

FANTASY CRIME

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I. Introduction

*[W]hen a man doth . . . imagine the death of our lord the King, . . . that . . . be . . . treason. . . .*ⁱ

This mid-fourteenth century statute did something we longer do: criminalize mere thought.ⁱⁱ In modern Anglo-American jurisprudence, the legal phenomenon “crime” requires the coalescence of four distinct elements: *actus reus* (an overt act or a culpable failure to act); *mens rea* (a blameworthy mental state); causation (consequence of *actus reus*); and “harm” (resultant injury to one or more victims).ⁱⁱⁱ Parsing the extent to which these elements coalesced in a particular instance can be surprisingly problematic, even for conduct in the real, physical world.

Our criminal law is, after all, the product of millennia of experience in the physical world. The physical world was historically the only world we could inhabit and was, as a result, the only available vector for our abiding predilection to inflict “harm” upon persons and/or property. Criminal law therefore evolved to deal with tangible, physical “harms;” and while it has, over the last several decades, expanded its scope to encompass “soft harms” of certain types, its bedrock principles are ultimately grounded in tangible “harm.”

The physical world is no longer the necessary and inevitable arena of human activity. Cyberspace gives us a new, non-spatial arena in which we can conduct many, if not all, of the activities we carry out in the physical world. The availability of this new, conceptual vector for human activity has various consequences for criminal law.

I have written about many of those consequences elsewhere: how cyberspace challenges the implementation of the systems we use to enforce our criminal laws and control crime; how it can require us to broaden the way we define certain crimes – such as theft – to encompass intangibles; how it may require us to define new crimes, such as the denial of service attacks that are used to shut down access to websites and essential services. These consequences are all important and conceptually challenging, but my task here is to analyze an even more intransigent phenomenon: crime in virtual worlds like *Second Life*.

The analysis that follows is divided into three sections: Section II reviews the goals the criminal law is designed to achieve and analyzes the role “harm” plays in the articulation and realization of these goals; its focus is on crime in the real, physical world. Section III describes the virtual worlds that are emerging in cyberspace. Section IV analyzes the issue of ““fantasy crime,”” which is essentially whether we should extrapolate the criminal law to encompass conduct that inflicts “harms” that are virtual rather than tangible.

II. Real Crime

[C]rimes . . . are a breach . . . of the . . . duties due to the whole community, . . . in its social aggregate capacity.^{iv}

By “real” crime I refer to crime that occurs entirely in the physical world. In “real” crime, both the conduct involved in the commission of the crime and the resulting “harm” that conduct inflicts occur in “real,” physical space. Crime has been an essential – if not foundational – concern of law since

humans began living in organized groups.^v Organized social life requires the orchestration of the efforts and sensibilities of a more or less diverse populace, which brings us to the need for order:^{vi}

Human collectives – societies -- must maintain order if they are to survive and prosper. “Order” has historically had two complementary aspects: internal and external.^{vii} External order implicates a society’s relationship with its physical and biological environment.^{viii} Societies must implement the efforts of their individual members to deal with physical threats (e.g., earthquakes, droughts, fires) and threats posed by competing societies.^{ix} Historically, societies have dealt with external human threats by creating a separate institution -- the military – to discourage and resolve threats from “outsiders.”^x

Societies achieve and maintain internal order by using two complementary sets of rules. The first set – the “civil” rules -- structures the activities of those who comprise a society in predictable, productive ways.^{xi} They define relationships (e.g., ruler-ruled, husband-wife, employer-employee) and allocate tasks (e.g., farmer, teacher, mayor).^{xii} They also set legitimate social expectations (emancipation, safety, property ownership) and establish a baseline of order by defining the behaviors that are “appropriate” in that society.^{xiii} The members of a society tend to abide by its civil rules because they are socialized to believe in them; most members of a society consequently believe that conforming their behavior to the civil rules is the right thing to do.^{xiv} Individuals gain approval and avoid disapproval by conforming to the dictates of the civil rules.^{xv} But civil rules are not enough in this context: They suffice to maintain order in other biological systems, but because humans are highly intelligent, they have the capacity to deviate; unlike other biological species and the artificial entities so far created, humans can, and do, deliberately violate the civil rules that are meant to maintain internal order.^{xvi}

Societies deal with this issue by implementing a second set of rules – “criminal” rules – that reinforce the need to obey the civil rules.^{xvii} Every society will, for example, have both civil rules that define property rights and criminal rules that prohibit violating these property rights and prescribe sanctions for doing so.^{xviii} Sanctions are imposed to achieve any or all of several goals, e.g., retribution, incapacitation, rehabilitation and deterrence.^{xix} In the millennia since humans began to live in organized groups, the repertoire of criminal sanctions has included corporal punishment, death, incarceration, fines and banishment.^{xx} Modern societies let individuals sort out disagreements over the proper application of civil rules (civil litigation); but maintain exclusive control over their criminal rules because the violation of such a rule is a profound threat to internal order.^{xxi} No society can survive if its members are free to prey upon each other by violating the personal integrity and/or property rights of other citizens.^{xxii}

This brings us to “harm.” Essentially, criminal law is used to control the infliction of certain types of “harm” within a given society.^{xxiii} As I have explained elsewhere, we cannot – given the ingenuity and persistence of the human psyche – hope to eliminate the infliction of all “harm” within a society.^{xxiv} While that would be the optimum outcome, it is not one we can achieve, at least not in the foreseeable future.

We concentrate, instead, on controlling the incidence with which “harms” of particular types are inflicted on the members of a society.^{xxv} We do this, as I noted earlier, by proscribing certain behaviors and by inflicting sanctions that are designed to reduce the future incidence of these behaviors and the “harms” they inflict.^{xxvi} The first task is the responsibility of the criminal law; the second is the responsibility of agencies that are charged with enforcing a society’s criminal laws.^{xxvii}

A society’s criminal law is therefore a compendium of “harms.”^{xxviii} The infliction of each “harm” in a society’s compendium is proscribed by a rule that defines this activity as a specific “crime”. For the purposes of this analysis, we will divide the repertoire of potential “harms” into hard “harms” and soft “harms.”^{xxix}

A. Hard “Harms”

What we are interested in, ultimately, is to prevent harm.^{xxx}

Hard “harms” are the bedrock of the criminal law; they involve the infliction of tangible, egregious injuries to persons and/or property and, as such, are the oldest and most persistent “harms.” The cataloging of these “harms” has been essentially constant from the Code of Hammurabi through such subsequent enactments as the Salic Law, the common law of Blackstone’s era and the statutes of the present day.^{xxxii} Every society must outlaw the infliction of a set of core physical “harms” (e.g., murder, assault, rape) on individuals or descend into a state of chaos in which the strong exploit the weak. Each society will also outlaw a collateral set of physical “harms” (e.g., adultery, incest, child abuse) the infliction of which can erode its ability to maintain internal order. Since property is valued almost as highly as human life, each society will also outlaw the infliction of a set of core physical “harms” to property (e.g., arson and other types of damage, theft, robbery), and more evolved societies will also proscribe the infliction of a collateral set of derivative “harms” (e.g., fraud, counterfeiting, vandalism and forgery).

In modern societies, especially the United States, we see the extrapolation of many of the core and collateral hard “harms” into an almost dizzying array of “crimes” of varying types and degrees of severity.^{xxxiii} The extrapolation is attributable to two factors: One is the refinement of penal philosophies, which have moved beyond the *lex talionis* and a default reliance on death as the punishment for criminal conduct; modern penal philosophies and modern criminal law focus on the nuances of the “harm” inflicted and the personal characteristics of the offender in an attempt to impose a sanction that is idiosyncratic enough to constitute fair, but not unjust, punishment.^{xxxiii} The other factor is the politicization of crime; the use of the penal sanction has been expanded broadly, most notably in the area of regulatory offenses.^{xxxiv} While the criminal law of ages past was concerned primarily, if not exclusively, with retribution,^{xxxv} our criminal law is increasingly intended to regulate conduct in a variety of areas, most of which have little or nothing to do with inflicting the core or collateral “harms” outlined above.^{xxxvi} And that brings me to the other category of “harm.”

B. Soft “Harms”

In all cases the crime includes an injury. . . .^{xxxvii}

Unlike hard “harms,” which involve tangible injury to persons or property, soft “harms” are more difficult to categorize. Essentially, soft “harms” involve the infliction of some type of injury – which can be tangible or intangible – to morality, to affectivity or to a systemic concern with the safety of individuals and/or the integrity of property. We will examine each type of soft “harm” below.

1. Morality

Soft “harms” involving injury to morality encompass a wide range of activities and a correspondingly wide range of justifications.^{xxxviii} The “crimes” that have been defined to proscribe the infliction of this type of soft “harm” include gambling, obscenity, indecency, blasphemy, public intoxication, adultery, prostitution, bigamy, fornication, sodomy, lewdness, blasphemy and the consumption of certain chemical substances.^{xxxix} The soft “harm” crimes usually have no individual victim; instead of causing “harm” to an individual, the “harm” they inflict is assumed to constitute an injury to the “moral sense of the community.”^{xl}

While crimes in this category existed before then,^{xli} the criminalization of these soft “harms” did not become widespread until the end of the nineteenth century, when “‘societies for the suppression of vice’ became” actively involved in outlawing activities they believed were undermining the moral fabric of this country.^{xlii} As a historian noted, the “first three decades” of the last century were “the peak period . . . in the battle against vice and moral decay” an era of “fresh legislation and spasms of zeal in its enforcement”.^{xliii}

The zeal for using criminal law to discourage the rather uncertain infliction of soft “harms” in this category declined as the twentieth century declined.^{xliv} Laws criminalizing the infliction of some of the soft “harms” have been struck down as unconstitutional, and those criminalizing the infliction of many of the others have either been repealed or tend to be enforced lackadaisically.^{xlv} One notable exception is the laws that criminalize the production, sale and possession of controlled substances.^{xlvi} While some argue that they fall into the category of “victimless crimes” against morality, others contend that the use of controlled substances does inflict at least soft “harms” on actual victims.^{xlvii}

The other notable exception is gambling: All fifty states regulate gambling; most outlaw all but a few types of gambling when conducted by private citizens.^{xlviii} States do not, however, outlaw *all* gambling.^{xlix} In what smacks of hypocrisy, at least thirty-seven states (plus the District of Columbia) operate their own lotteries, and state-licensed casinos operate legally in at least twenty-eight states.¹ States collect revenue from their lotteries and “usually collect a fairly high tax on wagers” placed in casinos they license “through a privately negotiated contract with the casino or . . . a statute that mandates a wager tax.”^{li}

Except for their continuing criminalization of the arguably soft “harm” associated with the use of controlled substances and their rather ambiguous denunciation of private gambling, states have moved away from criminalizing the soft “harms” of morality. We will return to that issue in the next section, when we consider “harms” in the virtual world.

2. Affectivity

Soft “harms” involving injury to affectivity are a relatively late addition to criminal law. Anglo-American common law really did not encompass affective “harm.” The closest it came was criminalizing libel. In the early seventeenth century, the English Court of Star Chamber criminalized defamatory comments directed toward an individual: “The Court's rationale . . . was that libels may be penalized because they tend to create breaches of the peace when the defamed undertake to revenge themselves on the defamer.”^{lii} The English colonists brought the offense with them when they came to America, and after the Revolution it became part of the criminal law of the states.^{liii}

Because it was intended to prevent dueling and other forms of physical conflict, criminal libel has traditionally been consigned to the category of “offenses against public peace,” i.e., crimes that directly threaten a sovereign’s ability to maintain internal order.^{liv} The gravamen of the offense was publishing material that was likely to “cause disorder, riot or breach of the peace.”^{lv}

So although it appeared to criminalize a soft “harm,” criminal libel was actually concerned with a traditional, hard “harm.” As we saw earlier, the bedrock concern of the criminal law has always been to control conduct that is likely to jeopardize internal order. Since its focus was on controlling dueling and other aggressive conduct, criminal libel’s concern with malicious communications lay not with the soft

“harm” such communication could inflict on the victim *per se*, but on the consequential hard “harm” the victim could inflict by retaliating against the person responsible for publishing the communication.

Criminal libel was rarely prosecuted in the United States in the nineteenth and twentieth centuries, which was one of the reasons the drafters of the Model Penal Code gave for not including it in their template of offenses.^{lvi} In their commentary on this issue, they said that deciding “whether to penalize anything like libel” was one of “the hardest questions” they confronted.^{lvii} They began with the premise that “penal sanctions cannot be justified . . . by the fact that defamation is damaging to a person in ways that entitle him to maintain a civil suit.”^{lviii} After noting that penal sanctions are only appropriate for “harmful behavior that exceptionally disturbs the community's sense of security,” they considered whether libel falls into this category.^{lix}

The drafters of the Model Penal Code concluded that behavior “exceptionally disturbs the community's sense of security” for either of two reasons: One is that the “harm” inflicted “is very grave, as in rape or murder, so that even the remote possibility of being similarly victimized terrifies us. Or our alarm may, as in the case of petty theft or malicious mischief, derive from the higher likelihood that such lesser harms will be inflicted upon us”.^{lx}

The Model Penal Code’s drafters found that because “personal calumny falls in neither of these classes”, it is “inappropriate for penal control,” which probably explained “the paucity of prosecutions “ and “near desuetude of criminal libel legislation in this country.”^{lxi} They therefore did not include a libel provision in the final version of the Code, which appeared in 1962.^{lxii} As a result, criminal libel still survives in the criminal codes of some states, but it tends to be a very minor offense and is almost never prosecuted.^{lxiii}

In the United States, the only offenses that directly encompass soft “harm” are the related crimes of stalking and harassment (and the online versions of each). Both are relatively new crimes.

Harassment is the older offense, at least in its original form. The criminalization of harassment began about a century ago, when it became apparent that telephones could be used for less than legitimate reasons. The initial problem came from callers who used “vulgar, profane, obscene or indecent language”.^{lxiv} Concerned about the “harm” being done to the women and children who received such calls, states responded by adopting statutes that created the offense of “telephone harassment.”^{lxv} The offense tended to focus only on obscene or threatening phone calls, but some states broadened their statutes to encompass more general conduct, such as “anonymous or repeated telephone calls that are intended to harass or annoy”.^{lxvi} But as a 1984 law review article noted, the harassment statutes then in effect generally failed to encompass more problematic conduct, such as touching someone, insulting them or following them.^{lxvii}

That began to change in 1989, when actress Rebecca Schaeffer was stalked and killed by an obsessive fan.^{lxviii} Shocked by the Schaeffer murder and five similar murders, California legislators passed the nation’s first criminal stalking law in 1990.^{lxix} By 1993, forty-eight states had followed suit,^{lxx} and in 1999 New York became the final state to adopt a criminal stalking statute.^{lxxi}

Most of the early statutes followed the California model,^{lxxii} which criminalized harassment culminating in a “credible threat.”

The statute has two actus reus elements. . . . First, [it] requires willful . . . and repeated following or harassment. . . . The statute defines ‘harasses’ as requiring a course of conduct, which is a series of acts over a period of time that shows a continuity of purpose. . . . Second, the statute requires a ‘credible threat’ . . . intended to cause the

victim to reasonably fear death or great bodily injury. The . . . victim must experience both subjective and objective fear.^{lxxiii}

California's approach led some to characterize stalking as an inchoate crime, on the premise that the "harm" it addresses is the "murder, rape or battery that the stalking . . . could" produce.^{lxxiv} In this view, stalking is concerned not with a soft "harm," but with preventing the infliction of a hard "harm." Others argued -- correctly, in my opinion -- that stalking is not an inchoate crime because its real concern is with the infliction of a distinct, soft, "harm." As one article noted, the "harm" stalking laws address is not "future harm. Stalking is wrongful because the threat of future violence causes emotional injury to the victim."^{lxxv}

Florida took a different approach. It created two crimes, basic stalking and aggravated stalking.^{lxxvi} The basic stalking offense required that the stalker (i) intend to inflict emotional "harm" on the victim and (ii) willfully engage in repeated following or harassment of the victim.^{lxxvii} The aggravated stalking offense tracked the California provision by requiring that the stalker make a "credible threat" with the intention to cause the victim to fear for her safety.^{lxxviii} Basic stalking was a misdemeanor, while aggravated stalking was a felony.^{lxxix lxxx}

As the years passed and we became more familiar with the nuances of the conduct involved in and the "harm" inflicted by stalking, states began to expand the scope of their stalking statutes. As a law review article noted, contemporary statutes criminalize three types of conduct: (i) conduct requiring proximity to the victim; (ii) conduct that conveys a credible threat of death or injury; and (iii) conduct that would cause a reasonable person "to fear physical harm or to suffer severe emotional distress".^{lxxxi}

The statutes in the last category are the most interesting for the purposes of this discussion because they go beyond the concept of stalking as a crime concerned with the potential infliction of physical harm: They explicitly target the infliction of "emotional distress," a purely soft "harm." Missouri's statute, for example, states that anyone "who purposely and repeatedly harasses . . . another person commits the crime of stalking," and defines "harasses" as engaging "in a course of conduct directed at a specific person that serves no legitimate purpose, that would cause a reasonable person to suffer substantial emotional distress, and that actually causes substantial emotional distress to that person."^{lxxxii}

A number of other states have similar provisions,^{lxxxiii} and some courts have noted that stalking statutes are intended to prevent "emotional harm to victims."^{lxxxiv} A few states have adopted cyber-stalking provisions that outlaw engaging "in a course of conduct to communicate, or to cause to be communicated, words, images, or language by or through the use of . . . electronic communication, directed at a specific person, causing substantial emotional distress to that person and serving no legitimate purpose."^{lxxxv}

While a number of states incorporate harassment into their stalking statutes, either as a way of defining stalking or as a way of defining a lesser-included offense of stalking,^{lxxxvi} a few have harassment offenses that also make it a crime to inflict emotional distress on a victim. Delaware's harassment statute, for instance, makes it an offense to "harass . . . another person" by insulting, taunting or challenging them or engaging "in any other course of alarming or distressing conduct which serves no legitimate purpose and is in a manner which the person knows is likely to . . . cause a reasonable person to suffer substantial emotional distress."^{lxxxvii}

It has been difficult, and arguably problematic, for criminal law to encompass the infliction of purely affective "harm."^{lxxxviii} The "emotional distress" stalking and harassment statutes described above represent a compromise: While they criminalize the infliction of affective "harm," they do not predicate

the imposition of criminal liability purely on self-diagnosed psychic injury.^{lxxxix} They incorporate a “reasonable person” standard to ensure that the imposition of liability is based not on the idiosyncrasies of a particular individual but on conduct that can be deemed to inflict an objective ascertainable “harm.”^{xc}

3. Systemic

Over a century ago, American criminal law began using “regulatory offenses” to create “forward-looking incentives yielding socially optimal outcomes.”^{xc} These crimes, which are also known as “public welfare” offenses, resulted from a “shift in emphasis from the protection of individual interests which marked nineteenth century criminal administration to the protection of public and social interests.”^{xcii}

Regulatory offenses are the product of a very different approach to criminal liability. To understand how this approach differs from that traditionally used in the imposition of criminal liability, it is helpful to consider an example of a regulatory offense, i.e., antitrust.^{xciii} Antitrust prosecutions differ from traditional criminal prosecutions in that they are predicated on the infliction of a systemic “harm,” while traditional prosecutions are predicated on the infliction of “harm” to individual victims.^{xciv} In a traditional criminal proceeding, the state acts to vindicate its obligation to protect individual members of the social system it represents;^{xcv} in a criminal antitrust proceeding, the state acts to vindicate its obligation to ensure the viability of an essential component of a social system.^{xcvi} The “harm” at issue in the latter is an erosion of the principle of competition.

Like antitrust, other regulatory offenses target the infliction of systemic “harm.”^{xcvii} Like antitrust prosecutions, prosecutions for the other regulatory offenses also tend to be predicated on presumed “harm,” rather than on the actual “harm” that is a standard feature of traditional criminal prosecutions.^{xcviii} The regulatory offenses that currently exist essentially impose liability for not preventing the occurrence of conditions that either (i) create the potential for generalized “harms” constituting threats to public health and safety or (ii) result in the occurrence of specified systemic “harms” such as environmental damage.^{xcix}

While the commission of a regulatory offense results in the imposition of criminal liability, these offenses differ from traditional crimes in several respects. As noted above, they do not require actual “harm.” Most also do not require *mens rea*. As the Supreme Court explained in *United States v. Balint*, while “the general rule at common law was that . . . scienter was a necessary element in . . . every crime, . . . there has been a modification of this view in . . . prosecutions under statutes the purpose of which would be obstructed by such a requirement”.^c And as the paragraph above noted, regulatory offenses, unlike traditional offenses, tend to emphasize liability by omission;^{ci} because they are meant to create incentives to engage in socially-desirable conduct, regulatory offenses often target a failure to act when the law imposes a duty to do so.^{cii} And while regulatory offenses are crimes, a conviction for a regulatory offense usually does not carry the moral stigma and severe penalties associated with conviction of a traditional crime like rape or murder.^{ciii}

The soft “harm” targeted by regulatory offenses is therefore more analogous to the “harm” targeted by offenses against morality than it is to offenses targeting “harm” to affectivity. Offenses against morality and regulatory offenses both target generalized, essentially presumptive “harms.” Each is concerned with protecting the integrity of a particular system: Offenses against morality are concerned with protecting the integrity of a conceptual system – the ethical and moral principles that are predominant in a given society. Regulatory offenses are concerned with protecting the integrity of any of a host of infrastructure systems, the reliability and efficacy of which is deemed essential to the survival and well-being of the members of the social system they serve.

Offenses targeting the soft “harms” of affectivity are analogous to traditional criminal offenses in that as they are concerned with redressing, and preventing, injury to a specific, individual victim. They deviate from traditional criminal offenses in that the injuries they encompass are intangible and amorphous. As we saw above, criminal law has, so far, anyway, made the inclusion of an objective indicator of “harm” an essential condition for recognizing and enforcing offenses that target the infliction of affective soft “harms.”

