized as the best high jumper in the world.⁸⁷ According to Bartle and other game designers, game operators should have the ability to terminate traded characters because traded characters interfere with the game's ability to function as a game.⁸⁸

Because of this interest in the progression of the game, the terms of use for virtual worlds such as World of Warcraft forbid real-world trades of these assets.⁸⁹ World of Warcraft's Terms of Use make it clear that "[g]ame play is what World of Warcraft is all about."⁹⁰ In furtherance of that view, the terms forbid the trading of player accounts, and similarly state that players have no "right or title . . . to . . . the virtual goods or currency appearing or originating in the [g]ame."⁹¹ All of the content is provided by the developer, and the Terms of Use employ language that clearly grant limited rights to make specified uses of that content.

By contrast, in non-scripted worlds, participants design the content and dictate the progression of life in the world. A person who joins Second Life can acquire assets in several ways. For example, one may create them. Doing so is a complicated process, as Linden provides only the basic building units and textures.⁹² To build a house or any other item in Second Life requires both time and skill. As persons with these

Metaverse, 49 N.Y.L. SCH. L. REV. 81, 89 (2004).

85. *Id.*

86. *Id.*

87. Richard A. Bartle, *Virtual Worldliness*, in STATE OF PLAY, *supra* note 77, at 31, 35–37.

88. Richard A. Bartle, *Virtual Worldliness*, in STATE OF PLAY, *supra* note 77, at 31, 35–37.

89. World of Warcraft, Terms of Use Agreement, ¶ 9.C, <http://www.worldofwarcraft.com/legal/termsfuse.html> (last visited Nov. 5, 2009).

90. *Id.*

91. *Id.* ¶ 11. Notwithstanding these prohibitions, property won in World of Warcraft is routinely traded on other websites. *See, e.g.*, Buy WoW Accounts, <http://www.buywowaccounts.com/security.php/> (last visited Nov. 5, 2009) (promising that all accounts are "protected & guaranteed from being reclaimed or disabled"). There is also an emerging economy of "gold farmers" who employ individuals to play these games for hours on end in order to achieve and sell desirable status. Julian Dibbell, *The Life of the Chinese Gold Farmer*, N.Y. TIMES MAG., June 17, 2007, at 36, 38.

92. Ondrejka, *supra* note 84, at 92.

skills proliferate in Second Life, they establish retail outlets for their creations. A Second Life member without much time or skill can purchase the items she needs or wants for her Second Life existence from these in-world retailers. The plaintiffs in *Eros* are good examples of such virtual world entrepreneurs.⁹³ The plaintiff in *Bragg*, on the other hand, purchased his Second Life items.⁹⁴

B. *The Second Life Terms of Service and www.secondlife.com: What Does a New Member Receive?*

Virtual world developers require prospective members to agree to online terms of service, also called end-user license agreements, which claim to define the members' rights in their in-world assets. The terms of service tend to be "click-wrap" agreements to which the prospective member must assent by clicking an icon labeled "I agree" or something similar before proceeding with the membership process.⁹⁵ The Second Life Terms of Service are typical of these agreements. When printed out, the Second Life Terms of Service consist of thirteen printed pages.⁹⁶ A prospective member is not required to scroll through the agreement before clicking her assent, but she has the chance to view the agreement by clicking on a hyperlink. As I explain further in this Part, the Terms of Service describe the respective property rights of Linden and the members in fairly ambiguous terms which often contradict the representations that Linden makes about property rights in its public pronouncements and on its website.⁹⁷

Linden distinguished itself from other virtual world developers when it announced that members of Second Life would have property rights in their Second Life creations and acquisitions.⁹⁸ In 2003, Linden announced "a significant breakthrough in digital property rights for its customers . . . Second Life's Terms of Service now recognize the ownership of in-world content by the subscribers who make it."⁹⁹ Linden explains this property regime to prospective members (and anyone else who is interested) in plain English on the Second Life website.¹⁰⁰ On the "Create Anything" page, Linden proclaims that "once

93. See *Eros* Complaint, *supra* note 19, at 4.

94. *Bragg* Complaint, *supra* note 18, at 17, 19.

95. See Christina L. Kunz et al., *Click-Through Agreements: Strategies for Avoiding Disputes on Validity of Assent*, BUS. LAW., Nov. 2001, at 401, 401 (defining "click-wrap").

96. Second Life, Terms of Service, <http://secondlife.com/corporate/tos.php> (last visited Nov. 5, 2009).

97. *Id.*

98. Press Release, Linden Lab, Second Life Residents to Own Digital Creations (Nov. 14, 2003), available at http://lindenlab.com/pressroom/releases/03_11_14.

99. *Id.*

100. Second Life, Create Anything, <http://secondlife.com/whatis/create.php> (last visited Nov. 5, 2009).

you've built something, you can easily begin selling it to other residents, because you control the [intellectual property] [r]ights of your creations."¹⁰¹

A person who clicks the "Land" link at the top of Second Life home page is taken to a page that describes the types of land in Second Life.¹⁰² The land page contains several links, including those labeled "Buy Land," "Land Rentals," and "About Land."¹⁰³ An individual clicking the "About Land" icon is greeted with language that seems to grant the property rights in virtual land that one obtains upon the purchase of "real" land.¹⁰⁴ Linden assures its members that "[o]wning land lets you control what happens on that land."¹⁰⁵ The page tells users that they have rights that we normally consider to be components of the property bundle of rights: the right to exclude ("[y]ou can prevent others from visiting or building . . ."), and the right to alienate ("sell it[)").¹⁰⁶ The website tells members that they can buy land three different ways: from residents who put their land up for sale, from Linden in auctions of newly created land, and from Linden if the buyer wants to purchase a larger private region (also known as an island).¹⁰⁷ Private regions vary in cost, with the most expensive being "Full Regions" that can be used for any Second Life purpose and the least expensive being "Open Space Regions" that can be used for scenery.¹⁰⁸

While the Second Life website speaks of land ownership, the Terms of Service make no mention of ownership, nor do they mention land.¹⁰⁹ The greatest right that the Terms of Service appear to give users is a license right, but it is not even clear that they grant a license to use Second Life land. Second Life members are granted a license to "use the Linden Software and the rest of the Terms of Service."¹¹⁰ The "service" is defined as the servers, software, application program interfaces, and websites.¹¹¹ It is not clear that the land is part of the Service; two paragraphs later, the Terms of Service define the graphics as "Content."¹¹² Later, the Terms state that nothing in the Terms of

101. *Id.*

102. Second Life, Buy Land, <http://secondlife.com/land/> (last visited Nov. 5, 2009).

103. *Id.*

104. *Id.*

105. Second Life, Knowledge Base, <https://support.secondlife.com/ics/support/kbAnswer.asp?questionID=4058> (last visited Oct. 4, 2009).

106. *Id.*

107. Second Life, Purchasing Land, <http://secondlife.com/land/purchasing.php> (last visited Nov. 5, 2009).

108. Second Life, Private Region Pricing, <http://secondlife.com/land/privatepricing.php> (last visited Nov. 5, 2009).

109. Second Life, Terms of Service, *supra* note 96.

110. Second Life, Terms of Service, *supra* note 96, ¶ 3.1.

111. Second Life, Terms of Service, *supra* note 96, ¶ 1.1

112. Second Life, Terms of Service, *supra* note 96, ¶ 1.3.

Service or Linden's websites grant any rights in any Content.¹¹³ When a Second Life member acquires land with the purpose of building something on it, clearly that member thinks that he is acquiring rights in something. The website indicates that the member is buying "land," but the Terms of Service appear to grant nothing.¹¹⁴

A member obtains this land by paying for it in Lindens, the Second Life currency that currently trades at 259 Lindens to the U.S. dollar.¹¹⁵ The Terms of Service are clearer concerning members' rights in Lindens, but here again the Terms of Service and the Second Life website send contradictory messages. Second Life hosts a currency exchange, the LindeX, through which members can trade Lindens.¹¹⁶ The LindeX is a part of the Second Life website, and it describes transactions in Lindens as purchases and sales.¹¹⁷ The website describes the LindeX as "a Linden dollar exchange offering residents of Second Life the ability to either buy or sell Linden dollars."¹¹⁸ A Second Life member makes these purchases in her local currency, and Linden enables transactions in currency other than U.S. dollars through the International Linden Dollar Marketplace.¹¹⁹ Linden does not agree to repurchase this currency when a participant wishes to leave Second Life; the participant must find a buyer for her virtual currency, which she can do through the LindeX.¹²⁰

Second Life's Terms of Service tell the users something very different. First, despite the fact that the website tells members that they can buy virtual currency, the Terms of Service tell users that their right to use Lindens arises under a license to use an "in-world fictional currency."¹²¹ Linden reserves the right to manage, regulate or eliminate the currency for any reason in its sole discretion.¹²² According to the Terms of Service, the LindeX is not a currency exchange, but rather an "aspect of the [Second Life] Service through which Linden . . . administers transactions among users for the purchase and sale of *the licensed right to use Currency*."¹²³

113. Second Life, Terms of Service, *supra* note 96, ¶ 3.1.

114. Second Life, Terms of Service, *supra* note 96, ¶ 1.3.

115. Second Life, LindeX Exchange, <http://www.secondlife.com/currency/market.php> (last visited Nov. 5, 2009).

116. Second Life, LindeX Exchange: About the LindeX Exchange, <http://secondlife.com/currency> (last visited Nov. 5, 2009).

117. *Id.*

118. *Id.*

119. Second Life Wiki, L\$ Marketplace, [http://wiki.secondlife.com/wiki/L\\$Marketplace](http://wiki.secondlife.com/wiki/L$Marketplace) (last visited Nov. 5, 2009).

120. *Id.*

121. Second Life, Terms of Service, *supra* note 96, ¶ 1.4.

122. *Id.*

123. *Id.* ¶ 1.5 (emphasis added).

