

# PITFALLS OF VIRTUAL PROPERTY

---

Dr. Richard A. Bartle  
The Themis Group  
April 2004



## **Abstract**

This paper describes various pitfalls associated with the notion of real-world ownership of virtual property, taken from the perspective of a developer of virtual worlds. It makes no commentary on the positives of virtual property: rather, it assumes that the reader already regards the concept favourably or as inevitable, and is performing due diligence to discover the extent of any downside to it.

Five pitfalls are summarized in total, of which one is philosophical, two are law-related and two are concerned with gameplay.

## Introduction

Virtual worlds (“VWs”) are computer-moderated, persistent environments through and with which multiple individuals may interact simultaneously. In order to make these environments persuasive, such systems always present to their players an illusion that encourages the acceptance of familiar concepts such as *place*, *inhabitant* and *object*<sup>1</sup>. Thus, it is usual to refer to these virtual items in the same way that one refers to real items - as “a castle” or “a shopkeeper” or “a book”, rather than as “an interpretation of bits”.

Many virtual worlds allow characters within those worlds to buy and sell virtual goods. If my character needed a new sword, I might approach another character in the virtual world and offer a number of virtual coins in exchange. In this way, the virtual world can have its own, internal economy dealing with virtual property; this can add greatly to gameplay.

The more people who accept an illusion, however, the more it becomes real. A “share in a company” is not a tangible thing, for example, but folk deal in them on stock exchanges every day. If a player can buy and sell virtual goods in a virtual world, there's no conceptual barrier to buying and selling them in the real world. People can trade in intellectual property, so why not in virtual property?

Why not indeed... Trading in virtual goods already takes place and involves large sums of money. During the two-week period ending April 14<sup>th</sup> 2004, the market volume of virtual goods from *Ultima Online* traded on eBay was \$156,857<sup>2</sup>. That's one virtual world on one auction site: at the time of writing<sup>3</sup>, a snapshot of eBay's category 1654<sup>4</sup> as a whole lists a total of 16,799 items for sale - by no means out of the ordinary<sup>5</sup>. PlayerAuctions<sup>6</sup>, which only deals in virtual objects (mainly from *EverQuest*), receives over two million hits a day; ItemBay<sup>7</sup>, the dominant virtual object trading site for the Korean market (out of over 130 such sites), is rumoured to have a turnover greater than that of the combined virtual worlds it services.

These are just the brokerage sites. Some companies, most notably Internet Gaming Entertainment<sup>8</sup> (“IGE”), also employ people in low-wage countries such as China to play virtual worlds full time. This enables them to obtain rare items that would otherwise seldom come to market, for which they can charge a premium<sup>9</sup>. IGE has around 100 employees, most of whom work on its help desk (which is open 24/7). These are not companies operating out of bedrooms and garages.

---

<sup>1</sup> Note that it is not essential that the program code itself differentiates between these concepts.

<sup>2</sup> Source: <http://www.juliandibbell.com/playmoney/index.html>

<sup>3</sup> 20<sup>th</sup> April, 2004.

<sup>4</sup> <http://listings.ebay.com/aw/plistings/list/all/category1654/index.html>

<sup>5</sup> Typically, around 65,000 sales are completed in a typical two-week period. Sales for Q1 2004 in this category were \$5.85 million.

<sup>6</sup> Source: [http://terranova.blogs.com/terra\\_nova/2004/04/ebay\\_sales\\_rise.html](http://terranova.blogs.com/terra_nova/2004/04/ebay_sales_rise.html)

<sup>7</sup> <http://www.playerauctions.com/>

<sup>8</sup> <http://www.itembay.com/>

<sup>9</sup> In practice, IGE doesn't do much of this itself: rather, there are important independents who farm goods very effectively (some use bots to do so) and sell the resulting product to IGE. In this sense, IGE is acting more as a retailer than a producer, although the difference between paying someone to farm goods and paying them for the goods they've farmed is fine. Another good source of high-ticket items for them is the buying of them back from people who want to stop playing a particular VW and decide to cash in - <http://www.ige.com/>

Three major and three minor categories of virtual property are traded:

## *Major*

- Objects (weapons, armour, jewelry...)
- Characters
- Currency (gold pieces, platinum pieces, pyreals...)

## *Minor*

- Real estate<sup>10</sup> (houses, shops, building plots...)
- Accounts
- Other (permissions, memberships, maps...)

So trading in virtual property is already an established phenomenon. It is not, however, universally welcomed by developers. In particular, Sony Online Entertainment (“SOE”), the creators of *EverQuest* and *Star Wars: Galaxies*, takes a famously dim view of the practice. Why is this?

Well, there are pitfalls...

The key word in the discussion that follows is *commodification* - the transformation of previously non-commercial relationships into commercial ones. When speaking about virtual worlds, this means the treatment of virtual world goods as objects of real-world commerce. Some virtual worlds are designed from the outset for the real-world buying and selling of their virtual-world goods, and they are comfortable with it; for these, not all of the pitfalls apply. Others, while offering the possibility of commodification, are as a consequence of their design not susceptible to it; for these, too, not all of the pitfalls apply. In both these cases, however, the avoidance of pitfalls has other consequences that can be dissuasive. Furthermore, avoidance of *some* of the pitfalls is not avoidance of *all* of them.

Note that although in general it is the buying and selling of virtual property that is of concern here, that's not all that can be done with it. ItemBay announced in late 2003 that it was going to act as a broker for *renting* virtual objects - a move that united the major Korean VW developers in their wrath.

So what is it about virtual property that causes so much alarm?

Let's find out...

## **Pitfall #1: What is Virtual Property?**

Is virtual property a meaningful concept?

This may seem an odd question to ask, given that every virtual world has objects and that these objects can belong to individual characters. If one character says to another one, “that's mine!”, any argument that ensues will be about who owns the object in question, not whether objects or ownership themselves are valid concepts.

---

<sup>10</sup> Technically, this should be “virtual estate”.

# PITFALLS OF VIRTUAL PROPERTY

The short answer is that within the virtual world itself, property is a meaningful concept, but within the real world it is not meaningful in the same way unless the virtual world explicitly recognizes it.

Here's an analogy. Suppose you own a *Monopoly* set, and invite me and a few friends round for a game. During the course of the game, I land on Boardwalk and buy it. Do I own it? Well yes, in the game, but no in real life because it's your *Monopoly* set. Let's say another player had Park Place<sup>11</sup> and that I wanted to buy it from them but didn't have enough *Monopoly* money to do so. What would happen if I paid them \$10 of real money for it? Allegations of unfairness and rule-breaking aside, what I've actually bought isn't real-world ownership of the object, because the seller doesn't real-world own it (it's your *Monopoly* set). Instead, I've bought a service from you: for my \$10 of real money, you'll give me the property "for free" in-game.

Now suppose that instead of playing *Monopoly* we were playing *Magic: The Gathering*. The original rules for this included putting up an ante: each player removed a card at random from their deck, and the winner of the game got to keep both. You might begin the game owning a Black Lotus and finish not owning it. Here, the rule mechanics of the game do (or rather did<sup>12</sup>) allow for transference of real-world ownership. That said, if you were in a tournament and bought from your opponent one of the cards they actually had in play, you might expect some resistance from the referee were you then to start tapping it.

As a player of virtual worlds, *you* don't own anything, your *character* owns it. What's more, you don't own your character, either - you don't even own "your" account. These are all part of the "set" that is owned by the developer. Only if the rules of the virtual world acknowledge that real-world ownership can be transferred does the concept of ownership in the virtual world correspond with the concept of ownership in the real world.

