

COMPETING LOCKEAN CLAIMS TO VIRTUAL PROPERTY

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I. INTRODUCTION

By now, it is well-known that fights over virtual goods can have real-world consequences. In 2005, for example, one Chinese gamer killed another over a stolen dragon saber.¹ Virtual world goods can also translate into real world profits — 2006 saw the first millionaire of the popular virtual world Second Life, Anshe Chung, who accumulated more than one million dollars in virtual world assets.² As real as the effects of virtual products are, one wonders whether the property entitlements that might attach to them are secure. In particular, if the operator of a virtual world wanted to shut the world down, and by so doing destroy all of the products contained therein, would users have a right to stop it? This Note explores one normative

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¹ See Cao Li, *Death Sentence for Online Gamer*, CHINA DAILY, June 8, 2005, http://www.chinadaily.com.cn/english/doc/2005-06/08/content_449494.htm; *Chinese Gamer Sentenced to Life*, BBC NEWS, June 8, 2005, <http://news.bbc.co.uk/1/hi/technology/4072704.stm>.

² Rob Hof, *Second Life's First Millionaire*, BUSINESSWEEK ONLINE, Nov. 26, 2006, http://www.businessweek.com/the_thread/techbeat/archives/2006/11/second_lifes_fi.html.

justification that users might wish to use to assert claims to virtual property against operators of virtual worlds: Lockean labor-desert. I argue that the operators' initial labor-based rights to their virtual worlds severely limit the competing labor-based claims of users.

Virtual worlds are persistent, dynamic computer-based environments in which interconnected users interact with each other and the virtual worlds around them.³ Most worlds allow for an in-world property model, whereby users accumulate virtual products.⁴ As a descriptive matter, End User License Agreements (“EULAs”) typically limit any claims a user might wish to assert against an operator, but the underlying normative issue of user rights persists. Indeed, if a user's claim to a virtual product is strong enough, courts might be justified in ignoring the terms of a EULA that limit virtual property rights.

A virtual property right is a property right in a virtual product.⁵ While virtual and intellectual property rights both protect interests in non-corporeal things, virtual property rights apply to *rivalrous* goods whereas intellectual property rights apply to *nonrivalrous* goods.⁶ For example, a virtual property right can protect a domain name.⁷ While anyone can own a copy of the Beatles' “White Album” without making others worse off, we cannot all own the same domain name — say, www.google.com — without destroying its usefulness. The content of a virtual property right is also different from that of an intellectual property right. Like real property

³ Virtual worlds are often referred to as Massively Multiplayer Online Role-Playing Games (“MMORPGs”). For background on virtual worlds, see Wikipedia, *Virtual World*, http://en.wikipedia.org/wiki/Virtual_world (as of Mar. 9, 2007, 07:17 GMT).

⁴ Jack Balkin describes the predominant property model as an “accelerating real-world commodification of virtual worlds.” Jack M. Balkin, *Virtual Liberty: Freedom to Design and Freedom to Play in Virtual Worlds*, 90 VA. L. REV. 2043, 2070 (2004).

⁵ See generally Joshua A.T. Fairfield, *Virtual Property*, 85 B.U. L. REV. 1047, 1052–64 (2005) (describing the characteristics of virtual property rights, including rivalrousness, persistence, and interconnectivity).

⁶ *Id.* at 1053–55.

⁷ *Id.* at 1055.

rights, virtual property rights typically provide for the right to use, exclude others from, and alienate or transfer objects. Intellectual property rights, by contrast, prohibit copying or producing similar ideas, expressions, or products.⁸

Whether users can assert property claims against operators may have both economic and legal implications. Trade in virtual products is extensive — a spokesman for Sony Online Entertainment recently estimated that there is a \$200 million market for the sale of virtual goods.⁹ If users cannot protect their virtual property interests against operators, the value of such products and trade may diminish. But if users can assert virtual property rights against operators, such rights suggest myriad legal questions. Are operators required to maintain artificial scarcity in virtual products? If a server fails, destroying virtual products, what relief can users seek? Are operators required to sustain virtual worlds to protect virtual property rights, even to the point of bankruptcy? Though this Note will not address all of these questions, they help to convey the importance of the point at issue.

Part II of this Note briefly explains how the EULAs of most virtual worlds currently act to limit users' claims against virtual world operators. Part III addresses the underlying normative conflict from a Lockean perspective: as between users and operators, who has the greater labor-based claim to the products of the virtual worlds? I argue that the operators' claim is the stronger.

⁸. This is an abstract and simplified account, especially given the variety of entitlements that different types of intellectual property rights can provide, but it is adequate for the purposes of this Note.