We will return to the role “harm” – both hard and soft – plays in criminal law in § IV, when we take up the issue of fantasy crime. Before we can do that, however, I need to describe the context in which fantasy crime emerges.

III. Virtual Worlds

[T]he . . . firewall between word and deed . . . is not likely to survive. . . .^{civ}

In describing the context in which fantasy crime emerges, I need to distinguish *the* virtual world – cyberspace – from the discrete virtual worlds it contains, worlds that in a sense represent the colonization of cyberspace. The essential distinction between the two phenomena lies in how we approach them.

We all *use* cyberspace as a tool . . . a cross between an automobile, a telephone, a television, a map, a radio, a movie theater and probably more. Cyberspace transports us – visually and figuratively – to other places; it lets us communicate with people almost anywhere on the globe; it provides us with news and entertainment, on demand and on our terms. Those who merely use it as a tool do not inhabit cyberspace; they employ it situationally to enhance the efficiency and quality of their lives in the real, physical world. In that sense, cyberspace is indistinguishable from any of the consumer technologies that have been over the last century and a half.^{cv}

Some of us also *inhabit* cyberspace. They use cyberspace as a tool, but they also shift a segment of their lives into one of the discrete, distinctive virtual worlds that are being established in shards of cyberspace.^{cvi} These people are, in effect, colonizing cyberspace. They “live” in varying degrees in both the real and virtual worlds, and that raises important questions about how seriously law should take conduct that straddles both realities.

We take up that issue in § IV, *infra*. First, though, we need to trace the history of virtual worlds.

A. MOOs, MUDs and MMORPGs

You’re in our world now.^{cvii}

The first virtual worlds were text-based online games known as Multi-User Dungeons, or MUDs.^{cviii} For the purposes of our analysis, we will define “game” as an interactive “form of play with goals and structure.”^{cix} Games are fun, not work; games have goals, toys (also a source of fun), do not; and games involve conflict among players, who “interact in such a way as to foil each other’s goals.”^{cx} A goal-oriented activity we engage in for fun but that does not involve competing against others is a puzzle, not a game.^{cx}

MUDs, which were modeled after the role-playing game *Dungeons and Dragons*,^{cxii} began to appear in the late 1970s on the bulletin board systems that were then the extent of online interaction.^{cxiii} MUD gameplay takes place in a fantasy world populated by elves, goblins and other “fantasy-based races, with players” assuming the role of “warriors, mages, priests, thieves, . . . to gain specific skills or powers. The object . . . is to slay monsters, . . . complete quests, . . . create a story by roleplaying, and/or advance

the created character.^{cxiv} Using dedicated terminals on computer networks and working only with text, MUD players created the characters and “storylines” and carried out the quests.^{cxv}

The next stage in the development of virtual worlds came in the 1990s, with the rise of MOOs, a type of MUD. James Aspnes, a graduate student, decided to create a MUD that had “no aim beyond social interaction.”^{cxvi} He added features that let users create objects and virtual rooms and “the original task of exploring a prefabricated virtual world to earn points and power was replaced by an open-ended quest to build . . . relationships and the world's infrastructure.”^{cxvii} Two years later, Xerox researcher Pavel Curtis took Aspnes’ idea and combined it with code that used a method called object orientation; Curtis named his new creation Lambda MOO, for Lambda MUD Object Oriented: “Every player . . . [could] create . . . objects and extend the virtual space. Instead of wandering through a maze of the game designer's imagination, they were crafting it themselves. . . . [T]housands of new places and objects emerged, and the virtual world expanded to include thousands of users, with hundreds logged on simultaneously.”^{cxviii}

The MOO-MUD worlds were popular, but “their text-based realities left a great deal to the imagination. They were models, . . . but they were not true simulacra.”^{cxix} They did, though, pave the way for the next stage in the evolution of virtual worlds.^{cxx}

The next stage – graphical MUDs – began in the mid-1980s.^{cxxi} One of the earliest and most influential graphical MUDs was *Habitat*, an online role-playing game released in 1986.^{cxxii} Unlike its predecessors, *Habitat* was designed to exploit the still-primitive Internet: Participants used a home computer – a Commodore 64 – and modem to connect to a mainframe system; once connected to the mainframe, they used special *Habitat* software to participate in its “multi-participant online environment.”^{cxxiii} *Habitat*’s environment was graphical, rather than text-based; participants used avatars – “online virtual bodies” -- to interact with other participants and the environment.^{cxxiv} *Habitat*’s success was limited by two factors: One was the “narrow bandwidth and low processing power” of the graphics chips and computers then in use; the other was its being based on a “per minute pricing model.”^{cxxv} Players accessed *Habitat* through a Commodore online service provider called Quantum Link that charged them \$9.95 a month plus 6-8 cents for each minute they were online.^{cxxvi}

The next, far-more advanced iteration of the MUDs came in the mid-1990s. Two virtual world providers – Archetype Interactive and Origin Systems -- changed everything by using the Internet to connect players to their worlds and eliminating per minute online charges for a monthly flat fee.^{cxxvii} Another world launched during this era – Lineage – exploited the “computer-literate, . . . populace of Korea” and had one million participants seventeen months after it launched in August of 1998.^{cxxviii} Three other worlds created around the same time -- EverQuest, Asheron's Call, and Final Fantasy IX – quickly attracted over 100,000 users, and by the end of 2004, EverQuest and Final Fantasy each had 500,000 users.^{cxxix}

The next stage in the evolution of virtual worlds was a move from MUDs to MMORPGs: “massively multi-player online role-playing games”.^{cxxxi} While MMORPGs have in a sense existed since the early 1990s, in the twenty-first century they began to evolve dramatically in the texture and complexity of the experiences they provided. “As Internet access speed increased and computer-processing power improved. . . , allowing for more complicated graphics, the basic MUD evolved into sophisticated MMORPGs--complex, persistent environments that were depicted with stunning 3-D visuals.”^{cccci}

MMORPGs generally continue their predecessors’ emphasis on fantasy, but they have several distinctive characteristics. As in all role-playing games, they assume role of a fictional character, usually

a character from fantasy, and control “many of that character's actions. MMORPGs are distinguished from single-player or small multi-player [role-playing games] by the number of players, and by the game's persistent world, . . . which continues to exist and evolve while the player is away from the game.”^{cxxxii} Operationally, modern MMORPGs share certain features with *Habitat*, the graphical MUD described above. MMORPGs also use “client-server” system architecture:

The software that generates and persists the ‘world’ runs continuously on a server, and players connect to it via client software. The client software may provide access to the entire playing world, or further ‘expansions’ may be required . . . to . . . access . . . certain areas of the game. . . . Players generally must purchase the client software for a one-time fee, although an increasing trend is for MMORPGs to work using pre-existing ‘thin’ clients, such as a web browser.^{cxxxiii}

And like *Habitat* and its immediate successors, some MMORPGs require players to pay a monthly subscription fee to play the game.^{cxxxiv}

MMORPGs have become incredibly popular. As I write this in the summer of 2008, a site dedicated to MMORPGs lists 294 separate MMORPGs, the vast majority of which are described as “fantasy” games.^{cxxxv} While MMORPGs have evolved vastly in technical complexity and sophistication, they – like the MUDs – tend to be “based on traditional fantasy themes, often occurring in an in-game universe comparable to that of *Dungeons & Dragons*.”^{cxxxvi}

To understand these themes and how they are integrated into virtual worlds, it is useful to consider an example: Based on the number of players, World of Warcraft [WoW] is “the world’s largest” fantasy MMORPG.^{cxxxvii} To play WoW in the United States, one must first buy the client software, which comes with 15 days of game playing time, for \$19.99.^{cxxxviii} After that, a player must use a credit card to buy additional playing time, which costs approximately fifty cents a day.^{cxxxix}

The primary setting for game play is the fictional planet of Azeroth.^{cxl} The WoW environment is populated by two types of characters: Player Characters are avatars that are controlled by a human being; Non-Player Characters are avatars that are controlled by the game software and interact with Player Characters “through scripted events or artificial intelligence.”^{cxli} Non-Player Characters carry out various roles in WoW: They “buy and sell merchandise,” teach various skills to Player Characters, “and provide a large number of services . . . needed in the game. While some will merely offer advice . . . others . . . patrol . . . set paths” to defend cities against attacks by Player or Non-Player Characters.^{cxlii}

Human players select their characters from ten “races” that are divided into two factions: Alliance and Horde.^{cxliii} A character’s race determines his or her appearance, “starting location and initial skill set”.^{cxliv} The five Alliance races are Humans, Night Elves, Dwarfs, Gnomes and Draenel; the five Horde races are Orcs, Tauren, Undead, Trolls and Blood Elves.^{cxlv} After a player has chosen his/her race, the next step is to select a character class from among nine potential character classes.^{cxlvi} “Each class has a set of unique abilities and talents.”^{cxlvii} The classes are Druid, Hunter, Mage, Paladin, Priest, Rogue, Shaman, Warlock and Warrior.^{cxlviii}

After settling on a race and a class, players acquire appropriate equipment for their characters, though they can expand the character’s possessions as they play the game.^{cxlix} Players then embark upon the game, which “rewards success with in-game money, items, experience and reputation” and these, in turn, “allow players to improve their skill and power.”^{cl} Players explore the virtual landscape, fight monsters, embark on *WoW* assigned quests, join guilds and unite in “groups and raid parties” to attack enemies of varying types.^{cli}

One of the focal points of the *WoW* experience is earning in-game money: *WoW* gold.^{clii} As in the real world, *WoW* players need gold to buy essential and non-essential items and to advance from level to level within the game.^{cliii} There are various ways players can earn gold, most of which involve particular skills, such as crafts, gathering or certain types of farming.^{cliv} They can also earn gold by performing repetitious tasks, such as killing certain types of *WoW* fauna and other creatures.^{clv}

Repetitiously killing monsters, beasts or Non-Player Characters to earn gold is known as “grinding”.^{clvi} Grinding is, as a *WoW* guide noted, “one of the most boring” but also one of the “most profitable” ways for players to generate gold.^{clvii} This presents *Wow* players with a choice: They can “spend hours” grinding or “they can pay someone real money to do it for them.”^{clviii} In the last decade, the latter has become a lucrative endeavor (at least for some) known as “gold farming.”^{clix} Gold farmers are individuals who play *WoW* and other MMORPGs to earn *WoW* gold or the currency applicable in another, similar virtual world; they earn real world wages by the hour and work for businesses that sell the gold (or other currency) they generate online in “real-money trading.”^{clx} Gold farming is the most significant, if not the only, point of intersection between the virtual environments of the MMORPGs and the real, physical world.^{clxi} It is also, as we shall see, outlawed in *WoW* and other MMORPGs.

The fundamental themes in *Wow* are combat and material enrichment, both of which players pursue in a Tolkien-esque fantasy environment.^{clxii} Much of the combat derives from the tension between the Horde and Alliance factions, which are “battling for control of the world” of Azeroth.^{clxiii}

Since *WoW* is predicated on combat, it is not unusual for Player Characters to die in game.^{clxiv} When a player dies, he becomes a ghost; he is sent to a graveyard and his property decreases in durability, which means it is more easily destroyed.^{clxv} A player can elect to remain a ghost for as long as he likes or “return to the world of the living” with no loss of status or experience.^{clxvi} There are three ways to do this: (i) return “to the immediate vicinity” of his body and click a button; (ii) have one of the classes capable of resurrecting him do so with a spell; or (iii) use a Spirit Healer (which further reduces the durability of his property and leaves him weakened with “resurrection sickness”).^{clxvii}

The fact that death is a routine – but impermanent -- aspect of participating in *WoW* might lead one to conclude that the world has no rules or law, but that is not true. The *WoW* Terms of Use set out a number of rules, most of which focus on issues other than playing the game.^{clxviii} Section 5 of the Terms of Use includes two sets of rules: “rules related to interaction with other users” and “rules related to game play.”^{clxix}

The rules governing player interactions are detailed and are primarily concerned with outlawing in-game threats, harassment, stalking and “unwanted attention or discomfort”, though they also outlaw in-game scams, cheating and impersonating a “real person” without their permission.^{clxx} The latter prohibition seems to be primarily concerned with preventing players from pretending to be employees of Blizzard Entertainment, which owns and operates *WoW*.^{clxxi} The rules also include a provision outlawing the use of *WoW* to transmit any content Blizzard deems “to be offensive, including . . . content or language that is unlawful, harmful, threatening, abusive, harassing, defamatory, vulgar, obscene, hateful, sexually explicit, or racially, ethnically or otherwise objectionable. . . .”^{clxxii}

Blizzard has a separate harassment policy, the provisions of which supplement the rules described above.^{clxxiii} It divides harassment into three categories: (i) verbal; (ii) physical; and (iii) ongoing.^{clxxiv} Verbal harassment is further divided into using “highly inappropriate” and “moderately inappropriate” language.^{clxxv} Language is considered “highly inappropriate” if it targets someone for their race, citizenship or ethnicity, refers to “extreme or violent” sexual or “real life” acts, threatens harm in the real world, releases real world information about players or *WoW* employees or insultingly refers to a player’s sexual orientation.^{clxxvi} Language is considered “moderately inappropriate” if it is obscene, vulgar,

insulting or defamatory, if it maligns religion or religious figures or if it refers to drugs, other illegal activities, spamming and/or advertising in game.^{clxxxvii} The policy does not define physical harassment, except to note that it can encompass stealing; and it notes that ongoing harassment can take “many forms”, but “intent” will be a significant indicator of this type of harassment.^{clxxxviii}

The harassment policy outlines the penalties that can be imposed for the above conduct and for violating the “rules governing game play” described below.^{clxxxix} Penalties are imposed by Game Masters, Blizzard employees who circulate through the *WoW* world(s) and both observe violations and respond to player complaints.^{clxxx} Blizzard has a hierarchy of penalties, which range from a warning through accelerating suspensions (3 Hour, 24 Hour, 48 Hour and 72 Hour) to a Final Warning and then the ultimate sanction, “Account Closure.”^{clxxxxi} According to the *WoW* website, the imposition of the last two is, respectively, “quite rare” and very rare”.^{clxxxii} Blizzard says it “hope(s) to give only the most minor of penalties”, but “factor(s) in the severity of the infraction and how often the player has violated our policies in the past.”^{clxxxiii} Like most MMORPGs, *WoW* does not post statistics on the number and type of penalties imposed in a given period, but postings in *WoW* fora clearly indicate that penalties are being imposed.^{clxxxiv}

The second set of rules – the rules “related to game play” -- are quite concise.^{clxxxv} They begin by announcing that Blizzard considers “most conduct” including player killing,” to be part of the Game, and not harassment”.^{clxxxvi} They then advise users that since *WoW* is a “player vs. player game”, they should protect themselves “in areas where the members of hostile races can attack you, rather than contacting Blizzard's in-game customer service representatives for help when you have been killed by an enemy. . . . Nonetheless, certain acts go beyond what is ‘fair’ and are considered serious violations of these Terms of Use.”^{clxxxvii} The “serious violations” include, “but are not necessarily limited to,” three things: (i) using or exploiting errors in design or “program bugs” to gain competitive advantage over other players;^{clxxxviii} (ii) violating *WoW*'s End User License Agreement;^{clxxxix} and (iii) anything Blizzard Entertainment “considers contrary to the ‘essence’ of the Program.”^{cxc} Blizzard has indicated that gold farming falls into the last category because it “diminish[es] the gameplay experience for everyone” not involved in it.^{cxcii}

But Blizzard's primary justification for outlawing gold farming has nothing to do with game play itself. Section 8 of the *WoW* Terms of Service makes it clear that players own none of the content they generate in the game:

You . . . have no right or title in or to any such content, including the virtual goods or currency . . . originating in the Game, or . . . associated with the Account. . . . 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.^{cxcii}

Blizzard's position is consistent with that taken by the other MMORPGs. An empirical study published in 2006 found that “56.25% of the virtual worlds surveyed prohibited sales of virtual property outside of their world”, and 33.33% claimed “the entire world” – including content created by participants in the world – as “their virtual property”.^{cxciii} 72.92% of the worlds claim “copyright in the parts of” their world that “are not created by participants.”^{cxciv}

WoW is emblematic of other fantasy MMORPGs in its European fantasy-based environment, in its characters and in its emphasis on combat and on the acquisition of wealth and status. Like most, if not all, of the MMORPGs,^{cxcv} *WoW* is a highly structured experience for its players; they can create certain

items within the game, and they can engage in independent action within it, but their experience is inevitably bounded by the embedded strictures Blizzard imposes on the *WoW* virtual world(s).

Those who frequent *WoW* and the other MMORPGs live out scripted “heroics in an alternate realm.”^{cx cvi} Their in-world experience is a cross between playing a traditional, real world game and acting in a play; in both, one’s actions are, to a greater or lesser extent, determined by external constraints, the game rules in one instance and the script in the other. While MMORPG players do have some ability to improvise, their virtual life experiences are to a great extent shaped by the often elaborate rules of the game: by the talents and limitations of their characters, by obligations the game imposes (to go on quests, say) and by the at least implicit need to improve their character’s status and wealth.^{cx cvii} This reality is inherent in the nature of MMORPGs. They are, after all, “role-playing” games, and in role-playing games the participants assume the role of fictional characters that are created and defined by, the rules of the game.^{cx cviii}

The experiential strictures of the MMORPGs do not mean they do not qualify as fully realized virtual worlds under the definition I outlined earlier.^{cx cix} It means they tend to offer their participants fewer opportunities for inflicting “harms” of varying types than do the newer, less structured virtual worlds to which we now turn our attention.

B. Second Lives

This world. . . is whatever you make it. . . .^{cc}

Over roughly the last decade, a few virtual worlds have arisen that “eschew the . . . medieval fantasy-based role-playing game play common to such online blockbusters as “*World of Warcraft*” and other MMORPGs.”^{cci} These worlds offer what is essentially an augmented version of reality, what one author calls “BeBop Reality.”^{ccii} BeBop Reality is “a universe in which the fundamental laws of physics and identity are open to constant improvisation by its inhabitants, who instantly modify and embellish it . . . without breaking the world’s underlying structure.”^{cciii}

The BeBop Reality worlds are, in varying degrees, attempts to realize the Metaverse, the fictional online environment Neal Stephenson described in his 1992 novel, *Snow Crash*:

The Metaverse appears to its users as an urban environment, developed along a . . . road . . . that runs the . . . circumference of a . . . spherical planet. The virtual real estate . . . is available to be bought and buildings developed thereupon. . . .

Within the Metaverse, individual users appear as avatars of any form, with the sole restriction of height, “to prevent people from walking around a mile high.”^{cciv}

1. *Second Life*

There are, as noted above, several worlds that to some extent attempt to realize the Metaverse, but only one – *Second Life* – was intentionally created to replicate the Metaverse and has for all intents and purposes achieved its goal.^{ccv} I will therefore devote this section to *Second Life*, and briefly review the other Metaverse-style worlds in the next section.

Second Life is the brainchild of Philip Rosedale who, along with Mitch Kapor and other investors, founded Linden Lab, the company that would develop this particular Metaverse.^{ccvi} Their first attempt

was Linden World, which has been described as “the Book of Genesis turned into an action movie.”^{ccvii} It was a primitive world inhabited by robot avatars armed with guns and grenades and by snakelike creatures that ate the other native fauna, rock-eating birds.^{ccviii} Users had some ability to transform Linden World, but it was really meant to be another, perhaps less-structured MMORPG, i.e., it was meant to be a game users would “play.”^{ccix} That changed when Rosedale and his development team realized that what was unique and appealing about Linden World was its capacity to give users the ability to “build and see the results instantaneously; to share the act of creation with others; to riff off their work, . . . to collectively create.”^{ccx}

They therefore set about revising Linden World, a process that led to a name change, among other things: Linden World became *Second Life* because, as a Linden staffer noted, “everybody wants a *Second Life*.”^{ccxi} The name was also chosen because it exemplified the goals of this new world: a virtual community in which “you can be somebody different, and do something different.”^{ccxii}

In developing *Second Life*, Linden Lab staffers sought to create a world that offers opportunities for individual self-expression instead of the structured experiences common to MMORPGs.^{ccxiii} They began a beta test in November of 2002, and opened *Second Life* to the public in April of 2003.^{ccxiv} In a press release issued at the time, Philip Rosedale described what *Second Life* had already become:

[T]housands of people have been . . . building . . . a vibrant online society that has the complexity . . . of the real world. . . . Our residents have built thousands of unique structures to explore - museums, nightclubs, even entire cities. Over 3,000 people have attended in-world parties, contests, events, and classes. And the in-world economy is booming - residents have bought and sold everything from designer fashions to sophisticated weapons in over 30,000 transactions.’^{ccxv}

His comments reflect Linden Lab’s vision of *Second Life* as “an alternative existence, . . . that strives to be better than the physical world.”^{ccxvi} *Second Life* is based on the premise that the Metaverse must be created by its users, must, in other words, “evolve organically.”^{ccxvii} Linden Lab constructs the landscape, the backdrop;^{ccxviii} everything else is “imagined and created by its Residents.”^{ccxix} This is how it explains the *Second Life* experience to potential users:

Second Life provides near unlimited freedom to its Residents. This world really is whatever you make it, and your experience is what you want out of it. If you want to hang out with your friends in a garden or nightclub, you can. If you want to go shopping or fight dragons, you can. If you want to start a business, create a game or build a skyscraper you can. It’s up to you.^{ccxx}

To participate in *Second Life*, Residents must be at least 18. There is a separate world – “*Teen Second Life*”^{ccxxi} – for Residents who are at least 13 years old but less than 18.^{ccxxii} The Residents of *Teen Second Life* are transferred to *Second Life* when they turn 18.^{ccxxiii}

The plasticity and fluidity of the *Second Life* experience is one of several characteristics that distinguish it from the MMORPGs we examined in the previous section.^{ccxxiv} Another is that unlike the MMORPGs, it can cost nothing to participate. Users (“Residents”) can have a “Basic Account” for free; with a Basic Account, they can access “events, shopping, building, scripting -- everything you can do in” *Second Life*.^{ccxxv} Each additional Basic Account “costs a one-time fee of \$9.95”; a Premium Account – which lets Residents buy land on which they can “build . . . and live” – starts at \$9.95 a month or \$72 a year.^{ccxxvi} Residents with Premium Accounts also receive a weekly stipend of \$300 Linden Dollars – the currency used in *Second Life* -- from Linden Lab.^{ccxxvii}

In March of 2008, *Second Life* had approximately 13 million Residents, i.e., 13 million individual accounts had been opened.^{ccxxviii} The number of accounts does not, though, translate into the number of

actual Residents because “a large percentage” of the accounts “are inactive” and “some Residents have multiple accounts”.^{ccxxix} The number of inactive accounts has led to speculation as to precisely how many Residents regularly frequent *Second Life*. According to some estimates, “only a hard core estimated to number several hundred thousand are thought to be regular visitors”.^{ccxxx} A decline in new Premium Accounts in the first quarter of 2008 led some to conclude that “a smaller, highly engaged base of *Second Life* users is intensifying its interest in the virtual world even as *Second Life*’s appeal to new users fades.”^{ccxxxii}

The decline in new Premium Accounts did not interfere with growth in the *Second Life* economy,^{ccxxxiii} and that brings me to another distinction between *Second Life* and MMORPGs like *WoW*. As we saw in the previous section, *WoW* players need game funds – *WoW* gold – in order to prosper and progress in their game play. As we also saw there, the only ways they can obtain *WoW* gold is to earn it in-game or buy it illegally from an online vendor.^{ccxxxiii} *Second Life* has no such restrictions, and game currency plays a very different role in this virtual world.