Nevertheless, players can (and routinely do) claim that they real-world own virtual goods in the same sense as they own real goods. There are two basic attitudes:

- What can be bought and sold in the virtual world maps identically onto what is bought and sold in the real world. If I buy your sword on eBay, I now own that sword.
- Trades in virtual objects are actually trades in imaginary tokens that buyers and sellers use as a convenience to represent transfer of the in-world possession of virtual objects<sup>13</sup>. You may advertise your sword as being for sale at \$200, but what you actually mean is that your character will give the sword to my character if I pay you \$200 of real world money (not that either of us particularly cares about the actual mechanics). Note that this doesn't work for character transfers.

Of these attitudes, the first one causes most unease among developers as it implies that real-world commerce laws govern virtual object trades. The second does not do this, although it's just as bad for developers in other areas (see Pitfalls #3 and #4).

OK, so what logic do players use to justify their claims to real-life ownership of parts of your virtual world "set"?

<sup>11</sup> Non-American readers: I believe that this is the property that makes a set with Boardwalk, but never having played *Monopoly* on an American board I'm just as much in the dark as you are.

<sup>12</sup> This rule was dropped from later sets of *Magic: The Gathering*; as rare-card prices rose, players began to resent the idea.

<sup>13</sup> In this sense, the tokens are a kind of virtual virtual object.

Essentially, there are five arguments<sup>14</sup>. In order of increasing sophistication:

1) *I own it because I bought it.*

The suggestion here is that if I purchase something in good faith, I should get to keep it. The classic example of this in law concerns purchasing stolen goods: if I buy something that I know (or that any reasonable person with my knowledge would suspect) to be stolen, I'm guilty of receiving stolen goods; otherwise, I'm an honest, law-abiding citizen who should not be unduly punished by having to return my purchase to its original owner without compensation. Some countries take this further: in Japan, for example, once two years have elapsed from the date at which they were bought, stolen goods don't have to be returned to their original owner at all if the buyer didn't realize they were stolen<sup>15</sup>.

The problem with this approach is that it's terribly unfair on the victim of the original theft. It means, for example, that if (without your knowledge) someone were to put your soul up for sale on eBay and I were to buy it for a thousand dollars, I would own your soul and you wouldn't get it back unless I chose to sell it to you<sup>16</sup>.

In the context of virtual worlds, the argument has little merit anyway because players can't really claim to have bought any item "in good faith". If the virtual world developer never sells virtual property, admonishes those who do sell it, and bans the practice under the terms of its End-User Licence Agreement ("EULA")<sup>17</sup>, it's difficult to see how any player might successfully argue that an object they saw for sale was *bona fide* owned by the seller. "I own it because I bought it, and I bought it because I'm stupid" doesn't work.

2) *I own it because I stole it*

This is the argument used by squatters. If I take adverse possession of something for a sufficient period, it becomes mine. In law, there are usually conditions to do with whether or not the original owner attempts to recover the property, and whether or not they were making use of it; basically, though, if I take something from you that you don't miss for however many years<sup>18</sup>, I can claim ownership of it.

This argument suffers in that the virtual world's developers can maintain that I didn't have adverse possession in the first place - especially if I'm paying them a monthly fee tantamount to rent. There are variations in this approach that don't involve any initial "theft", however, and these could prove more tiresome. For example, in the UK tenants who rent a house may have a right to buy it after a certain time<sup>19</sup>. It's conceivable that someone could attempt to stretch right-to-buy laws intended for use with real-world property into the virtual world, although the chances of their succeeding seem (thankfully) very low.

<sup>14</sup> Another two that players don't tend to use, which are based on the notions of property espoused by Jeremy Bentham and by Georg Hegel, appear in Lastowka, F. G. and Hunter, D.: *The Laws of the Virtual Worlds*. University of Pennsylvania Law School, 2003. <http://papers.ssrn.com/abstract=402860>

<sup>15</sup> See <http://www.asahi.com/english/nation/TKY200310010219.html> for a description of this law in action.

<sup>16</sup> This is irrespective of whether you or I believe that souls exist and are transferable; enough people do that I could sell it online.

<sup>17</sup> Also known as the Terms of Service ("TOS").

<sup>18</sup> For virtual worlds, people argue "months" rather than "years"...

<sup>19</sup> 1,300,000 people bought houses from their local authorities this way.

[http://www.odpm.gov.uk/stellent/groups/odpm\\_housing/documents/page/odpm\\_house\\_601737.hcsp](http://www.odpm.gov.uk/stellent/groups/odpm_housing/documents/page/odpm_house_601737.hcsp)

### 3) *I own the product of my labour.*

This argument, which has its roots in the philosophy of John Locke<sup>20</sup>, says that because I created something through my personal endeavours, I get to keep it. There wasn't a 50th level battlemage in the box when I bought the client software - it only exists because I made it.

Well no, but then there isn't a completed jigsaw in a jigsaw puzzle box, just a bunch of pieces. What there is, however, is the *means by which to create* the jigsaw. If I let you borrow my jigsaw puzzle, would you get to own the completed result? No, you wouldn't.

Ah, but perhaps your artistic input makes a difference? If so, I guess that means I shouldn't lend you my Etch-a-Sketch, either, then.

Maybe the fact that you're *invited* to make something is important? Well no, it isn't. Family-friendly restaurants sometimes have a play area for children. In that play area, there is often a table and a collection of Duplo blocks. Younger children play with the blocks and make things. They have been invited to the table, given a bunch of blocks, encouraged to make something, and produced a red dinosaur with yellow eyes. Do they get to own it? No, they don't. The next kid who comes along will dismantle it and make something else.

Now there is a problem here, in that “the means to produce” can be stretched a long way. Using this argument, Microsoft could claim to own anything written using Microsoft Word, except that IBM could claim to own Microsoft Word because its PCs were used for Word's early development. However, IBM and Microsoft wouldn't have sold any of their products if they had asserted these conditions in their EULAs, so they didn't. Many virtual world developers are of the opinion that their creations will be more attractive<sup>21</sup> to players if they do assert these conditions in their EULAs, so they do.

The thing is, with the jigsaw and the Etch-a-Sketch and the Duplo, people are being invited not to “make things” but to “make things for fun”. It's not work, it's play. If you start regarding it as work, you're breaking the implicit conditions under which you were given access to the necessary materials. With virtual worlds it's the same, but for the fact that the conditions may be explicitly expressed as an EULA.

The root of the problem, then, is that some people consider to be work what is being sold to them as fun. They wish to be recompensed as if it were work<sup>22</sup>. They weren't paid to make what they made, therefore they own it themselves. Except, because they paid to make it and were only allowed to do so on condition they don't own it, they don't.

Note that there may be Intellectual Property (“IP”) laws that apply here irrespective of why the act of creation occurred. These are discussed in Pitfall #5.

---

<sup>20</sup> Locke, J.: *Second Treatise of Government*. London, 1690.  
<http://www.swan.ac.uk/poli/texts/locke/lockcont.htm>

<sup>21</sup> See pitfall #3 for why.

<sup>22</sup> Note that the counter-argument is rarely used: people who regard their work as play won't insist that they aren't paid.

## 4) *I'm selling my time.*

This refined argument was used by a company called Black Snow, who were banned by Mythic Entertainment (developers of *Dark Age of Camelot*) because they hired inexpensive workers in Mexico to farm virtual goods that were then sold on to players. Mythic's EULA bans the buying and selling of its virtual objects, but Black Snow claimed that this wasn't what they were selling. Rather, they were selling the *time and effort* they had put into obtaining the virtual objects. Black Snow took Mythic to court, but unfortunately (from the point of view of this paper) neglected to pay their lawyers; the suit was dropped before it was heard. Nevertheless, people buying and selling virtual objects on eBay will routinely claim that they're not selling the objects concerned, just the time and effort they invested in obtaining them.