A Second Life member purchases Lindens with U.S. dollars (or any other currency) and uses those Lindens to purchase in-world items. When the Second Life member tires of his Second Life existence, he can sell those Lindens to another member for U.S. dollars. Yet Linden insists, in its online Terms of Service, that the member's rights in the Lindens are merely license rights.¹²⁴

In Second Life, not only can a member acquire land using Lindens, that person can also build on the land. Building is difficult—Linden provides some basic building blocks, colors and textures, but putting together a simulation of a building requires both time and skill. Linden has made many representations to the effect that users have property rights in the content that they create.¹²⁵ The Terms of Service grant the users “copyright and other intellectual property rights” with respect to anything that they create in Second Life.¹²⁶ In the next paragraph, however, Linden states that while a creator of content has intellectual property rights in that content, that person's intellectual property rights give him no rights whatsoever in data stored on Linden's servers, including “any data representing or embodying” any of the creator's content.¹²⁷

C. Issues Raised by the Second Life Terms of Service

The Second Life Terms of Service, viewed in the context of the *Bragg* and *Eros* disputes, illuminate some significant issues that often arise in disputes involving intangible assets. In these disputes one party often argues that the extent of the asset holder's property right is limited by the terms of the contract. A classic example of such an argument was that made by Network Solutions, Inc. (NSI) in *Network Solutions, Inc. v. Umbro International Inc.*,¹²⁸ a dispute over a domain name. In that case, NSI argued that its contract with the domain name registrant was “the *only* source of rights . . . and that a registrant receives only the conditional contractual right to the exclusive association of the registered domain name with a given [Internet Protocol] number for a given period of time.”¹²⁹

124. *Id.* As I will discuss in the next Part, a license should not be a license merely because the person drafting the agreement labels it as such. *See infra* Part IV.

125. *See supra* text accompanying note 99. In addition, Linden's Vice President of Product Development, Cory Ondrejka, has written an article to that effect. Ondrejka, *supra* note 84, at 95 (“Rather than attempting to recreate intellectual property law, Second Life's developers decided to allow real world laws to reach into the virtual world. In November 2003, Second Life's terms of service were changed to allow users to retain real-world intellectual property rights to their virtual creations.”).

126. Second Life, Terms of Service, *supra* note 96, ¶ 3.2.

127. Second Life, Terms of Service, *supra* note 96, ¶ 3.3.

128. 529 S.E.2d 80 (Va. 2000).

129. *Id.* at 85 (emphasis added) (internal quotation marks omitted).

Linden made a similar argument in the *Bragg* dispute.¹³⁰ In its answer to Marc Bragg's complaint, Linden argued that its contractual characterization of Bragg's property rights should govern the relationship between Linden and Bragg with respect to the land.¹³¹ Linden characterized Bragg's rights in his Second Life land as "a license to computing resources."¹³² Linden's answer attempted to reconcile Linden's public statements with the Second Life Terms of Service by describing the public representations that members would own title to their land as "metaphors or analogies to the concepts of ownership of real property."¹³³ Linden seemed to claim that the analogy to real property ownership could not possibly be determinative of a member's right to Second Life land. "Ownership" may be a metaphor to Linden, but that metaphor might be determinative when one separates the property idea from the item at issue. Linden did more than use a metaphor in its public pronouncements; it set forth the important attributes of a member's relationship to the bits that make up the member's "land." Title is an intangible concept. The components of title are likewise intangible, and are made up of relationships.¹³⁴ If Linden concedes that members have these relationships with Linden and others with respect to items on Linden's servers, then Linden is recognizing property rights. The property rights that the Terms of Service grant, however, bear little obvious resemblance to known property rights.

The Second Life Terms of Service are rife with novel property forms. For instance, as explained above, Linden describes a participant's right to his virtual money as a license to use a fictional currency.¹³⁵ To determine the meaning of this grant, one has to define both "license" and "fictional currency." The term license is often used

130. Linden Answer, *supra* note 29, at 11.

131. Linden Answer, *supra* note 29, at 11.

132. Linden Answer, *supra* note 29, at 11.

133. Linden Answer, *supra* note 29, at 11. Here, Linden may have unwittingly stepped into a property theory debate. Many have written about the role of metaphor in property law. *See generally* Dan Hunter, *Cyberspace as Place and the Tragedy of the Digital Anticommons*, 91 CAL. L. REV. 439 (2003) (discussing the pervasiveness of the "Cyberspace as Place" metaphor and power of metaphor to affect legal thinking and thus lawmaking); Eduardo M. Peñalver, *Property Metaphors and Kelo v. New London: Two Views of the Castle*, 74 FORDHAM L. REV. 2971, 2972 (2006) (noting that the "bundle of sticks metaphor continues to serve a useful function for lawyers trying to get their minds around the . . . property doctrine and, consequently, is not likely to disappear any time soon").

134. *See* RESTATEMENT OF PROPERTY 3 (1936) ("The word 'property' is used in this Restatement to denote legal relations between persons with respect to a thing."); JOSEPH WILLIAM SINGER, INTRODUCTION TO PROPERTY § 1.1.1 (2d ed. 2005) ("Property concerns relations *among people*, not relations between people and things . . . [M]any property rights do not concern 'things' at all, but intangible resources, such as copyright or interests in an ongoing business.").

135. *See supra* text accompanying notes 122–23.

today to describe a conveyance of rights in intangible assets,¹³⁶ but the use of the term to describe rights in money is unusual. Perhaps, then, the fact that this currency is “fictional” makes the conveyance by license acceptable. But what is a fictional currency? The value of a U.S. dollar has no relation to the value of the paper on which it is printed. Money is based on trust; currency has value because people trust that it can be exchanged for items of value and for other currencies.¹³⁷ In a sense, all money is virtual, as we commonly exchange not paper money, but credit card numbers and bank account numbers.¹³⁸ Clearly the members of Second Life trust the Linden as a currency, as they spend Lindens to buy Second Life assets and accept them in exchange for those assets.

Linden’s grant of intellectual property rights is also confusing. The creator of a sex bed or other Second Life content ought to have the intellectual property rights to her creation regardless of whether the Terms of Service grant such rights. Copyright law provides that copyright “vests initially in the author or authors of the work.”¹³⁹ The ownership of a copyright and the ownership of the material object in which the copyrighted work is embodied are separate however,¹⁴⁰ and if the Terms of Service grant only intellectual property rights, then it is not clear what someone who buys currency, land, or a sex bed receives.

It is also unclear what creators like those in the *Eros* case convey. The Second Life website tells members and potential members that they can sell the items that they make, because they have the intellectual property rights in those creations.¹⁴¹ Certainly the creators of sex beds, avatar skins, and other virtual world items do not intend to transfer their intellectual property. They must, then, be selling something else, the material embodiment of the intellectual property. It is not clear that they can sell that material embodiment of the intellectual property, however. Linden claims that it licenses its textures and environmental content to its members.¹⁴² These textures and environmental content are the materials that creative members use to create the very assets that they are allowed to “sell” in Second Life.

Today, the term license escapes a precise definition. In real property law, a license is a revocable permission to “use or enjoy” the licensor’s

136. See *infra* text accompanying notes 148–50.

137. Malaby, *supra* note 12, at 152. Malaby also reminds us that the Euro was introduced “virtual[ly]” before any physical money was introduced, in order to test the new currency’s viability. *Id.*

138. WILLIAM GREIDER, *SECRETS OF THE TEMPLE* 229–30 (Simon & Schuster 1987) (“When money is no longer represented even by paper, it becomes a pure abstraction . . .”).

139. 17 U.S.C. § 201(a) (2006).

140. *Id.* § 202.

141. Second Life, Create Anything, <http://secondlife.com/whatis/create.php> (last visited Nov. 5, 2009).

142. Second Life, Terms of Service, *supra* note 96, ¶ 3.4.

land and it does not grant a possessory interest.¹⁴³ In the world of intellectual property, a license grants permission to use intellectual property in ways that would otherwise infringe the exclusive rights of the licensor.¹⁴⁴ The rights granted by a license cannot be defined generally, because a license is a contract and courts tend to respect freedom of contract.¹⁴⁵ The word “license” is never used to describe a grant of rights in an ordinary material object.¹⁴⁶ Bicycle shops do not offer their customers a license to use a bicycle. In Second Life, on the other hand, it seems that the only rights that a purchaser of a virtual bicycle receives are license rights.

Regardless of the definition of license, a license is recognized as a contract. When the right being transferred is copyright, this makes sense. Copyright is a set of exclusive rights granted to creators, and creators are entitled to dictate, for a limited time, the permissible uses of their creations, subject to the limitations of first sale and fair use.¹⁴⁷ The plaintiffs in *Eros* could have been clever creators with no marketing skills. Therefore, after they created their sex beds, avatar skins and other useful Second Life items, they might have turned to someone more skilled in marketing to sell their items, thus giving the marketing expert a license to distribute their work.

Virtual world terms of service are not unique in their attempt to define property rights in ways that do not comport with our common understanding of those rights. Several scholars have identified this problem as it applies to software, and have questioned the general acceptance of licensing as a method of transferring software copies.¹⁴⁸ This licensing practice was common even before software was routinely delivered electronically, as even software delivered on a tangible disk is often accompanied by terms stating that the disk is licensed, not sold.¹⁴⁹ Purchasers of Internet domain names also must enter into contracts with

143. 4 RICHARD R. POWELL & MICHAEL ALLAN WOLF, *POWELL ON REAL PROPERTY* § 34.01, at 34–37 (2009).

144. 1 RAYMOND T. NIMMER, *THE LAW OF COMPUTER TECHNOLOGY* § 7.4 (3d ed. 1997).

145. RAYMOND T. NIMMER, *LICENSING OF INTELLECTUAL PROPERTY AND OTHER INFORMATION ASSETS* 3 (2007).

146. John A. Rothchild, *The Incredible Shrinking First-Sale Rule: Are Software Resale Limits Lawful?*, 57 *RUTGERS L. REV.* 1, 33 (2004).

147. Copyright Act, 17 U.S.C. §§ 101–1332 (2006).

148. See, e.g., Mark A. Lemley, *Intellectual Property and Shrinkwrap Licenses*, 68 *S. CAL. L. REV.* 1239, 1239 (1995) (criticizing attempts by software vendors to “avoid the rules of intellectual property law entirely”); Michael J. Madison, *Reconstructing the Software License*, 35 *LOY. U. CHI. L.J.* 275, 333–34 (2003) (questioning the legal support for the practice of software licensing); Glen O. Robinson, *Personal Property Servitudes*, 71 *U. CHI. L. REV.* 1449, 1473–78 (2004) (examining the practice of software licensing and its acceptance by some courts); Rothchild, *supra* note 146, at 26–28 (discussing cases in which courts have accepted the arguments of software publishers that software copies are licensed, not sold).

149. Rothchild, *supra* note 146, at 4–5.

domain name registrars, and those contracts tend to prohibit forced transfers of the registered names to creditors,¹⁵⁰ despite the fact that in a permitted voluntary transfer, a domain name can sell for a large amount of money.¹⁵¹ Should the law allow those who transfer intangible assets to define the extent of property rights in those assets without any limitation on the types of rights transferred?