⁹. Tom Leupold, *Spot On: Virtual Economies Break out of Cyberspace*, GAMESPOT, May 6, 2005, http://www.gamespot.com/news/2005/05/06/news_6123701.html. Castronova found that one virtual world had so much trade that he was able to calculate, among other things, that world's GNP and currency exchange rate against the U.S. dollar. See Edward Castronova, *Virtual Worlds: A First-Hand Account of Market and Society on the Cyberian Frontier* 31–33 (CESifo Working Papers, Paper No. 618, 2001), available at <http://ssrn.com/abstract=294828>.

Part IV concludes that users can find stronger property rights in worlds designed to support such rights, such as open source worlds.

II. THE STATE OF VIRTUAL PROPERTY IN VIRTUAL WORLDS

Virtual property rights in all of the most popular virtual worlds are delineated by EULAs. Although a vast market for virtual products has emerged, most virtual world EULAs prohibit the trade of virtual products and deny any property claims users might wish to assert against operators. As a practical matter, any legal dispute between users and operators over virtual property in such worlds would likely turn on these agreements. EULAs may shape user-operator disputes in worlds that openly oppose virtual property rights differently than in worlds whose operators purport to accept and even foster users' property rights, such as Second Life.

A. Property-Averse Worlds

The EULAs of property-averse worlds deny virtual property rights that could give rise to a user claim against an operator. World of Warcraft, the most popular virtual world in the United States, is a good example.¹⁰ Blizzard Entertainment, which owns and operates World of Warcraft, includes the following in its EULA:

¹⁰. See generally Bruce Sterling Woodcock, *An Analysis of MMOG Subscription Growth— Version 21.0*, (June 29, 2006) <http://www.mmogchart.com>.

You may not purchase, sell, gift or trade any Account, or offer to purchase, sell, gift or trade any Account, and any such attempt shall be null and void. Blizzard owns, has licensed, or otherwise has rights to all of the content that appears in the Program. You agree that you have no right or title in or to any such content, including the virtual goods or currency appearing or originating in the Game, or any other attributes associated with the Account or stored on the Service. Blizzard does not recognize any virtual property transfers executed outside of the Game or the purported sale, gift or trade in the “real world” of anything related to the Game. Accordingly, you may not sell items for “real” money or otherwise exchange items for value outside of the Game.¹¹

The message is clear. Users do not have any right to virtual goods or even the accounts for which they pay. They also have no right to buy, sell, gift, or trade any such goods — though this provision is regularly breached.¹² Elsewhere in the EULA, Blizzard asserts that it owns all objects in the game, and that it may terminate user accounts at any time for any reason.¹³

Blizzard is not alone. NCsoft, the operator of Lineage,¹⁴ also strictly limits user rights. Their EULA includes the following: “[Y]ou agree that you do not own the account you use to

¹¹. World of Warcraft: Terms of Use Agreement § 8 (Jan. 11, 2007), <http://www.worldofwarcraft.com/legal/termsofuse.html> [hereinafter *WoW EULA*].

¹². See Leupold, *supra* note 9 (“According to data gathered by Advanced Economic Research Systems, a company that tracks eBay sales, through April more than \$2 million was spent on World of Warcraft (WOW) gold this year.”).

¹³. *WoW EULA*, *supra* note 11, § 7.

¹⁴. Lineage is another popular virtual world, which reports more than four million active subscribers worldwide. NCsoft Profile, <http://www.lineage.com/nci/nci.html> (last visited Mar. 12, 2007).

access the service, the characters NC Interactive stores on NC Interactive servers, [or] the items stored on these servers”¹⁵ Unlike World of Warcraft, Lineage allows users to upload their own content into the virtual world. Nevertheless, the EULA limits a user’s right even as to his own content — he must agree to grant the operator a perpetual right to do roughly anything it wants with the content.¹⁶

These EULAs are representative of property-averse virtual worlds; the terms deny users any claims to virtual property. There are at least two objections to concluding that the EULAs alone deny such rights, but neither of these objections stands up to careful scrutiny.

First, one might argue that the EULAs are unenforceable. After all, users have no choice but to accept the terms of these complicated contracts or be excluded from the virtual worlds altogether. Some courts have refused to enforce EULAs where users have no opportunity to bargain, and where the terms are unreasonable.¹⁷ Whether the terms relating to ownership of virtual property are unreasonable speaks in part to normative issues addressed below — one might argue that users so *deserve* to earn property from their labor in virtual worlds that depriving them of virtual property rights without the opportunity to bargain is unreasonable. This is why a normative account is important. Without a positive theory of virtual property claims, it is hard to consider a world beyond the EULAs.

¹⁵. Lineage User Agreement § 4(d) (Jan. 20, 2003), <http://www.lineage.com/support/terms.html>.

¹⁶. *Id.* § 6(c).