Ingenious though the argument is, it doesn't stand up very well. "I'm not selling counterfeit coins, I'm selling the time and effort I put into obtaining them" wouldn't save you from a term in prison.

Besides, if the time and effort required to obtain something were all that mattered, it would be fine for me to pay you to take my driving test for me, rather than have to bother with all those tedious lessons myself. Time and effort are not the only factors here, as we shall see in pitfall #5.

## 5) *I own it because you made me buy it*

This final argument turns the accountability for the sale back onto the virtual world developer. The player claims that although the developer says one thing in words, they say another in their deeds: the design of the virtual world is such that it actively encourages players to buy and sell virtual goods in the real world.

Here, the player is painted as a hapless victim of circumstances - an honest individual subjected to unreasonable pressures to do things they don't want to do. The almost exquisite highlight of this argument is that virtual worlds are designed to favour "time-rich people" (*i.e.* ones who can spend hours every day playing them) and that this is unfair for "time-poor people" (*i.e.* ones who have to work during the day, making them relatively cash-rich). Surely players who are time-poor but cash-rich should be able to counteract the excessive advantage that time-rich players have? It's inequitable otherwise.

Stirring though these appeals to unfairness are, they're a red herring. The same counter-argument used for point 4) above works: it's unfair that time-rich people can get an MBA when cash-rich people can't, so why not let cash-rich people simply buy the qualification? Well, because not everyone is capable of getting an MBA no matter how much time they have; similarly, not every player is capable of reaching level X in a virtual world. Claiming that it's merely lack of time that's preventing you from advancing is like saying that lack of time is all that stops you from being a laparoscopic surgeon. Plenty of things stop you from being a laparoscopic surgeon<sup>23</sup>, of which lack of time (or money) is but one.

---

<sup>23</sup> This assumes you aren't actually a laparoscopic (*i.e.* "keyhole") surgeon, but if you are then you might want to consider playing *Super Monkey Ball* instead of virtual worlds.  
[http://www.psychology.iastate.edu/faculty/dgentile/MMVRC\\_Jan\\_20\\_MediaVersion.pdf](http://www.psychology.iastate.edu/faculty/dgentile/MMVRC_Jan_20_MediaVersion.pdf)

Besides, what would happen if a virtual world didn't encourage buying and selling? It's not hard to do. For example, in a skill-based virtual world a +100% damage axe in the hands of an axe-skill 70 character might function as a +80% axe in the hands of an axe-skill 65 character. This would limit its appeal to characters who wouldn't get the full benefit of it, *i.e.* those with an axe-skill below 70. Would this kind of discouragement help those players who claimed the virtual world "made them" want to buy it? The chances are that it wouldn't - being unable to get full use out of a twink-proof item they'd bought on eBay would greatly annoy them. This would seem to suggest that "you made me buy it" isn't truly at work here.

As for the general point, that the virtual world through its design encourages real-world trade in virtual items, well this is indeed true for any virtual world with an achievement metric. Again, though, so what? It's the cry of the captured virus-writer: "if you didn't make this software so hackable I wouldn't have hacked it". The incidence of an offence can diminish if committing it is made harder, but being easy to commit doesn't make it less of an offence. Credit cards, through their design, encourage fraud, but "I'm not repaying you because your credit card made me use it" doesn't work.

Thus, we have a variety of explanations for how players can come to assert that they own virtual objects, none of which are entirely convincing even in their own terms. Furthermore, they all begin with an assumption that virtual objects are things that can be "owned" by different people independently of one another; this is not as clear-cut a proposition as it might at first seem.

When I find someone sitting in "my" seat on a transatlantic flight, I don't mean that I own that seat any more than I own "my" parents. I'm bound to both in some way, but not through ownership.

Siblings A, B, C and D are the benefactors of a will. Their uncle has died and has left them four companies: Alpha, Beta, Gamma and Delta. Because of arcane tax laws, each sibling can only own three of the four companies. One company each they don't own: A's unowned company is Alpha, B's is Beta, C's is Gamma, D's is Delta. When A says to B, "I don't own Beta", B replies, "no, that's mine: you don't own Alpha".

The above example<sup>24</sup> shows how use of possessive pronouns can explicitly refer to something *not* owned - that just because something is "yours", that doesn't mean you *own* it. It doesn't even have to exist: "I won't buy your anti-gravity machine because you don't have one".

What it comes down to is that unless the developers say otherwise, players are paying to manipulate bits in a database, not for the rights to own any data their manipulations affect. They may legitimately say that certain emergent properties of those bits are "theirs", but that doesn't mean they *own* them. You can rent a house, redecorate it with the full permission of the owner, live in it for five years, fill the garden full of flowers, insulate the loft, do a whole bunch of other things, but you don't get to sell it. It's *not yours to sell*.

---

<sup>24</sup> I first heard this in a Linguistics seminar at the University of Essex in the late 1980s, but unfortunately I don't know who originated it.

So is “virtual property” a meaningful concept, or is it a handy cipher for something else? And why should anyone but philosophers be interested in the answer?

They should be interested because of what the answer might imply. The existence of virtual property as a practical phenomenon has two major side-effects: it activates real-world property laws, and it stops the game being a game. If virtual property isn't viewed as essentially the same thing as real property, the impact of both these side-effects can be minimized. If it is, well, we get pitfall #2 and pitfall #3.

## **Pitfall #2: Responsibility**

If you accept (or if the law accepts) virtual property as a concept, you as a developer become a custodian rather than an owner - you have responsibilities. Of these, the one that seems to attract the most attention from pro-commodification players is an obligation to ensure that virtual property retains its value.

Value comes from the effects of many subtle interactions of human desire. If no-one wants something, it's worthless; if everyone wants it, it's priceless. Virtual objects are no different from real objects in this regard; where they do become distinct is that they only have value because of the software that provides their context. If the software were to change the meaning of a virtual object, that object's value would also change.

This assumption of responsibility places virtual world developers in a very awkward position. It implies that, as controllers of the software that determines the intrinsic characteristics of virtual objects in their custody, developers have a duty to ensure that these characteristics do not change in such a manner as to affect unduly the value of their associated objects. This puts severe - perhaps impossible - constraints on them.

For example, suppose that as a player you were to buy the Sword of Truth, the most deadly weapon in some particular virtual world. You might expect to pay a premium for it. However, if the very next day the virtual world were to be flooded (through design, patch or bug) with ten thousand Swords of Greater Truth, your investment would be wiped out. It doesn't have to be a sword, it could be an axe; it doesn't have to be better, it could be the same. Whatever, PayPal isn't going to refund your \$5,000.

So what the Sword of Truth is depends on what everything else is: there's no single piece of code or data that you can point at and say “this is the Sword of Truth”, because the sword's nature is dependent on what armour is, what spears are, what arrows are, etc... Precisely what “the Sword of Truth” signifies is contingent on what everything else signifies.

This is true of objects in the real world, of course: the computer my younger daughter got for her birthday outclasses in performance the one I'm using to write this paper because hers is brand new whereas mine is 18 months old. Even if it were unopened in its box, my computer wouldn't cost anywhere near as much today as it did when I bought it. I expect obsolescence in computers.