In order to reject licenses, and therefore freedom of contract, as the default mechanism for transferring intangibles, we need guidance in identifying the point at which freedom of contract ends and property right protection begins. As I discuss in the next Part, the *numerus clausus* principle provides such guidance.

IV. VIRTUAL PROPERTY AND THE *NUMERUS CLAUSUS*

A. *Contract or Property?*

In the previous Part, I identified some of the aspects of the Second Life Terms of Service that obscure the property rights granted by those terms. Several scholars have identified the problem of allowing the contracts governing virtual worlds to define the boundaries of virtual world property rights. Greg Lastowka and Dan Hunter, in *The Laws of the Virtual Worlds*, predicted that “[w]e will likely see courts rejecting [Terms of Service] to the extent that they place excessive restrictions on the economic interests of users,” adding that “[a]s we live out more of our lives in these worlds, any simple resolution of the property rights issues will become more difficult.”¹⁵² Joshua Fairfield, in *Virtual Property*, questioned why we permit virtual world developers to “prevent formation of property rights in the first instance any more than we tolerate other consensual restraints on alienation.”¹⁵³ As Fairfield correctly observed, our law does not normally permit customization of property rights outside of recognized forms.¹⁵⁴ As illustrated in the previous Part, some terms of service not only customize property rights, but do so in an incomprehensible manner. In this Part, I discuss the *numerus clausus* principle, which limits property rights to a list of defined forms, and explain why the justifications for that principle apply with special force to disputes over intangible assets.

To illustrate the problem of allowing those who create and convey

150. See, e.g., Register.com, Master Services Agreement, ¶ 29, <http://www.register.com/policy/servicesagreement.rcmx#18> (last visited Nov. 5, 2009) (stating that any attempt by a creditor to obtain rights in a domain name “renders this Agreement voidable at our option”).

151. For instance, as of October 4, 2009, the domain name “models.net” was listed for sale at \$195,000. Afternic Domain Listing Service, <http://www.afternic.com/names.php?feat=1> (last visited Oct. 4, 2009).

152. Lastowka & Hunter, *supra* note 9, at 50–51.

153. Fairfield, *supra* note 8, at 1083–84.

154. Fairfield, *supra* note 8, at 1084.

intangible assets unfettered discretion to define and limit property rights in those assets, it is helpful to break down an asset transfer into three components: the asset, the property right in the asset, and the contract transferring the asset. Property rights in assets are often transferred by contract, and when a contract transfers rights in a tangible asset, it is easy to separate the three elements. Everyone can distinguish between a house and a contract to sell a house. Lawyers understand that when the house is sold, the contract transfers a property right, such as a fee simple, in that asset. The property right is itself intangible.

When rights in intangible assets are transferred, however, we cannot visualize the asset and therefore we have difficulty separating the asset from both the property right and the contract transferring it. Courts have this problem as well. For example, in *Network Solutions, Inc. v. Umbro International, Inc.*, a case in which a judgment creditor attempted to garnish Internet domain names to satisfy its judgment, the court characterized the names, which were generic and had great economic value, as “the product of a contract for services.”¹⁵⁵ As a result, the court held that the names were not the type of property that could be garnished.¹⁵⁶ *Umbro* illustrates one reason why the distinction between contract and property is significant—under creditors’ rights laws only rights that are property can be seized or garnished.¹⁵⁷ However, the *Bragg* dispute illustrates another reason: If Marc Bragg acquired property rights in his Second Life currency and land, then Linden Research likely committed conversion when it denied him access to his account. In both the *Bragg* and *Eros* disputes, the plaintiffs were deprived of assets that undoubtedly had value. Property casebooks are filled with cases in which a party who seeks something of value asks the court to find that he or she has a property right in that thing of value.¹⁵⁸

The distinction between contract and property is ordinarily not relevant to a dispute between the parties to the conveyance. If I buy a house and promise my seller that I will not paint it orange, my seller

155. 529 S.E.2d 80, at 81 (quoting *Dorer v. Arel*, 60 F. Supp. 2d 558, 561 (E.D. Va. 1999)). I discuss this case in more detail in Moringiello, *Seizing Domain Names*, *supra* note 14, at 103–10 (discussing judicial treatment of domain names).

156. *Umbro*, 529 S.E.2d at 86.

157. In addition, creditors can only create rights against property of their debtors. *See* U.C.C. § 9-203(b)(2) (2005) (stating that a security interest cannot be enforceable unless the debtor has “rights in the collateral[.]”). Collateral is a defined term in Article 9, and means “the property subject to a security interest.” *Id.* § 9-102 (a)(12) (emphasis added).

158. *See, e.g.*, *Moore v. Regents of the Univ. of Cal.*, 793 P.2d 479, 481–82 & n.4 (Cal. 1990) (stating how a plaintiff sued for conversion of cells used in medical research without his permission); *In re Marriage of Graham*, 574 P.2d 75, 75 (Colo. 1978) (addressing whether the monetary value of a professional degree could be divided as marital property in a divorce proceeding).

should be able to enforce that promise against me.¹⁵⁹ There are few limits on the types of contract promises that the law will enforce because contracts create in personam rights which bind only the parties to the contract.¹⁶⁰ Some promises are unenforceable as a matter of public policy,¹⁶¹ and courts may refuse to enforce some contract terms on unconscionability grounds.¹⁶² But beyond these limitations, contract rights are infinitely customizable.¹⁶³ A person who has agreed to contract terms should not later have the ability to say that she should not be bound by those terms. Because contract rights bind only the parties to the contract, who presumably have agreed to the scope of those rights, this view comports with the policy of freedom of contract.

The difference between contract and property is relevant, however, to parties who have not agreed to the scope of the right. A third-party who wants to or is forced to deal in some way with the right in question, such as by purchasing it, lending against it, or enforcing rights in it, must learn both the extent of the right and the identity of the holders of that right.¹⁶⁴ Therefore, it is often said that the main difference between a contract right and a property right is the extent to which the right binds persons other than the parties to the contract conveying the right. As a result, the law will enforce my promise not to paint the house orange against subsequent owners of the house only if my promise takes a prescribed form.¹⁶⁵ Because the classic in rem, or property, right is enforceable against the entire world, property scholars agree that there must be some method of publicizing such rights.¹⁶⁶ One way to do so is to record the interest in an established recording system.¹⁶⁷ Another is the standardization of property forms provided by the *numerus clausus* principle.¹⁶⁸

159. See SINGER, *supra* note 134, § 6.1, at 231 (“When a dispute arises between the original covenanting parties, it is governed by general rules of contract.”).

160. See Thomas W. Merrill & Henry E. Smith, *The Property/Contract Interface*, 101 COLUM. L. REV. 773, 776–77 (2001).

161. RESTATEMENT (SECOND) OF CONTRACTS § 178 (1981).

162. *Id.* § 208.

163. Henry Hansmann & Reinier Kraakman, *Property, Contract and Verification: The Numerus Clausus Problem and the Divisibility of Rights*, 31 J. LEGAL STUD. S373, S373 (2002); Thomas W. Merrill & Henry E. Smith, *Optimal Standardization in the Law of Property: The Numerus Clausus Principle*, 110 YALE L.J. 1, 3 (2000).

164. Hansmann & Kraakman, *supra* note 163, at S382–83.

165. See SINGER, *supra* note 134, § 6.2 (describing the formalities that must be satisfied in order for a servitude to run with the land).

166. See Richard A. Epstein, *Notice and Freedom of Contract in the Law of Servitudes*, 55 S. CAL. L. REV. 1353, 1357 (1982).

167. *Id.* at 1358. Discussing servitudes, Epstein argued that, because interests in land are recorded, freedom of contract should prevail in the area of servitudes. *Id.*

168. Merrill & Smith, *supra* note 163, at 776–77.

B. *The Numerus Clausus and its Justifications*

Numerus clausus means “the number is closed.”¹⁶⁹ The principle operates to prevent courts from recognizing property interests outside of a closed set.¹⁷⁰ As a result, property law limits the types of property interests that can be created and transferred.¹⁷¹ When parties attempt to customize property interests in a way that lies outside this closed set, the court will determine which of the recognized types of property forms best fits the interest that the parties created.¹⁷² Civil law countries apply the *numerus clausus* explicitly; in common law countries, its application is more implicit, and it is reflected in American law without explicit mention.¹⁷³

The *numerus clausus* is an important interpretation tool. To give two textbook examples, a landlord might try to convey property to a tenant “for the duration of the war” only to see a court transform the tenancy into one for a term of years.¹⁷⁴ Likewise, a will that granted a house to a beneficiary “to live in and not to be sold” was construed to convey a fee simple interest without a restraint on alienation.¹⁷⁵ In the former case, the grant resembles a known partial interest, a leasehold, while the latter grant is closer to a fee simple interest than to any recognized partial interest.

In the past decade, a handful of scholars have written extensively on the *numerus clausus*.¹⁷⁶ While these scholars formulate their justifications for a closed set of property rights differently, one conclusion in *numerus clausus* scholarship is that this closed set provides a necessary shorthand so that people other than the parties to the contract conveying the right will know both the extent of the right

169. Stephen R. Munzer, *The Commons and the Anticommons in the Law and Theory of Property*, in THE BLACKWELL GUIDE TO THE PHILOSOPHY OF LAW AND LEGAL THEORY 148, 156–57 (Martin P. Golding & William A. Edmundson eds., 2005); Merrill & Smith, *supra* note 163, at 4.

170. THOMAS W. MERRILL & HENRY E. SMITH, PROPERTY: PRINCIPLES AND POLICIES 579 (2007).

171. *Id.*

172. Merrill & Smith, *supra* note 163, at 11.

173. MERRILL & SMITH, *supra* note 170, at 579; *see also* Merrill & Smith, *supra* note 163, at 4, 10–11 (explaining that the *numerus clausus* principle is explicitly recognized in civil law jurisdictions and is applied, without specific mention, by American courts). American statutory law also reflects the *numerus clausus*. *See* U.C.C. § 1-203 (2005) (providing rules for distinguishing leases from secured sales).

174. Merrill & Smith, *supra* note 163, at 11.

175. *White v. Brown*, 559 S.W.2d 938, 940–41 (Tenn. 1977) (Cooper, J., and Fones, J., concurring, joined by Harbison, J., and Henry, C.J., dissenting) (emphasis omitted).