¹⁷. *See* Comb v. Paypal, Inc., 218 F. Supp. 2d 1165, 1172–77 (N.D. Cal. 2002) (using a two-step analysis to hold a EULA unenforceable because it was a contract of adhesion (thus “procedurally unconscionable”) and because it contained unreasonable terms (making it “substantively unreasonable” as well)). Courts have also refused to enforce EULAs where, for example, a EULA is not properly presented to users such that it is clear that users are entering into a contract. *See* Specht v. Netscape Commc’ns Corp., 306 F.3d 17, 31–32 (2d Cir. 2002).

That said, while no court has addressed the validity of virtual world EULAs, many courts have upheld “clickwrap” licenses in other contexts.¹⁸ There is reason to think that virtual world EULAs are at least as likely to hold up in court.¹⁹ Blizzard’s EULA even invites users to call for a refund if they do not accept the terms of the EULA, doing so in bold, capital letters at the beginning of the EULA.²⁰ While this makes the EULA no less a contract of adhesion, it puts some power back in the users’ hands.

A second argument in favor of virtual property rights despite the EULAs is more pragmatic: where users are trading over \$200 million in virtual property, there must be property rights.²¹ As a practical matter, users seem to have exclusive possession of the virtual products, and they have the ability to transfer those products to other users. It would be ignorant or naïve, according to this argument, to deny the existence of property rights under such circumstances. But the pragmatic argument fails as well. First, trade among users may suggest the existence of rights among users, but it does little to indicate the structure of rights between users and operators. Second, pragmatic concerns can shape the opposing argument — the very conditions that give rise to putative property rights are controlled by the virtual world operators, and despite appearances, operators possess the virtual products insofar as they possess the entire world. The operators can prohibit transfer by changing the code; they can provide identical goods to every

¹⁸. See, e.g., *Specht*, 306 F.3d at 22 n.4 (discussing the validity of “clickwrap” licenses and the analogy to “shrinkwrap” licenses).

¹⁹. Indiana University Law School Professor Joshua Fairfield argues that U.S. courts tend to enforce such EULAs strictly. Kathleen Craig, *Second Life Land Deal Goes Sour*, WIRED NEWS, May 18, 2006, <http://www.wired.com/news/culture/0,70909-0.html> (citing Fairfield).

²⁰. WoW EULA, *supra* note 11.

²¹. There is a stronger related policy argument, which states that we should protect virtual property rights because failing to do so would destroy an otherwise viable market. Such utilitarian policy arguments have been discussed elsewhere, and are worthy of further investigation. See Theodore J. Westbrook, *Comment, Owned: Finding a Place for Virtual World Property Rights*, 2006 MICH. ST. L. REV. 779, 795–97 (2006).

player to destroy any value property might have; they can even destroy all property by shutting off the world.

B. Second Life: Property-Promoting?

Linden Lab's Second Life is supposed to be different. Second Life purports to protect the virtual and intellectual property rights of its users.²² Linden Lab's CEO, Philip Rosedale, has said, "We like to think of Second Life as ostensibly as real as a developing nation If people cannot own property, the wheels of western capitalism can't turn from the bottom."²³ To the users of his world, Rosedale says, "You create it, you own it — and it's yours to do with as you please."²⁴ Linden Lab even sells land directly to users, who can have their own island for \$1,675 plus \$295 per month.²⁵ Linden Lab therefore appears strongly committed to the virtual property rights of Second Life users.

A careful reading of the Terms of Service suggests, however, that Linden Lab's property protection is not as vigorous as it seems. The Terms of Service state: "[Linden Lab retains] the perpetual and irrevocable right to delete any or all of your Content from Linden Lab's servers

²². When Second Life announced its plan to give rights to users, other developers were shocked. See Amy Kolz, *Virtual IP Rights Rock Online Gaming World*, LAW.COM, Dec. 6, 2004, <http://www.law.com/jsp/article.jsp?id=1101738506769>.

²³. Aleks Krotoski, *Second Life and the Virtual Property Boom*, GUARDIAN UNLIMITED: GAMESBLOG, June 14, 2005, http://blogs.guardian.co.uk/games/archives/2005/06/14/second_life_and_the_virtual_property_boom.html.

²⁴. Joakim Baage, *Five Questions with Philip Rosedale, Founder and CEO of Linden Lab, Creator of Second Life*, DIGITAL MEDIA WIRE, Dec. 21, 2006, <http://www.dmwmmedia.com/news/2006/12/21/five-questions-with-philip-roosedale-founder-and-ceo-of-linden-lab-creator-of-second-life>.