The difference between virtual property and real property, however, is that in the real world nobody<sup>25</sup> gets to change the way physics works. In virtual worlds, the developers do. Adjusting the way that a monster's shaggy coat absorbs slashes from edged weapons will, like it or not, affect the usefulness or otherwise of a longsword; making marsh gas acidic will limit the effectiveness of metal armour; teleportation portals render ferries and bridges obsolete.

Because everything in a virtual world is intertwined like this, any change to one object is almost certain to affect other objects in intricate and unpredictable ways. An important implication of this is that any change that affects one group of players positively will affect another group of players negatively: at the very least it will reduce the difference in power between them. When it's the developer who makes the change, players can be expected to complain.

Now traditionally, developers have been able to ride roughshod over such objections because (as the *EverQuest* developers succinctly put it) "you're in our world now". However, this is not the case if they are obligated to guarantee that virtual objects' values won't substantially change as a result of anything they do<sup>26</sup>. Being unable to ignore players' complaints leads to problems in two areas: evolution and bug-fixing.

How can a virtual world ever evolve if developers take on (or are given by the law) responsibility to assure objects' continuing scarcity or utility demand? Can you, as a designer, add new content? You need to, because otherwise your virtual world will stagnate and be left behind by new virtual worlds that introduce new ideas. Yet how could you ever possibly add new content in a manner that would affect all players equally? Even the best designers can't predict exactly what will happen when new content is added - just what they *think* will happen.

Ultimately, as a designer you have to use your own, personal judgment. All you can do is to add whatever content you determine to add. Put like this, it's an artistic decision; as with all artistic decisions, it is therefore part and parcel of the product<sup>27</sup>. Unfortunately, if you're so tied down that you can't make changes that unduly affect the value of virtual property, artistic decisions like this don't get a look-in (any more than a regulated fund manager can invest your savings "artistically").

OK, so never mind evolution: what about ensuring the survival of what's already there? Virtual world software is normally sold "as is"; the developer makes no claims that the software is bug-free, mainly because that's an impossible claim to prove. If bugs do appear, surely no-one could object to their being fixed?

Trivially, if all virtual weapons except the Sword of Truth cause a client crash, then yes, as owner of the Sword of Truth I could claim that by fixing the client crash bug you were reducing the value of my investment.

---

<sup>25</sup> Or, if you're a religious person, only your deity/deities but they choose not to.

<sup>26</sup> What other players do to affect value is usually afforded more indulgence: there seems to be an implicit distinction between somehow "natural" forces due to other players and "unnatural" ones due to the developer. Furthermore, when players do behave unnaturally (e.g. manufacturing so many swords that the sword market collapses) the developer still gets the blame for permitting such a thing to happen.

<sup>27</sup> If the makers of *The Simpsons* want to kill off Bart, they are within their rights to do so. There may be economic reasons they may wish not to do this, of course, but these just make it a bad idea - not an illegal one.

Most bugs in virtual worlds are not of this nature, however. Indeed, most bugs don't cause crashes or hangs at all, they're judgment calls: when you make a change to a virtual world it will sometimes have unforeseen side-effects, some of which you will deem "good" and some of which you will deem "bad". The good ones, you want to keep; the bad ones, you want to fix in a patch. The bad ones are bugs that must be exterminated.

Again, though, there's a problem in that one person's bug is another person's feature<sup>28</sup>. "The designer didn't intend it" is not an argument in favour of one or the other. For example, suppose a new AI system for mobiles meant that players could herd animals. The designer envisages that this will encourage players to try out being ranchers: they can now breed cattle to take to market and be sold. After a few weeks, the designer discovers that cunning players are taking cows with them to use as beasts of burden: this appeals to the designer, who is pleased that their creation has such hidden depths. However, shortly afterwards a key part of the storyline is derailed when a meant-to-be unstoppable invasion by an army of hobgoblins is crushed beneath the hooves of 10,000 stampeding cattle that the players have bred solely for this purpose.

The designer in this example planned neither beasts of burden nor stampedes, but wants to keep the former in and be rid of the latter. Intent doesn't make something a bug or a feature; rather, it's an on-going decision.

Everything has winners and losers. If a programming error means that suddenly there is a money machine exploit, you as a developer have the ability to fix it. Should you remove all virtual money that it generated? But what if people have paid real money for some of it - do you have to compensate them? They may have paid an amount you consider to be outrageous<sup>29</sup>. Yet if you close the loophole and let people keep their ill-gotten gains, you're hurting other players: characters that were previously rich may be impoverished because they didn't know about the bug, and now instead of having 5% of the virtual world's wealth they have 0.005%. To whom must you defer?

How about value changes that result from real-world actions? If players of some character class - say, bards - suddenly find that as a result of a TV interview with you on the subject your VW is swamped by newbies playing bards, can they claim that the value of their character has gone down because now there's more competition for bard resources? Yet if it wasn't you but some regular player who was interviewed on TV, would that be OK?

This may all seem overly-alarmist. In practice, players accept that virtual worlds must evolve and that bugs do need to be fixed. They're reasonable people who will accept reasonable changes: so long as you don't change property values unduly, they're OK with occasional, minor fluctuations.

---

<sup>28</sup> The term *feature* has a number of meanings to programmers which they have no trouble disambiguating. In this particular case, non-programmers are referred to sense 1 of the definition in *The Jargon File* (<http://catb.org/~esr/jargon/html/F/feature.html>).

<sup>29</sup> What's more, they may have done so deliberately. Let's say that A and B are working in collusion. A buys virtual money from B for real money, you take it away but give A real money compensation, B then returns A's real money and they split the compensation between them.

This would be fine, except there's no way to define "reasonable". Different players - and groups of players especially - regard different things as "reasonable" and "unreasonable". Who decides when something is reasonable or not? Players have nowhere near the knowledge that virtual world designers have, and might *en masse* say that a proposed change is unreasonable which, were it to be implemented, they may after a year realize was actually the best thing that ever happened to the VW. Putting the matter to player vote isn't a solution.

If developers take on a duty of care to ensure that the objects in their VW don't lose real-world value, they have difficult issues to face when it comes to fixing bugs or evolving the virtual world. These pale in comparison to the dilemmas they might face when they feel that it's time for their VW to end.

Developers of commercial virtual worlds ultimately use commercial pressures to decide whether something is a good thing or a bad thing. This is how *they* judge reasonableness. What happens, though, when they decide that their VW is no longer viable? If you set up a VW and condone or indulge in virtual trades, are you signing up to run the VW in perpetuity? What, exactly, is the shelf life of a virtual object?

In March 2004, Electronic Arts announced that their virtual world *Earth and Beyond* was closing down. At that moment, a player was winning an eBay auction for an *E&B* character with a bid of \$3,000. Is that just a bad break, or could it be argued that EA were liable?

Electronic Arts were not selling the character on eBay. Let's say, though, that as a developer of a virtual world you do decide to sell characters yourself. After all, you can provide for free what the likes of IGE have to pay hordes of people to farm - you can always undercut whatever anyone else is charging, thereby capturing the market. However, if you were to sell a virtual object and then the next day announced that you were planning to close down your virtual world, could the buyer claim their money back? What if they bought it from someone else who bought it from you? How long ago would you have to have sold them it before compensation was an issue? How long would you have to keep the virtual world running after having announced that it would close before it actually did close? Electronic Arts does sell characters to players in *Ultima Online*.

Thankfully, players do on the whole accept at some level that the nature of a virtual world affects the buying and selling of stuff related to that virtual world. VWs with permanent character death, for example, don't have a roaring trade in the buying and selling of characters: if you're a level N player and you buy a level 2N character, you're just going to get it killed. Similarly, VWs that reset entirely (rather than on an object-by-object, respawning basis) don't see much traffic in goods that can't be transferred across reset boundaries: no matter how good a sandcastle is, if it's built below the tide line few people are going to want to buy it.