As noted above, *Second Life* Premium Account holders receive a regular stipend from Linden Labs. And any Resident can import currency into *Second Life* from the real world or vice versa. They can convert the real world currency of their choice -- U.S. Dollars, Euros, Rupees, Pesos, Yen, etc. – into Linden Dollars, which they can spend in *Second Life*.^{ccxxxiv} Residents can also convert Linden Dollars into the real world currency of their choice in order to move money out of *Second Life*.^{ccxxxv} To facilitate these transfers, *Second Life* has its own currency exchange – LindeX – but there are also several independent currency exchanges.^{ccxxxvi} In this regard, then, *Second Life* is more analogous to a distinct nation-state than it is to a traditional “game.”

Since *Second Life* does not have the embedded game structure of a MMORPG, its Residents are not driven to acquire Linden Dollars in order to progress along a game grid of some predetermined sort. They are driven, in greater or lesser degrees, to acquire whatever quantity of Linden Dollars they need to realize the “*Second Life*” they create for themselves in Linden Lab’s world. Residents use Linden Dollars to buy land, to build homes or other structures on the land they purchase, to furnish the structures they build and to buy clothing and other adornments (including physical modifications) for the avatars they use to live out their second lives.^{ccxxxvii}

That brings us to yet another distinction between *Second Life* and a MMORPG. There is, on one level, some similarity between the activities of *Second Life* Residents and those of *WoW* players: Both can earn game currency by engaging in activity inside the virtual world. As we saw earlier, *WoW* players do this by engaging in the structured quests *WoW* assigns them; they can also earn *WoW* gold by creating crafts, gathering certain items and killing various beasts or Non-Player Characters.^{ccxxxviii} The task of completing quests is a structurally embedded feature of *WoW*; the need to acquire gold is a functionally embedded correlate feature of *WoW*, since it derives from players’ desire to progress in the game.^{ccxxxix}

Second Life Residents, on the other hand, have absolutely no obligation to do anything. When a new Resident first logs into *Second Life*, he or she picks the type of avatar they prefer (male or female, human or non-human);^{ccxli} the avatar comes with clothing, which the Resident can customize to some extent without using Linden Dollars. New Residents can acquire more clothing and more modifications for their avatar’s appearance (hair, skin, eyes, etc.) for no cost at Free Dove, an in-world store that gives these items away.^{ccxlii} Since Free Dove is not the only establishment that gives away clothing and other items,^{ccxlii} a Resident can do as much or as little as he or she likes once he or she has settled into *Second Life*.^{ccxliii} Some Residents work, either for someone else or in their own businesses; others devote themselves to artistic endeavors of varying types, online hedonism or, in a few instances, to organized crime.^{ccxliv}

Unlike players in most MMORPGs, *Second Life* Residents pursue activities that are, almost without exception, peaceable; its organized crime is more theatrical than threatening,^{ccxlv} and in most parts of *Second Life*, Residents are functionally indestructible.^{ccxlv} Avatars can teleport, fly, walk along the floor of oceans and fall from heights without being damaged.^{ccxlvii}

But there are a few areas where avatars can be injured or even killed. When *Second Life* was opened to the public in 2003, it included several regions that were “damage-enabled”, i.e., let Residents “explore . . . [its] combat capabilities.”^{ccxlviii} Warfare raged in these regions – known collectively as the Outlands – for a time, but waned as non-violent Residents began moving into the area.^{ccxlix} In April of 2003, Linden Lab responded to pressure from the peaceable Residents and transformed most of the Outlands into non-combat regions.^{cc} The notable exception was a portion of the former Outlands known as Jessie. Jessie was moved to a remote (if such a concept exists) area of *Second Life* and parceled out among Residents who wanted land “for combat projects.”^{ccli}

Jessie still exists, and a few other combat enabled regions have been added.^{cclii} Those who are so inclined can use these areas to wage war and engage in other types of violence.^{ccliii} The “Linden Labs Combat System” goes into effect when a Resident enters one of these areas:

[T]here will be a heart with a percentage next to it on your upper menu bar. When you see this meter, it means you can be killed in the area. When this percentage drops to zero, you are then 'dead', and you will be teleported to your home location. . . . [B]eing killed is not a big deal. You have to teleport back into the combat simulation from your home location, if you want to return to the combat. You will not lose anything (money, attachments, inventory) if you happen to die.^{ccliv}

The existence of Jessie and a few similar regions notwithstanding, most *Second Life* Residents engage in peaceful pursuits. As noted above, many of them are involved in creating original art and other items,^{cclv} and that brings us to a final distinctive characteristic of this virtual world: Residents own the rights to intellectual property they create in *Second Life*.^{ccv} Under the Linden Lab Terms of Service, “Residents retain intellectual property rights in the original content they create in the *Second Life* world, including avatar characters, clothing, scripts, textures, objects and designs. . . . If you create it, you can sell it, trade it, and . . . give it away for free, subject of course to our Terms of Service.”^{ccvii}

Linden Lab reportedly decided to deviate from the usual MMORPG rule that player-created content belongs to the owner of the virtual world to encourage commerce in *Second Life*.^{ccviii} It has reinforced that commitment by making the unauthorized copying of a Resident’s intellectual property a violation of the *Second Life* Terms of Service that results in the violator being banned from the world.^{cclix}

The Terms of Service follow MMORPG practice by prescribing standards of conduct for *Second Life* Residents. The Terms of Service primarily do this by listing specific prohibitions:

[Y]ou shall not: (i) take any action or . . . transmit Content that infringes . . . third party rights; (ii) impersonate any person or entity without their consent . . .; (iii) take any action . . . that violates any law or regulation; (iv) take any action . . . that is harmful, threatening, abusive, harassing, causes tort, defamatory, vulgar, obscene, libelous, invasive of another's privacy, hateful, or racially, ethnically or otherwise objectionable; (v) take any action . . . that contains any viruses, Trojan horses, . . . or other computer programming . . . intended to damage, . . . surreptitiously intercept or expropriate any system, data or personal information; (vi) take any action . . . that would violate any right or duty under any law or . . . contractual or fiduciary relationships . . .; (vii) upload . . . or otherwise transmit any unsolicited or unauthorized advertising, or promotional materials,

that are in the nature of . . . `spam,' . . . or any other . . . solicitation of such nature; (viii) interfere with or disrupt the Service or servers or networks connected to the Service, or disobey any requirements, procedures, policies or regulations of networks connected to the Service; (ix) attempt to gain access to any other user's Account or password; or (x) `stalk', abuse or attempt to abuse, or otherwise harass another user.^{cclx}

Since *Second Life* is not a structured game, these prohibitions, unlike those in WoW and other MMORPGS, focus on general standards of conduct analogous to those expected in the real, physical world instead of on how Residents conduct themselves in pursuing uniquely in-world endeavors.^{cclxi} And they are not the only rules Residents must obey: *Second Life*'s Terms of Service also require them to "read and comply with the Community standards posted on" the *Second Life* website.^{cclxii}

The Community Standards are relatively concise, compared to the list of prohibitions quoted above. They are meant to achieve certain goals: "treat each other with respect . . . and refrain from any hate activity which slurs a real world individual or . . . community."^{cclxiii} The way the Standards seek to achieve these goals is by listing six behaviors that will cause a Resident to be suspended or, in the case of repeated violations, expelled from *Second Life*: intolerance, harassment, assault, disclosure, indecency and disturbing the peace.^{cclxiv}

The Community Standards separately prohibit "Global Attacks:" implementing "[o]bjects, scripts, or actions which broadly interfere with or disrupt the *Second Life* , . . . servers or other systems".^{cclxv} A Resident found to have used such a device to "substantially disrupt" *Second Life* faces "a two-week suspension and "probable expulsion from *Second Life*." ^{cclxvi} The penalties for engaging in conduct that otherwise violates the Community Standards are "a Warning, followed by Suspension and eventual Banishment from *Second Life*." ^{cclxvii}

Second Life's system for policing violations of its Terms of Service and/or Community Standards relies primarily on self-reporting:^{cclxviii} *Second Life* encourages Residents who observe a violation of either to file an abuse report with Customer Service.^{cclxix} It encourages Residents to file a report even if they are not sure that what they saw was actually a violation: "There may not be any real penalties beyond a warning if it's a grey area. After all, if you're not sure, then the person you're reporting may not be either. But they may also have been warned before. . . ." ^{cclxx}

Filing a report is simple: The Resident clicks "Report Abuse" from a menu that appears when one is in *Second Life*.^{cclxxi} This opens an "abuse report window," which the Resident uses to submit a brief description of what occurred and a screenshot, if that seems likely to help "clarify things".^{cclxxii} After completing a report, the Resident clicks a button and sends it to Customer Service, which replies with an automated email acknowledging its receipt.^{cclxxiii} Customer Service investigates the report and "takes appropriate action" if it is well grounded; "appropriate action" consists of imposing one of the penalties described above.^{cclxxiv}

Second Life publishes a "Community: Incident Report" that "displays the 25 most recent disciplinary actions taken by the *Second Life* Governance Team."^{cclxxv} There unfortunately seems to be no way to obtain longitudinal data concerning the frequency and severity of *Second Life* prohibited conduct.^{cclxxvi} The disciplinary actions listed on the Incident Report specify the date when the violation occurred, where it occurred in *Second Life*, the type of violation and the sanction imposed. A non-scientific sampling of the postings showed penalties ranging from warnings to suspensions for periods ranging from one to fourteen days.^{cclxxvii} The violations included disturbing the peace, assault, indecency and even one instance of "global attack".^{cclxxviii}

It is unclear how effectively this system deals with in-world miscreants -- “griefers.”^{cclxxxix} Anecdotal postings on various websites express dissatisfaction with its inability to discourage violations of the Community Standards and Terms of Service.^{cclxxx} In 2007, Linden Lab announced it had instituted a new system for responding to abuse reports, one that used a “pattern-based methodology” to “cull[] data from every Abuse Report filed and display[] patterns based on multiple criteria”.^{cclxxxi} According to the announcement, this system lets *Second Life* staffers identify and respond to “serious and disruptive behavior” much more quickly.^{cclxxxii}

Around the same time it announced this system for responding to abuse reports, Linden Lab also announced that it had been beta-testing a new governance system – the Estate Level Abuse program -- for Estates, privately-owned areas of *Second Life*.^{cclxxxiii} Under this program, abuse reports concerning violations occurring on private Estates are sent directly to the owners of the Estates, who resolve them “in the method in which they best see fit.”^{cclxxxiv} Perhaps the most interesting part of this announcement was how Linden Lab saw this program evolving:

In time, as Linden builds out more Premium Estate Services, these services will become available to the residents of *Second Life* in one form or another. As Linden uses the same tools on the mainland and develops out the *Second Life* experience our way, residents will have the option of resolving issues their way, or opting-in to the way Linden runs the *Second Life* grid.^{cclxxxv}

As an observer of virtual worlds noted, the Estate Level Abuse program was “a big step toward decentralized private government” in *Second Life*.^{cclxxxvi} When Linden Lab announced its plan to expand the program, some Residents expressed concern that Estate owners might abuse the privilege they were being given.^{cclxxxvii} A Linden staffer responded by pointing out that “This is not real life. This is *Second Life*. Many people want . . . to govern what they own”.^{cclxxxviii} He also noted that if an Estate owner was abusive, “well he can run his region the way he wants, you should probably not hang out there.”^{cclxxxix} That comment illustrates one limitation on the Estate Abuse Level program: It only applies to privately Estates, i.e., to certain areas in *Second Life*; the rest of *Second Life* is still governed by Linden Lab.^{ccxc}

Another, perhaps less significant, limitation is illustrated by what happened to the Estate owned by Woodbury University, a California institution.^{ccxci} On June 30, 2007, Linden deleted the Woodbury University Estate from *Second Life*: it “dropped off the map of the virtual world.”^{ccxcii} Deleting the Estate “was a disciplinary move . . . for Terms of Service . . . violations.”^{ccxciii} It was apparently the scene of “ongoing” violations including “grid attacks, racism and intolerance, persistent harassment of other residents, and crashing” *Second Life* servers.^{ccxciv} This episode suggests that if an Estate owner were to use his/her governance authority under the Estate Abuse Level program to allow violations of the Terms of Service or Community Standards to go unchecked, Linden Labs would presumably step in to restore order. If the Estate owner were to do just the opposite -- i.e., govern too strictly -- Linden Lab would probably not interfere.^{ccxcv}

Governance in *Second Life* is a far more complicated matter than in MMORPGs like WoW because unlike MMORPGs, this world is not a “game,” as defined earlier.^{ccxcvi} It lacks the elaborate embedded character definitions and story structure of a MMORPG; it also lacks the purposive component of those, and other, games.^{ccxcvii} As we saw above, Residents in *Second Life* have no obligatory tasks to complete and no goals other than those they choose to set for themselves.

Second Life is a somewhat fantastical, slightly skewed replication of life in the real world; the experiences it offers are consequently real-life-plus. Many, perhaps most, of the activities Residents engage in are analogues of activity in the external physical world: They have jobs; they buy land, build structures and furnish them; they give parties; they get married; they have sex; they have pets; they create

art and play music; they go to school; they travel; they play sports; they practice their religion, and so on.^{ccxcviii} They also, as we have already seen, engage in activities – like combat – that are not a routine aspect of the real world. In § IV, we will examine some of the other activities Residents engage in that are not a routine aspect of the real world, either because they are not tolerated there or because they simply cannot be carried out there. Before we can examine those issues, though, we need to briefly review the other Metaverse-style virtual worlds.

2. The Lesser Metaverses

Until recently, there were only three worlds – *Habbo*, *There* and *The Sims Online* – that could legitimately be described as Metaverse-style worlds.^{ccxcix} In April of 2008, a new world – often described as “China’s answer to *Second Life*” – opened to the public in beta test form.^{ccc} We will begin with the three older worlds, and then examine China’s *HiPiHi*.

a. *The Sims Online*

The Sims Online is the oldest of the three. It is an online version of *The Sims*, a non-networked computer game (using the term loosely) that appeared in February of 2000.^{ccci} *The Sims* is usually described as a game, but it constitutes a puzzle under the definitions we are employing in this analysis.^{ccci} *The Sims* was a goal-oriented activity players engaged in for fun, but it did not involve competing against other players.^{ccci} Players were in charge of the lives of virtual people called “Sims;” they could create their own Sims or use pre-made characters.^{ccciv} The objective was to keep one’s Sims healthy, provide them with a secure environment and a well-adjusted personal and social life, all of which was complicated by the fact that Sims had a level of free will conferred by sophisticated artificial intelligence programming.^{ccciv}

The Sims was such a success that in 2002 its developers moved it online as a MMOG – a “massively multiplayer online game.”^{cccvi} To participate in *The Sims Online*, as the new version was called, one had to buy software (\$39.95) and pay \$9.999 a month for a subscription to the game.^{cccvi} In *The Sims Online* players interacted with each other, instead of focusing all of their attention on their own Sims.^{cccvi} It was similar to *Second Life* in that players began by creating their own male or female Sim and entered the game with a bank balance of Sim funds.^{cccix} The similarities ended there: Unlike *Second Life* avatars, Sim characters required food, showers, sleep and bathroom breaks; they had to have a place to live, along with money to pay for their shelter, food and other requirements.^{cccix} The initial bank balance was not enough to sustain a Sim for long, so players had to find work; much of the gameplay centered on finding work, performing repetitive tasks at work to earn money and interacting with other, equally-driven Sims.^{cccxi}

Reviewers found that *The Sims Online* had a few interesting aspects – e.g., instances in which Sims had created a “precious few interactive activities” – but generally concluded that its virtues were outweighed by poor graphics, a primitive chat system and the fact that there was, essentially, nothing to do (except work and tend to the physical needs of one’s Sim).^{cccxi} This, as a reviewer noted, was a critical (and, in his eyes, fatal) difference between *The Sims Online* and a MMORPG, in which “players are hooked by being constantly given little carrots to grab for: another level, a higher rank, a new spell, a better sword. The whole idea is to keep you chasing goals so you’ll pay for next month.”^{cccxi} In his view, *The Sims Online* was “hobbled by a lack of motivation to . . . do anything beyond noodle around and idly chat with the other players who are noodling around.”^{cccxi}

The Sims Online anticipated *Second Life* in that regard, but unlike *Second Life*, it did not fully embrace the notion of the Metaverse. *The Sims Online* world was a crippled Metaverse: It imposed the

strictures and necessities of the physical world on its participants and, in so doing, denied them the opportunity to experience life in a truly virtual world. The problem was that *The Sims Online* simply exported *The Sims*' focus on pursuing mundane, repetitive tasks to ensure the survival of Sims into a virtual environment where one interacted, rather minimally, with other players equally bent on ensuring the survival of their Sims. It put players into an environment that gave them the capacity to be (somewhat) creative, but denied them the opportunity to do so. In comparing it with *Second Life*, a person with experience in both said, "The Sims Online. . . treated us like slightly retarded lab rats . . . and [*Second Life*] treated us like artists."^{cccxcv}

Not surprisingly, *The Sims Online* was never very popular.^{cccxcvi} On February 27, 2008, Electronic Arts, publisher of the game, terminated *The Sims Online* and replaced it with a new online world: EA-Land.^{cccxcvii} Apparently dissatisfied with EA-Land's reception, Electronic Arts announced that it would be shut down on August 1, 2008. As I write this, there are efforts to resuscitate the game.^{cccxcviii}

b. *There* and *Habbo*

Like *Teen Second Life*,^{cccxcix} *There* and *Habbo* (formerly *Habbo Hotel*) cater exclusively to teenagers.^{cccxxx} Both worlds are for minors who are at least 13 years old; both say the age range of users is 13-18, but neither seems to have the stringent ejection-from-the-world policy *Teen Second Life* implements.^{cccxxxi}

There opened to users in October, 2003.^{cccxxxi} As with *Second Life*,^{cccxxxi} Basic Memberships are free, but Premium Memberships cost \$9.95.^{cccxxiv} Basic Members receive an avatar, clothes, a hoverboard, in-world text and instant-messaging and the ability to "explore the world"; Premium Members receive all of that plus "Voice Chat," the ability to participate in certain sports and the ability to own property and to create and sell clothing, vehicles and home furnishings.^{cccxxv} *There* describes itself as "an online getaway where you can hang out with your friends and meet new ones--all in a lush 3D environment that's yours to explore!"^{cccxxvi} Unlike MMORPGs, *There*'s focus is on social interaction; it is essentially a teen networking world.^{cccxxvii}

To ensure it provides a "strict 'PG-13'" experience, *There* implements a "customizable profanity filter" to screen "inappropriate language" and enforces content standards that prohibit "sexual language and interaction".^{cccxxviii} Staff review "new avatar clothing items" to ensure they are appropriate and do not "make[] the avatar appear to be nude."^{cccxxix} *There*'s Terms of Service outline a set of "behavior guidelines" that prohibit, among other things, pornography, obscenity, gambling, scams, and violating "any applicable law or regulation, including the infringement of any . . . intellectual property right."^{cccxxx} Members who violate the standards of behavior will be suspended or banned from the world.^{cccxxxi} There seem to be no reports of crime or other serious misconduct in *There*; the world does not provide an external reporting service analogous to *Second Life*'s Incident Report.^{cccxxxii} It is not clear how many teens actually participate in *There*.^{cccxxxiii}

Like *There*, *Habbo* describes itself as "a virtual world where you can meet and make friends."^{cccxxxiv} *Habbo*, though, is not a "world;" it is a social network that takes the form of a virtual hotel, complete with a lobby and Guest rooms.^{cccxxxv} Guest rooms serve as chat rooms, as do Public rooms, which present themselves as "restaurants, cinemas and dance clubs."^{cccxxxvi} Teens can create an account, acquire an avatar, "check in" to the hotel and play for free, but there are fees for buying furniture, clothing and other items.^{cccxxxvii} Players can also purchase a subscription to the *Habbo Club*, which gives them extra furniture and clothing, along with additional access to certain areas of the hotel and an expanded "buddy list."^{cccxxxviii} Like other worlds, *Habbo* has its own currency: *Habbo*