²⁵. Second Life – Land: Islands, <http://secondlife.com/community/land-islands.php> (last visited Mar. 9, 2007).

and from the Service, whether intentionally or unintentionally, and for any reason or no reason, without any liability of any kind to you or any other party”²⁶

Linden Lab assumes the right to destroy content in a virtual world where *everything* is content. To the extent that this term is valid, users have no claim against Linden Lab even for the loss of all of their property. While Linden Lab is happy to sell you an island for almost \$2,000, the Terms of Service emphasize: “Linden Lab does not provide or guarantee, and expressly disclaims . . . any value, cash or otherwise, attributed to any data residing on Linden Lab’s servers.”²⁷ In other words, the operators have no obligation to protect the value of user property, and they reserve the right to do anything they want with it.²⁸

Bragg v. Linden — the first case in a United States court that could test virtual property rights — highlights some of these issues.²⁹ Bragg accumulated Second Life property worth thousands of dollars, some of which he purchased through a loophole in an auction system, and some of which he accumulated through legitimate means.³⁰ When Linden Lab learned of Bragg’s questionable dealings, it seized *all* of Bragg’s in-game assets, including land, items, and roughly \$2,000 in real-world money on account.³¹ Because of his exploitation of the auction system, Bragg is not a particularly sympathetic plaintiff, and the case is likely to turn on whether Bragg

²⁶. Second Life – Terms of Service, <http://secondlife.com/corporate/tos.php> (last visited Mar. 9, 2007).

²⁷. *Id.* (all capitals in original omitted).

²⁸. This includes the right to copy, use, reproduce, or analyze user content for almost any reason. *See id.*

²⁹. For the various documents filed throughout the litigation of this case, see Second Life – Law Suit. *Bragg v. Linden, et. al.*, <http://secondlife.typepad.com> (last visited Mar. 9, 2007). *See also* Craig, *supra* note 19.

³⁰. *See* Craig, *supra* note 19.

³¹. *Ejected Online Game Player Claims Virtual Real Estate Was Wrongly Confiscated*, ELECTRONIC COMMERCE & LAW REPORT, May 31, 2006, <http://ipcenter.bna.com/pic2/ip.nsf/id/BNAP-6QCKN8> [hereinafter *Ejected Player*].

violated the Terms of Service rather than on the general question of whether users can assert virtual property claims against operators.³² Still, Linden Lab's willingness and potential ability to seize and sell off a user's assets may cast doubt on whether they support strong user rights.

Bragg and the Second Life EULA show that Linden Lab's commitment to virtual property rights is not absolute. Linden Lab's CEO tells users that their virtual goods are theirs to do with as they please. At the same time, Linden Lab reserves the right to delete any content at any time for any reason, or take and sell the virtual property of those users Linden Lab believes to be in violation of the Terms of Service. If users want to retain robust virtual property rights, Second Life is not a perfect world.

On the other hand, the seeming disparity between Rosedale's statement and the EULA may be reconcilable. Rosedale and Linden Lab are committed to virtual property rights insofar as they are committed to protecting and fostering a user's stock of in-world goods, and to protecting a user's in-world property rights against the infringement of other users. In short, Linden Lab is committed to protecting property in user-user conflicts but not in user-operator conflicts.³³ Even *Bragg* may highlight Linden Lab's commitment to protecting user rights in that it shields users from those who wish to obtain property through questionable or fraudulent means. Linden Lab's failure to protect all possible user claims may just be a necessary precaution: they might not

³². This is why Fairfield says, "This case is not the case that [people interested in virtual property have] been waiting for." Craig, *supra* note 19 (square brackets in original). Linden Lab's general counsel believes this is purely a question of whether *Bragg* violated the Terms of Service. See *Ejected Player*, *supra* note 31.

³³. Linden Lab may be expressing, in part, a commitment to respect user intellectual property rights as well as user-user virtual property rights. This commitment would not preclude them from deleting user-copyrighted designs, for example, and would be consistent with the Terms of Service.

otherwise be able to operate if a server failure could delete vast amounts of user property and open Linden Lab up to millions of dollars in liability.

III. DESERT IN OWNED WORLDS

Beneath the largely contractual user-operator disputes over virtual property lies a normative conflict over the allocation of property rights. Regardless of the content of the EULAs, users argue that they deserve virtual property rights.³⁴ Perhaps user property rights are so strong that the courts should protect them despite the EULAs. Or, if the EULAs are void for other reasons, perhaps we should allow for user property claims against operators. In order to make such an argument, users need to justify their virtual property claims. One commonly proposed justification comes from Lockean labor-desert theory — because users have invested time and effort in developing their avatars and acquiring in-world possessions, they deserve property rights.³⁵ But frontier analogies aside,³⁶ a user's claim to a virtual property right does not emerge in a vacuum. The virtual world operators have a competing claim: they can argue that their labor in creating and maintaining the virtual worlds gives rise to a property right in the entire world. As such, there is little room for user claims to desert. Thus, there arises a question of allocation: do users or operators have a stronger Lockean claim to in-world products?

³⁴. Game designer Raph Koster, for one, suggests that the right to virtual property may be an inalienable right. See Raph Koster, Declaring the Rights of Players, Aug. 27, 2000, <http://www.raphkoster.com/gaming/playerrights.shtml> (last visited Mar. 9, 2007).