It's not unreasonable, therefore, to point out to players that virtual worlds can and do close, and that they should factor this into their assessment of how much a virtual object is worth. This only applies for unsanctioned trades, though: for sales direct from the manufacturer (*i.e.* the developer), players can expect the same kind of security that they get under regular consumer protection laws. If a developer only guarantees that a virtual object will last 90 days, that 90-day warning had better be in big, big letters - and the fact that virtual objects bought 90 weeks ago are still intact will be used to argue that the warranty is unreasonably short anyway.

In theory, there is already potential for relief for players under existing real-life laws that allow for individuals to prevent a business from being wound up until they have had a chance to dispose of their dependent assets. For example, if the Chicago Stock Exchange wanted to close down, it couldn't stop its operations until companies that traded stocks on it had been given time to move to some other stock exchange. Lawyers have suggested<sup>30</sup> that if people have money tied up in a virtual world, they could seek that the virtual world not be closed down because that would rob them of wealth. However, because they could never move that wealth out of the VW without selling it to someone else (who could then invoke the same law), in effect the VW would have to be kept running forever. Were this the case, why would any company commit to developing a virtual world in the first place?

*Wealth* here doesn't just mean dollars, either: the argument also applies for social capital, *i.e.* the reputation and network of friends that a player has built up in a virtual world. For many players, this is more important than the monetary value of the virtual objects they hold. For this reason, the developer of a virtual world can't simply buy back all outstanding virtual objects and then close the system down, because social capital can't be bought. Compensation is an option, but players would rather not lose their social capital in the first place.

For this reason, when a virtual world closes down players will sometimes try to buy the hardware and software and operate the VW themselves<sup>31</sup>. If the business can be sold or given to some other organization as a going concern, their social capital would remain intact. Developers are usually reluctant to acquiesce, however, and not simply because it means competition for their remaining products: it could involve handing over important business assets that could be better sold elsewhere (for example patented software or user databases), or the revelation of trade secrets.

## Pitfall #3: The Game Conceit

Virtual worlds aren't games, but almost all of them use the same conceit: the players agree to give up some of their real-world freedoms (*i.e.* to play by the rules) in order to gain new freedoms and benefits (*e.g.* have fun). In Ludology, this is known as the *magic circle*<sup>32</sup>; players who break the *magic circle*<sup>32</sup> are branded as spoilsports whom people will think twice about playing with in future.

---

<sup>30</sup> At the *State of Play* conference, New York Law School, November 2003.

<sup>31</sup> This happened with *Earth and Beyond*, but EA rejected the overtures.

<sup>32</sup> The term was coined in Huizinga, J.: *Homo Ludens*, Tjeenk Willink, Haarlem The Netherlands, 1938.

For example, let's suppose you were playing the game *Clue*<sup>33</sup> with a man and a woman. You think you're getting close to winning, when suddenly the man leans over to the woman and whispers something in her ear. She shows him her cards, and he announces that Colonel Mustard did it in the study with the candlestick. He wins.

Now you probably wouldn't be happy about that. The reason you wouldn't be happy is because the man has brought something into the game that shouldn't be there. He might have been bribing the woman, threatening her, calling in a favour - you don't know. All you know is that all the fun goes out of the game if one of the players shows all their cards at once to another player. The magic circle has been broken: it's not a game any more.

Virtual worlds also have a magic circle. They operate under certain rules, and while people follow those rules all is well. Many of the rules are encoded in the software, but some aren't - nor could they ever be. If one player breaks the rules and the other players know about it, it spoils the virtual world for them. Commodification of virtual worlds not built for virtual property sales is the prime example of this in action.

Commodification within the rules of a game is fine. Poker, for example, calls upon players to pay into the kitty to see each other's cards. The virtual world *Achaea* has a business model that involves players purchasing virtual objects from the developers. However, these forms of commodification are still bound by game (or game-like) rules: in Poker, you can't pay someone directly to see all of their hand; in *Achaea*, the real-life sales of its virtual goods between players is vigorously banned.

For virtual worlds with a magic circle, the "world of play" is separate from the real world. Furthermore, in most cases it must remain so because of the very reason that players play virtual worlds in the first place. In brief<sup>34</sup>, players are on a search for identity that maps onto the archetypal *hero's journey of myth*<sup>35</sup>. The most critical phase of this correlates with what is usually referred to in VWs as *achievement*<sup>36</sup>: the player must feel that they are, through their own skill and expertise, progressing towards acceptance as defined by some stated in-world measure. Typically, this measure will involve experience points and levels, although more elaborate systems are possible. Whatever the measure is, it tells players three things:

- How they stand with the virtual world. Level 40 out of 50 is pretty good,
- How they stand with respect to other players. A level 45 player is better than they are, but a level 35 player is worse.
- How they stand with respect to their past and future selves. When they reach level 45 they will be better than they are now, which is better than they were when they were level 35.

---

<sup>33</sup> This is known as *Cluedo* outside the USA (it was invented in the UK).

<sup>34</sup> In verbose, see Bartle, R. A.: *Designing Virtual Worlds*, New Riders, Indianapolis, 2003 (ch5).

<sup>35</sup> Campbell, J.: *The Hero with a Thousand Faces*, Princeton University Press, *Bollinger Series 17*, Princeton, 1949. In this book, Campbell demonstrates that there is a pattern followed in the myths of all cultures, ancient and modern, that takes an individual on a journey to a world of adventure (*i.e.* a virtual world in our case) where challenges are met, foes defeated, aspects of the self confronted, and identity asserted. As a result, the individual is a more complete person than they were before they made the journey. In virtual worlds, the undertaking of a hero's journey is, for many players, the ultimate source of the fun they derive from playing (even though few of them realise this).

<sup>36</sup> Bartle, Richard A.: *Hearts, Clubs, Diamonds, Spades: Players who Suit MUDs*, *Journal of MUD Research* Vol. 1 (1), June 1996.  
<http://www.mud.co.uk/richard/hcdds.htm>

Unfortunately, although players regard themselves as being level this or level that, actually it's their *character* that bears the level. The measurement system completely breaks down if individual characters are not permanently bound to individual players. The buying and selling of characters therefore undermines the achievement hierarchy, because players feel that their achievements are worth nothing - they lose any bragging rights they feel they have.

Also a major source of feelings of unfairness is the buying and selling of virtual goods as opposed to characters<sup>37</sup>. For example, you may be able to rise levels faster if you have a kick-ass sword, but the only source of such swords is guarded by a monster that can slay you ten times over before you can blink. However, taking a quick trip to eBay gets you the sword for a few hundred bucks. You can now rise in levels faster than people who don't have a few hundred bucks to spare; more to the point, you can do so faster than people who do have the cash but are playing by the rules. To these people, you're a cheat<sup>38</sup>. You're taking an unfair short-cut and cheapening the successes of people who don't take it. What's the point of their working up to level 50 if everyone who sees them thinks they bought at least some of those levels with real-world dollars? The status of the character should reflect the status of the player behind it.

The counter-argument<sup>39</sup> is that players want fun but they don't want to have to sit through unfun to get it. People who sell virtual property are merely providing a service: individuals who prefer to play their way through the virtual world don't have to buy stuff if they don't want to, it's not like they're being forced<sup>40</sup>. What business is it of the developers or of other players if two people want to make a private transaction that leaves both of them better off? It's the developers' fault anyway: players who buy stuff are skipping content because the content isn't compelling. If it were compelling, they wouldn't skip it. I don't pay people for save files of near-complete games of *Civilization III* - the whole game is fun, not just the end-game<sup>41</sup>.