Credits.^{cccxxxix} *Habbo* Credits cost twenty cents each; players can buy them with a credit card in-game or at certain real world stores.^{cccxl} They use Credits to create Guest rooms and to buy clothing and other items.^{cccxli}

Once in-world, players can “share content, create groups, chat, and play games”.^{cccxlii} *Habbo* offers access to a number of traditional games and to some uniquely-*Habbo* games.^{cccxliii} *Habbo*’s environment its audience: By May of 2008, *Habbo* had 97,000,000 registered users in 32 countries, with 9,500,000 “unique visitors” each month.^{cccxliv}

Habbo has a detailed Terms of Use document, but perhaps because of the age of its constituency, the basic “code of conduct” is “the *Habbo* Way.”^{cccxlv} It tells players that the Way is “how *Habbos* should act in the hotel”, and it warns that those who “break the *Habbo* Way are not welcome in the hotel and may be banned.”^{cccxlvi} The prohibitions in the *Habbo* Way include (i) abusing, harassing or bullying other users; (ii) using hate speech or making “rude comments” about another user’s “race, religion, gender or sexuality”; (iii) using programs “to hack, script or edit *Habbo* in any way”; (iv) stealing passwords or property from other users; (v) discussing or participating in sexual acts with other users; (vi) acting out or role-playing “violent acts, even as a joke”; and (vii) breaking the laws or talking others into doing so..^{cccxlvii}

Habbo tells parents its hotel “is moderated 24 hours a day, 7 days a week, by a team of highly trained; police vetted Customer Assistants and Safety Moderators. Teenagers can gain help from staff at any time via a clearly marked button which is accessible at all times they are in the Hotel.”^{cccxlvi} It notes that *Habbo* implements filtering techniques that “hide offensive chat” and otherwise filter out objectionable content.^{cccxliv} *Habbo* also tells parents that it monitors “chat without warning” and reports “questionable” behavior to the police.^{ccccl} In another section of its site, *Habbo* announces that it “works closely and in full cooperation with . . . law enforcement” and gives law enforcement inquiries “top priority.”^{ccccli}

Habbo’s emphasis on security and on cooperating with law enforcement may be due, at least in part, to the fact that in 2007 it was the scene of a virtual crime incident. In November, a 17-year-old Dutch teenager was arrested “for allegedly stealing virtual furniture from ‘rooms’ in *Habbo*”.^{cccclii} Dutch police also questioned five 15-year-olds who were allegedly involved in the theft.^{ccccliii} The teens were alleged to have misappropriated 4,000 Euros (then approximately \$5,800) worth of *Habbo* furniture by tricking the victims into giving them their passwords.^{ccccliv} As a *Habbo* spokesperson noted, their actions constituted “‘theft because the furniture is paid for with real money. But the only way to be a thief in *Habbo* is to get people’s usernames and passwords and then log in and take the furniture’”, which is what the accused teens apparently did.^{cccclv} There is no indication if the 17-year-old was convicted and, if so, what penalty he may have received.

c. *HiPiHi*

As noted earlier, *HiPiHi* is a virtual world being developed in China. On April 21, 2008, it entered its public beta testing phase “with the release of the ‘Dawn of Society’ version of the world.”^{cccclvi} The new version followed “almost a year of private testing” under the “Genesis” version of *HiPiHi*.^{cccclvii} “Genesis” attracted over 40,000 users; the “Dawn of Society” version seems to be designed to attract more users and complete the “emergence of a new virtual society”.^{cccclviii}

Those who have previewed *HiPiHi* say it is “strikingly” similar to *Second Life*, which is not surprising since it is, at the least, modeled on that world.^{cccclix} *HiPiHi*’s website describes it as a “digital world as rich and complex as the real world, . . . created, inhabited and owned by its residents. . . . a world

of limitless possibilities for creativity and self-expression, within a complex social structure and a full functioning economy.”^{ccclx} Its name – HiPiHi – translates as “The World Exists Because of You,” a sentiment reminiscent of *Second Life*’s own philosophy.^{ccclxi}

Screenshots show a world that is strikingly similar in design and content to *Second Life*.^{ccclxii} One observer reports that it is “exactly like *Second Life*: avatars can fly and modify their own appearances, build houses, explore the land with planes, choppers and hot air balloons, which HiPiHi calls public transportation systems.”^{ccclxiii} According to this report, *HiPiHi* “seems to be organized around malls and town squares with socializing at its very core.”^{ccclxiv} Like *Second Life* Residents, *HiPiHi* users will be able to “buy land and build their own houses.”^{ccclxv}

HiPiHi will follow *Second Life*’s lead and let users own intellectual property they create in-world.^{ccclxvi} And like *Second Life*, it will have its own currency.^{ccclxvii} Avatar sex will be allowed “as long as it’s done in private”, but political discussions will not.^{ccclxviii} In-world chat will be run through a filtering system that is designed to identify unacceptable speech.^{ccclxix} As to what constitutes “unacceptable” speech, *HiPiHi*’s Terms of Service apparently tell users they are “subject to the regulations of the People’s Republic of China” and therefore must not make remarks “which . . . undermine national unity, fabricated or distorted the facts, spread feudal superstition and obscenity, pornography, and other violations of the . . . laws and regulations of expression.”^{ccclxx}

HiPiHi is currently only available in Chinese, but English and Japanese versions will be available at a later date.^{ccclxxi} The developers also say the restriction on political speech will only apply to Chinese users; U.S. and Japanese users will have their own, separate “worlds” in *HiPiHi*, which will apparently not be encompassed by this restriction.^{ccclxxii} *HiPiHi* will lease the virtual space for Japanese, U.S. and other national versions of *HiPiHi* to local developers, who will decide the policies for their worlds.^{ccclxxiii}

Only a small percentage of *Second Life*’s Residents are from China because language has been a barrier.^{ccclxxiv} Also, while MMORPGs have been, and continue to be, very popular with the Chinese, they have so far not been interested in non-MMORPG worlds like *Second Life*.^{ccclxxv} Many believe *HiPiHi* will change that; they cite the technological sophistication of the Chinese people, the above-noted popularity of MMORPGS, the “willingness of Chinese to strike up online friendships with strangers” and several other factors as all militating for the success of *HiPiHi* and other Chinese clones of *Second Life*.^{ccclxxvi}

It will be interesting to see how *HiPiHi* develops. Structurally and philosophically, it is similar enough to *Second Life* that one would expect it to develop along the same lines, i.e., evolve into a rather fantastical, augmented version of the real world. Some wonder how *HiPiHi* can evolve into even a modest simulacrum of *Second Life* given the Chinese government’s very restrictive policies on controversial content and conservative attitudes toward capitalism.^{ccclxxvii}

At the very least, *HiPiHi* demonstrates that non-MMORPG virtual worlds are not likely to remain a purely Western phenomenon. As one source noted, “China is staking its claim in the Metaverse.”^{ccclxxviii} There is some indication that China hopes to use its virtual worlds as a purifying influence to resolve the “moral” and “legal dilemmas” that can arise in current virtual worlds, e.g., issues concerning matters such as child pornography and gambling.^{ccclxxix} In a presentation at a virtual worlds conference, a *HiPiHi* representative explained that the “great hope is that Asian virtual worlds will be able to cure some of the ills that we see in virtual worlds today.”^{ccclxxx}

We will consider the need to “clean up” augmented reality worlds like *Second Life* in § IV.^{ccclxxxi} Before we take up what one observer called “the sleazy underbelly of virtual worlds,”^{ccclxxxii} I want to speculate a bit about the future of virtual worlds.

3. Evolving Metaverse(s)

In 2007, analysts for the Gartner consulting firm predicted that by the end of 2011, 80% of Internet users “will have a *Second Life*,’ but not necessarily in *Second Life*”.^{ccclxxxiii} The Gartner analysts believe increased participation in virtual worlds will be a function not of the commercial opportunities they offer, but of the “collaborative and community-related aspects of these environments”.^{ccclxxxiv} They also believe that the current “multiplicity of virtual environments” is a transitory stage and that the future will bring “a merging of . . . worlds into a smaller number of . . . environments that support the free transfer of assets and avatars from one to another with the use of a single, universal client.”^{ccclxxxv} Gartner’s analysts are, in effect, predicting the realization of the Metaverse or, perhaps more accurately, the realization of *a* Metaverse, a real world version of the world Neal Stephenson described in *Snow Crash*.^{ccclxxxvi}

The 2007 prediction only encompassed what we might call recreational virtual worlds --worlds people occupy for non-commercial, non-professional reasons. In 2008, Gartner analysts predicted that by 2012, 70% of business organizations “will have established their own private worlds”, which they will successfully use for a variety of purposes.^{ccclxxxvii} The purposes include “role-based scenario-driven” training exercises and simulations and using virtual worlds to “provide a secure, persistent and interactive workspace to . . . improve collaboration.”^{ccclxxxviii} (The latter is likely to prove increasingly attractive in an era of rising fuel prices.)

As the Gartner predictions illustrate, many are confident that a significant proportion of our lives will migrate online into virtual worlds of varying types. Indeed, analysts predict that cyberspace will transform from its current, text-based incarnation into the 3d Web, “a galaxy of interconnected virtual worlds.”^{ccclxxxix} Companies like IBM and Google -- plus “a bevy” of others -- are working to overcome the technical challenges to transforming our text-based Web into the virtual Web.^{cccxc} Most predict the virtual web will become a reality within the next decade.^{cccxc} If and when that happens, there will be no disconnect between being online – being in cyberspace – and being in a virtual world. Cyberspace will become synonymous either with a virtual world or, as noted earlier, with a series of virtual worlds connected to create a Metaverse.

While many believe the acceleration of our exodus to virtual worlds is inevitable, no one knows exactly what that will mean. Some say the real world will “fade into the background” as we move the conceptual, collaborative aspects of our lives online.^{cccxcii} Others agree, suggesting that even governance and citizenship will move online, as people become citizens of virtual states.^{cccxciii} Others believe the process will take a different path, one in which the real and virtual worlds converge.^{cccxciv}

No one can predict the future of virtual worlds with any accuracy. For the purposes of analysis in the next section, I will make two assumptions, both of which I believe are supported by current trends and inferences from those trends. The first is that we will come to spend an increasing amount of time online in virtual worlds; the second assumption is that we will spend at least the majority of that time in augmented reality worlds like *Second Life* and *HiPiHi*. If those assumptions are correct, we will live a substantial part of our lives in worlds that are at once real and unreal. This means, as I explain in the next section, that what we do in these worlds can, to paraphrase a popular slogan, either “stay in those worlds” or bleed out of them to have an impact in the real world. As we will see in the next section, those alternatives have important consequences for how we develop the laws and policies governing virtual worlds.

IV. Fantasy Crime

Behind every avatar is a real person.^{cccxcv}

The first step in analyzing what I am calling fantasy crime is defining precisely what it is we are dealing with. To do that, I need to parse two dichotomies.

The first is the crime-cybercrime dichotomy. As I have written elsewhere, this dichotomy assumes that cybercrime is a phenomenon distinct from, yet sharing certain characteristics with, traditional crime. Crime is the infliction of socially-intolerable “harms” on members of a society; crime is destructive and/or disruptive activity that undermines a nation-state’s ability to maintain internal order.^{cccxcvi} Cybercrime is essentially computer-mediated crime; that is, it consists of using computer technology to inflict “harms.”^{cccxcvii} The “harms” inflicted by cybercrime can be “harms” societies have historically outlawed (e.g., theft, fraud) or new, virtual “harms” (e.g., the “harm” resulting from a distributed denial of service attack).^{cccxcviii} In either event, cybercrime is justifiably distinguished from crime because the technology involved in its infliction (i) allows criminals to inflict “harm” on a scale greater than that possible in the real world and (ii) makes it increasingly difficult for law enforcement to respond effectively to cybercrime.^{cccxcix} In these and other regards, cybercrime is conceptually and empirically distinct from traditional crime.^{cd}

This brings us to the second dichotomy. Cybercrime is an omnibus term encompassing any criminal activity the commission of which involves the use of computer technology. As such, it encompasses cybercrime committed (i) in the “public” areas of cyberspace and (ii) in “private” areas, i.e., in virtual worlds like *Second Life*.^{cdi} We examine that dichotomy in the first section below. In the next section we will consider whether an emerging, elusive phenomenon – what I am calling fantasy crime – can legitimately be included in the second category, i.e., whether it in fact constitutes a type of cybercrime.

A. Cybercrime

‘there’s nothing virtual about online crime.’^{cdii}

As I noted above, cybercrime is a variety of crime. As such, it involves the infliction of a socially-intolerable and socially-proscribed “harm.”^{cdiii} As I also noted above, the “harm” inflicted by cybercrime can be a traditional “harm” or a new “harm.”^{cdiv} In either event, the impact of the “harm” is felt in the real, physical world.

If a fraudster uses spam email messages to defraud a thousand people out of, say, an average of \$1,500 each, we have a cybercrime that inflicts a traditional “harm” (fraud, i.e., the use of trickery to wrongfully deprive someone of their money or property) in the real world. The methodology used to inflict the “harm” is novel, but the “harm” itself is not. This is, I submit, true of all cybercrime.

Cybercrime is merely a subset of crime;^{cdv} as such, it is a constituent component of a congeries of conceptual categories and operational methodologies, the purpose of which is to control human activity that negatively affects a nation-state’s ability to maintain order in the real world.^{cdvi} Indeed, until the end of the last century, such activity could occur only in the real world.

That is, in a sense, still true of cybercrime. While criminals can use cyberspace as a vector for the infliction of “harm” and thereby free themselves from the constraints of physical reality, the ends they seek – and the “harms” they inflict – are still grounded in physical reality. That is true regardless of whether a cybercriminal steals data by copying it or inflicts physical injury or even death by sabotaging a civilian aircraft control system. In either instance, the “harm” is felt in the real world: The owner of the

data is incrementally deprived of control over that property; and the victims of the compromised air traffic control system suffer physical injury or death in airplane crashes.

Those examples both involve the infliction of hard “harms,” but the physical grounding of “harm” is equally inevitable when a criminal uses cyberspace to inflict one of the soft “harms” the criminal law recognizes.^{cdvii} Online gambling is outlawed in the United States at the federal and state levels.^{cdviii} The rationale for doing so is the same as that given for outlawing gambling that occurs entirely in the real world: The laws protect those who cannot control themselves from losing money they cannot afford to lose, and victimizing themselves and those who depend on them.^{cdix} The same is true for the rationale used to extrapolate stalking and harassment laws to encompass the use of cyberspace to inflict the soft “harms” these laws encompass.^{cdx} It is true for all the cybercrime laws we have because, as I noted before, those laws, like all of our criminal laws, are concerned with deterring the infliction of “harm” in the real, physical world. The physical world is where we ultimately reside; it is where the mechanisms that enforce crime and cybercrime laws are designed to operate. And it has, until recently, been the only venue for human activity.

What about cybercrime in virtual worlds? As I noted earlier,^{cdxi} cybercrime can be committed in both the “public” areas of cyberspace and in the “private” areas of virtual worlds. Does the above analysis apply to cybercrime committed in a virtual world? Logically, it would seem that cybercrime committed “in” a virtual world is, by definition, not committed “in” the real world and cannot, therefore, result in the infliction of a “harm” (hard or soft) encompassed by real world crime/cybercrime laws.

The flaw in this logic is that it assumes that the commission of a cybercrime “in” a virtual world occurs wholly “in” that virtual world. More precisely, it assumes not only that the *conduct* involved in the commission of the cybercrime occurs in the virtual world but also that the “*harm*” the conduct inflicts exists only in that virtual world. Both assumptions are incorrect: Unless and until we decant our consciousnesses into computer media and abandon the physical world,^{cdxii} the conduct involved in committing a cybercrime “in” a virtual world cannot occur entirely in that virtual environment. The perpetrator and the victim are physically located in the physical world; and the physical world is the locus of the activity (their conduct) that has certain effects in the virtual world (or, perhaps more accurately, are perceived as having certain effects in the virtual world). The conduct involved in committing a cybercrime “in” a virtual world will to some extent occur “in” that virtual world, but it ultimately remains grounded in physical reality.

And while the conduct can manifest itself “in” the virtual world, the “harm” cannot. As I explained earlier, a cybercrime necessarily and inevitably results in the infliction of a recognized, proscribed “harm” in the physical world.^{cdxiii} If the “harm” resulting from conduct “in” a virtual world does not bleed out into the real world, then there is no cybercrime. Consider that for a moment: If one avatar engages in activity that has a negative effect on another avatar, but the negative effect has absolutely no consequences in the real world, can it be a cybercrime?

I think it might be helpful to illustrate my point with some examples. Assume, first, that Avatar X (Jack Black) likes a jacket Avatar Y (John Doe) owns and wears on occasion. When Avatar Y is not wearing the jacket, he keeps it in the closet of his virtual apartment *Second Life*. Avatar X goes into the closet when Avatar Y is away and takes the jacket. Has he committed a cybercrime? Has Avatar Y suffered a “harm” in the real world?

First, assume Avatar Y got the jacket from Free Dove.^{cdxiv} It cost him nothing; as we saw earlier, Free Dove gives clothing to new *Second Life* Residents. In this version of our scenario, Avatar Y is justifiably aggravated because he has lost the use of his virtual jacket – a collection of bytes and pixels. But he has sustained no “harm” in the real world. He lost an intangible that has value only within the virtual world of *Second Life*, and its value is presumably limited there; since he was given the jacket, he

may not be able to sell it to another Resident. That is, there may be no interest in buying something one can get for free, if not from Free Dove then from another source. If he could not have sold the jacket, he cannot claim to have lost revenue in the form of Linden Dollars, revenue he could have, if so inclined, transferred out of *Second Life* and into a real world bank account. And since the jacket does not constitute intellectual property in which Avatar Y can assert a cognizable legal interest,^{cdxv} Avatar X's misappropriation of the virtual construct again inflicts no "harm" in the real world and cannot qualify as a cybercrime.

Now assume that instead of being given the jacket, Avatar Y paid \$100 Linden Dollars for it (approximately fifty cents in U.S. currency). In this version of our scenario, Avatar Y does sustain a monetary loss – albeit a concededly *de minimis* one – that can be construed as the infliction of a real world "harm," i.e., the "harm" of having your property stolen. Conceptually, Avatar X's conduct constitutes the cybercrime of theft (using computer technology to steal property) because Avatar Y has suffered a "harm" that has an impact in the physical world.^{cdxvi} It is, of course, of such a slight magnitude it is highly unlikely Avatar X would be prosecuted for what he did,^{cdxvii} but this illustrates the point I want to make about cybercrime in virtual worlds.

As noted earlier, people can, and do, import and export real world money – often large sums – into and out of virtual worlds^{cdxviii} They use the real world money they import into virtual worlds like *Second Life* to acquire virtual property of a value far exceeding twenty-five cents. Anshe Chung, for example, is the *Second Life* persona/avatar of a woman who owns between \$1 and \$2.5 million worth of virtual land in *Second Life*; over the last four years, she has made substantial profits by buying, developing and selling virtual land.^{cdxix} She is not alone; as I noted earlier, *Second Life* has a robust and thriving economy.^{cdxx}

Virtual property has value in the real world. *Second Life* Residents can buy and sell *Second Life* property – of all types – on external marketplaces, including eBay.^{cdxxi} In 2007, eBay banned trades in MMORPG virtual property from its site, but made an exception for *Second Life* because it does not consider *Second Life* a "game."^{cdxxii} Virtual property from *Second Life* and from MMORPGs like *WoW* is widely traded online; as one observer noted, the "trading of virtual items in the real world is believed to be worth hundreds of millions of dollars".^{cdxxiii} Some people earn their living by trading in virtual property.^{cdxxiv}

It is consequently not surprising that people have been prosecuted for stealing virtual property that had value in the real world. As we saw earlier, a Dutch teen-ager was charged with theft for stealing furniture from other *Habbo* users.^{cdxxv} In 2005, Japanese police arrested a Chinese exchange student for stealing virtual property in the Asian MMORPG, *Lineage*.^{cdxxvi} And South Korea police have a special section that deals with in-game crime; it apparently receives thousands of reports of theft and other crimes.^{cdxxvii}

Virtual theft prosecutions do not appear to have been brought in the United States, even when the stolen property had value in the real world. In 2008, someone broke into Geoff Luurs' account on the MMORPG *Final Fantasy XI* and took "the items and currency" he had collected in four years' play.^{cdxxviii} He suspected another player of having committed the theft and went to the Blaine (Minnesota) Police Department, asking them to investigate.^{cdxxix} They refused, even though he explained that the items were worth "about \$3800" and could be sold "to gamers who would rather pay for it than play for it."^{cdxxx} The officers told Luurs the items were "devoid of monetary value", therefore no theft had taken place."^{cdxxxi} That, of course, is incorrect. The officers clearly did not understand the concept of virtual property with equivalent value in the real world; that will most certainly change, in Blaine, Minnesota and elsewhere.