³⁵. See, e.g., Mathias Klang, *Avatar: From Deity to Corporate Property*, 7 INFO., COMMUNITY, & SOC'Y 389, 399 (2004); F. Gregory Lastowka & Dan Hunter, *The Laws of Virtual Worlds*, 92 CAL. L. REV. 1, 46–48 (2004); Westbrook, *supra* note 21 at 791–95.

³⁶. See, e.g., Lastowka & Hunter, *supra* note 35, at 46 (noting how virtual worlds are similar to Locke's vision of America).

Lockean property theory is not the only available justification, of course. The most common alternative theories include utilitarianism and personality theory.³⁷ A full analysis of these theories is beyond the scope of this Note,³⁸ so this section will focus only on Lockean claims.

A. Desert and Operator Rights

The Lockean labor-desert theory of appropriation confers property rights upon those who labor to distinguish that which is appropriated from the common of natural resources. In Locke's terms: "Whatsoever then he removes out of the State that Nature hath provided, and left it in, he hath mixed his *Labour* with, and joyned to it something that is his own, and thereby makes it his *Property*."³⁹ This account raises several questions, many of which are not unique to virtual property.

First, what constitutes the common from which virtual property might be drawn? This question is at least as challenging for virtual products as it is for intellectual products.⁴⁰ For operators, before a virtual world is created, the common must be some commonly-owned or unowned set of cultural or ideological resources, if there is a common at all. To determine whether users ought to be able to assert Lockean virtual property claims against operators, the inquiry requires no more specificity than this. If there is no coherent account of any kind of raw

³⁷. These theories have been rehearsed at length in the intellectual property theory literature. See generally William Fisher, *Theories of Intellectual Property*, in *NEW ESSAYS IN THE LEGAL AND POLITICAL THEORY OF PROPERTY* 168 (Stephen R. Munzer ed., 2001); Justin Hughes, *The Philosophy of Intellectual Property*, 77 *GEO. L.J.* 287 (1988). Fisher also offers a novel justification called "social planning theory." Fisher, *supra*, at 172–73.

³⁸. Such an enterprise would be akin to Hughes's article which is roughly four times as long as this Note. See Hughes, *supra* note 37; see also Westbrook, *supra* note 21 (providing a short survey of Lockean, utilitarian, and personality theories).

³⁹. JOHN LOCKE, *The Second Treatise of Government*, in *TWO TREATISES OF GOVERNMENT* § 27 (Peter Laslett ed., Cambridge Univ. Press 1988) (1698) [hereinafter LOCKE, *Second Treatise*].

⁴⁰. See Fisher, *supra* note 37, at 186–87 (considering the difficulties associated with defining the intellectual common).

materials for virtual products to form a common, neither users nor operators will get far on a Lockean account. If we can identify a set of resources out of which virtual products are created and come to be possessed, then we must next ask whether users and operators have an equal claim to those resources. At least for the initial creation of the world and the objects therein, users and operators have equal claims to the common, from which anyone could have created such a world. We will see below that it is an altogether different case when users enter a preexisting world.

Second, what counts as labor? The labor requirement cannot depend on sweat, pain, or displeasure, for property would be then contingent on unhappiness — property pleurably gained would be no property at all. But enjoyment is no less a bar to property in virtual worlds than in real ones. Labor is best treated as a technical term in the context of Lockean labor-desert, referring merely to that process by which one distinguishes goods from the common.⁴¹ As such, labor does little to limit potential acts of appropriation.

Third, what is the content of the property right attained through labor-desert?⁴² At the very least, if an operator can claim to own the resources of a virtual world, he can prevent users from asserting competing labor-based rights to virtual products within the world. If operators have virtual property rights in their worlds, then they can likely exclude users at will and shape the possibilities for user appropriation within the world. Labor-desert could therefore provide

⁴¹. See Steven J. Horowitz, *Rethinking Lockean Copyright and Fair Use*, 10 DEAKIN L. REV. 209, 215 (2005) (“Labour is merely the process of putting a distinction on particular goods.”). On this account, labor should be defined by its use in Locke.

⁴². See Westbrook, *supra* note 21, at 793.

support for upholding EULAs: if operators have a Lockean claim to the resources of the world, then there is no reason to stop them from shaping users' use of products within those worlds.

Some Lockean objections are available, however. First, the "enough and as good" proviso may limit appropriation where common resources are overly depleted.⁴³ But the creation of one virtual world does not preclude the creation of others, so it makes little sense to say that providing operators with virtual property rights overly depletes the common. Second, the "spoilage" proviso can limit appropriation where property may spoil.⁴⁴ This does not seem to apply either, since digital products do not spoil. The spoilage proviso could be loosely interpreted to mean that resources must be used efficiently, but this would turn labor-desert into a utilitarian theory of appropriation. It makes little sense to have a proviso transform a rights-based argument into a utilitarian argument. If users or operators wish to make utilitarian arguments, they should do so openly.