176. *See, e.g.*, Nestor M. Davidson, *Standardization and Pluralism in Property Law*, 61 VAND. L. REV. 1597, 1598 (2008); Hansmann & Kraakman, *supra* note 163, at S374; Merrill & Smith, *supra* note 163, at 11; Merrill & Smith, *supra* note 160, at 778; Francesco Parisi, *Entropy in Property*, 50 AM. J. COMP. L. 595, 625 (2002).

and the identity of the persons entitled to convey the right.¹⁷⁷ The *numerus clausus* principle functions as a notice mechanism in that it tells people transacting in or interacting with property that the property interest can take one of a limited number of defined forms. Below, I summarize some of the work by two sets of authors, Thomas Merrill and Henry Smith and Henry Hansmann and Reinier Kraakman, and discuss why their explanations of the *numerus clausus* illustrate why it should be more rigorously applied to emerging intangible rights.

In *Optimal Standardization in the Law of Property: The Numerus Clausus Principle*,¹⁷⁸ Merrill and Smith posit that information costs are the driving force behind the distinction between property and contract and thus the *numerus clausus* principle.¹⁷⁹ They argue that permitting an unlimited number of property forms would cause third-parties interested in acquiring property rights to incur significant measurement costs.¹⁸⁰ Such costs arise often, because in order to avoid violating another's property rights, the person faced with those rights must know what they are. These measurement costs do not affect the original parties to the transaction creating the novel property right, and the law does not intervene to protect these parties. The costs to other market participants, however, can be quite high.¹⁸¹ If I see a house that I want to buy, I know that the house can be held in only a limited number of ways. The owners might be tenants in common, joint tenants, or tenants by the entirety; they could own the house in fee simple, as life tenants, or in a defeasible fee. Because the permissible forms of ownership are in a closed set, the potential buyer needs to ask only a finite number of questions. On the other hand, if a landowner were permitted to fashion any estate she wished, potential buyers of all houses would be forced to ask an infinite number of questions about ownership.¹⁸² Therefore, they argue, if property interests are standardized, measurement costs are minimized.

Prospective buyers, however, are not the only third-parties affected

177. See, e.g., Davidson, *supra* note 176, at 1653 (viewing the fixed categories of property as regulatory platforms which “are primarily tools to assist legal actors—courts, legislatures, and other formal sources of legal recognition—in their regulatory role”); Hansmann & Kraakman, *supra* note 163, at S384 (explaining the *numerus clausus* as a solution to the problem of verification when two or more holders of rights in the same asset are not in privity of contract); Merrill & Smith, *supra* note 163, at 27 (justifying the *numerus clausus* as a means of reducing the external costs on other market participants); Parisi, *supra* note 176, at 625 (explaining that “[i]f we could organize a public record sufficiently dependable to keep track of property rights, there would be no reason to limit their number”).

178. Merrill & Smith, *supra* note 163.

179. Merrill & Smith, *supra* note 163, at 9.

180. Merrill & Smith, *supra* note 163, at 69.

181. Merrill & Smith, *supra* note 163, at 29–31.

182. Merrill & Smith, *supra* note 163, at 27–32. As an example of an idiosyncratic property right, Merrill and Smith use a right to use a watch on Mondays only. *Id.*

by novel and perhaps indecipherable property rights. Henry Hansmann and Reinier Kraakman, in *Property, Contract and Verification: The Numerus Clausus Problem and the Divisibility of Rights*,¹⁸³ focus not on the potential transferee of assets, but on co-owners and those charged with enforcement of property rights in assets.¹⁸⁴ They see the main problem to be solved by the *numerus clausus* as one of verification and identify two contexts in which verification problems arise: coordination and enforcement.¹⁸⁵ Verification arises in coordination because two co-owners of an asset might not be in privity of contract.¹⁸⁶ When parties are in privity of contract, the contract itself, agreed to by the parties, provides the verification mechanism.¹⁸⁷ An enforcing court also needs to determine the extent of property rights.¹⁸⁸

As a simple example of a verification rule, Hansmann and Kraakman use the rule of possession.¹⁸⁹ If possession were the sole verification rule, only the person in possession of an asset would have the right to transfer that asset.¹⁹⁰ In a modern economy, however, possession is not a sufficient verification rule for several reasons. First, a possession rule would not allow partial transfers, such as non-possessory security interests. Second, possession as we know it is not possible for intangible assets.¹⁹¹

While Merrill and Smith and Hansmann and Kraakman formulate their justifications for a *numerus clausus* differently, both sets of authors agree that standardization is valuable in identifying the intangible, or invisible, boundaries of property rights. Merrill and Smith thus describe the *numerus clausus* as being valuable in identifying the “dimensions of property rights that are least visible, and hence the most difficult for ordinary observers to measure.”¹⁹² Hansmann and Kraakman refine this description, as they believe that “the law is concerned with the physical dimensions of assets that are difficult for all parties concerned to verify.”¹⁹³ According to Hansmann and Kraakman, verification rules help us identify the conveyable, or verifiable,

183. See Hansmann & Kraakman, *supra* note 163.

184. Hansmann & Kraakman, *supra* note 163, at S382.

185. Hansmann & Kraakman, *supra* note 163, at S382.

186. Hansmann & Kraakman, *supra* note 163, at S383.

187. Hansmann & Kraakman, *supra* note 163, at S383.

188. Hansmann & Kraakman, *supra* note 163, at S383–84.

189. Hansmann & Kraakman, *supra* note 163, at S383–84.

190. Hansmann & Kraakman, *supra* note 163, at S384.

191. Under the U.C.C., control substitutes for possession for certain types of intangibles. See U.C.C. § 8-106(c) (2005) (defining control of uncertificated securities), § 9-104 (defining control of deposit accounts), § 9-105 (defining control of electronic chattel paper).

192. Merrill & Smith, *supra* note 163, at 34.

193. Hansmann & Kraakman, *supra* note 163, at S416 n.81.

boundaries of property.¹⁹⁴ Merrill and Smith make a similar point, explaining that the in rem, or property, strategy both identifies the resource and specifies the person, or owner, who can regulate the resource.¹⁹⁵

When the asset is tangible, the physical boundaries of the asset are visible, and we take identification of the resource for granted. Therefore, a fence is a verification mechanism that can define the physical boundaries of real estate.¹⁹⁶ A person interested in a house can easily identify that house's physical boundaries and characteristics. Little effort is required in verifying the square footage, number of bedrooms, and condition of the kitchen in a house. The less visible dimensions of real estate, such as life estates, leaseholds, and time shares, must be verified in other ways.¹⁹⁷

The foregoing justifications for the *numerus clausus* can help us distinguish rights that should be protected as property rights and rights that, as contract rights, can be infinitely customized. In another article, Merrill and Smith apply their work on the *numerus clausus* to make those distinctions. In *The Property/Contract Interface*, they explore legal institutions that do not fall clearly into the in rem and in personam categories, or institutions that “lie along [the] property/contract interface”¹⁹⁸ in order to test their theory that information costs are crucial to the distinction between property and contract.¹⁹⁹ To do so, they examine whether the law in various areas resembles contract law in situations in which two parties bear the bulk of the information costs and resembles property law in situations in which a large number of parties must bear information costs.²⁰⁰ The four institutions they chose to study—bailments, landlord-tenant law, security interests, and trusts—bear an important similarity to many intangible rights, as, according to Merrill and Smith, those institutions “historically have been subject to disputes about whether they are ‘truly’ based on contract or on property.”²⁰¹ These institutions all lie somewhere in the middle of the spectrum between “pure” contract, in which one person has rights against a single, identified person, and “pure” property, in which one person has rights against a large number of unidentified persons.²⁰²

One example that Merrill and Smith give of such an institution is

194. Hansmann & Kraakman, *supra* note 163, at S415.

195. Merrill & Smith, *supra* note 163, at 790.

196. Hansmann & Kraakman, *supra* note 163, at S416.

197. Hansmann & Kraakman, *supra* note 163, at S416.

198. Merrill & Smith, *supra* note 163, at 777.

199. Merrill & Smith, *supra* note 163, at 779.

200. Merrill & Smith, *supra* note 163, at 822.

201. Merrill & Smith, *supra* note 163, at 809.

202. Merrill & Smith, *supra* note 163, at 809.

landlord-tenant law.²⁰³ American law recognizes only four types of leases: the term of years, the periodic tenancy (such as the month-to-month tenancy), the tenancy at will, and the tenancy at sufferance,²⁰⁴ and two types of tenant transfers: assignment and sublease.²⁰⁵ If a lease were viewed as a pure contract, there would be no need for such standardization; the *in personam* strategy specifies use rights between specified individuals.²⁰⁶ Leases affect other parties, however, including future lessees who want to know when the property will become available and creditors of both the lessor and lessee who need to know the extent of the interest that is available to them if they must enforce their remedies.²⁰⁷

Merrill and Smith conclude, with respect to each of their examples, that as the group of people affected by the right grows in number or the identity of the persons affected by the right becomes less-known (as is the case with rights transferred by standard form contracts), the law provides a mechanism to inform these persons of the extent of the right in question.²⁰⁸ For leases, these mechanisms take the form of immutable rules, such as the implied warranty of habitability, and standard property forms, such as the permissible tenancies.²⁰⁹ As I explain in the next sub-Part, emerging intangible assets also lie along the property/contract interface and virtual property can help us understand why emerging intangible assets fall into this category.

C. *Why Standardization is Necessary for Rights in Intangible Assets*

The foregoing justifications for the *numerus clausus* are particularly relevant as new forms of intangible assets emerge. As explained above, the *numerus clausus* helps us to define the boundaries of property when those boundaries are invisible.²¹⁰ In the tangible world, we know that there is a difference between the tangible asset and the intangible right in the asset because we can see the physical boundaries of the asset. Before the advent of virtual property, however, the boundaries of intangible assets were invisible to human eyes. We can see a book, and even though we cannot see the copyright in the book, we recognize that the ownership right in the book is different from the ownership of the copyright. The law has long recognized this as well. The Copyright Act

203. Merrill & Smith, *supra* note 163, at 820.

204. Merrill & Smith, *supra* note 163, at 832.

205. Merrill & Smith, *supra* note 163, at 830.

206. Merrill & Smith, *supra* note 163, at 790.

207. Merrill & Smith, *supra* note 163, at 833.

208. *See generally* Merrill & Smith, *supra* note 163, at 833 (discussing these mechanisms).