While virtual theft prosecutions are rare anywhere, and apparently unknown in the U.S., law enforcement agencies around the world are taking in-world cybercrime seriously. In 2007, Europol and

the United Kingdom's Serious Organised Crime Agency announced that they were "concerned" about criminals and/or terrorists using *Second Life* to launder money: "[P]olicing the movement of money in *Second Life* presents challenges, as funds may be transferred across borders."^{cdxxxii} A few months earlier, Britain's Fraud Advisory Panel cited a "growing risk" of theft, fraud, identity theft, money laundering and tax evasion in virtual worlds."^{cdxxxiii} And in 2008, U.S. Attorney General Michael Mukasey noted that technology "has created brand-new avenues for money laundering, with the proliferation of . . . virtual world[s] . . . like *Second Life*."^{cdxxxiv}

Money laundering was also a concern when Federal Bureau of Investigation agents looked into the legality of gambling in *Second Life*, which had "[h]undreds of casinos offering poker, slot machines and blackjack".^{cdxxxv} Linden Lab invited the FBI in, as part of its effort to determine if the in-world gambling violated U.S. laws (which seemed likely).^{cdxxxvi} In August, 2007, Linden Lab banned gambling in *Second Life*, citing "conflicting gambling regulations around the world."^{cdxxxvii} Linden Lab said it would "remove violators' virtual equipment," might "suspend or terminate" the accounts of Residents who flouted the ban and might "report user information to authorities."^{cdxxxviii}

As these examples illustrate, it is already apparent that in-world cybercrime can and no doubt will be addressed by real world legal systems and law enforcement agencies.^{cdxxxix} While the law enforcement response to virtual world cybercrime is nascent in many countries (South Korea being probably the most notable exception), that will change as officers develop an appreciation for the real world consequences of in-world crime. Virtual world cybercrime is essentially in the same position "public" cybercrime was in a decade or so ago, when officers had not yet learned that virtual crime inflicts real "harm".^{cdxl} As our increased use of cyberspace produced a concomitant rise in the incidence of cybercrime, officers in the U.S. and elsewhere learned to take "regular" cybercrime seriously. As virtual worlds come to play an increasingly important role in our lives, they will come to appreciate the need to take in-world cybercrime equally seriously.

Since in-world cybercrime is merely the transposition of "regular" cybercrime into a new virtual context, it should not require the adoption of new, virtual-world-specific cybercrime laws. As we saw earlier, harassment tends to be a problem in MMORPGs and in virtual worlds; so far, it is being dealt with by the entity that operates the MMORPG or virtual world. That, I think, is the appropriate default approach for dealing with the problem; while in-world harassment will inevitably inflict some residual affective "harm" on the victim in the real world, its primary effect is likely to be limited to the virtual experiential context. It is therefore reasonable to assume that in most instances those who control the environment from which it sprang – the operator of the MMORPG or virtual world -- can best address such conduct. As we saw earlier, they have the power to suspend offending players or ban them entirely.^{cdxli}

That approach may not be adequate if the effects of in-world harassment leak out of the virtual world to cause substantial "harm" in the victim's "real" life. Criminal charges might be appropriate here; the case could be prosecuted under existing law as long as the jurisdiction's harassment statute encompassed the use of electronic signals for the purpose of harassing another.^{cdxlii} This dichotomous approach should also be appropriate for in-world stalking or fraud or any other crime that can be committed without physical contact (e.g., rape).^{cdxliii} The two-tiered approach is not appropriate when in-world activity results in the infliction of death, physical injury to persons or damage to property in the real world. In these instances, the hierarchy of "harm" noted above is reversed: The primary effects of the "harmful" conduct are felt in the real world; some residual "harm" may also be inflicted in the virtual environment, but it pales in significance to the external "harm." Here, the virtual environment is a vector for inflicting a traditional, hard "harm" in the physical world; since this constitutes the commission of a crime (albeit by non-traditional means), the perpetrators must be prosecuted for what they have done. That should not be difficult; as I noted earlier, statutes specifically outlawing the use of cyberspace to inflict these "harms" have been adopted at the federal level and in several states.^{cdxliv}

The problematic aspect of using our criminal laws and criminal justice system to control in-world cybercrime lies not in defining offenses or establishing jurisdiction but, as with “regular” cybercrime, in finding the resources and expertise necessary to enforce our laws in this new context. As I have explained elsewhere, “regular” cybercrime challenges our law enforcement system because of its complexity, because it tends to be transnational and because it tends to be committed on a scale far exceeding that possible in the physical world.^{cdxlv} Another factor complicating the enforcement of our existing and, I think, quite adequate cybercrime laws is that it represents a new quantum of crime that is added to the real world crime to which officers must continue to respond.^{cdxlvii} In-world cybercrime will to some extent further exacerbate this aspect of the general cybercrime enforcement problem, since it constitutes an additional increment of new crime that is added to the real world crime and “public” crime to which officers must respond.

B. Fantasy Crime

Virtual worlds liberate us from our bodies, but not from one another.^{cdxlviii}

To analyze the phenomenon I am calling fantasy crime, we must understand the role “harm” plays in criminal law; the first section below therefore reviews the nature and import of “harm.” In the next section we take up the relationship between “fantasy” and “harm.”

1. “Harm”

In the sections above, I defined cybercrime as using computer technology to inflict the socially intolerable “harms” that are outlawed – criminalized – by modern nation-states.^{cdxlviii} The “harm” is inflicted in either the “public” or “private” areas of cyberspace.^{cdxlix} This definition may seem to be all encompassing since it ostensibly incorporates all the criminal activity that occurs online, but it may not be. It exhausts the digital geography of cyberspace; there is no residual virtual forum for criminal activity because the “public” and “private” areas comprise the malleable totality of cyberspace.^{cdl} And since it construes cybercrime as an omnibus term comprising the use of computer technology – which subsumes the use of cyberspace – to commit any crime outlawed by modern nation-states, the definition is also conceptually exhaustive.^{cdli} It therefore encompasses the use of computer technology to commit any crime anywhere in cyberspace.

The definition’s potential deficiency lies in a residual category of online activity that may – or may not – constitute the commission of real world crime. This category – the phenomenon I am calling fantasy crime – has not been defined, presumably because it is difficult to define. It has certain identifiable characteristics: It involves activity in cyberspace, usually in a virtual world like *Second Life*.^{cdlii} The activity consists of, or involves, conduct that would constitute the commission of a crime in the real world. That is, it results in the infliction of a hard or soft “harm” that has been more or less generally outlawed by the nations of the world. And while such activity might seem to constitute cybercrime committed in a “private” area of cyberspace,^{cdliii} it cannot readily be assigned to that category of cybercrime because the “harm” apparently inflicted is fictitious – a fantasy.

In § IV(A), we examined the cybercrime committed in “private” areas of cyberspace; an essential defining characteristic of this type of cybercrime is that it results in the infliction of a “harm” recognized by the criminal law of the physical world. As we saw in § II, criminal law has historically targeted the infliction of a fairly extensive repertoire of hard “harms” and in the last few decades has expanded to encompass the infliction of a few soft “harms,” as well. This focus on the infliction of “harm” embedded a specific dynamic in the traditional structure of a “crime:” perpetrator inflicts proscribed “harm” on

victim.^{cdliv} The perpetrator's participation in the dynamic is active, volitional and intentional; the victim's participation is passive, compelled and neither intentional nor desired.^{cdlv}

A modified version of the dynamic is embedded in the structure of the victimless crimes that evolved in the last century or so: There may be no victim at all in the traditional sense;^{cdlvi} the victim may be both the perpetrator and the presumptive victim of the outlawed activity;^{cdlvii} or the victim may belong to a class of people whose generalized, often presumptive victimization results from reckless or negligent conduct on the part of those who responsible for providing essential goods or services.^{cdlviii} The dynamic has also been modified to encompass frustrated efforts to inflict prohibited "harm."^{cdlix} The law of inchoate crimes authorizes the prosecution of those who embark on a course of conduct that is intended to culminate in the infliction of a proscribed "harm" but does not because they are interrupted before they achieve their goal.^{cdlx}

All of these modifications preserve the essential dynamic: For a "crime" of whatever type to have been committed, there must have been a perpetrator, an actual or contemplated "harm" and a victim who was the actual and/or contemplated target of that "harm."

The conceptual structure of "crime" also includes an embedded assumption: Although criminal law has expanded to encompass a few soft "harms," its ultimate concern is always with the infliction of "harm" in the physical world. As we saw in § II(B)(2), this concern with objective, tangible "harm" was for some time an impediment to criminalizing harassment and stalking that it did not involve threats of death or physical injury. While "soft" stalking and harassment have been outlawed by many jurisdictions in the United States and elsewhere,^{cdlxi} the influence of the concern with tangible "harm" persists: The criminalization of these activities is not predicated solely on the infliction of affective "harm;" instead, the offense definitions require that the person accused of stalking or harassment have engaged in conduct that can objectively be deemed to cause "harm."^{cdlxii}

Criminal law's concern with tangible "harm" is understandable and justifiable. As we saw earlier, it evolved to maintain order in a society; criminal law's goal is to prevent the members of a particular society from "harming" each other in ways that erode the social fabric and physical infrastructure of that society. That is why it does not punish thoughts; aside from anything else, thoughts cannot inflict "harm" that threatens the existence of social order.^{cdlxiii}

As we saw in § III, human activity of various types is increasingly migrating online, much of it into the artifices we experience as virtual "places." As we saw in § IV(A), activity in these spaces can cause "harm" in the real, physical world; as we also saw in that section, criminal law can address this phenomenon with relatively little conceptual difficulty because it involves the infliction of traditional, tangible "harm." As we will see in the next section, these virtual "places" also allow their inhabitants to engage in activity that does not actually inflict tangible "harm" but either simulates the infliction of such "harm" or otherwise seems to implicate the concerns of the criminal law. This brings us to fantasy crime.

2. Fantasy

In analyzing fantasy crime, I will rely exclusively on activity that has occurred or could occur in *Second Life*. I focus on *Second Life* for two reasons: One is that it is a Metaverse, not a MMORPG; as such, it offers an open, unstructured experience – essentially the opportunity to live a more or less skewed version of real-life. As such it offers greater opportunities to engage in novel, unconventional activities. The other reason is that *Second Life* is the most evolved of the extant Metaverse worlds. Therefore, while It is reasonable to assume future Metaverses will be more technologically sophisticated, *Second Life* is a likely to be a reliable indicator of the forces that will draw people to Metaverses and, in some instances, prompt them to engage in what some will regard as problematic activity: fantasy crime.

In the first two sections below, I focus on whether activity in *Second Life* inflicts “harms” analogous to those resulting from the commission of two types of real world crimes: victimless crimes and traditional crimes.^{cdlxiv} In the third section, I analyze whether we should apply criminal law to the infliction of virtual “harms” that are analogous to those inflicted in the real world.

a. Victimless crimes

We will begin our analysis with *Second Life* analogues of victimless crime: Gambling was once common in *Second Life*, but it has either disappeared or gone underground since Linden Lab banned it in 2007.^{cdlxv} Gambling in virtual worlds falls primarily into the category of in-world cybercrime because players’ winnings or losses tend to have an impact, a “harm,” in the real world:^{cdlxvi} If they lose money in a *Second Life* casino, the effects of the loss may be indistinguishable from a loss in a real world casino; as we saw earlier, Residents import real world funds into *Second Life*.^{cdlxvii} If someone gambles in-world with funds imported from their external bank account, the loss, the “harm,” is identical to the loss resulting from real world gambling.^{cdlxviii} Therefore, to the extent in-world gambling inflicts external “harm,” it constitutes in-world cybercrime, not fantasy crime. There is, however, a residual scenario that might constitute fantasy crime: If a Resident were to gamble in *Second Life* (assuming such opportunities still exist)^{cdlxix} using only *Second Life*-derived Linden Dollars,^{cdlxx} the effects of her losses, the “harm,” would presumably occur only in *Second Life*. The question, of course, is whether that “harm” is something of which the criminal law should take cognizance. We take up that issue in the next section.

Drug use is another victimless crime.^{cdlxxi} There is at least one recreational drug available in *Second Life*: Seclimine, a “virtual hypnotic.”^{cdlxxii} When a Resident’s avatar consumes Seclimine, an animation program (and a fair amount of imagination) replicates the effects of consuming a psychoactive drug like LSD.^{cdlxxiii} The company that produces and markets Seclimine describes it as “very addictive.”^{cdlxxiv} Residents sell it to other Residents in exchange for a commission and discounted purchases for their own use.^{cdlxxv} Does the production, sale and use of Seclimine in *Second Life* produce “harms” analogous to the “harms” real drugs inflict in the physical world? Seclimine cannot result in physical addiction because it is not, and cannot be, consumed by a human being; it consists of computer script, not chemicals. And it is difficult to understand how it could produce a psychological addiction because, again, it is -- quite fictively -- consumed by an avatar, not by the person the avatar represents. If there is no addiction, there seems little or no risk that Seclimine users will deplete their funds and otherwise destroy their lives in pursuit of the drug.^{cdlxxvi} And if there is no “harm” to those who use Seclimine, it is difficult to see how those who sell it are “harming” their customers. The only hint of “harm” I can see here is the possibility that the use of this virtual hypnotic might induce the Residents who use it to try real drugs in the physical world.

Prostitution is common in *Second Life*,^{cdlxxvii} which brings us to avatar sex. Residents can customize the avatars they are given initially;^{cdlxxviii} that can include modifying an avatar so it can engage in sexual activity. Base avatars are not anatomically complete, but Residents can buy genitalia for their avatars and can customize the avatar’s secondary sexual characteristics.^{cdlxxix} They can buy “skins” to make their avatars appear to be nude.^{cdlxxx} And they can buy “props” with that “attached software . . . to animate the user’s avatar through the motions of sex. Sometimes, the script is attached to a . . . sphere, called a `pose ball.’”^{cdlxxxi}

While avatar prostitutes are not the only ones to take advantage of this aspect of *Second Life*, they are the only ones who exploit it for financial advantage. The men and women who do this usually work for an escort service or a “virtual bordello.”^{cdlxxxii} Like their real world counterparts, *Second Life* prostitutes charge clients for their services and give the owner of the escort service or bordello a

percentage of their earnings for support she provides, such as accommodations, clothing and customers.^{cdlxxxiii} The currency used in these transactions is Linden Dollars, so prices are quite modest by real world standards.^{cdlxxxiv} Unlike their real world counterparts, *Second Life* prostitutes tend to work part-time (“for the thrills, for the extra cash, or both”).^{cdlxxxv} Does their activity inflict “harm” analogous to the “harm” that has led to the criminalization of prostitution in the real world? There is no risk of disease, death or physical injury to *Second Life*’s sex workers or their customers; as we saw earlier, an avatar cannot die, and since an avatar has no physical existence it cannot be injured or become ill.^{cdlxxxvi} And since virtual prostitutes cannot be physically restrained without their consent, there seems to be no risk of their being enslaved by pimps and madams (as is often the case in the real world).^{cdlxxxvii}

Concerns about morality historically contributed to the criminalization of prostitution,^{cdlxxxviii} but since no sexual activity actually occurs in *Second Life*, that “harm” is also absent. Indeed, *Second Life* prostitution is more accurately described as pornography, than as prostitution. In the United States, non-obscene pornography is protected by the First Amendment and cannot be criminalized.^{cdlxxxix} Therefore, even if we construe *Second Life* prostitution as pornography, it cannot inflict “harm” justifying the imposition of criminal liability.

Adultery and bigamy are considered victimless crimes, even though each involves the infliction of a (concededly soft) “harm” on a particular victim.^{cdxc} Either can occur in *Second Life*. Residents marry in-world and while the ceremonies are not legally binding,^{cdxci} they can become the basis of a stable, committed virtual relationship.^{cdxcii} Since many who marry in *Second Life* are married in the real world, Residents may find themselves engaged what is in effect cross-world bigamy and/or adultery. As long as the *Second Life* relationship remains in the virtual world, though, it cannot constitute either: Bigamy consists of entering into a legally-recognized marriage when one of the persons being married “has a living spouse.”^{cdxciii} Since the law does not recognize *Second Life* unions, they cannot support a charge of bigamy: Laws criminalizing bigamy target the “harm” duplicative marriages inflict on an existing marital relationship; since no valid marriage can occur in *Second Life*, its unions do not constitute bigamy.^{cdxciv} And since the partners in *Second Life* unions do not physically engage in sexual intercourse, their activity cannot support a charge of adultery, either.^{cdxcv}

While *Second Life*’s virtual relationships do not inflict the “harms” traditionally targeted by bigamy and adultery, they can still inflict emotional pain, especially when one of the parties to an ostensibly committed virtual relationship strays with another avatar.^{cdxcvi} Since the other party will experience the pain of the betrayal in the real world, one could argue for creating a new crime, a variation on adultery or bigamy, to encompass this soft “harm.” But that is not advisable; as we saw earlier, law has essentially abandoned the practice of criminalizing the infliction of relationship-based soft “harms.” States still prosecute bigamy, but most have decriminalized adultery; those that have not generally do not enforce their laws, and for good reason.^{cdxcvii} Even if we assume avatar-on-avatar conduct inflicts the same measure of “harm” as equivalent conduct in the external world, statutes criminalizing the online infliction of relationship-based soft “harms” are inconsistent with twenty-first century culture and may be unconstitutional.^{cdxcviii} To paraphrase one author, criminal law is not, and should not become, an arbiter of relationships.^{cdxcix}

This effectively exhausts the category of victimless crimes. Historically, it also included alcohol abuse and “certain sexual activities” (a euphemism for homosexuality), but the analysis above encompasses the “harms” these activities were deemed to inflict.^d Insofar as there is simulated alcohol use and abuse in *Second Life*,^{di} the “harm” analysis for such activity should be identical to the analysis, above, of the use of Seclimine. And since the Supreme Court has held that euphemistic “sexual activity” statutes are unconstitutional, the concerns, legitimate or otherwise, addressed by those statutes are not longer part of the criminal law.^{dii}

b. Traditional crimes

In reviewing *Second Life* analogues of traditional crimes. I begin with crimes that inflict lesser “harms” and progress to those that inflict serious “harms”. Since I cannot analyze every crime, I will focus on two categories: crimes that “harm” property crimes (lesser “harms”); and crimes that “harm” people (serious “harms”).

i. Property “harm”

In § IV(A), I analyzed a hypothetical involving theft in *Second Life*: Avatar X (Jack Black) stole a virtual jacket from Avatar Y (John Doe). I concluded that if Doe bought the jacket with funds that have value in the real world, the theft constitutes an in-game cybercrime; since the virtual property was purchased with “real” money, its loss inflicts a “harm” that resounds in the physical world. I also concluded that if Doe, in his persona as Avatar Y, received the jacket for free, no in-game cybercrime has been committed; I deferred the issue as to whether the theft of virtual property not purchased with “real” money inflicts “harm” of which the criminal law should take cognizance.

I will now address that issue. Before I begin, I need to note its implications: While the hypothetical focused on virtual theft, the analysis of whether the loss of virtual property not purchased with real world funds constitutes a “harm” cognizable by the criminal law will also apply to other property loss crimes. If a *Second Life* Resident extorts virtual property from another Resident, the same dichotomy arises: If the property was purchased with funds having value in the real world, then the extortion constitutes an in-game cybercrime; if it was not, then the analysis we are about to embark upon will determine the nature of the “harm” inflicted. The the same will be true of other property deprivation crimes, such as fraud, arson, vandalism, etc.

If a Resident of *Second Life* deprives another Resident of virtual property that has no independent value in the real world, does that act inflict “harm?” It obviously inflicts “harm” in a literal sense; there has, as a dictionary notes, been “a change for the worse”.^{diii} The real issue for our purposes is not the zero-sum question of whether there has been *a* “harm;” there has clearly been *some* “harm” to the Resident who lost the property. Criminal law does not, though, concern itself with every “harm;” it only targets “harms” the infliction of which can erode social order.^{dvi} The dispositive issue – here and in other traditional crimes – is the degree of “harm” inflicted. We are, after all, analyzing digital analogues of physical events; the “harms” that result from artifice are (so far, anyway) necessarily less momentous than the ones we deal with in the physical world.

Why is that true? Perhaps I should ask, Is that true? I am assuming that the “harms” inflicted via *Second Life* are in effect inferior to the “harms” we encounter in the real world; that assumption implicitly structured our consideration of victimless crimes in the section above. Is it valid? If so, why?

Pure virtual property damage crimes may best illustrate why virtual “harms” are (so far) categorically inferior to their real world counterparts. In these crimes, the “harm” manifests itself exclusively in the virtual environment. In the hypothetical above, Avatar Y lost the possession and use of his virtual jacket and consequently suffered some “harm,” some injury. But while that “harm” is analogous to the “harm” inflicted by real world theft, it is of a lesser magnitude. Theft has been, and for the most part still is, a zero-sum phenomenon.^{dv} If someone steals my jacket in the real world, I suffer what is in varying degrees a zero-sum “harm:” If the jacket is unique and the police cannot recover it, I sustain a total loss; I cannot replace it and thereby return to the status quo ante.^{dvi} If the jacket is fungible, I can replace it, but I will still effectively sustain a zero-sum loss: I buy a new jacket, which costs, say, the same as the old one; I have now lost the entire value of a jacket of that type, even though my ability to

use such a jacket has been restored.^{dvii} In either alternative, I sustain a zero-sum “harm.” This “harm”-loss calculus applies to other property loss crimes, such as fraud and extortion; it also applies to property destruction crimes like arson and property damage crimes like vandalism.^{dviii}

Does it also apply to the virtual analogues of these crimes? It does, and it does not. The inherently zero-sum quality of the “harms” property crimes inflict in the real-world is a function of the nature of real world property. Like all items in the real world, property is tangible; as such, it is a binary construct. I have money or I do not; I have a laptop or I do not; I have an automobile or I do not, and so on. This aspect of real world property also means that it is finite, i.e., subject to the laws of nature.^{dix} Property in the real world exists in limited quantities and is usually the product of significant effort; I can use my money to buy a laptop or an automobile, but I cannot create either. That is why, as noted above, I cannot avoid a zero-sum loss if you steal from me; if you take my laptop, I can buy another if I have the funds to do so, but I will still sustain a zero-sum loss because I “lose” the value of the laptop.

That is not necessarily true in *Second Life* and other virtual environments. Since it is a construct, virtual property can be recreated in most, if not all, instances. If I someone takes the virtual Mona Lisa I have in my *Second Life* flat,^{dx} I can either recreate the painting (if I created it originally or acquired the script needed to create it^{dx1}) or have someone else do so. Neither is possible in the real world: There, whoever has the Mona Lisa has it; it cannot be recreated and cannot exist in two (or three or forty) places at once.