A much stronger argument against the operator's property claim comes by analogy from the domain of intellectual property. Suppose *A* comes up with an idea for a song and shares it with *B*, thinking that they could write the song together. *B* declines to collaborate but goes home and writes a song based on *A*'s idea. In such a case, *B* would hold the exclusive copyright in the song, despite *A*'s role. *A*'s framework is drawn from the natural common of ideas, but it creates the particular framework for creation — in a sense, *A* provides resources to *B* as the operators

⁴³ The "enough and as good" proviso prohibits laborers from taking too much from common resources. See LOCKE, *Second Treatise*, *supra* note 39, § 27; Horowitz, *supra* note 41, at 215. Professor Jeremy Waldron convincingly argues that this is not a proviso at all. See Jeremy Waldron, *Enough and as Good Left for Others*, 29 PHIL. Q. 319, 320 (1979).

⁴⁴ This is the spoilage proviso: "As much as any one can make use of to any advantage of life before it spoils; so much he may by his labour fix a Property in. Whatever is beyond this, is more than his share, and belongs to others." LOCKE, *Second Treatise*, *supra* note 39, § 31. See also Horowitz, *supra* note 41, at 215.

provide resources to users. Still, *A* does not *own* that framework any more than she owns the common itself, and *B*'s labor is rewarded with a property right. By analogy, virtual world operators create the framework for the production or cultivation of virtual products, but they are not responsible for the products themselves. Thus, the argument goes, users have a stronger claim to virtual property rights in the particular products within virtual worlds than operators do.

One problem with this objection is that it does not properly describe much of the property in virtual worlds. In most worlds, users do not "produce" the products they claim as property; they earn them through battles with virtual beasts or trade with virtual shopkeepers. Such goods are created through the labor of the operators before users take control of them. When operators labor to produce virtual products, they have a greater initial labor-based claim to ownership of such products. An operator's virtual property right can be transferred to users, but not where the operator intends to retain his right. If users wish to use labor theory to establish strong competing interests to virtual property in an attempt to convince courts to ignore the terms of a EULA, they will have to explain how users come to acquire a greater right, when operators have an initial property right which they explicitly retain.

The analogical argument carries more weight where users can create goods rather than merely find or acquire goods created by the operators. The extent to which the analogy applies depends on the type of raw materials out of which a product is created. Two extremes exist, though a continuum of possibility lies between them. At one extreme, a user may combine two in-world products, themselves fully created by the operators, to produce a new good. For

example, a user might combine a candy and a stick to make a virtual lollipop. At the other extreme, a user might create an in-world product entirely from original code, where the operators have played no role in the possibility of user creation except by providing the space in which users may deploy the code.

Where the raw materials from which users produce new products are themselves *previously owned* by the operators, labor theory ought not to ignore the operators' initial right to the goods. In such cases, the songwriting analogy is inapt: such creative acts are much more akin to mash-ups of multiple, previously-recorded works.⁴⁵ But operators have a much weaker claim to users' products produced from raw materials to which operators have no claim. The best argument from labor theory for operator ownership of such goods is that, by their world-creation, operators come to own all extant *and possible* goods within it. Such an argument probably distorts Lockean theory beyond its plausible bounds. Still, it is unlikely that products created entirely by users comprise much of the property at issue in most virtual worlds, so even if operator claims fail where users are independent creators, the operators are not much worse off.

In short, an operator has a strong labor-based claim to her world and the products she creates within it. Where users create entirely new in-world products from unowned resources, an operator's claim to those products is much weaker.

⁴⁵ A mash-up is a musical form in which compositions are entirely made up of pieces of previously-recorded works. Wikipedia, *Mashup* (music), [http://en.wikipedia.org/wiki/Mashup_\(music\)](http://en.wikipedia.org/wiki/Mashup_(music)) (as of Mar. 8, 2007, 22:05 GMT).

B. Desert and User Rights

Users enter a virtual world at a disadvantage. Their Lockean claims to property within the world are limited by the pre-existing, competing claims of the operators who labored to produce the world and all of the products in it. Still, users may be able to assert such compelling claims that we should ignore the initial assignment of rights.⁴⁶

The Lockean argument for user property rights in virtual worlds is as follows. A user in a virtual world acquires possessions that would otherwise lie in their natural state, for example behind a dragon or in the store of a virtual shopkeeper's goods. In the process of acquiring these goods, a user must *labor* to distinguish them from goods that remain in their natural state. *My* dragon saber is different from all other dragon sabers insofar as the rest remain in the possession of a vicious and wild virtual beast. There are various objections to this account, however, especially when user and operator claims conflict.