The "poor content" argument is sound, in that it *is* the developer's fault if sections of content are boring. However, it's essentially a smokescreen: players don't usually buy stuff so as to skip content; rather, they do it so as to give the impression they haven't skipped it<sup>42</sup>. By claiming to be helpless victims of bad design, they obscure any motives they may have that might be regarded by other players as pro-cheating.

To see why this is so, consider the following: if selling to people what they want is such a great thing, why don't the developers simply do it themselves rather than leave it to third parties? They could say "Pay us 3 months' subscription and we'll raise your character to a level that a professional could reach in 3 months". The usual rejoinder to this is that it would be just another way to screw the players for more money: "You added the boring mid-level content so I'd have to pay you to skip it!".

---

<sup>37</sup> When not condoned by the rules that pertain within the magic circle, of course.

<sup>38</sup> They even have a special word for you: *twink*. Twinking can arise without eBaying (because once I have a +12 sword, that +1 sword in my stash is worth nothing to me - here, you have it!), so you may be called an *eBayer* instead - it's even more condescending than "twink"...

<sup>39</sup> Actually, it's only the main one; there are a number of other gambits that players will use to try justify why they buy and sell virtual goods when the EULA says they can't, but this is normally the first one used because it's most sympathetic to the commodifier.

<sup>40</sup> Professional campers can come close to "force", though: see pitfall #4.

<sup>41</sup> Actually, I find the end-game less fun than the beginning for *Civ3*...

<sup>42</sup> More excusably from a hero's journey perspective, they might also do it if they have already been through the mill and don't want to repeat it (see pitfall #4).

OK, but the developers can if they wish give the players for free what they are effectively saying they want: a command to allow anyone to raise their character to the highest level whenever they choose. You want to be a hero? Here, you're a hero! A similar thing could be done for objects, to help out players who do want to experience the lower-level content, only a little bit faster than the VW would normally allow them. You want a cooler weapon? Here, have one!

What would result from this would be a virtual world with a lot of bored high-level characters competing for an insufficient amount of high-end content, along with a very few lower-level ones pottering about or chatting rather than playing for points. The achievement hierarchy would be completely wrecked; the hero's journey would not be an option. If everyone is a hero, no-one is. This is why designers of game-oriented worlds are not about to yield in this matter.

A high-level character isn't just a high-level character: it's a marker of player status. If it's worn by someone not entitled to wear it, that very seriously annoys those who are entitled to wear it. It says something about a player's achievements: it's non-transferrable.

Some players scoff at the idea of non-transferability, but it does make sense. Many things are non-transferable, from seats at sporting events to bank accounts. Allowing players to buy high-level characters from one another is like allowing athletes to buy world records from one another - it rather blunts the point of them.

In practice, the more people who try to access the same high-end content of a VW, the less fun it is for everyone. Virtual world developers themselves are therefore unlikely to want to sell too many high-level characters for fear of over-crowding - they'd be better off selling just a few such characters but at a very high price. Independent traders, however, don't care a hoot whether or not players who buy their characters feel disenchanting and leave - they're not getting a share of the monthly fee. They therefore feel free to sell as many characters as they can. What might worry them is that if too many players don't accept the virtual world's achievement metric as being valid (because "you bought your success" becomes the default assumption). However, the number of high-level characters available for sale isn't yet sufficient to make this parasite-kills-the-host scenario a reality.

Commodification will break the magic circle for most players of virtual worlds, but not all. Yes, of course there are "players" who are actually "workers", trying to foist commodification on a virtual world so they can make an honest living; I don't mean these, though. Rather, I am referring to "genuine" players who for whatever reason have a different magic circle to the majority, *i.e.* they're actually playing a different "game" to everyone else but don't seem to realize it or (if they do realise it) think it's all that important. For them, buying and selling stuff is part of playing. If you're a top-class 100m runner, then people aren't going to call you a cheat if you go out and buy the best pair of running shoes that money will buy - it's expected. It's expected in virtual worlds that people will pay to enhance their playing experience, and other people shouldn't therefore let it impact on their own fun. Unfortunately, what these players regard as being "the best pair of running shoes" is often seen by others as "a motorbike". It's not within their rule set, and they're going to become very disenchanting over time (much to the bemusement of the players for whom it's not a problem<sup>43</sup>).

---

<sup>43</sup> Until they see someone paying for a service they *do* regard as unfair. The developer could, for example, set one account so that commands issued through it were given priority and executed much, much faster than everyone else's. Whoever bought this one "speed-up flag" for their account would have an edge over every other player in the virtual world. They'd have terrific fun, but it wouldn't be popular even among the "buying a million platinum hurts no-one" brigade.

## Pitfall #4: Player Resentment

Why do players willingly buy and sell virtual goods?

There are three main reasons:

- As an investment. They hope to sell the character or the objects that came with it for more than they paid.
- For group-play reasons. They stopped playing for a while but now they want to return. They buy a character of a higher level so they can run with their old buddies again<sup>44</sup>.
- To inflate their status. They buy a higher-level character so they can act like they're a higher-ability player<sup>45</sup>.

The first of these reasons is dependent on the other two for its success, so if they disappear then it also disappears. The second one is understandable, although ideally it should be unnecessary: virtual worlds ought to be set up so as to make mixed-ability parties of players viable. The third reason is the problematic one, as discussed in pitfall #3.

However, there *is* another reason that players buy and sell virtual goods. This one, though, they only engage in under protest. It concerns the situation whereby virtual objects they “should” be able to get hold of they can't, because the sources are tied up by other players - in particular, by organized groups of other players who are *camping* where a rare object is due to appear with the sole intention of selling that object to the very players they are preventing from obtaining it.

For example, let's say you want a Gem of Slaying. Such a magical item would enable you to beat back the hordes of undead that up until now have been giving your party problems. You know that a Gem of Slaying can be obtained by killing a Noble Lich. You know where Noble Liches respawn. When you get there, though, you find the area sealed off by a large group of professional players (*i.e.* they do this for money). When the Noble Lich appears, they make short work of it (because their characters are so high level that for them the Noble Lich doesn't pose much of a problem) and claim the Gem of Slaying that it drops. Then they stay where they are ready for the next respawn. If you want a Gem of Slaying, you're going to have to buy it from them for real dollars.

Players greatly resent this. Even players who are generally in favour of commodification resent it, because it's monopolization. One of the reasons that *EverQuest* banned the buying and selling of virtual objects on eBay was because such farming was “blocking normal play”.

---

<sup>44</sup> This category also includes players who want to change their role within a group. For example, if a party of adventurers has too many mages and not enough healers, the player of one of the mages may sell it and buy a healer with the proceeds.

<sup>45</sup> This also covers the situation mentioned earlier where a player wants access to high-level content without having to “waste time” playing through the low-level content to get there.

Now commodification by the VW developer (rather than by the players) can actually alleviate this problem: if a player can buy a Gem of Slaying from the developer, that means the campers can't charge any more for one. Make the price low enough, and camping becomes uneconomical. Of course, this would bring with it other problems: if everyone has a Gem of Slaying then any content for which you need a Gem of Slaying would be rapidly consumed; those who missed out on it would feel disappointed. In contrast, professionals do camp but don't flood the market with items (because they can't increase the rate at which these are introduced into a VW); this means that when they (rather than the developers) are moderating content it is consumed at roughly the same rate at which it was designed to be consumed. However, players now have to pay what amounts to a toll to access that content. Not unreasonably, players hate this.