209. Merrill & Smith, *supra* note 163, at 833.

210. *See supra* notes 194–98 and accompanying text.

provides that ownership of the material embodiment of a copyrighted work does not convey ownership of the copyright,²¹¹ and because of the first sale doctrine in copyright law, the purchaser of a book is permitted to sell it without infringing the copyright holder's intellectual property rights.²¹² If I own a book and another person steals it, that person has interfered with my ownership interest in the book and could be held liable for conversion. If the thief makes one hundred copies of the book and sells the copies, the thief has violated distinct property rights held by another person—the rights of reproduction and distribution granted by copyright law to the copyright holder.²¹³

On the other hand, while we can see a domain name, its physical manifestation looks like a more familiar intangible—a trademark. In fact, it is impossible, by simply looking at a domain name, to appreciate that the name might incorporate both trademark and other property rights.²¹⁴ Therefore, whether the domain name incorporates a trademark or not, a court might be tempted to apply trademark law to resolve a conflict over rights in the name. A court did exactly that in *Dorer v. Arel*.²¹⁵ Analyzing the question of whether a domain name could be garnished by a creditor, the court concluded that a domain name that is eligible for trademark protection is a form of “property,” while one that is not so eligible, such as a generic name, “arguably entails only contract, not property rights.”²¹⁶ Unfortunately, the analogy led the court to reach an illogical result. Generic names command large amounts of money on the market, and are freely transferable. Names incorporating trademarks, however, are generally useless to anyone but the trademark holder, because they cannot be transferred without the goodwill of the business.²¹⁷ Because, under the applicable law, only

211. 17 U.S.C. § 202 (2006).

212. *Bobbs-Merrill v. Straus*, 210 U.S. 339, 350 (1908); *see also* *UMG Recordings, Inc. v. Augusto*, 558 F. Supp. 2d 1055, 1065 (C.D. Cal. 2008) (rejecting a record company's attempt to restrict, by license, the sale of promotional CDs after the CDs were given to industry insiders).

213. 17 U.S.C. § 106; *see also* *Vernor v. Autodesk*, 555 F. Supp. 2d 1164, 1168 (W.D. Wash. 2008) (“First sale does not, however, exhaust other rights, such as the copyright holder's right to prohibit copying of the copy he sells.”).

214. Joshua Fairfield identified domain names as a type of “virtual property” that mimics tangible world property because it is “rivalrous, persistent, and interconnected.” Fairfield, *supra* note 8, at 1055. Only one person can have any word in a top-level domain. Therefore, while one party can own united.com and another can own united.net, there cannot be two uniteds in the .com top-level domain.

215. 60 F. Supp. 2d 558 (E.D. Va. 1999). In *Dorer*, the plaintiff had been awarded a money judgment against the defendant, and wanted to satisfy that judgment by garnishing the defendant's domain name.

216. *Id.* at 560–61.

217. *United Drug Co. v. Theodore Rectanus Co.*, 248 U.S. 90, 97 (1918) (“There is no such thing as property in a trade-mark except as a right appurtenant to an established business or trade in connection with which the mark is employed.”).

property subject to a judgment lien could be garnished,²¹⁸ the creditor was deprived of an asset that had great monetary value to its debtor.²¹⁹

Domain names, like tangible personal property, can also embody several property interests. One is in the use of the word, such as “wine” or “coca-cola,” which may or may not be protected by trademark law.²²⁰ The other is in the string of letters, such as www.wine.com, that directs people to the domain name owner’s website. The string is a unique identifier that is rivalrous and can therefore be controlled by one person. As a result, a person who causes the unauthorized transfer of a domain name should be subject to an action for conversion. While some courts have recognized such an action, they have done so by applying convoluted reasoning that misses the basic point that a *numerus clausus* analysis would catch: A domain name can be owned in the same way that a book or a bicycle can be owned.²²¹ Instead, in probably the most prominent domain name conversion case, *Kremen v. Cohen*,²²² the Ninth Circuit Court of Appeals held that a domain name could be the subject of a conversion action because it was “merged in a document.”²²³ Under the applicable state law, only an intangible asset merged in a document, such as a promissory note, could be converted, so the court found that the domain name system, which is both intangible itself and distributed among several locations, sufficed as the “document.”²²⁴

Domain names are not the only intangible assets that might be the subjects of a conversion action. In *Thyroff v. Nationwide Mutual Insurance Co.*,²²⁵ the court held that electronic business records could be converted.²²⁶ The court recognized that a person can exercise dominion over such a record by pressing the “delete” button, but ultimately based its conclusion on the fact that there is no difference

218. *Dorer*, 60 F. Supp. 2d at 559.

219. *Id.*

220. In this example, the word “wine,” if used to describe wine, is not eligible for trademark protection, while the word “coca-cola,” used to describe a certain soft drink, is. *See* 15 U.S.C. § 1052(e) (2006) (indicating a mark is not eligible for trademark registration if, when “used on or in connection with the goods of the applicant is merely descriptive . . . of them.”).

221. *See, e.g., Kremen v. Cohen*, 337 F.3d 1024, 1034, 1036 (9th Cir. 2003) (finding that a domain name can be the subject of a conversion action because it is merged in a “document,” the domain name system). *Thyroff v. Nationwide Mutual Insurance Co.*, 864 N.E.2d 1272, 1278 (N.Y. 2007), following *Kremen*, held that electronic business records could be converted. The court recognized that a person can exercise dominion over such a record by pressing the “delete” button, but ultimately based its conclusion on the fact that there is no difference between the monetary value of paper records and the monetary value of electronic records. *Id.*

222. 337 F.3d 1024 (9th Cir. 2003).

223. *Id.* at 1031 (emphasis omitted).

224. *Id.* at 1033–35.

225. 864 N.E.2d 1272 (N.Y. 2007).

226. *Id.* at 1278.

between the monetary value of paper records and the monetary value of electronic records.²²⁷

The *numerus clausus* principle could have helped the courts in both *Thyroff* and *Kremen* come to more useful conclusions, conclusions that could guide courts in analyzing rights in all sorts of emerging intangible assets. Conversion is defined in the *Restatement (Second) of Torts* as “an intentional exercise of *dominion* or *control* over a chattel which so seriously interferes with the right of another to control it that the actor may justly be required to pay the other the full value of the chattel.”²²⁸ Many of the standard property forms are defined in terms of the holder’s right to possess the asset involved. For example, a defining characteristic of a present estate in land is the “present right to exclusive possession.”²²⁹ If we recognize standard property rights in intangible assets, we can appreciate that in at least one important respect, domain names and electronic business records are identical—both can be exclusively possessed.

Because we cannot see the boundaries of domain names and electronic business records, we have difficulty appreciating this similarity. Using the property involved in the *Bragg* and *Eros* disputes to illustrate the nature of intangible assets can help us appreciate why the *numerus clausus* should apply to intangible assets in the same way that it applies to real estate and tangible assets. Because virtual worlds simulate the tangible world in many ways, we can see and experience the differences between virtual world land and virtual world trademarks. That experience helps us recognize that some intangible assets have boundaries in the same way that tangible assets have boundaries. The *numerus clausus*, with its standard forms, helps us identify the legal significance of those boundaries. In other words, if I can exclude a person from my virtual bicycle in the same way that I can exclude a person from my domain name, then perhaps my rights in the virtual bicycle and the virtual domain name are legally identical, regardless of the terms of the contracts conveying rights in those assets. Because we can experience virtual assets in this way, we expect that we can own them in the same way that we can own books and bicycles. Standard property forms acknowledge such similarities.

Standardized property forms serve a notice function, and might be particularly useful in an environment in which the predominant method of contracting is by online terms of use. Notice of rights in intangible assets is notoriously difficult to process not only because the assets themselves are invisible, but because the rights are often granted in standard form electronically presented contracts. Courts usually find

227. *Id.*

228. RESTATEMENT (SECOND) OF TORTS § 222A(1) (1965) (emphasis added).

229. STOEBUCK & WHITMAN, *supra* note 75, § 2.1.

that agreements like the Second Life Terms of Service meet the requirements for contract formation; they routinely find acceptance when the offeree is required to click “I agree,”²³⁰ and they are increasingly doing so when a click is not required.²³¹ Despite the fact that courts often find assent to these terms, a major criticism of electronically presented agreements is that they often do not provide offerees with sufficient notice of their terms.²³² Allowing unfettered freedom of contract in the transfer of these rights is also a problem because of the ease and frequency with which online contracts are changed. In the Second Life Terms of Service, Linden reserves the right to amend the terms “at any time in its sole discretion,” and Linden claims that such amendments will be effective when the amended Terms of Service are posted on the Second Life website.²³³ Assuming that such an agreement is enforceable, its operation would require the numerous Second Life members to devote time and effort re-learning the extent of their rights. Terms of service such as these, which affect numerous definite persons, create the very types of institutions that Merrill and Smith define as between property and contract.²³⁴

230. *See, e.g.*, *Treiber & Straub v. UPS*, 474 F.3d 379, 385 (7th Cir. 2007) (holding plaintiff to contract terms because he was required to click his agreement to them); Nancy S. Kim, *Clicking and Cringing*, 86 OR. L. REV. 797, 843 (2007) (“Courts have refused to uphold clickwrap agreements if users do not have sufficient notice of their terms, or do not have to affirmatively accept the terms of use.”); Juliet M. Moringiello, *Signals, Assent and Internet Contracting*, 57 RUTGERS L. REV. 1307, 1320–23 (2005) (explaining opinions holding that a click manifests assent to contract terms).

231. *See, e.g.*, *Hubbert v. Dell Corp.*, 835 N.E.2d 113, 121 (Ill. App. Ct. 2005) (recognizing that a prominently displayed hyperlink can give adequate notice of the terms found behind the link); *Hotels.com, L.P. v. Canales*, 195 S.W.3d 147, 155–56 (Tex. Ct. App. 2006) (noting that the agreement before it could not be “neatly characterized as either a ‘click-wrap’ or ‘browse-wrap’ agreement” and focusing instead on whether the users of the website had adequate notice of the challenged terms).

232. *See* Stephen E. Friedman, *Protecting Consumers from Arbitration Provisions in Cyberspace, the Federal Arbitration Act and E-Sign Notwithstanding*, 57 CATH. U. L. REV. 377, 399 (2008) (“The concept of assent, already more theoretical than real in the world of mass-market written contracts, is strained even further in the world of online contracting . . .”); Mark A. Lemley, *Terms of Use*, 91 MINN. L. REV. 459, 482 (2006) (concluding that “the problems terms of use pose stem from a combination of factors: judicial willingness to weaken or even eliminate the notion of assent when presented with a form that purports to be a contract, and the ease with which technology allows companies . . . to present forms that purport to be contracts”); Francis J. Mootz III, *After the Battle of the Forms: Commercial Contracting in the Electronic Age*, 4 ISJLP 271, 289 (2008) (“There is every reason to believe that a formalist endorsement of click-wrap agreements will not capture the parties’ ‘bargain in fact’ in some cases.”).