Many question whether "labor" is possible for players within a game,⁴⁷ but Lastowka and Hunter argue that this problem is "hardly clear in a world where professional athletes are paid fortunes to play games."⁴⁸ Indeed, as discussed above, it is best not to get caught up in the conventional meaning of "labor," for doing so would eliminate many acts of appropriation that most people, including Locke, would want to allow.

⁴⁶. See Lastowka & Hunter, *supra* note 35, at 46–48 (deploying Lockean theory in favor of user rights).

⁴⁷. See Westbrook, *supra* note 21, at 794–95 & n.95; Richard A. Bartle, *Pitfalls of Virtual Property*, Apr. 20, 2004, at 6, <http://www.mud.co.uk/richard/povp.pdf>.

⁴⁸. Lastowka & Hunter, *supra* note 35, at 46.

The primary problem for user claims to labor-desert against operators is the common. Users usually acquire products that are produced through the labor of the operators. For example, one might earn an item by defeating a virtual foe that carries it, where the operators have created both the foe and its item. Often, even new products are simply combinations of existing in-world products created by the operators. In proprietary worlds, most resources from which users claim to acquire property rights are owned by the operators. Or, at the very least, operators have a strong Lockean claim to those resources such that users must provide sound arguments to overcome the initial claims. If there is no common for virtual products — for users or for operators — then the defect that fails to confer to the operators a right to the world itself would likely vitiate users' claims as well. If the Lockean appropriation can justify virtual property rights at all, users should have no greater claim to the resources of virtual worlds than operators do.

Second Life users might argue that their world is full of uncultivated resources, made valuable only when users came to play. To the extent that the world lies barren until the users created value, there is a natural common of resources.

There are two problems with this argument. First, that something is uncultivated does not imply that it is commonly owned, even if people are invited to cultivate it. Indeed, private ownership of uncultivated land is unremarkable in the real world. Second, this argument from barrenness is not really about the common at all. It is a variant of a justification for property

rights, also derived roughly from Locke, which Waldron calls a “labour theory of value.”⁴⁹ The labor theory of value does not appeal explicitly to the common. Instead, property rights are justified where one’s labor creates the value of a good. But the labor theory of value cannot dispense with the common. Otherwise, it would allow for appropriation where labor created great value, even if resources were previously owned — a great painter could gain a property right in your car by painting on it, if only his painting were more valuable than the car itself.

In order for users to have a greater labor-based claim to virtual property in virtual worlds than operators do, they would need to dispense with the common, but the common is not incidental to Lockean property theory. As a historical matter, Locke’s treatises were written in response to Sir Robert Filmer, who argued that the world’s resources belonged to the direct descendants of Adam.⁵⁰ Locke devoted the entire *First Treatise* to refuting Filmer and establishing common ownership. To ignore the common is to remove Locke’s work from its historical context in a way that subverts its meaning.

Of course, one may follow Holmes and eschew such historical arguments: “It is revolting to have no better reason for a rule of law than that so it was laid down in the time of Henry IV.”⁵¹ But history is not all that ties us to the common. Lockean appropriation must provide justification for property rights, which confer ownership of goods at the exclusion of others. For Locke, the primary justification for private property is *necessity*. He begins with the argument

⁴⁹Jeremy Waldron, *Two Worries about Mixing One’s Labour*, 33 PHIL. Q. 37, 37 (1983).

⁵⁰. See generally ROBERT FILMER, *Patriarcha*, in PATRIARCHA AND OTHER POLITICAL WORKS OF SIR ROBERT FILMER 47, 47–126 (Peter Laslett ed., Cambridge Univ. Press 1949) (1680).

⁵¹. Oliver Wendell Holmes, Jr., *The Path of the Law*, 10 HARV. L. REV. 457, 469 (1897).

that the resources of the world are commonly owned, but if the resources are commonly owned, how can anyone make use of them without infringing upon the rights of others?⁵² Locke explains, “there must of necessity be a means *to appropriate* [natural resources from the common] . . . before they can be of any use”⁵³ Private use, Locke argues, requires private ownership. The necessity argument does not follow without initial common ownership. To give up the common is to give up this primary justification for Lockean rights. Above, we saw that justification from the labor theory of value fares no better without the common. To proceed within a Lockean framework without the common would require an alternative justification.

Some scholars suggest that Locke’s theory itself provides other justifications for private property rights.⁵⁴ Two other possible justifications include desert and efficiency.⁵⁵ Waldron describes the desert justification in this way: “God has commanded men to labour; so ‘the Industrious and the Rational’ are entitled to the products of their labour inasmuch as they have shown by their initiative that they are people of more merit than ‘the quarrelsome and Contentious’ who complain about private appropriation.”⁵⁶ Even if we were to assume that this justification is properly Lockean and cogent, we cannot approach the problem from the users’ perspective alone. In comparing the claims of users and operators, we must ask: who is industrious and who is quarrelsome? The most straightforward definition of “labor” would

⁵². Locke poses the problem in this way: “God . . . *has given the Earth to the Children of Men*, given it to Mankind in common. But this being supposed, it seems to some a very great difficulty, how any one should ever come to have a *Property* in any thing” LOCKE, *Second Treatise*, *supra* note 39, § 25.