The infinite^{dxii} quality of virtual property impacts on the “harm” inflicted by virtual property crimes: In the hypothetical above, the victim, Avatar Y, lost a virtual jacket and was therefore “harmed” in some degree. The “harm” Avatar Y sustains is necessarily mitigated by the fact he has options that are not available to a correlate victim in the real world. If the jacket is unique, Avatar Y, like his real world counterpart, cannot simply replace it by buying another; but he may be able to reconstruct it himself (particularly if it was his own creation). If he can reconstruct the otherwise irreplaceable jacket, what “harm” has he suffered? Here, he loses the time and effort involved in reconstructing the jacket, but that “harm” is far less than the zero-sum “harm” his real world counterpart unavoidably sustains.^{dxiii}

What if he cannot reconstruct the jacket himself? What if a uniquely gifted *Second Life* designer, who sells her designs but not the scripts needed to replicate them, created it? Avatar Y’s only option here is to pay her to reconstruct the jacket, assuming she is willing to do so. If she is willing to do so, the “harm” he sustains will be in one respect analogous to the “harm” a real world person would sustain in the same situation, i.e., he loses the price of the jacket. Are the “harms” equivalent in this scenario? I submit that they are not: As noted earlier, items in *Second Life* cost much less than in the real world (because they are virtual constructs and can therefore be produced inexpensively).^{dxiv} Even in this alternative, Avatar Y suffers less “harm” than his real world counterpart; he will have to pay to have the jacket recreated, but the price will be a tenth, perhaps even a hundredth, of what a real world victim would pay to replace a comparable item (assuming that was possible). Inevitably, then, Avatar Y sustains “harm,” but on a significantly reduced level from the “harm” theft, fraud or arson inflict in the real world.

There is another, more amorphous factor that also mitigates the “harm” which results from property loss or damage in virtual environments like *Second Life*. In the above analysis of the “harm” resulting from Avatar Y’s hypothetical loss of his virtual jacket, we implicitly assumed an operational equivalence between Avatar Y’s losing his virtual jacket and my losing my real world jacket. In other words, we assumed equivalence in the utilitarian value of the two jackets. But they are not actually equal: If our hypothetical jackets are the kind I wear to keep warm in the fall and winter, then mine has a value for me that the virtual jacket cannot have for Avatar Y. Avatars do not need clothing to protect themselves from the elements. Instead, and like us, they wear clothes to be fashionable and avoid nudity. Both jackets therefore have value as clothing (fashion and covering), but Avatar Y’s jacket lacks the

utility value my jacket also possesses. That means Avatar Y sustains a lesser degree of “harm” (no lost utility value) when his jacket is stolen; unlike me, Avatar Y does not really *need* his jacket. It is essentially an affectation.

While the differential utility value of the real and virtual jackets may seem a trivial matter, the import of that differential becomes more significant as we move from clothing to other types of property, such as computers or cars or buildings or appliances. If someone steals my car in the real world, I have sustained a utilitarian loss as well as a financial loss; without my car, I no longer have my own means of transport. In *Second Life*, avatars can fly and/or transport from place to place, so cars are, again, essentially an affectation – a toy. The same is true to a great extent for other types of personal property: Residents can buy appliances, furniture (couches, beds, lamps, tables, etc.) and computers for their avatars; they can also buy and/or build them homes (apartments, condos, houses). None of those items is essential. Avatars do not feel fatigue or gravity and they do not sleep, so they really do not need furniture; providing furniture is, again, essentially an affectation on the part of the human Resident. The same is true for other *Second Life* property except, perhaps, for property a Resident uses to earn income in the virtual world. That real or personal property would have a utilitarian value; while the value might not be equivalent to that of analogous property in the real world, it would differentiate this type of virtual property from virtual property as pure affectation.

Generally, then, property crimes like theft, fraud, arson and vandalism inflict “harm” in *Second Life* that is analogous to, but less serious than, the “harm” such crimes inflict when they are committed entirely in the real world. That means we *could* extrapolate the principles of criminal liability to encompass the conduct that inflicts these virtual “harms.” The real issue is whether we *should* do so. We will return to this issue in § IV(B)(3), *infra*. Before we can analyze the propriety of importing criminal liability into virtual worlds, we need to consider the infliction of personal “harm” online.

ii. Personal “harm”

I will use three crimes – rape, murder and pedophilia – to analyze the extent to which activity in *Second Life* inflicts “harm” analogous to the “harm” people inflict on each other in the physical world. I chose these crimes for two reasons: (i) Each has occurred in *Second Life*, so we know they are not mere possibilities; and (ii) they exemplify the serious “harms” individuals inflict on each other.^{dxv}

A. Virtual rape

Rape is far from new in virtual worlds. In 1993, Julian Dibbell reported a virtual rape that occurred in Lambda MOO, the MUD described earlier.^{dxvi} It happened on a Monday night in a Lambda MOO living room so “packed with chitchatters” it was “synonymous . . . with a party.”^{dxvii} A player using the avatar of Mr. Bungle – a “fat, oleaginous” clown – entered the room and used a subprogram to force avatars to perform sadistic or humiliating sexual acts on each other.^{dxviii} The “virtual rape” outraged the victims and those who saw or heard about the attacks.^{dxix} There was, as Dibbell notes, no physical rape: “[T]o the extent that Mr. Bungle’s assault happened in real life at all, it happened as a sort of Punch-and-Judy show, in which the puppets and the scenery were made of nothing more substantial than digital code and . . . creative writing.”^{dx} But while the attacks were evanescent, their effects were not; the victims were traumatized in varying degrees.^{dxxi} The Lambda MOO community debated what should be done with Mr. Bungle.^{dxxii} Some wanted him barred from the virtual world, but others felt that was too harsh; after listening to the discussions, a “wizard” – one of the programmers who operated the world -- terminated Mr. Bungle’s existence in Lambda MOO.^{dxxiii}

The Lambda MOO virtual rape anticipated issues that are beginning to arise in evolved virtual worlds like *Second Life*. In the Lambda MOO case, the community chose to resolve the matter internally instead of going to law enforcement.^{dxix} In 2007, Belgian police announced they were going to “patrol in *Second Life*” after a Belgian citizen had reportedly been raped there.^{dxv} That story gave rise to online speculation as to whether rape was possible in *Second Life*.^{dxvi} As noted above, avatars can engage in sexual activity, and in a post responding to this speculation, one person described being raped in *Second Life*.^{dxvii} She, though, was not traumatized by the event, noting that while it “was non-consensual” it “was between the equivalent of dolls.”^{dxviii}

Her reaction may not be typical. As a self-described *Second Life* “newbie,” she may not have had the emotional investment in her avatar more experienced Residents often develop. The Belgian police’s reaction to a reported virtual rape suggests some Residents do find such an experience traumatic.^{dxix} For the purposes of analysis, we will assume virtual rape has the capacity to inflict emotional trauma equivalent to that experienced by the Lambda MOO victims. We will assume, in other words, that it “harms” the victim. The question is whether that “harm” is sufficiently analogous to the “harm” a real world rape victim suffers to warrant the imposition of criminal liability for virtual rape.^{dx}

One factor differentiating virtual and real rape is physical injury; although virtual rape can inflict emotional trauma, it cannot cause physical “harm.”^{dxxi} Avatars in *Second Life* and other virtual worlds are vastly evolved iterations of Lambda MOO’s text-based digital constructs, but they still lack flesh that can be injured.^{dxxi} That, alone, is not dispositive of whether virtual rape could be prosecuted under real world criminal law. Injury is not a required element of rape;^{dxiii} the gravamen of the crime is non-consensual sexual intercourse.^{dxiv} So if a *Second Life* avatar had sex with another avatar without the latter’s consent, it would presumably constitute rape under existing criminal statutes.^{dxv}

For the purpose of analysis, I will assume virtual rape constitutes rape under existing criminal statutes. That is, I assume an encounter like the one the *Second Life* newbie described – an avatar purposefully having sex with another without her consent – satisfies the definition of rape insofar as its *mens rea* and *actus reus* are concerned. But does such an encounter inflict “harm” commensurate with that inflicted by real world rape? While physical injury is not the sole gravamen of rape, those who study the offense believe it is not irrelevant, either; the consensus seems to be that the “harm” in rape encompasses “physical and emotional injury.”^{dxvi} According to one author, if crimes “against the person” were ordered from least to most severe, emotional injury might be first, producing the least severe harm; followed by physical injury; then rape, causing even more injury than a general physical assault; then murder, obviously causing the most severe harm.^{dxvii}

Under that ordering of “harms,”^{dxviii} virtual rape would fall into the first, “least severe harm” category. It cannot inflict physical injury, but can inflict emotional “harm.”^{dxix} It might, therefore, be appropriate to approach virtual rape as a variation of harassment or stalking. As we saw in § II(B)(2), harassment and stalking statutes target affective “harm;” they also require that the perpetrator have engaged in a course of conduct that is inferentially and objectively likely to cause emotional injury.

Harassment and stalking statutes represent a compromise between criminal law’s historic insistence on tangible “harm” and the emergent realities of the twenty-first century; law has not, and cannot, criminalize the mere infliction of emotional “harm.” Doing so would in effect implement “thought crime in reverse;” instead of being prosecuted for my own thoughts, I could be prosecuted for yours, i.e., for your perhaps distorted perception of my words or actions.

We cannot take that path for many reasons: Like the criminalization of thoughts, it would invite abuse and would not be an effective deterrent.^{dxl} An even more important objection to this approach is that it is fundamentally inconsistent with the purposes of the criminal law; as I noted earlier, criminal law

is meant to control the infliction of “harms” the net effect of which is to erode social order. While we suffer varying degrees of “harm” from affective injuries, they do not rise to the level of “harms” that can erode a society’s ability to maintain social order, at least not in the real world. Harassment and stalking statutes use the requirements of repeated conduct and objectively definable affective “harm” to strike a balance between our evolving ability to inflict soft “harm” and the criminal law’s need to focus on tangible “harms.”

Could we adapt either offense so it encompasses virtual rape? We would presumably have to discard the “course of conduct” requirement, since a modified version of harassment or stalking targeting virtual rape would need to encompass a single, isolated attack (as in the real world). To ensure that the modified offense did not encompass purely idiosyncratic, subjective “harm,” we would need a definition of offense conduct that sufficiently encompassed objective “harm” to limit its applicability to truly egregious situations – those that clearly inflicted the “harm” with which we are concerned. One option would be to incorporate the conduct that constitutes virtual rape into the definition of criminal harassment; the expanded offense would target virtual rape as a means of inflicting affective “harm” (rather than as a sex crime).^{dxli}

While this may seem an eminently satisfactory approach, there is a complicating factor. We have assumed that virtual rape, like its real world counterpart, involves non-consensual sexual intercourse. And that is true of *some*, but not all, virtual rape. In the unreal worlds of cyberspace, rape can be non-consensual or consensual. Consensual rape, an oxymoron in the real world, is an accepted practice in virtual worlds.^{dxlii} The *Second Life Herald*, for example, described how Woodhen, a Resident, “allowed herself to be savagely raped by an animal, his claws rending her clothes and skin as she wept and pleaded. The ordeal lasted four hours.”^{dxliii} Note that she “*allowed*” herself to be raped. In the story about the incident, Woodhen said she and her attacker typed “descriptions of the rape at each other. . . . It was my first time going that dark, going that hard, so trying to keep up the level of detail with someone . . . is a huge blast. It was a lot like writing a horror novel.”^{dxliv}

The existence of consensual virtual rape complicates the analysis in several respects. For one thing, it means that we could not simply use the conduct constituting virtual rape as the definition of offense conduct in a free-standing virtual rape provision or, as suggested above, in a criminal harassment statute. In the real world, rape and consent are antonyms, and consent is a defense to a charge of rape.^{dxlv} In real world rape cases, consent is actually a failure of proof defense; it means no crime occurred.^{dxlvi} Should we apply the same rule in the virtual world, or is there some reason to treat consensual virtual rape as inflicting a “harm” with which the criminal law should concern itself?

That brings me to the central issue in the phenomenon I am calling fantasy crime: how the law should deal with conduct in virtual worlds that replicates serious criminal activity in the real world. Consensual rape is one, flawed example of such activity; it is not a particularly good example of this phenomenon because we recognize consent as nullifying the “harm” in what appears to be rape in the real world. Consent nullifies the “harm” because lack of consent is a defining characteristic of the crime of rape; it differentiates perfectly legitimate conduct from criminal conduct. Sexual intercourse between adults is not a crime; forced sexual intercourse is. In this regard, rape is unique; we do not recognize consent as a defense to other personal injury crimes, like murder or pedophilia, because neither encompasses otherwise legitimate activity.

We will examine virtual murder and pedophilia in the next section. First, we need to decide if consensual virtual rape inflicts a “harm” justifying the application of any level of criminal liability. Since this is consensual activity involving adults – a type of “dark” role playing – it does not “harm” the ostensible victim: As we saw above, the Resident whose avatar plays the victim in the encounter suffers no physical injury; and since the activity is consensual, he or she should not suffer the emotional trauma

we analyzed earlier. If the person subsequently experiences some emotional trauma as a result of the episode, this is not a matter cognizable by the criminal law; the putative victim's consent nullifies the "harm" here.

According to some, that does not end the "harm" analysis of virtual rape. They argue that virtual rape inflicts what is in essence a systemic "harm," but one that is very different from the systemic "harms" we examined in § II(B)(3). Those who take this view claim that "playing" rape online desensitizes people to the "harm" of rape in the real world and can "create people who are inured to the idea."^{dxlvii} Some say it "creates a mindset where that behavior is acceptable and can then bleed into RL [real life]."^{dxlviii} Others disagree; they say acting out virtual rape can prevent real rape "by giving the person a 'safe' outlet", i.e., a way to sublimate their desires.^{dxlix} There does not seem to be any reliable research that supports either view.^{dl}

On its face, the argument that virtual rape inflicts a systemic "harm" of the type described above seems to be nothing more than an iteration of the generally discredited claim that movies, television or publications "incited" people to commit violent acts.^{dlj} The claim is usually raised in civil cases brought by the relatives of those who fell victim to such acts; courts have consistently dismissed these claims on First Amendment grounds, since speech is protected even though it has "a tendency to lead to violence."^{dljj}

The outcome in these cases may or may not be dispositive of the dispute noted above, i.e., whether virtual rape in *Second Life* inflicts a generalized social "harm" that requires the use of criminal liability to discourage it. I am assuming the First Amendment applies in *Second Life* because it is, insofar as a virtual world can be "located" in a physical place, in the United States; Linden Lab's offices are in California and its Terms of Service specify California as the exclusive forum for resolving disputes.^{dljjj} If we assume Linden Lab and, by extension, *Second Life* are "in" the United States, the First Amendment should apply in *Second Life*; as others have noted, this conclusion should hold even if we construe *Second Life* as a private place analogous to a real world company town.^{dljjv} If we decide the First Amendment applies in *Second Life*, we will then have to decide what it encompasses, i.e., what constitutes speech and what does not.

Those who believe virtual rape should be criminalized because it inflicts a generalized systemic "harm" of the type noted above could distinguish it from the incitement claims brought in the cases cited above on the grounds that virtual rape is criminal conduct, not speech, and is therefore outside the protections of the First Amendment.^{dljjv} There is at least some merit to this argument.

The incitement cases described above involved written or visual material that was created by an artist and viewed by someone who committed violent crimes; in holding that the First Amendment barred the claims brought in these cases, courts have found that the "benefits society reaps from the free flow and exchange of ideas outweigh the costs society endures by receiving reprehensible or dangerous ideas."^{dljjvi} They have also that speech does not incite violence merely because it portrays violence.^{dljjvii} Whether this rationale encompasses virtual rape in *Second Life* and other virtual worlds depends on how we resolve two issues. One is the issue noted above: whether virtual rape is (i) speech protected by the First Amendment or (ii) criminal conduct not protected by the First Amendment.

Opponents of criminalizing virtual rape could argue that it is speech – that it is in effect a performance, not criminal conduct. It is true, as we saw earlier, that consensual virtual rape is an exercise in role playing which involves two or more Resident avatars. It seems to me that to sustain this argument, its proponents would also have to demonstrate that the "performance" had some expressive utility, i.e., conveyed some ideas or artistic content.^{dljjviii} Perhaps they could do this by extrapolating from the premise noted above, i.e., that virtual rape helps the virtual rapist sublimate urges he or she might otherwise act

upon in the real world; they might argue that consensual virtual rape performances demonstrate the “harm” of rape and thereby promote our understanding of why rape is wrong.^{dlx} Those who take the opposite position on consensual virtual rape could counter by arguing that even if virtual rape constitutes speech, it loses its First Amendment protection because it is likely to incite violent conduct in the real world.^{dlx}

They could also argue that the First Amendment cannot protect consensual virtual rape because it is criminal conduct, rather than speech.^{dlxi} That brings us to the other issue: We are assuming the First Amendment applies “in” *Second Life*, but we have not considered the scope of the protection it provides. Should we deem everything in *Second Life* to be speech protected by the First Amendment? That would be consistent with the view that activity in *Second Life* is fantasy, is a form of play-acting. The other alternative is to parse activity in *Second Life* into “conduct” and “speech” elements. This would have the virtue of replicating the dichotomy we maintain in the real world between conduct and speech. But if we take this approach, how do we decide what is “conduct” and what is “speech?”

Some say everything that occurs in *Second Life* is speech because the processes of creating and interacting in virtual worlds consist exclusively of communication.^{dlxii} They correctly point out that virtual worlds have no pre-existing, tangible existence; everything in a world like *Second Life* is fabricated by humans, who construct and sustain the world by communicating with each other (text or voice) and with systems they use to create digital artifices that pass as houses, cars, clothes, etc.^{dlxiii} In a sense, those who take this view are arguing that everything we do in *Second Life* – e.g., dancing, shopping, taking drugs – is a presentation, a collaborative, improvisational movie. Others argue that while virtual reality is inherently representational, we can still extrapolate the speech/conduct dichotomy we apply in the real world to virtual worlds like *Second Life*.^{dlxiv}

If we adopt the first approach, then the First Amendment would protect everything that occurred in *Second Life* unless an exception deprived an activity of the protection.^{dlxv} Virtual rape would presumptively be protected unless it was shown, on a case by case basis, that a particular rape constituted criminal conduct instead of speech. In that scenario, there seems to be no reason to outlaw consensual virtual rape; the purpose of criminal law is to establish clear definitional boundaries between conduct that is accepted and conduct that is not. We could, no doubt, develop a consensual virtual rape prohibition that encompassed the requirement that the proscribed activity constitute conduct, instead of speech, but such an exercise seems pointless because it would not accomplish its purpose. Those who advocate outlawing consensual virtual rape do so because they believe it can incite violence in the real world; they oppose it as a class of activity. A statute that accommodates the default First Amendment protection accorded to consensual virtual rape in this scenario would target a narrow subset of consensual virtual rape and therefore fail as a conclusive denunciation of the behavior and as an effective deterrent.

What about the other approach? Can we distinguish speech and conduct in worlds like *Second Life*? I think we can. I think the “everything in virtual worlds is speech” theory is too literal and therefore overbroad. It seems to me that the distinction between speech and conduct implicitly recognizes two things; One is that speech is more likely to convey expressive content that can benefit society; the other is that conduct is more likely to inflict “harm” that can erode a society’s ability to maintain the order it needs to survive and prosper. The distinction is far from perfect; words can inflict “harm,”^{dlxvi} and conduct can convey expressive content. But the “harms” words inflict are inferior to those that result from conduct; and while some conduct is expressive, most is not. As far as criminal law is concerned, the categories represent a rough benchmark of potential for “harm.” If we look at them that way, we can implement the distinction in worlds like *Second Life*. To do so, we simply operate on the basis of analogy. As someone noted, there is a “distinction between hitting Phil and calling him a jerk”,^{dlxvii} and it applies whether the act or the words occur in real life or in *Second Life*. Virtual rape may be consummated by using voice or text communications instead of flesh, but it still constitutes conduct; the

participants experience it as conduct and the observers, if any, perceive it as conduct. This was implicit in our analysis of virtual theft; if Avatar Y steals Avatar X's jacket, we have the representational analogue of the real world conduct constituting theft.

If we can differentiate speech and conduct in *Second Life*, the First Amendment will not *presumptively* protect consensual virtual rape. It may, as I noted earlier, protect particular instances of consensual virtual rape as expressive performance, but that possibility would not effectively nullify an effort to criminalize virtual rape, as in the approach analyzed above. The First Amendment would simply become a potential defense to be raised by those charged with consensual virtual rape.

It seems, then, that we *could* criminalize consensual virtual rape. The more difficult, and still unresolved, question is *should* we do so. As I noted earlier, virtual rape is a flawed example of conduct that apparently replicates real world criminal activity in a virtual environment because consent is a defense to a charge of rape. That means there is no "harm" to the putative victim in consensual rape, which is the most common type of rape in *Second Life*. There is "harm" to the victim in nonconsensual virtual rape but, as we have seen, it could be addressed (i) in world by community standards that sanction players for sexual harassment or (ii) by incorporating virtual rape into existing harassment laws. There therefore seems to be no need to criminalize virtual rape as rape, i.e., as conduct that inflicts "harm" on an individual victim.

The only "harm" that could support criminalizing virtual rape – especially consensual virtual rape – is the systemic "harm" we analyzed above. Instead of assessing whether that "harm" justifies the use of criminal liability in this context, I am going to address that issue in the next section, because the notion of generalized "harm" can also be used to argue for applying criminal liability to virtual murder and/or pedophilia. Since consent is not a defense to either crime, they should serve as a more useful analytical metric for the "harm" analysis.