233. Second Life, Terms of Service, *supra* note 96, ¶ 1. Not all courts agree that a web posting will result in an effective contract modification. *See Douglas v. U.S. District Court*, 495 F.3d 1062, 1066–67 (9th Cir. 2007) (holding that a consumer was not bound by a modification posted to a website because web posting did not give him adequate notice of the amendments).

234. Merrill & Smith, *supra* note 163, at 786.

By arguing for a *numerus clausus* approach, I am not necessarily arguing that only the property forms that exist today should be applied to intangible assets. It is possible that the nature of some intangible assets is such that new forms need to be recognized and brought into the standard framework. For example, some have made this argument with respect to software because of the ease of copying software,²³⁵ and James Grimmelmann has observed that virtual worlds such as Second Life should be viewed as feudal societies.²³⁶ In the United States, new forms of interests in real estate, such as condominiums and time shares, have been recognized by legislatures.²³⁷ Acknowledging that a new standard form *may* be necessary should not open the door to infinitely customizable licenses, however. The *numerus clausus* principle demands some standardization so that market participants will know the extent of the rights that they are acquiring.

Virtual worlds raise myriad property issues, as illustrated by the *Bragg* and *Eros* disputes. The virtual world context allows us to truly visualize the rights at issue; we can see virtual land on a computer. When we experience intangible assets in this way, it becomes clear that contracts such as the Second Life Terms of Service attempt to create novel property forms. Virtual world assets thus illustrate how property rights in intangible assets should be analyzed within a structure of standard forms. Courts honoring the *numerus clausus* principle should not allow the creation of novel property forms, and indeed do not do so when the asset transferred is tangible. Therefore, the *numerus clausus* principle can help us understand the extent of the property rights granted in virtual world and other intangible assets regardless of the language used in the contracts conveying those assets.

235. For instance, arguments have been made that the first sale right, an important component of the package of rights belonging to an owner of a copy of a work protected by copyright, should not apply to digitally-transmitted software because the transferor, in transmitting the software, both makes a copy and sends it. Such an action affects not only the copyright holder's distribution right, which is limited by the first sale rule, but also the reproduction right, which is not. *See, e.g.*, REGISTER OF COPYRIGHTS, U.S. COPYRIGHT OFFICE, SECTION 104 OF THE DIGITAL MILLENNIUM COPYRIGHT ACT 78-92 (2001), available at <http://www.copyright.gov/reports/studies/dmca/sec-104-report-vol-1.pdf>.

236. James Grimmelmann, *Virtual World Feudalism*, 118 YALE L.J. POCKET PART 126, 126 (2009) ("The similarity between ownership of land in feudal England and in Second Life suggests that offline courts should protect user interests in virtual items, gradually, without treating them as full-blown modern 'property.'"), available at <http://thepocketpart.org/2009/01/19/grimmelmann.html>.

237. Merrill & Smith, *supra* note 163, at 15-16, 18.

V. WHAT VIRTUAL PROPERTY CAN DO FOR PROPERTY

A. *Why a License?*

The contracts conveying intangible assets carry different names, such as “Terms of Service,”²³⁸ “Service Agreement,”²³⁹ “Terms of Use,”²⁴⁰ and “End User License Agreement,”²⁴¹ but share a common characteristic: many of them attempt to create and convey novel and confusing property rights. For instance, the Second Life Terms of Service discussed above appear to both grant and deny property rights.²⁴² The same problem exists with some mass-market software licenses. In its license for Microsoft Office,²⁴³ Microsoft appears to give the software transferee many of the important rights of an owner of the material embodiment of the software,²⁴⁴ yet still calls its agreement a license.

This pervasive use of licenses begs the question: “Why?” In all areas of law, a license is understood to be a grant of permission that does not convey a right of possession to the licensee. In the intellectual property arena, a license is permission to do something that would otherwise constitute infringement.²⁴⁵ Licenses today, however, are increasingly used to transfer rights in other types of intangible assets, such as the virtual assets developed in online environments such as Second Life.²⁴⁶ The word “license,” however, does not communicate any defined property right and courts defer to freedom of contract when faced with license agreements.²⁴⁷

238. Second Life, Terms of Service, *supra* note 96.

239. Network Solutions, Service Agreement, <http://www.networksolutions.com/legal/static-service-agreement.jsp> (last visited Nov. 5, 2009).

240. World of Warcraft, Terms of Use Agreement, *supra* note 89.

241. World of Warcraft, End User License Agreement, <http://www.worldofwarcraft.com/legal/eula.html> (last visited Nov. 5, 2009).

242. *See supra* Part III.B.

243. Microsoft Office 2008 for Mac Home & Student Edition, Microsoft Software License Terms, http://download.microsoft.com/documents/useterms/Office%20for%20Mac%20Home%20and%20Student_2008_English_8e9a97ac-8ca6-47bc-8039-fc6048a94cdc.pdf (last visited Nov. 5, 2009) [hereinafter Microsoft License].

244. For instance, the “license” recognizes the licensee’s right to transfer the software to another person, so long as the licensee deletes his own copy of the software, thus recognizing the right of an owner of a copy to transfer that copy. *Id.* ¶ 12. The licensee is also granted the right to make a backup copy of the software, a right given by the Copyright Act, 17 U.S.C. § 117(a)(2) (2006), to “owners” of software copies. Microsoft License, *supra* note 243, ¶ 6.

245. RAYMOND T. NIMMER, INFORMATION LAW § 11:2 (2005).

246. *See* Madison, *supra* note 148, at 291 (“With the coming of the Internet, the licensing norm developed for computer programs has been gradually but seamlessly extended to all forms of copyrighted works in digital form, including both ‘creative’ websites and collections of digitized data.”).

247. *See, e.g.,* ProCD, Inc. v. Zeidenberg, 86 F.3d 1447, 1449 (7th Cir. 1996) (“Shrinkwrap licenses are enforceable unless their terms are objectionable on grounds applicable to contracts

A close look at virtual world assets should illustrate why an intangible right should not be immediately conflated with the contract conveying it. It is understandable that one might make this mistake with a domain name; to buy a domain name, one enters into a contract on a website and pays a yearly fee.²⁴⁸ The product that the buyer receives looks, to the untrained eye, like just a string of words, and the string of words performs the magic of ushering humans around the World Wide Web. It is not common to buy words, though, so it is natural for us to assume that what the domain name purchaser is buying might be a right to services. On the other hand, virtual currency functions like a known asset, “real” currency.

This is not an Article about software; but the story of the evolution of licensing as the predominant method of transferring rights in software²⁴⁹ provides a good backdrop against which to evaluate the emerging practice of licensing other intangible assets in the electronic world.

Courts tend to accept, without much analysis, the proposition that in a software transaction denominated as a “license,” there is no transfer of ownership of the material object on which the software is embodied.²⁵⁰ Proponents of the practice of software licensing justify licensing by arguing that the nature of software mandates that transactions in goods and transactions in software be treated differently.²⁵¹ Certainly, it is easy to copy software,²⁵² and many software vendors place restrictions aimed at controlling distribution in their license agreements.²⁵³ A detailed discussion of software licensing is beyond the scope of this

in general . . .”).

248. See, e.g., Network Solutions, Service Agreement Version Number 8.0, <http://www.networksolutions.com/legal/static-service-agreement.jsp#general> (last visited Nov. 5, 2009).

249. For two excellent discussions of the evolution of licensing in the software industry, see Madison, *supra* note 148, at 310–16; Molly Shaffer Van Houweling, *The New Servitudes*, 96 GEO. L.J. 885, 917–21 (2008).

250. Rothchild, *supra* note 146, at 26–28; see, e.g., MAI Sys. Corp. v. Peak Computer, Inc., 991 F.2d 511, 519 (9th Cir. 1993) (noting, without analysis, that defendants were not protected as “owners” under § 117 of the Copyright Act because they had entered into license agreements).

251. Christian H. Nandan, *Software Licensing in the 21st Century: Are Software “Licenses” Really Sales, and How Will the Software Industry Respond?*, 32 AIPLA Q. J. 555, 613 (2004); Raymond T. Nimmer, *An Essay on Article 2’s Irrelevance to Licensing Agreements*, 40 LOY. L.A. L. REV. 235, 237 (2006); Raymond T. Nimmer, *Through the Looking Glass: What Courts and UCITA Say About the Scope of Contract Law in the Information Age*, 38 DUQ. L. REV. 255, 256 (2000).

252. See Maureen A. O’Rourke, *Drawing the Boundary Between Copyright and Contract: Copyright Preemption of Software License Terms*, 45 DUKE L.J. 479, 489 (1995).

253. See, e.g., ProCD, Inc. v. Zeidenberg, 86 F.3d 1447, 1450 (7th Cir. 1996); Adobe Sys., Inc. v. Stargate Software, Inc., 216 F. Supp. 2d 1051, 1055 (N.D. Cal. 2002).

Article, but assuming that software is different, then licensing, or something like a license, such as a sale with restrictions, may be justified.²⁵⁴ In order to determine whether a license is justified, however, it is necessary to consider the nature of the interest being transferred. Because virtual worlds afford us the opportunity to study intangible assets with different fundamental characteristics, they can help lawmaking institutions to look beyond the “intangible” label and focus on the important characteristics of the assets transferred. While software vendors may have a justifiable interest in controlling the distribution of their product, it is hard to see how Linden would have an interest in controlling the further use of its currency, the Linden, any more than the Bank of America would have an interest in controlling the use of U.S. dollars in a depositor’s account.

For several reasons, software transferors may want to characterize their transfer agreements as licenses, not only of the computer program, which is an intangible work of authorship for copyright purposes, but also of the tangible medium on which that work of authorship is inscribed. For example, a transfer of rights by license might avoid application of the first-sale doctrine, which limits the exclusive right of a copyright holder to distribute copies of her work.²⁵⁵ The Copyright Act gives the benefit of the first sale doctrine to a person in possession of a copy of a work if that person is the “owner” of the copy.²⁵⁶ “Owner,” however, is not defined in the Act.²⁵⁷ Once a copyright owner sells a copy, she can no longer control distribution of that copy.²⁵⁸ The copyright holder retains all of her other exclusive rights, such as the right to reproduce her work, even after sale.²⁵⁹ A lesser justification for using a license may be to avoid the application of Article 2 of the Uniform Commercial Code (U.C.C.), as Article 2 governs sales of goods.²⁶⁰

254. Molly Van Houweling suggests that the rights conveyed by mass-market software licenses are, in fact, servitudes. Van Houweling, *supra* note 249, at 889.