⁵³. *Id.* § 26.

⁵⁴. Waldron suggests that Locke provides four different justifications, including need and value (mentioned above). See Waldron, *supra* note 49, at 37–38.

⁵⁵. *Id.*

⁵⁶. *Id.* at 38.

suggest a greater right for operators than for users — they are working in the business of game development whereas users are merely playing. A more technical definition of labor as whatever distinguishes goods from the common would provide users with no greater rights than producers.

Efficiency could provide a reasonable alternative, and some treat Lockean theory as a primarily utilitarian, efficiency-maximizing justification for private property rights.⁵⁷ If Locke's were a utilitarian theory of property, however, one might wonder why he spilled so much ink on the necessity justification, or even on his *First Treatise*, since utility could solve his problems more directly.⁵⁸ Still, efficiency has some support in the text.⁵⁹ To the extent that the Lockean justification for private property rights is utilitarian, it lies outside the scope of this analysis.

IV. CONCLUSION

The inquiry above suggests that, if we respect the EULAs of the virtual worlds, users do not have strong claims to virtual property that they may assert against operators. If users wish to marshal Lockean labor-based arguments so as to defeat the EULAs or to protect virtual property rights in worlds that do not prohibit user claims, users will have to confront the competing claims of operators. Operators have strong labor-based claims to the resources of the virtual worlds, and these claims undermine most attempts to justify user rights. Users may have stronger claims than operators to a limited set of products, specifically those produced entirely with unowned raw

⁵⁷ See, e.g., Viktor Mayer-Schönberger, *In Search of the Story: Narratives of Intellectual Property*, 10 VA. J.L. & TECH. 11, ¶¶ 8–14 (2005).

⁵⁸ One possible explanation is that the *magna opera* of utilitarianism were written one hundred years after Locke's treatises.

⁵⁹ For example, in his discussion of labor-based appropriation, Locke says, "For it is *Labour* indeed that *puts the difference of value* on every thing" LOCKE, *Second Treatise*, *supra* note 39, § 40.

material— usually code to which operators have no property right. This is the exception, however. Concerning the vast majority of products in virtual worlds, operators have a stronger Lockean claim to virtual property rights than users do.

It is possible that we should look for other ways to protect users' claims against operators where the preceding Lockean arguments fail. At least one alternative exists within the Lockean framework that would support stronger user claims to property. User property claims fail primarily because they play out in proprietary worlds, previously created and owned by the operators. But unlike real world evil, this is one that need not be explained away by postulating that we play in the best of all possible virtual worlds.⁶⁰ If a different model would support stronger user claims to virtual property, we could build such a world. Indeed, worlds built on open source platforms such as Croquet⁶¹ and The OpenSource Metaverse Project⁶² already exist, and they allow for much stronger user claims. If an open model produces better worlds, then users should live and play in those worlds. In addition, if more users flock to open worlds, proprietary worlds might also switch to a more open model, just as proprietary internet service providers such as America Online had to change their business model as the open internet emerged.⁶³

⁶⁰ That we live in "the best of all possible worlds" is part of Leibniz's response to the problem of evil from his *Theodicy*. See generally Alvin C. Plantinga, *Which Worlds Could God Have Created?*, 70 J. PHIL. 539 (1973).

⁶¹ The Croquet Consortium, <http://www.opencroquet.org> (last visited Mar. 9, 2007).

⁶² The OpenSource Metaverse Project, <http://metaverse.sourceforge.net> (last visited Mar. 9, 2007).

⁶³ The current predominance of proprietary worlds may simply reflect that the open worlds have not yet received enough publicity to attract a critical mass of quality content. But see Andrew E. Jankowich, *Property and Democracy in Virtual Worlds*, 11 B.U. J. SCI. & TECH. L. 173, 190 (2005) (stating that open source worlds "may appeal only to specific tastes."). The operators of proprietary worlds may also provide a sense of security that is absent in the open model.

In the future, open source worlds allowing for stronger user claims may become more prominent. For now, we live in a world of owned worlds. Blizzard Entertainment will not soon foster user rights in World of Warcraft, and neither they nor the other virtual world operators need to give up much according to a Lockean approach. By laboring to produce their virtual worlds, operators earned a property claim to the resources contained therein. As users collect products within those worlds, they are more often than not merely taking possession of fully-created, owned products. Locke starts from a point of common ownership: God, Locke says, “hath given the World to Men in common”⁶⁴ Unfortunately for users, however, the operators of the virtual worlds have not been so generous.

⁶⁴. LOCKE, *Second Treatise*, *supra* note 39, § 26.