They can dislike some less obvious effects of real-world trade in virtual objects, too, although they usually put the blame on the virtual world design rather than commodifiers. For example, a side-effect of farming is that it can lead to inflation. This is unpopular among players in general as it means the value of their savings falls, but it's particularly hard on those who produce goods for sale to NPCs - crafters. Virtual worlds typically use a *faucet/drain* economy: wealth enters the system through drops from mobiles, the mining/harvesting of raw materials, as a reward for quests, and perhaps some other mechanisms too<sup>46</sup>; wealth leaves through sales of goods to NPCs, sales taxes, wear-and-tear<sup>47</sup>, consumption of components/reagents for crafting/spells, and whatever other drains the designers can get away with<sup>48</sup>. Within the virtual world, virtual currency is used for trade, especially when NPCs are involved. However, if players are buying and selling using real coins rather than virtual coins, and trading with each other rather than with NPCs, that drastically reduces the volume<sup>49</sup> of trade that uses virtual coins. Usually, it's worse than that because the faucet/drain is imbalanced: the rate at which wealth enters perhaps doesn't change (mobile still drop coins) but the rate at which it leaves perhaps does (because people aren't buying from NPCs). The result of all this extra money in the system is an upward pressure on prices - inflation, in other words<sup>50</sup>. How this hurts players depends on whether the virtual world uses fixed prices or not. If NPCs can't raise prices, their goods (and any equivalent ones made by player crafters) become worthless; if they can do so, the professionals will simply turn to crafting as their source of money and leave those players relying on mobile drops for income to languish in poverty instead<sup>51</sup>.

<sup>46</sup> Magic spells may be able to conjure objects from thin air, for example. Also, newbie characters may enter with a grubstake, thereby adding the value of the grubstake to the economy.

<sup>47</sup> This is just another form of taxation - pay money to repair worn-out items.

<sup>48</sup> Potions, food and other consumables, for example. Note that some exchanges can both add and remove wealth, for example exchanging with a non-player character one plot token for another.

<sup>49</sup> Thereby screwing with any sales tax drain, if nothing else.

<sup>50</sup> Although external trade in virtual goods tends to increase the amount of money available to players, it could instead decrease it (e.g. if the faucets were controlled by a small group who soaked up most of the money but didn't spend it). This would lead to the situation where goods were in plentiful supply but there wasn't enough virtual cash around for players to buy them. Even if NPCs were smart enough to drop their prices accordingly, this would still be disastrous as each sale to them would remove yet more cash from the virtual economy and they'd have to drop their prices even more. If you wanted to buy something, you'd first have to buy the virtual currency from the hoarders using real currency...

<sup>51</sup> Mobile drops can be scaled for inflation too, but this isn't popular among players. "Last week I got 600 gold for killing a wozbat but yesterday my friend got 650. You owe me another 50 or it's unfair".

Virtual economies are hard to design at the best of times. The real-world economy, applied to virtual goods, can easily warp it out of all shape. If you are planning on having serious commodification in your virtual world, your economy will only make sense if it integrates with the real economy, rather than pretend that it doesn't exist. Any elements of the economy that have no access to real-world prices (e.g. NPC traders) would have to be removed in such circumstances. Furthermore, if you want commodification in your virtual world but don't want players to feel they're at the mercy of professional object-farmers, you have to make sure that your design is such that farming can't occur or is pointless (e.g. let players build whatever they want whenever they want it). This can all be done, but not by mere tinkering with a design after the fact: if you want to do it, you need to plan it from the start and accept that you won't end up with a simulated economy but a small part of the real one.

A second reason why commodification is disliked by players is that it's too easy to be ripped off. Big sellers like IGE have reputations to protect so can usually be trusted to deliver the goods, but scamming is a problem for individual sellers. Just because you paid someone for a million platinum pieces, that doesn't mean you'll actually receive them. What's more, it's the developer who suffers as a result of this - it's *their* customer service desk that gets the call when a player feels they've been swindled. As a developer, you might therefore want to set yourself up as an honest broker so that if people do want to buy and sell things to one another you can escrow both the goods and the money to guarantee honesty in all transactions. The process can be automated and run unattended, eBay-style.

Finally (and perhaps obviously), players can feel resentful about a virtual world with commodification if they can't afford the prices of virtual goods on sale. This is the case even if they're pro-commodification. A manifestly inferior player with a manifestly superior weapon is harder to stomach when you know that to buy such a weapon would cost you a month's salary: you're never going to get a weapon like it because you simply don't have the money

When poor people can't even role-play being rich, they're going to be disheartened.

## **Pitfall #5: Intellectual Property**

Who owns the copyright of virtual objects? The law, as it stands, isn't really very clear on the subject.

Virtual world developers have traditionally claimed all intellectual property ("IP") in their products. Some, most notably *Second Life*, do cede IP to players but still in a limited way. But why would a VW developer care whether players had full IP rights over "their" creations or not?

Consider the following scenarios:

1) *The better offer.*

The player JohnX designs a neat virtual hoverbike for the virtual world VWX. It's his technology, and VWX's developer happily grants him the IP. Everyone likes the hoverbikes: they put in orders for them, customise them, race them, request improvements. Then, one day, a rival developer comes to JohnX and says, "Gee, John, you're a great designer/programmer. We'd like to hire you." JohnX accepts. Now he works for another company. Now he wants every hoverbike removed from VWX. They're all his IP one way or another.

2) *The art within art.*

JaneX creates a virtual, pole-less magnet. Any object of this kind will stick to any other object of this kind until a player removes it. JaneX manufactures a thousand shiny spheres tinted in various colours, and makes all of them pole-less magnets. She builds a staggeringly impressive statue out of them. Everyone who comes and looks thinks it's brilliant. One player takes a screen shot and puts it on their web site. "Hold on", thinks JaneX, "that's my IP. That player has no right to publish it on a web site without my say-so. Come to that, the developers have no right to publish it via players' client software without my say-so. I should ask for a licence fee."

3) *The sponsor.*

The McCola corporation likes the demographics of VWX's player base; it's willing to pay the developers \$20,000 a month to have virtual copies of McCola products appear in VWX. Its competitor, Burger Up, also likes the demographics of VWX's player base; it's willing to pay a Chinese teenager \$200 a month to spam VWX with virtual copies of Burger Up products.

4) *The reputation.*

A bunch of VWX players get together and form The Guild of Schoolgirls. They choose as their avatars the sweetest young things they can create, and spend their playing time hanging around corners saying, "Like, blue, *duh!*" and similar phrases incomprehensible to anyone but a schoolgirl. Incongruous though these characters may be, they're regarded fondly by most people, as harmless role-players who make VWX the fun place it is. "It takes all sorts!". The media get hold of the story and publish interviews with the Schoolgirls. The Schoolgirls get their own fan club, web sites are set up about them, and it's all great publicity for the virtual world with whom they're indelibly associated, VWX. Then, one day, a pornographer pays the guild leaders \$10,000 each to publish pictures of their avatars indulging in naked lesbian sex sessions.

5) *The dispute.*

JackX spends two months programming a virtual pinball for VWX. VWX doesn't have any pinballs, and JackX isn't a great programmer, but he sticks at it and produces a serviceable model that meets with a warm reception from the other players. JillX sees the pinball and thinks it's a great idea. She may not be as imaginative as JackX but she's a much better programmer, and within a week her mega-pinball hits the virtual streets. No-one wants to play JackX's pinballs any more, they all want to play JillX's. JackX is not at all happy. He has another idea, for gravity-free 3D virtual pinballs, but doesn't want to be ripped off a second time. That's why he's going to patent it. In fact, he's so unhappy that he's going to patent it and only license it to other VWs. See how many people stay with VWX playing stupid gravity-restricted pinballs when all their competitors have the new, exciting, gravity-free ones!