255. Under the Copyright Act, a license does not trigger first sale. 17 U.S.C. § 109(d) (2006). *See also* Madison, *supra* note 148, at 281 (“[T]he software license is designed to defeat copyright law’s doctrine of first sale, which would otherwise permit the ‘licensee’ to re-distribute that copy of the program . . .”).

256. 17 U.S.C. § 109(d).

257. Rothchild, *supra* note 146, at 17.

258. Rothchild, *supra* note 146, at 12.

259. Rothchild, *supra* note 146, at 9–10.

260. *See generally* Jean Braucher, *Contracting out of Article 2 Using a “License” Label: A Strategy That Should Not Work for Software Products*, 40 LOY. L.A. L. REV. 261, 275 (2006) (noting that “Article 2 defines a sale in terms of the passing of title for a price.”). Elizabeth Winston gives several other justifications for transferring by license rather than sale, including the ability to withhold warranties and “frustrate fair use” in a license. Elizabeth I. Winston, *Why Sell What You Can License? Contracting Around Statutory Protection of Intellectual Property*, 14 GEO. MASON L. REV. 93, 102 (2006). Licenses also enable software developers to engage in

Software licensing has many critics. Many deem the practice to be controversial because of its impact on the balance struck by copyright law.²⁶¹ These commentators and others also recognize that licenses transfer novel, and perhaps impermissible, property rights. John Rothchild has suggested that the software companies may be using the license label to describe a “new species of property relation,”²⁶² and Michael Madison has suggested that the typical license of a software copy might not be a license at all, but a lease, a bailment, or a conditional gift.²⁶³

While software vendors often purport to transfer the tangible media containing software by license, licenses of other tangible personal property are almost unheard of. Using a license for the transfer of a car as an example, Jean Braucher, in *Contracting out of Article 2 Using a “License” Label: A Strategy That Should Not Work for Software Products*, demonstrates that the license label does not “describe some necessary objective reality.”²⁶⁴ Rothchild made a similar point when he observed that “to say that one ‘licenses’ a material object . . . is [a] nonstandard usage of the term ‘license.’”²⁶⁵ Put another way, the license label does not necessarily signal an identifiable property interest. Most people would be offended by the use of a license to transfer an automobile; few are offended by the use of a license to transfer software. Elizabeth Winston identifies one reason for this, noting that “consumers bring with them a preconceived notion of a set of rights when they purchase books, one that does not limit the consumer’s use of the book. No such notion, however, existed for software. Software was new, difficult to protect, expensive to develop, and easy to replicate.”²⁶⁶ Winston’s point is an important one: licensing has grown as an important method of transferring software in part because consumers had no preconceived notions about software. One could make the same observation today with respect to other emerging intangible assets. Today, a prospective member of Second Life is not surprised to see license language in the clickwrap Terms of Service because that individual has likely seen license terms in many other clickwrap agreements (if she bothered to read them), most of which were likely related to software delivered to her electronically. Likewise, it might not surprise a purchaser of a domain name to be presented with a “Service Agreement.”

price discrimination in order to price software according to its value to the user. Nadan, *supra* note 251, at 557, 559.

261. See, e.g., Lemley, *supra* note 148, at 1246; Madison, *supra* note 148, at 279–80; Rothchild, *supra* note 146, at 32–35; Winston, *supra* note 260, at 102.

262. Rothchild, *supra* note 146, at 35.

263. Madison, *supra* note 148, at 306–08.

264. Braucher, *supra* note 260, at 267.

265. Rothchild, *supra* note 146, at 33.

266. Winston, *supra* note 260, at 100; see also O’Rourke, *supra* note 252, at 488–90.

It might seem that the intangibility of software is the distinguishing characteristic that makes licenses acceptable for software and unacceptable for tangible personal property such as books. This assumption, however, ignores the fact that software vendors purport to license not only the software that they transfer, but also the tangible disk on which the software resides. In accepting this practice, courts tend to confuse the “computer program and the material object on which it is distributed.”²⁶⁷ As Rothchild has explained, the distinction between the physical embodiment and the copyrighted content has become blurred in the software context.²⁶⁸ Using the sale of a book as an illustration, he explains that the sale of the physical object (the book) conveys title only to the physical object, not to the copyright to that book.²⁶⁹ Conversely, transfer of the copyright to a book has no effect on the ownership of a physical embodiment of that book.²⁷⁰

The problem that Rothchild identified is exacerbated when the software is not embodied in anything that we consider tangible. This is where virtual property can contribute to our understanding of property law; just as the assets involved in *Bragg* and *Eros* were intangible assets in which the parties claimed different types of property interests, so are the software program and the copyright in the software program.²⁷¹ But as software is delivered electronically rather than by disk, it is more difficult to appreciate the difference between the program and the copyright in the program and it becomes harder to separate the intellectual property from the material embodiment of the intellectual property.²⁷² Because of this blurred distinction between the tangible copy and the intangible copy, courts may find it even more difficult to reject software licenses.

This again, is where virtual worlds provide us with the opportunity to identify the significant aspects of property. Joshua Fairfield proposed a theory of virtual property when he identified the characteristics that separate some intangible assets from others.²⁷³ *Bragg* and *Eros* illustrate these characteristics more sharply. In virtual worlds, the distinction between the possessory ownership right and the intellectual property right should be clear. A bicycle in a virtual world can be used and transferred. The intangible item that is used and transferred is distinct from the copyright in that item. The ability to experience these intangible assets in ways that mimic the tangible experience is what

267. Rothchild, *supra* note 146, at 28 (emphasis omitted).

268. Rothchild, *supra* note 146, at 29–31.

269. Rothchild, *supra* note 146, at 29–30.

270. Rothchild, *supra* note 146, at 30.

271. Madison, *supra* note 148, at 279–80. Madison describes the program as the “electronic instantiation of the instructions that comprise the computer program.” *Id.*

272. Madison, *supra* note 148, at 291–92.

273. Fairfield, *supra* note 8, at 1063–64.

makes virtual property valuable as a vehicle for understanding property rights and interpreting license agreements with an understanding of property forms in mind.

B. *Interpreting Licenses Using Property Forms*

A *numerus clausus* approach to rights in intangible assets might eliminate some of the confusion about the rights granted by license agreements, and might enable courts to recognize that the rights granted in some licenses are not license rights at all. Applying the *numerus clausus* to the license of a software copy, it is clear that the license does create something else. Again, virtual worlds, by giving us intangible assets with visible physical boundaries, can help us to understand the rationale for this. Without describing the *numerus clausus* principle by name, Rothchild has suggested an application of it, arguing that if the “licensee” of the physical embodiment of software (referring to CD-ROMs and floppy disks) is not required to return the item during its useful life, then the license should be classified as a sale.²⁷⁴ Courts do reclassify licenses as sales, but they do so in a non-uniform manner.²⁷⁵ An appreciation of the different property forms embodied in intangible assets can help courts better interpret licenses for all types of emerging intangible assets.

American law implicitly applies the *numerus clausus* not only to estates in land, but also to personal property transactions.²⁷⁶ The rules by which courts will reclassify leases as sales are well-established and codified to a limited extent. The most common methods of transferring rights to tangible personal property are sale, lease, and security interest. Courts commonly reclassify transfers that are described as one type (a lease, for instance) as another (a sale) if the transfer carries the identifying characteristics of the other type of transfer.²⁷⁷ This is a recognition that there are limits on the ability of contracting parties to customize property interests.

Under the U.C.C., if a “lease” looks too much like a security interest, it is a security interest. The U.C.C. contains a bright-line test that incorporates the economic realities of lease and sale transactions.²⁷⁸ Under this test, if the structure of the transfer transaction indicates that the transferor does not intend to receive anything of value at the end of the lease term, that lease is really a sale.²⁷⁹ Therefore, a lease with no

274. Rothchild, *supra* note 146, at 35.

275. *See infra* notes 292–318 and accompanying text.

276. U.C.C. § 1-203, at 42 (2005).

277. This type of reclassification has been codified in the Uniform Commercial Code. *Id.* § 1-203(b)(1)–(4).

278. *Id.*

279. *Id.*

termination option is in fact a secured sale if one of four elements is met.²⁸⁰ These elements reflect the economic differences between sales and leases. For instance, a lease is in fact a secured sale if there is no termination option and the lease term is equal to or greater than the remaining economic life of the goods.²⁸¹ The lack of a termination right is essential to the application of the bright-line test; when a transferor transfers an asset to someone else for an unlimited term, the transfer looks like the transfer of a fee simple.

The rules reclassifying leases as secured sales apply only to goods. When the transaction is reclassified, the property interest that the parties intended to convey by their contract is transformed. Rather than transferring a leasehold interest with a reversionary interest in the transferor, the agreement transfers a fee simple, and the transferor retains a security interest.

The bright-line test tells a court only when a transfer definitely creates a security interest. It does not exclude other purported lease transfers from reclassification, however. Courts reclassifying transfers falling outside of the bright-line test also apply a *numerus clausus* analysis. Courts reclassify leases by applying traditional property concepts, and the use of property language is clear in the opinions: a transferor must intend to retain a “meaningful reversionary interest” in order to have its lease form respected.²⁸² Therefore, in a case in which the “lessee” had no practical ability to return the transferred goods because of the cost and difficulty of removal, the court reclassified the license as a sale.²⁸³

Another reclassification rule is found in U.C.C. § 2-401. If a party transfers goods and attempts to retain title to those goods after the

280. *Id.* (reclassifying a lease as a sale with a security interest if there is no termination option and one of the four following elements is present: “(1) the original term of the lease is equal to or greater than the remaining economic life of the goods; (2) the lessee is bound to renew the lease for the remaining economic life of the goods or is bound to become the owner of the goods; (3) the lessee has an option to renew the lease for the remaining economic life of the goods for no additional consideration or for nominal additional consideration upon compliance with the lease agreement; or (4) the lessee has an option to become the owner of the goods for no additional consideration or for nominal additional consideration upon compliance with the lease agreement”).

281. *Id.* § 1-203(b). For an excellent discussion of the lease-sale distinction under the U.C.C., see generally Corinne Cooper, *Identifying a Personal Property Lease Under the UCC*, 49 OHIO ST. L.J. 195, 197 (1988) (noting the law has never provided a consistent framework to distinguish between a sale and a lease in the personal property area).