B. Virtual murder and pedophilia

In real life, consent is usually not involved in the commission of these crimes, and is not a defense when it is; in *Second Life*, consent is inevitably involved in the commission of both. As noted above, *Second Life* avatars are virtually indestructible, which means they can be killed only if they consent.^{dlxviii} This can occur in either of two ways: One avatar can kill another without the target avatar's immediate consent in combat enabled areas like Jessie; avatars assume the risk of (consent to) being killed by entering one of these areas.^{dlxix} Killing avatars in a combat enabled area is not murder; it is the product of military-style combat.^{dlxx}

For an avatar to be murdered in a non-combat enabled area of *Second Life*, he must consent to being killed. I find cannot find any reported cases of mundane avatar murder in *Second Life*; by mundane murder, I mean the kind of killings that routinely occur in real life, those prompted by passion (e.g., spouse on spouse murder), profit (e.g., robberies) or revenge (e.g., an ex-employee goes postal). So far, murder in *Second Life* is far from mundane. I have found reports of avatar mannequins (constructs not belonging to a Resident) being murdered. Perhaps the most notorious instance involved the fabricated avatar of a "hermaphrodite hooker" that was placed on a bed in a carefully constructed crime scene, complete with blood splatter on the walls, as an amusement at a party; the scene included pose balls that let guests "strangle the dead hooker" and/or "have sex with it."^{dlxxi} They apparently did both.^{dlxxii}

It is not uncommon for "real" avatars to allow themselves to be killed, as in Dolcett play. Dolcett play derives from the work of a cartoonist who specializes in graphic depictions of "the hanging, decapitation, butchering, live skewing, roasting, and eating of women."^{dlxxiii} And that is what happens in

Dolcett play; an avatar, apparently always a female avatar (which may or may not belong to a woman),^{dlxxiv} submits to being killed in any of the above ways, after which her body is butchered, cooked and eaten.^{dlxxv} But murder is not exclusively a function of Dolcett play; I have, for example, found graphic descriptions of the torture-murder of two female avatars.^{dlxxvi}

Murder in *Second Life* is, of course, not murder; avatars come back to life.^{dlxxvii} Since virtual murder, whether it is part of Dolcett play or an independent activity, does not result in a loss of life and is necessarily consensual, it seems that here, as with consensual virtual rape, there is no “harm” to the victim. But while consent is a defense to a charge of rape, it is not a defense to a charge of murder.^{dlxxviii} As we saw above, consent is a defense to rape because it nullifies the “harm” rape targets, i.e., nonconsensual sexual intercourse; if the putative victim consented to sexual intercourse, there was no “harm” and therefore no crime. That rationale does not apply to other crimes because the “harm” targeted by most crimes, including murder, is not nullified by the victim’s consent. Criminal prosecutions are brought by the state, not by aggrieved parties; their purpose is, as noted earlier, to deter and thereby control conduct that inflicts “harms” which erode social order. Since crime is in effect an injury to the state, “private persons cannot license crime” and “the criminal cannot be excused by . . . consent.”^{dlxxix}

But there is no real “harm” when an avatar is murdered. In the real world, victims cannot consent to have their lives taken, but in the virtual world murder is a charade. The victim returns to life, having endured no pain or physical suffering; and since the victim consented to his or her (or its) demise, the event presumably did not inflict emotional trauma. Here, again, we have no individual “harm” that could justify the use of criminal liability to discourage a virtual analogue of a real world crime.

We might, though, have an analog of the systemic “harm” we considered in our analysis of virtual rape.^{dlxxx} The systemic “harm” here is the danger that those who play at murder and/or observe murders in *Second Life* will “carry out their fantasies [in real life]”.^{dlxxxi} In analyzing this “harm,” I will assume we can differentiate conduct and speech in *Second Life* so that while the First Amendment can be raised as a defense in a particular virtual murder case, it does not bar the criminalization of virtual murder, as such.^{dlxxxii} That brings us to the issue I reserved above: whether systemic “harm” such as this can, and should, justify the use of criminal liability.

The issue, as we saw above, is essentially incitement: whether we should use criminal liability to discourage the production of material that incites people to inflict “harms” proscribed by the criminal law. In analyzing virtual rape, I noted that courts usually dismiss incitement claims on First Amendment grounds.^{dlxxxiii} Since I am assuming virtual murder is for the most part non-expressive conduct that is outside the scope of the First Amendment,^{dlxxxiv} my focus here will be on the essentially empirical issue of whether the possibility of the systemic “harm” described above could justify using criminal liability to proscribe virtual murder. Conceptually, the use of criminal liability would be based on the premise that committing virtual murder is a generalized, indirect way of aiding and abetting virtual murder or soliciting virtual murder.^{dlxxxv}

I do not believe the possibility of such systemic “harm” can justify the use of criminal liability for this purpose, at least not at this point in our experience with virtual life. While studies have shown that playing violent video games – which are to some extent analogous to *Second Life* – increases aggressive behavior and thinking, none of the studies has shown a causal link between playing violent games and committing violent acts.^{dlxxxvi} If there is no causal link between virtual game violence and real violence, the systemic “harm” postulated above becomes a mere possibility and, as such, cannot warrant the criminalization of murder, rape or other violence in *Second Life*. That proposition is valid if we accept that the results of research into the effects of game violence can be extrapolated to *Second Life*, which, as I noted earlier, is not a game.^{dlxxxvii}

While I tend to assume the proposition is valid, I can see an argument to the effect that violence in *Second Life* is different from violence in the games these studies focused on. The two are alike in that activity in both occurs in a digitally created, essentially cartoonish world, which might reinforce participants' understanding that what goes on there is divorced from what goes on in real life; that could mitigate the effects of aggression that develops in either context. They are, however, not alike when it comes to the way their respective participants experience violence: As we saw in § III(A), violence in video games (and MMORPGs) is highly scripted; it is an embedded, routine aspect of playing the game. Violence in *Second Life* is different; like violence in the real world, it is more personal and is often integrally associated with sexuality.^{dlxxxviii} In a sense, violence in *Second Life* is more adult than violence in video games, and that *might* distinguish it from the violence analyzed in the studies cited above. There *might* be more of a causal nexus between violence in *Second Life* and violence in the real world than there is for video games. But absent empirical research verifying that hypothesis, there is no basis for outlawing murder or other virtual violence in *Second Life* or other, similar worlds.

That brings me to our final crime: virtual pedophilia. Virtual pedophilia is a version of ageplay; in ageplay, "a physical adult takes on the role of a child."^{dlxxxix} Ageplay can be perfectly innocuous; some use it as part of inner child therapy or merely to "express a childlike side".^{dx} It can also be used for what is in effect virtual pedophilia: a Resident whose avatar is an adult has virtual sex with a Resident whose avatar is a child.^{dxci} In 2007, the *Second Life Herald* published an interview with "Emily Semaphore," 35 year old Resident who "works as a librarian" in the real world; in *Second Life*, she "roleplays as a 13 year old girl" and manages "JailBait," a virtual club "dedicated to age-play."^{dxcii} She said that half of ageplay is sexually oriented.^{dxciiii} Emily engages in sexual ageplay with her husband, who plays her "father."^{dxciiv} Incest seems to be a common ageplay scenario.^{dxcv} There are also escort services that provide child avatars for ageplay.^{dxcevi}

Ageplay came to public notice in 2007, when a Sky News reporter visited Wonderland, an area of *Second Life* in which ageplay was common.^{dxcvii} According to the reporter, it was an area where "paedophiles cruise and kids are solicited."^{dxcviii}

`At first site it looks like a real-life playground.

`Here child-like avatars are not just playing on swings - they're offering sex. These are virtual children of all ages - even toddlers.

`After talking to one child I was offered a range of sordid and sick sexual acts.

`My avatar had entered a virtual paedophile ring.'^{dxciix}

The report triggered outrage, much of which may have been due to a misunderstanding. As we saw earlier, there are no minors in *Second Life*; the "children" in Wonderland were adults. The Sky News reporter, and many who saw his reports, apparently assumed the avatars were "real" children and the adults with whom they had virtual sex were "real" pedophiles.^{dc}

So the activity was virtual, not real; and some believe it does not involve pedophiles or pedophilia. According to Emily Semaphore, most Residents involved in ageplay do not want to "play sexually with [real life] children."^{dc} She thinks people misunderstand ageplay:

Dateline NBC parades sexual predators out to convince people that everyone is out to prey on their children. So, people assume that anyone who ageplays in a sexual way, must be a pedophile. . . Our culture fetishizes the sexuality of youth, but then seeks to punish us for responding to it. In [*Second Life*] one is able to . . . take on the appearance

of a young person . . . and that is frightening to people who only see the childlike appearance and are convinced that something illegal . . . is happening.^{dcii}

Was something illegal happening in Wonderland? Since both parties to the sexual encounters were adults, the encounters did not constitute child molestation under existing law.^{dciii} And since the Residents whose adult avatars participated in the encounters knew they were having virtual sex with an adult, not a child, they did not constitute attempted child molestation, either.^{dciv}

That leaves us with a version of the systemic “harms” examined earlier in this section and in the section above: the possibility that sex with a child avatar will encourage either those involved to have sex with children in the real world or those who observe such activity to do so. These issues were widely debated after Sky News discovered Wonderland, and the dichotomy we examined in connection with virtual rape often came up in these discussions: Some thought virtual pedophilia could encourage sex with real children; others saw it as an “outlet” that could prevent them from doing so.^{dcv} One expert said ageplay is not likely to promote the molestation of real children, at least not when the Resident playing the adult does not persistently “play the role of someone sexually aggressing a child.”^{dcvi}

The Supreme Court addressed a version of this issue in 2002, when it decided *Ashcroft v. Free Speech Coalition*.^{dcvii} In *Ashcroft*, the Department of Justice asked the Court to uphold a statute criminalizing the manufacture, distribution and possession of virtual child pornography; one of its arguments was that “virtual child pornography whets the appetites of pedophiles and encourages them to engage in illegal conduct.”^{dcviii} The Court held that the statute violated the First Amendment.^{dcix} In so doing, it noted that the Department of Justice had “shown no more than a remote connection” between viewing virtual child pornography and “any resulting child abuse.”^{dcx} The *Ashcroft* Court’s holding presumably applies to sexual ageplay in *Second Life*: Screenshots of sex between adult and child avatars are photographic child pornography, and a video of the acts is video child pornography.^{dcxi} Since no real child is involved, both presumably constitute virtual child pornography and, as such, are not illegal in the United States.^{dcxii}

The *Ashcroft* decision has probably not permanently resolved the legality of virtual child pornography and, by extension, of sexual ageplay in *Second Life*. In its opinion, the *Ashcroft* Court said the government cannot criminalize virtual child pornography without demonstrating “a significantly stronger, more direct connection” between it and “resulting child abuse.”^{dcxiii} There may come a time when the government can provide compelling scientific evidence linking virtual child pornography with child molestation. If and when it does, the Court will have to revisit the *Ashcroft* issue; if it finds that the link justifies the criminalization of virtual child pornography, the holding might be extrapolatable to the infliction of other virtual “harms,” such as virtual rape and murder. I suspect this outcome is unlikely; if there were a direct causal link between fictive and real violence, it seems to me it should have already become apparent, given our longstanding and accelerating predilection for graphic portrayals of violence in the media.

There may be another way to avoid the *Ashcroft* holding and criminalize sexual ageplay in *Second Life*, if one is so inclined. *Ashcroft* arguably does not apply to ageplay because in it the Court only addressed the passive act of viewing already-created virtual child pornography. *Second Life*, which did not exist when *Ashcroft* was argued or decided, adds a new dimension to virtual child pornography. In *Second Life*, ageplay participants simulate child molestation. That factor might be the “stronger, more direct connection” between virtual child pornography and child molestation the Supreme Court demanded in *Ashcroft*; if it was, it might lead the Court to uphold the criminalization of ageplay.^{dcxiv} If the Court were to do this, this holding might also be extrapolatable to virtual rape and murder.

3. Final thoughts

In the 1956 movie *Forbidden Planet*, Earth astronauts land on the planet Altair.^{dcxv} They find a scientist who is reconstructing technology that was created by the Krell, Altair's original inhabitants.^{dcxvi} He tells them that the Krell all died 200,000 years before "in a single night of inexplicable destruction."^{dcxvii} After an invisible creature with tremendous strength attacks the astronauts and their ship, they investigate the technology he is studying.^{dcxviii} They discover that the Krell created a gigantic machine which gave them the ability to "materialize anything they wanted" by simply thinking of it.^{dcxix} When an astronaut dies while using the Krell machine, the others realize what the Krell did not: it unleashes the user's subconscious.^{dcxx} As the Krell slept that tragic night, their ids acted "out their darkest urges" and destroyed them.^{dcxxi}

The Krell's story is an instructive analogy for some of the issues raised by virtual worlds like *Second Life*. Like the Krell machine, virtual worlds let us act out the desires and fantasies we have historically kept to ourselves; that is, as we have seen, particularly true of our "darkest urges." As long as the consequences of our realizing those fantasies stay in the virtual realm, they should not be the concern of the criminal law, at least as it is currently configured. As we saw earlier, criminal law is concerned with controlling the infliction of "harms" that undermine social order in the physical world. As long as the effects of *Second Life* fantasies – however dark – stay in *Second Life*, the "harms" they inflict cannot threaten order in the real world and therefore should not be the concern of the criminal law.

The problem we are beginning to grapple with is a variation of the problem the Krell overlooked: Our newfound ability to realize the discreditable ideas and impulses we have always harbored but never been able to express may have unintended consequences. The repellant things we do in a virtual world may leak into the real world in varying degrees and with varying effects. We will have to decide what our level of tolerance is for virtual activities we would find disgusting and horrifying if they were to occur in the real world. What if someone recreated the Auschwitz death camp in *Second Life*, complete with Residents whose avatars were its Nazi overlords and tragic inmates? That would be illegal in many European countries, but not in the United States.^{dcxxii} Should it be illegal here? Personally, I think not, even though I find many of the things I have seen in *Second Life* to be inexplicably abhorrent. I would find the virtual Auschwitz to be abhorrent, but I do not see how it can legitimately be the concern of real world criminal law. Nothing that happens there is "real:" No one is killed or tortured or enslaved or otherwise "harmed" in a way that threatens the maintenance of order in the real world.^{dcxxiii}

In this article I have tried to illustrate the usually nebulous "harms" attributable to some of the edgy activities in *Second Life*. So far, the argument for criminalizing an activity in a virtual world like *Second Life* is that it has a direct, corrosive effect on social order in the real world. I tried to identify such "harm" resulting from three of the edgier *Second Life* activities, and failed. I am glad I failed; my goal is to illustrate the complexity of the issues that arise in this context, not to provide a blueprint for virtual criminalization. I fear that the novelty and strangeness of these new worlds will result in an overreaction, an effort to criminalize what many simply do not understand.

This does not mean substantial "harms" cannot and will not leak out of virtual worlds and into the real world. If that happens, the analysis outlined in § IV(A) applies; virtual "harms" that erode social order in the real world constitute cybercrime and can be dealt with as such.

The more interesting, and more challenging, scenario is a reverse-Krell scenario in which "harms" inflicted in virtual worlds *do* become a significant threat to our ability to maintain order in the real world. For now, the concerns of the criminal law lie exclusively in the real world; virtual worlds may serve as vectors for the "harms" criminal law takes cognizance of, but the "harms" must resound in

physical reality, because that is where our lives are grounded. We may some day fly spaceships and find worlds like Altair, but that possibility lies in the far distant future. As we saw earlier, many knowledgeable people predict that the conceptual and emotional aspects of our lives will increasingly migrate online into virtual worlds far more sophisticated than *Second Life*. If that is true, then it seems reasonable to assume we will approach a tipping point at some stage in that process, i.e., a point at which we are sufficiently invested in virtual life that “harms” which resound only in the cyber domain necessitate the application of the criminal law. We will then have to decide if we want to extrapolate our existing criminal law to cyberspace or develop a new (fantasy) criminal law for the virtual worlds.

NOTES

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ⁱStatute the Fifth, 1351-1352, 25 Edw 3 Stat 5 (Eng.).

ⁱⁱAt least in later centuries, it seems to have required either an overt act of levying war against the King or speech that could be construed as treasonous. See, e.g., Benjamin A. Lewis, Note, *An Old Means to a Different End: The War on Terror, American Citizens . . . and the Treason Clause*, 34 Hofstra L. Rev. 1215, 1220-1221 (2006); William T. Mayton, *Seditious Libel and the Lost Guarantee of a Freedom of Expression*, 84 Colum. L. Rev. 91, 101 (1984).

ⁱⁱⁱSee, e.g., Wayne R. LaFare, Substantive Criminal Law § 1.2(b) (2d ed. 2003).

^{iv}William Blackstone, 4 Commentaries *5.

^vSee Susan W. Brenner, *Toward A Criminal Law for Cyberspace: Distributed Security*, 10 B.U. J. Sci. & Tech. L. 1, 8-11 (2004).

^{vi}See Brenner, *Toward A Criminal Law for Cyberspace: Distributed Security*, *supra* at 8-11.

^{vii}See *id.*

^{viii}See *id.* at 9-10.

^{ix}*Id.*

^x*Id.* at 10.

^{xi}See *id.* at 31-45.

^{xii}See *id.* at 35-39.

^{xiii}See *id.*

^{xiv}See *id.* at 41-42.

^{xv}See *id.*

^{xvi}See *id.* at 41.

^{xvii}See *id.* at 42.

^{xviii}See *id.* at 42-43.

^{xix} See *id.* at 42-46. See also note 21, *infra*.

^{xx} See *id.* at 42-46.

^{xxi} See *id.* at 45-46.

^{xxii} See *id.* at 46.

^{xxiii} See, e.g., Wayne R. LaFare, Substantive Criminal Law § 1.2(3) (2d ed. 2003) (“The broad aim of the criminal law is . . . to prevent harm to society”). See also Jerome Hall, Principles of Criminal Law 213 (1960) (“‘harm’ is a central notion of penal theory”). Professor Hall defined “harm” as “the loss of a value”, such as public or individual safety. See Hall, Principles of Criminal Law, *supra* at 217.

^{xxiv} See, e.g., Susan W. Brenner & Leo L. Clarke, *Distributed Security: Preventing Cybercrime*, 23 J. Marshall J. Computer & Info. L. 659, 662 (2005).

^{xxv} See Brenner & Clarke, *Distributed Security: Preventing Cybercrime*, *supra* at 662.

^{xxvi} See *id.*

^{xxvii} See *id.* (“[C]rime control requires that there be some system . . . which ensures rule violators are . . . sanctioned. There must . . . be a credible threat of retaliation for violating criminal rules; absent such a threat, the rules . . . cannot deter crime and maintain internal order”).

^{xxviii} See, e.g., William Blackstone, 4 Commentaries *6).

^{xxix} I am indebted to Professor Joel Feinberg for the concept of soft “harm,” from which I extrapolated the necessary residual category of hard “harm.” See Joel Feinberg, *The “Soft Harm” of Psychic or Moral Offense as a Justification of Criminal Legislation* in Foundations of Criminal Law 127 (Leo Katz, Michael S. Moore & Stephen J. Morse, eds. 1999).

^{xxx} Leo Katz, *Bad Acts and Guilty Minds* 153 (1987).

^{xxxi} See, e.g., William J. Stuntz, *The Pathological Politics of Criminal Law*, 100 Mich. L. Rev. 505, 512-513 (2001). Compare The Code of Hammurabi (L.W. King, trans.), The Avalon Project, <http://www.yale.edu/lawweb/avalon/medieval/hamframe.htm> and The Salic Law, The Avalon Project, <http://www.yale.edu/lawweb/avalon/medieval/salic.htm> and William Blackstone, 4 Commentaries * 148-*296 and Model Penal Code §§ 210-251.4 (Proposed Official Draft 1962).

^{xxxii} See, e.g., Stuntz, *The Pathological Politics of Criminal Law*, *supra* at 513-515; Am. Bar Ass’n, Criminal Justice Section, Task Force on the Federalization of Criminal Law, *The Federalization of Criminal Law* 9-10 n. 11 (1998); Susan L. Pilcher, *Ignorance, Discretion and the Fairness of Notice: Confronting “Apparent Innocence” in the Law*, 33 Am. Crim. L. Rev. 1, 32 (1995).

^{xxxiii} See, e.g., Kyron Huigens, *What Is and Is Not Pathological in Criminal Law*, 101 Mich. L. Rev. 811, 817-819 (2002). See also Robert M.A. Johnson, *Is It A Crime?*, 21-FALL Crim. Just. 1 (2006) (noting the vertical and horizontal expansion of criminal law in the United States in the twentieth century).

^{xxxiv} See Ric Simmons, *Private Criminal Justice*, 42 Wake Forest L. Rev. 911, 972-975 (2007).

^{xxxv} See, e.g., *Payne v. Tennessee*, 501 U.S. 808, 819 (1991).

^{xxxvi} See, e.g., Sara Sun Beale, *The Many Faces of Overcriminalization: From Morals and Mattress Tags to Overfederalization*, 54 Am. U. L. Rev. 747 (2005). See also William J. Stuntz, *Self-Defeating Crimes*, 86 Va. L. Rev. 1871, 1893-1894 (2000) (“legislatures have an incentive to criminalize based on too-narrow majorities”).

^{xxxvii} William Blackstone, 4 Commentaries *6 (“In all cases the crime includes an injury”).

^{xxxviii} For the distinction between crimes against morality and crimes against persons or property, see, e.g., Lawrence M. Friedman, *Crime and Punishment in American History* 126 (1993).

^{xxxix} See, e.g., Lawrence M. Friedman, *Crime and Punishment in American History*, *supra* at 127-139, 325-357; Rollin M. Perkins & Ronald N. Boyce, *Criminal Law* 453-476 (3d ed. 1982); Model Penal Code §§ 250-251.4 (Proposed Official Draft 1962). See also N.Y. Penal Law §§ 220.16 – 220.46 (McKinney 2008) (controlled substance crimes). Some include incest in this category, but I think it can, at least arguably, be assigned to the category of hard “harms” involving injury to persons. See, e.g., Rollin M. Perkins & Ronald N. Boyce, *Criminal Law*, *supra*, at 459-462.