It seems unlikely that any EULA wording would resolve the situation depicted in the fifth of these examples, since it would be equivalent to my demanding that if you play my virtual world, you're prohibited from selling a patent to someone else (thereby unfairly restricting free trade). Once it is accepted that a player owns something as IP, it's hard to see how that player can be prevented from exercising the same rights they have for any other piece of IP.

The case described in the fourth example is also tricky. It's difficult to conceive how the developer could prevent a pornographer from publishing images that use none of the developer's IP. An EULA that enabled the developer to claim damages under a "bringing the VW into disrepute" clause would be fought tooth and nail. Besides, the Guild of Schoolgirls could inflict bad publicity on VWX simply by publicly switching their allegiance to some other "superior" virtual world.

The other three situations in the above examples are routinely covered in existing EULAs, whether these recognise the player's IP<sup>52</sup> or not<sup>53</sup>; however, if the developer does accept that players have IP interests in their virtual world, three awkward issues are immediately raised:

- Minors are generally prohibited by law from signing away their IP. Even if they lie to VW developers and say they aren't minors, the developer doesn't get to enjoy any IP rights signed over to them by such players.
- Many countries<sup>54</sup> give moral rights to authors (i.e. content creators) under article 6bis of the Berne Convention<sup>55</sup>. Some go further, decreeing that these are basic human rights that as such cannot be signed away<sup>56</sup>. In most of the EU, for example, there are rights of integrity (the author can object if distortion of the material prejudices the author's honour/reputation) and rights of attribution (the author can demand their name appear on their work). The first of these could be particularly painful for VW developers to guarantee.
- Again, many countries have strict laws against unfair contracts. If a contract is too one-sided - even if it was entered into voluntarily and did not involve a monopoly or cartel - then a court can render it void. Is demanding all IP rights just so that people can "play a game" too one-sided?

Note that all of the above could apply even if the developer denied that players had IP rights in VWs. The courts get to do the deciding, not the developers.

OK, so what has all this stuff about IP rights got to do with commodification?

Well, IP was the first real weapon used by VW developers to try to stop commodification: if the commodifiers don't own what they are selling, they can't (legally) sell it. As an argument, it proved sufficiently credible for Sony to be able to persuade eBay to remove *EverQuest* character sales from its service<sup>57</sup>.

---

<sup>52</sup> *Second Life's* EULA is at <http://secondlife.com/corporate/terms.php>

<sup>53</sup> *EverQuest's* EULA is at <http://sonyonline.com/tos/tos.jsp>

<sup>54</sup> The USA not included.

<sup>55</sup> <http://www.cerebalaw.com/berne.htm>

<sup>56</sup> In the same way that if you signed a contract to be a slave, you couldn't be held to it.

<sup>57</sup> See <http://www.cdmag.com/articles/031/079/news010119-05.html>

The downside of this argument, however, is that it takes a step in the commodifiers' favour - it accepts the principle that copyright does indeed subsist in virtual objects/characters independently of the VW as a whole. Sony's lawyers could have argued that characters were an intrinsic part of a virtual world, and that trying to separate them out as individual IP entities made about as much sense as taking every 50<sup>th</sup> word from a novel and splitting that off from the book as a whole<sup>58</sup>.

The players' first response to this was to deny it, as described in pitfall #1. It's the "I made it" "We made the means by which you made it" "MS doesn't own what I write in Word" "If they'd written their EULA differently they would" debate.

The next assault was to consider that even if the developer does own the IP, that doesn't mean they can stop players selling something they've bought. If I purchase a book, I can sell it to someone else second-hand whether the publishers want me to or not. The counter-argument to this was that players aren't buying, they're renting, and as owners the developers can veto what amounts to sub-letting.

A further attack took the developers' point of view and extended it to its logical (and absurd) conclusion. OK, so if you own the copyright in a character, does that mean you could sue if I played another virtual world and created an identical avatar there with the same name? Unfortunately, at this point things became much less clear because other laws suddenly have a say. If, for example, I created an avatar who looked just like a famous movie actor, I couldn't rule out the possibility that I might be hearing from that actor's lawyers if they ever got wind of it. Such *rights of publicity* seem to depend on hard-to-gauge, subjective matters such as how well a player (and presumably, therefore, a character) is known<sup>59</sup>.

At the moment, IP laws do not cover this situation at all well. In the UK and the USA, copyright can only be held to subsist in certain specific types of created content, none of which appear to apply to characters or to virtual objects. They're not software, for example, just the result of executing it; they're not databases, just entries in databases; they are computer-generated, but is the author the person who wrote the software or the person who used it?<sup>60</sup>

Given, then, that at the moment the law doesn't say for sure who owns "virtual property", and that this uncertainty does not favour developers (even if they disposed towards commodification), there is a second line of defence protecting the developer's position: their EULA. Unfortunately, some of the biggest commodifiers won't necessarily have signed the EULA. In 2003, Webzen tried to obtain an injunction against Itembay<sup>61</sup> to stop it from buying and selling *MU-Online* goods, but failed because Itembay was an intermediary - as an organization, it hadn't played *MU-Online* and therefore wasn't bound by its EULA. Even companies that do farm can easily get round this by requiring their playing staff to be self-employed (then contracting their services).

---

<sup>58</sup> Of course, if Sony's lawyers had done this then that would have made the inclusion of branded objects in virtual worlds impossible (not that there is any product placement in *EverQuest* or *Star Wars: Galaxies!*).

<sup>59</sup> Otherwise, one of my nieces would have good cause to sue Bethesda Softworks - there's a character in *The Elder Scrolls III: Morrowind* who looks just like her.

<sup>60</sup> For a much closer look at these and the other main arguments with respect to the applicability of current IP laws to virtual property, see Reynolds, R.: *Hands Off MY Avatar: Issues with Claims of Virtual Property and Identity*, proc. Digital Games Industry, University of Manchester, 2003 (forthcoming).

<sup>61</sup> <http://www.itembay.com>. Warning: brush up on your Korean before hitting this site.

IP laws are currently a pitfall for VW developers because they are inadequately stated; until the matter is tested in a court of law, developers and players alike are left wandering in a no-man's land.

Whether, once the courts have a grip on matters, IP laws are still a pitfall depends on what decisions were made. It should be possible to satisfy both the developers who want commodification and those who don't; the danger is that the players who do (or don't) want commodification win the day and force the developers to take a stance they (and the other players) have no wish to take.

## **Conclusion**

Different groups of people involved in virtual worlds want different things, not all of which are necessarily compatible with the wants of others. Some of these wants are self-defeating, some are misguided, some border on the paranoid, but as yet no significant disputes have been tested in the courts. All parties therefore believe they are in the right.

The situation we have at present is relatively stable, but it cannot last. Sooner or later, those who make and interpret laws will have to formulate judgements about virtual worlds. Who knows what new laws might be enacted? Who knows what old laws may be retooled to apply? Will the courts make the right decision for you? Or will they put you in a situation you find intolerable yet from which you are unable to escape?

The biggest pitfall of virtual property comes from the fact that the concept is so new: there aren't the precedents, either in law or in practice, to be certain how it will finally be managed. Working with the unknown, while perhaps exciting for those who enjoy gambling, is nevertheless on the whole bad for business.

The biggest pitfall of virtual property is this: the uncertainty of its status in law.