282. *WorldCom, Inc. v. GE Global Asset Mgmt. Servs. (In re WorldCom, Inc.)*, 339 B.R. 56, 71 (Bankr. S.D.N.Y. 2006) (emphasis omitted); *In re QDS Components, Inc.*, 292 B.R. 313, 342–43 (Bankr. S.D. Ohio 2002).

283. *In re WorldCom, Inc.*, 339 B.R. at 73–74 (involving communications satellite equipment).

transfer, the reservation of title is limited to a security interest.²⁸⁴ Some describe this as an example of the Code's functional approach, defining this approach as one that classifies "with an eye to whether it produces good results."²⁸⁵ Alternatively, this reclassification could be described as another application of the *numerus clausus*: a person who gives up possession of goods permanently, and for a price, has sold those goods.

Licenses are also subject to reclassification by courts. As noted above, the term "license" in itself does not communicate any property interest, as a license is a contract. Earlier in this Article, I described scripted and non-scripted virtual worlds.²⁸⁶ In both types of these worlds, the virtual world operators describe the rights they convey as license rights.²⁸⁷ A comparison of the Second Life and World of Warcraft licenses, however, show that the rights that licensors attempt to convey are very different. To some, the rights conveyed by Blizzard (World of Warcraft's developer) and Linden might appear to be similar. After all, they both convey some kind of intangible asset in a virtual world. Blizzard, however, intends that World of Warcraft members use in-world items for one purpose, the progression of a scripted game. Linden intends that its members will develop a vibrant world in which business should thrive.²⁸⁸

Some courts analyzing licenses, like courts analyzing leases, hold that the label given to a transfer is not determinative. Like the Second Life Terms of Service described earlier in this Article, software licenses may also ambiguously describe the rights transferred. The Microsoft End User License Agreements provide an example of this ambiguity. While the license states clearly that "[t]he software is licensed, not sold,"²⁸⁹ the agreement appears to give the transferee rights that she would have under the first sale doctrine, as it permits the transferee to transfer the software, and the agreement, to a third-party. The first transferee is permitted to transfer the software so long as she removes the software from her computer.²⁹⁰

The rules for reclassifying licenses as sales are not as established as those for reclassifying leases as sales. Some courts accept the license

284. U.C.C. § 2-401.

285. Braucher, *supra* note 260, at 275.

286. *See supra* notes 76–92 and accompanying text.

287. *See* Second Life Terms of Service, *supra* note 96, at ¶ 1.4 (describing the users' right to their virtual currency as a "limited license right"); World of Warcraft Terms of Use, *supra* note 89, at ¶¶ 7, 11 (stating that the user has "no ownership or other property interest in the account" and forbidding transfers of game items).

288. The Second Life website tells the world that "[o]ne of the most exciting aspects of Second Life is its vibrant marketplace for virtual goods and services." Second Life, The Marketplace, <http://secondlife.com/whatis/marketplace.php> (last visited Nov. 5, 2009).

289. Microsoft License, *supra* note 243, at ¶ 5.

290. Microsoft License, *supra* note 243, at ¶ 12.

label without question when the license is for software.²⁹¹ Other courts, however, have applied the same sort of economic realities test as that applied to leases. Unlike the economic realities test used to distinguish leases from secured transactions, however, these tests have differed depending on the context in which they were applied.

For example, in *Microsoft v. DAK Industries, Inc.* (In re *DAK Industries, Inc.*),²⁹² the court had to distinguish between a lease and a license in order to determine whether payments due under the agreement were entitled to administrative expense priority in the licensee's bankruptcy.²⁹³ The economic distinction that the court had to consider in that case was the distinction between a pre-petition creditor whose claim arose before the bankruptcy petition and the obligee under an executory contract whose claim would continue to accrue after the petition.²⁹⁴ Because it was determining the moment at which the payments were due rather than when the property rights transferred, the court focused primarily on the payment schedule in ruling that the license was analogous to a sale transaction and therefore, the licensor was a pre-petition creditor.²⁹⁵ Property forms played a subsidiary role in the court's opinion, as the court recognized that the debtor, as a software distributor, obtained a "right to sell" in its license, rather than the "permission to use" that a traditional license grants.²⁹⁶

Other courts have focused more clearly on the duration of the possessory interest transferred. In *UMG Recordings, Inc. v. Augusto*,²⁹⁷ the court likewise applied an "economic realities" test to distinguish a license from a sale.²⁹⁸ At issue in that case was not software, but promotional recordings of music.²⁹⁹ Every CD at issue had a label with license language that stated that the CDs were the property of the plaintiff and that recipients were not permitted to transfer the recordings.³⁰⁰ The court, while classifying its analysis as an economic realities analysis, in fact inquired into the property rights granted by the "license."³⁰¹ Because the recipient was granted perpetual possession of

291. See, e.g., *MAI Sys. Corp. v. Peak Computer, Inc.*, 991 F.2d 511, 518–19, 518 n.5 (9th Cir. 1993) (noting, without analysis, that defendants were not protected as "owners" under § 117 of the Copyright Act because they had entered into license agreements).

292. 66 F.3d 1091 (9th Cir. 1995).

293. *Id.* at 1092, 1095.

294. Under the Bankruptcy Code, a "creditor" is any person with a prepetition claim against the debtor. 11 U.S.C. § 101 (10)(A) (2006). A trustee can assume or reject any executory contract of the debtor. *Id.* § 365(a).

295. *In re DAK Indus., Inc.*, 66 F.3d at 1094–95.

296. *Id.* at 1095.

297. 558 F. Supp. 2d 1055 (C.D. Cal. 2008).

298. *Id.* at 1062.

299. *Id.* at 1058.

300. *Id.*

301. *Id.* at 1060.

the CDs and was not required to return them, the court found that the CDs were sold, not licensed.³⁰² The court also found it relevant that the asset at issue was a CD, not software, and observed that “music CDs are not normally subject to licensing.”³⁰³ The court also touched upon the lack of a continuing payment obligation, but found the transferees’ “ability [to] indefinitely possess the . . . CDs” to be determinative of the property right transferred.³⁰⁴

Perpetual possession was also important to the court in *Vernor v. Autodesk, Inc.*,³⁰⁵ another case in which the court reclassified a software license as a sale.³⁰⁶ Recognizing that there is no bright-line test for distinguishing a license from a sale, the court held that if the transferee received perpetual possession of the software in exchange for a one-time payment, then the software is sold, not licensed.³⁰⁷

Closest to recognizing that a software transaction involves several distinct property interests in the software asset was the court in *Softman Products Co., LLC v. Adobe Systems, Inc.*,³⁰⁸ a case in which a software distributor sold copies of unbundled Adobe software, in contravention of the Adobe license.³⁰⁹ Adobe framed the question as one about the ownership of intellectual property.³¹⁰ The court rejected that characterization, instead describing the dispute as one “about the ownership of individual pieces of Adobe software.”³¹¹ The court further recognized that the Copyright Act distinguishes between the “tangible property rights in copies of the work and intangible property rights in the creation itself.”³¹² The software at issue in *Softman*, like the software at issue in the other reclassification cases, was delivered on a tangible disk, which made it easy for the court to emphasize the importance of possession.³¹³

In another case involving Adobe, however, the court also recognized that there is a difference between ownership of the intellectual property and ownership of the copy of the software but held nevertheless that the license agreement granted license rights rather than ownership rights.³¹⁴

302. *Id.* at 1061.

303. *Id.* at 1062.

304. *Id.* at 1061.

305. 555 F. Supp. 2d 1164 (W.D. Wash. 2008).

306. *Id.* at 1170.

307. *Id.*

308. 171 F. Supp. 2d 1075 (C.D. Cal. 2001).

309. *Id.* at 1080.

310. *Id.* at 1084.

311. *Id.*

312. *Id.* at 1084–85.

313. *Id.* at 1085–86.

314. *Adobe Sys., Inc. v. Stargate Software, Inc.*, 216 F. Supp. 2d 1051, 1058 (N.D. Cal. 2002).

In that case, the court placed an unfortunate amount of emphasis on the distinction between tangible and intangible assets, stressing that the value of the CDs at issue was attributable to the intangible code inscribed on it.³¹⁵ Because the court recognized, correctly, that the CD would be worthless without the intellectual property, it upheld the license as a license.³¹⁶ The court in *Adobe Systems, Inc. v. Stargate Software, Inc.* emphasized the difference between software and other assets, focusing on the ease of inexpensive copying.³¹⁷

All of the software reclassification cases illustrate why an understanding of virtual world assets can help us apply a *numerus clausus* analysis to agreements that transfer intangible assets. Most of these cases focus on possession, which is an important property attribute. Estates are defined in terms of the possessory rights that they convey, so determination of the existence and duration of possession is crucial to identification of the property rights granted in a conveyance. To most people today, “possession” means manual possession or occupation of tangible assets; understanding virtual world property helps us appreciate that rights similar to possessory rights can exist with respect to intangible assets.

VI. CONCLUSION

One of the justifications for a closed set of property rights is that such a set gives notice to rights holders of the extent of their rights. Without such notice, people might not use their rights efficiently.³¹⁸ On the one hand, many might not care whether sex beds, virtual money, or virtual land are used “efficiently”; these are still viewed by many as the playthings of people with too much time on their hands. But when we use these virtual playthings as a vehicle through which to explore rights in intangible assets generally, we can appreciate why concepts like the *numerus clausus* should be more strictly applied to rights in emerging electronic assets.

If rights in tangible assets are not infinitely customizable, then there is no reason that rights in intangible assets should exist in an unlimited number of forms. Given the notice function of standardized forms, there are probably more reasons to standardize rights in intangible assets than in tangible ones. Many contracts convey rights in intangible assets that are equivalent to the rights that exist in tangible assets. Specifically, as

315. *Id.* at 1058–59.

316. *Id.* at 1059.

317. *Id.*

318. Hansmann & Kraakman, *supra* note 163, at S382 (“If two persons are both to have rights in a single asset, they need some means of assuring that they share a common understanding of those rights. Absent such understanding, the parties may mistakenly make inconsistent uses of the asset or underuse the asset.”).

with tangible assests, a holder of an intangible asset can often exclude others from the use of that asset. It is not always easy to appreciate this when the asset is invisible, but when the asset is visibly represented in a virtual world and can function like tangible property, we can understand that possession is not limited to tangible things.