^{xl} Friedman, *Crime and Punishment in American History*, *supra* at 126. See also *id.* at 126 (“Many crimes against morality are . . . ‘victimless crimes,’ that is, crimes about which nobody complains, or in which . . . nobody has been hurt. The crime, rather, damages us generally, rips the social fabric, or offends ‘public decency and order’”).

^{xli} Since the American colonists, especially the Puritans, saw no distinction between “crime” and “sin,” their criminal laws outlawed the activities listed in the previous paragraph as well as more innocuous activities such as “lying and idleness.” See Lawrence M. Friedman, *Crime and Punishment in American History*, *supra* at 34. By the eighteenth century, American criminal codes had “shifted focus, . . . from victimless crimes [against morality] to more conventional crimes – in particular, crimes against property.” *Id.* at 54. See also Lawrence M. Friedman, *A History of American Law* 258 (1973) (“‘If crime was a sin . . . before the Revolution, it gradually shifted to concern for protection of private property’”).

^{xlii} See *id.* at 135-139.

^{xliii} See *id.* at 325. See also *id.* at 325-356.

^{xliv} See *id.* at 352-357.

^{xl} See *id.* at 352-356. See, e.g., *Lawrence v. Texas*, 539 U.S. 558 (2003) (statute criminalizing sodomy between adults unconstitutional); *State v. West*, 9 Md. App. 270, 263 A.2d 602 (Md. App. 1979) (statute criminalizing blasphemy violated First Amendment). Many states have de-criminalized adultery, fornication and other victimless sex crimes. See, e.g., Melanie C. Falco, Comment, *The Road Not Taken: Using the Eighth Amendment to Strike Down Criminal Punishment for Engaging in Consensual Sexual Acts*, 82 N.C. L. Rev. 723, 737-738, 744-747 (2004). See also “Sylvia A. Law, *Commercial Sex: Beyond Decriminalization*, 73 S. Cal. L. Rev. 523, 526 n.8 (2000) (drafters of Model Penal Code did not criminalize adultery or fornication because “such laws are widely disobeyed and rarely enforced”) (citing Model Penal Code §213 note on adultery and fornication (1980)).

The morality soft “harm” statutes that survive and are enforced with some diligence tend to be those that inflict at least an attenuated hard “harm” on an individual victim, such as bigamy and, arguably, prostitution. *See, e.g.,* State v. Guadagni, 178 P.3d 473, 477-478 (Ariz. App. 2008) (bigamy is not a victimless crime); Shay-Ann M. Heiser Singh, *The Predator Accountability Act: Empowering Women in Prostitution to Pursue Their Own Justice*, 56 DePaul L. Rev. 1035, 1041-1042, 1060 (2007) (prostitution is not a victimless crime).

^{xlvi} *See* Friedman, Crime and Punishment in American History, *supra* at 354-357.

^{xlvii} Compare Andrew Carlon, *Entrapment, Punishment and the Sadistic State*, Note, 93 Va. L. Rev. 1081, 1119 (2007) (drug use as victimless crime) with Jerry Cederblom & Cassia Spohn, *A Defense of Retributivism Against Criticisms of the Harm-for-Harm Principle*, 43 No. 6 Crim. Law Bulletin 4 (2007) (“potential victims include children (if drugs are used while caring for children), motorists (if drugs are used while driving), and neighbors (if drug use results in neighborhood deterioration)”) and Paul H. Robinson & Robert Kurzban, *Concordance and Conflict in Intuitions of Justice*, 91 Minn. L. Rev. 1829, 1890 n. 230 (2007) (“even if cocaine use is a victimless crime that only harms the user, those distributing controlled substances are creating the victims”).

^{xlvi} *See, e.g.,* Peter Brown, *Regulation of Cybercasinos and Internet Gambling*, 610 PLI/Pat 607, 614-615 (2000).

^{xlvi} Only Hawaii and Utah ban all types of gambling and neither operates a lottery nor licenses casinos. *See id.*

ⁱ *See, e.g.,* J. Nick Badgerow, *Apocalypse at Law: The Four Horsemen of the Modern Era – Drugs, Alcohol, Gambling and Depression*, 77-FEB J. Kan. B.A. 19, 22 (2008) (quoting Tom Raabe, “Compulsive & Problem Gambling,” <http://www.family.org/socialissues/A000000434.cfm>).

ⁱⁱ Christopher Grohman, *Reconsidering Regulation: A Historical View of the Legality of Internet Poker and Discussion of the Internet Gambling Ban of 2006*, 1 J. Legal Tech. Risk Mgmt. 34, (2006).

ⁱⁱⁱ Susan W. Brenner, *Complicit Publication: When Should the Dissemination of Ideas and Data Be Criminalized*, 13 Alb. L.J. Sci. & Tech. 273, 280-84 (2003). *See also* Rollin M. Perkins & Ronald N. Boyce, *Criminal Law* 488-492 (3d ed. 1982).

ⁱⁱⁱ *See, e.g.,* Susan W. Brenner, *Should Online Defamation Be Criminalized?*, 76 Miss. L.J. 705, 713-714 (2007).

^{iv} *See, e.g.,* Rollin M. Perkins & Ronald N. Boyce, *Criminal Law* *supra* at 477-492 (including libel in offenses against public peace, which also included fighting, riot and forcible entry).

^v *Tucker v. State*, 42 Okla. Crim. 204, 275 P. 382, 382 (Okla. Crim. App. 1929).

^{vi} *See* Brenner, *Should Online Defamation Be Criminalized?*, *supra* at 715-716.

^{vii} Model Penal Code § 250.7 cmt. at 44 (Tentative Draft No. 13, 1961).

^{viii} *Id.*

^{lix}*Id.*

^{lx}*Id.*

^{lxi}*Id.* They also cited First Amendment concerns. *See id.* at 45.

^{lxii}*See id.* at 45-46. Their rationale for not criminalizing libel is to some extent identical to their rationale for not criminalizing fornication or adultery. *See supra* note xlv.

^{lxiii}*See, e.g.,* Edward L. Carter, *Outlaw Speech on the Internet: Examining the Link Between Unique Characteristics of Online Media and Criminal Libel Prosecutions*, 21 Santa Clara Computer & High Tech. L.J. 289, 289, 291 (2005).

^{lxiv}*See, e.g.,* Darnell v. State, 72 Tex. Crim. 271, 161 S.W. 971, 971 (Texas Court of Criminal Appeals 1913).

^{lxv}*See id.* *See also* Andrea J. Robinson, Note, *A Remedial Approach to Harassment*, 70 Va. L. Rev. 507, 524 (1984).

^{lxvi}*See* Darnell v. State, *supra*. *See also* Andrea J. Robinson, Note, *A Remedial Approach to Harassment*, *supra* at 524 (surveying telephone harassment statutes then in effect).

^{lxvii}*See id.*

^{lxviii}*See, e.g.,* Robert A. Guy, Jr., *The Nature and Constitutionality of Stalking Laws*, 46 Vand. L. Rev. 991, 991-991 (1993).

^{lxix}*See* Guy, *The Nature and Constitutionality of Stalking Laws*, *supra* at 992.

^{lxx}*See* Paul E. Mullen & Michele Pathe, *Stalking*, 29 Crime & Just. 273, 275 (2002).

^{lxxi}*See* Kimberly Wingteung Seto, *How Should Legislation Deal with Children as the Victims and Perpetrators of Cyberstalking?*, 9 Cardozo Women's L.J. 67, 70 (2002).

^{lxxii}*See* Guy, *The Nature and Constitutionality of Stalking Laws*, *supra* at 992.

^{lxxiii}*Id.* at 1000-1001 (notes omitted) (describing original California anti-stalking statute).

^{lxxiv}Nick Zimmerman, Comment, *Attempted Stalking: An Attempt-to-Almost-Attempt-to-Act*, 20 N. Ill. U. L. Rev. 219, 234 (2000) ("stalking seeks to prevent a certain harm-murder, rape, etc."). *See also* Elizabeth A. Patton, Note, *Stalking Laws: In Pursuit of a Remedy*, 25 Rutgers L.J. 465, 508-509 (1994).

^{lxxv}Guy, Jr., *The Nature and Constitutionality of Stalking Laws*, *supra* at 1010-1011.

^{lxxvi}*See id.* at 1004-1006.

^{lxxvii}*See id.*

^{lxxviii}*See id.*

^{lxxix}See *id.*

^{lxxxi}Naomi Harlin Goodno, *Cyberstalking, A New Crime: Evaluating the Effectiveness of Current State and Federal Laws*, 72 Mo. L. Rev. 125, 134-135 (2007) (notes omitted). For threats as a soft “harm,” offense *see supra* note lxxv.

^{lxxxii}Vernon’s Ann. Mo. Stat. § 565.225. The Missouri statute does not define “emotional distress,” but other statutes do. The Michigan stalking statute, for example, defines it as “significant mental suffering or distress that may, but does not necessarily, require medical or other professional treatment or counseling.” Mich. Comp. Laws Ann. § 750.411h(1)(b). The Michigan statute is very similar to the Missouri statute. It criminalizes stalking, which it defines as “a willful course of conduct involving repeated or continuing harassment of another individual that would cause a reasonable person to feel terrorized, frightened, . . . , harassed, or molested and that actually causes the victim to feel terrorized, frightened, . . . harassed, or molested.” Mich. Comp. Laws Ann. § 750.411h(1)(d) *See also* Mich. Comp. Laws Ann. § 750.411h(2) (stalking is a crime). It then defines “harassment” as “conduct directed toward a victim that includes, but is not limited to, repeated or continuing unconsented contact that would cause a reasonable individual to suffer emotional distress and that actually causes the victim to suffer emotional distress.” Mich. Comp. Laws Ann. § 750.411h(1)(c)

^{lxxxiii}*See, e.g.,* Colo. Rev. Stat. § 18-9-111(b)(III); D.C. St. § 22-404(b); Fl. Stat. Ann. § 784.048; Idaho Code § 18-7906(1)(a); La. Stat. Ann. § 14:40.2(A); Mont. Code § 45-5-220(1); 21 Okla. Stat. Ann. § 1173; 18 Pa. Cons. Stat. Ann. § 2709.1(a); Tenn. Code Ann. § 39-17-315; Utah Code Ann. § 76-5-106.5(2); W. Va. Code § 61-2-9a; Wis. Stat. Ann. § 940.32; Wy. Stat. Ann. § 6-2-506(a).

^{lxxxiv}*See* Snowden v. State, 677 A.2d 33, 38 (Del. 1996). *See also* People v. Furey, 2 Misc.3d 1011(A), 784 N.Y.S.2d 922, 2004 WL 869586 *2 (N.Y.City Crim.Ct. 2004).

^{lxxxv}Fla. Stat. Ann. § 784.048(1)(d). Florida has amended its stalking statute to include cyberstalking in its offense provisions. *See* Fla. Stat. Ann. § 784.048(2)-(7). *See also* R.I. Gen. Laws § 11-52-4.2(a).

^{lxxxvi}*See supra* notes lxxxii & lxxxiii. *See also* Ark. Code Ann. § 5-71-229(a)(1); Colo. Rev. Stat. § 18-9-111; Ga. Code Ann. § 16-5-90; Haw. Rev. Stat. §§ 711-1106.4 & 711-11-6.5 Idaho Code §§ 18-7905 & 18-7906; Wash. Rev. Code Ann. § 9A.46.110.

^{lxxxvii}11 Del. Code § 1311(a)(1). *See also* Mass. Gen. Laws Ann. 265 § 43A(a); N.M. Stat. Ann. § 30-3A-2(A).

^{lxxxviii}For a characterization of this affective “harm,” *see* Lambèr Royakkers, *The Dutch Approach to Stalking Laws*, 3 Cal. Crim. L. Rev. 2, *20 (2000).

^{lxxxix}For the premise that affective “harm” is too idiosyncratic to provide a reliable predicate for the imposition of criminal liability, *see, e.g.,* Janice Nadler & Mary R. Rose, *Victim Impact Testimony and the Psychology of Punishment*, 88 Cornell L. Rev. 419, 441-442 (2003).

^{xc}*See, e.g.,* 11 Del. Code Ann. Tit. 11, § 1311(a); Idaho Code Ann. § 18-7906. *See also supra* note lxxxii. The inclusion of an objective standard also prevents the affective “harm” statutes from being held void for vagueness. *See, e.g.,* People v. Cross, 114 P.3d 1, 7 (Colo. Ct. App. 2004) *rev'd*, 127 P.3d 71 (Colo.

2006); *State v. Partowkia*, 96 Wash. App. 1027 (Wash. App. 1999); see also *State v. Bryan*, 910 P.2d 212, 220-21 (Kan. 1996).

^{xcii}Louis Michael Seidman, *Points of Intersection: Discontinuities at the Junction Of Criminal Law and the Regulatory State*, 7 J. Contemp. Legal Issues 97, 142 (1996).

^{xciii}M. Dine Barber, *Fair Warning: The Deterioration of Scienter under Environmental Criminal Statutes*, 26 Loy. L.A. L. Rev. 105, 110 (1992). “See also Francis B. Sayre, *Public Welfare Offenses*, 33 Colum. L. Rev. 55, 68 (1933)).

^{xciii}See, e.g., Einer Elhauge, *Preference-Eliciting Statutory Default Rules*, 109 Colum. L. Rev. 2162, 2201 (2002).

^{xciv}See *United States v. Balint*, 258 U.S. 250, 251-252 (1922) (regulatory offenses focus on “achievement of some social betterment”). See, e.g., Charles S. Start, *International Cooperation in the Pursuit of Cartels*, 6 Geo. Mason. L. Rev. 533 (1998); Christopher R. Leslie, Comment, *Achieving Efficiency through Collusion: A Market Failure Defense to Horizontal Price-Fixing*, 91 Cal. L. Rev. 243, 273 (1993). See also *Northern Pac. Ry. Co. v. U.S.* 356 U.S. 1, 5 (1958); *People v. Coria*, 21 Cal.4th 868, 876, 985 P.2d 970, 975, 89 Cal.Rptr.2d 650 (Cal. 1999). For the individual “harm” encompassed by traditional prosecutions, see *supra* § II(A).

^{xcv}See American Bar Association Standards for Criminal Justice 3-2.1, Commentary. See also *supra* § II(A). The individuals being protected can be individual human beings or artificial entities, such as corporations.

^{xcvi}See, e.g., U.S. Dept. of Justice: United States Attorneys’ Manual § 7-1.100 (1997), http://www.usdoj.gov/usao/eousa/foia_reading_room/usam/title7/1mant.htm.

^{xcvii}See *Morissette v. United States*, 342 U.S. 246, 255-256 (1952).

^{xcviii}See *id.* See also *supra* §§ II(A) & II(B)(1)-(2). See, e.g., See Arthur Leavens, *Beyond Blame – Mens Rea and Regulatory Crime*, 46 U. Louisville L. Rev. 1, 16 (2007). Actual “harm” is not required in prosecutions for the inchoate offenses of attempt, solicitation and conspiracy, but the gravamen of these offenses is preventing the infliction of such “harm.” See, e.g., Wayne R. LaFave, *Substantive Criminal Law* §§ 11.1, 11.2 & 12.1 (2d ed. 2003).

^{xcix}See note xcvi, *supra*. See also Leavens, *Beyond Blame – Mens Rea and Regulatory Crime*, *supra* at 14. See, e.g., *United States v. Park*, 421 U.S. 658 (1975); *United States v. FMC Corp.*, 572 F.2d 902 (2d Cir. 1978).

^c258 U.S. 250, 251-252 (1922).

^{ci}See, e.g., John S. Baker, Jr., *Prosecuting Dioceses and Bishops*, 44 B.C. L. Rev. 1061, 1062 (2003).

^{cii}See Leavens, *Beyond Blame – Mens Rea and Regulatory Crime*, *supra* at 16.

^{ciii}See *Morissette v. United States*, 342 U.S. 246, 256 (1952).

^{civ} Julian Dibbell, *A Rape in Cyberspace*, Village Voice (December 21, 1993), <http://www.villagevoice.com/specials/0543.50thdibbell.69273.31.html>.

^{cv} See, e.g., Susan W. Brenner, Law in an Era of “Smart” Technology 75-122 (2007).

^{cvi} See, e.g., “Shard,” Wikipedia, <http://en.wikipedia.org/wiki/Shard> (“a world . . . in some massively multiplayer online games . . .”).

^{cvi} This is the motto of the EverQuest MMORPG, which is discussed later in this section. See Everquest Titanium (Released January 2006), Station.com Store, <https://store.station.sony.com/hardgood.jsp?SKU=EQTNM-HG-SW0106-EQTITA>.

^{cvi} See, e.g., Peter Brown, *What You Need to Know About Virtual Worlds, Virtual Property, Advertising and Intellectual Property*, 929 PLI/Pat 601, 605 (March-April 2008). See also “MUD,” Wikipedia, <http://en.wikipedia.org/wiki/MUD>.

^{cix} Kevin Marone, My Entire Waking Life, *The Games Journal* (May, 2001), <http://www.thegamesjournal.com/articles/MyEntireWakingLife.shtml>.

^{cx} Chris Crawford, Chris Crawford on Game Design 8 (2003). See *id.* at 5-8. See also “Game,” Wikipedia, http://en.wikipedia.org/wiki/Game#cite_note-craw-3.

^{cx} See *id.*

^{cxii} See “Mud,” Wikipedia, *supra*. See also Andrew D. Schwarz & Robert Bullis, *Rivalrous Consumption and the Boundaries of Copyright Law: Intellectual Property Lessons from Online Games*, 10 Intell. Prop. L. Bull. 13, 14 (2005). For a description of *Dungeons and Dragons*, see “Dungeons and Dragons,” Wikipedia, http://en.wikipedia.org/wiki/Dungeons_%26_Dragons (*Dungeons and Dragons* is “a tabletop fantasy role-playing game . . . first published in 1974).

^{cxiii} See, e.g., Brown, *What You Need to Know About Virtual Worlds, Virtual Property, Advertising and Intellectual Property*, *supra* at 605. See also “Mud,” Wikipedia, *supra*.

^{cxiv} “Mud,” Wikipedia, *supra*.

^{cxv} Brown, *What You Need to Know About Virtual Worlds, Virtual Property, Advertising and Intellectual Property*, *supra* at 605. See also Jason S. Zack, *The Ultimate Company Town: Wading in the Digital Marsh of Second Life*, 10 U. Pa. J. Const. L. 225, 228 (2007).

^{cxvi} Viktor Mayer-Schönberger & John Crowley, *Napster’s Second Life?: The Regulatory Challenges of Virtual Worlds*, 100 Nw. U. L. Rev. 1775, 1783-1784 (2006) (note omitted).

^{cxvii} *Id.*

^{cxviii} Mayer-Schönberger & Crowley, *Napster’s Second Life?*, *supra* at 1784 (notes omitted). See also F. Gregory Lastowka & Dan Hunter, *The Laws of the Virtual Worlds*, 92 Cal. L. Rev. 1, (2004) (MOOs moved virtual worlds from “traditional D&D elements, such as killing for points” and into more social, even real-world settings). See, e.g., “Objected-oriented programming,” Wikipedia,

http://en.wikipedia.org/wiki/Object-oriented_programming. We will return to LambdaMOO in § IV, *infra*.

^{cxix} Mayer-Schönberger & Crowley, *Napster's Second Life?*, *supra* at 1784.

^{cxx} See, e.g., Mayer-Schönberger & Crowley, *Napster's Second Life?*, *supra* at 1784.

^{cxxi} See, e.g., "Mud," Wikipedia, *supra*.

^{cxxii} See "Habitat (video game)," Wikipedia, http://en.wikipedia.org/wiki/Habitat_%28video_game%29. See also, Mayer-Schönberger & Crowley, *Napster's Second Life?*, *supra* at 1784.

^{cxxiii} See "Habitat (video game)," Wikipedia, *supra*.

^{cxxiv} "Avatar (computing)," Wikipedia, http://en.wikipedia.org/wiki/Avatar_%28computing%29. See "Habitat (video game)," Wikipedia, *supra*. See also Zack, *The Ultimate Company Town*, *supra* at 230.

^{cxxv} Mayer-Schönberger & Crowley, *Napster's Second Life?*, *supra* at 1785.

^{cxxvi} See "Quantum Link," Wikipedia, http://en.wikipedia.org/wiki/Quantum_Link. Until the mid-1990s, per-minute billing was standard for online commercial games. See, e.g., Mayer-Schönberger & Crowley, *Napster's Second Life?*, *supra* at 1785 n. 45 (quoting Jessica Mulligan, Raph Koster, Online World Timeline, <http://www.raphkoster.com/gaming/mudtimeline.shtml>).

^{cxxvii} See Mayer-Schönberger & Crowley, *Napster's Second Life?*, *supra* at 1786. Origin System's Ultima Online went live in 1997, a year after Archetype Interactive released its Meridian 59. See "Meridian 59," Wikipedia, http://en.wikipedia.org/wiki/Meridian_59; "Ultima Online," Wikipedia, http://en.wikipedia.org/wiki/Ultima_Online

^{cxxviii} Mayer-Schönberger & Crowley, *Napster's Second Life?*, *supra* at 1786 (notes omitted).

^{cxxix} Mayer-Schönberger & Crowley, *Napster's Second Life?*, *supra* at 1786 (notes omitted).

^{cxx} See, e.g., "Massively multi-player online role-playing game," Wikipedia, <http://en.wikipedia.org/wiki/MMORPG>.

^{cxxxi} Zack, *The Ultimate Company Town*, *supra* at 230. See also *Second generation MMORPGs*, "History of massively multi-player online games," Wikipedia, http://en.wikipedia.org/wiki/History_of_MMORPGs.

^{xxxii} "Massively multi-player online role-playing game," Wikipedia, <http://en.wikipedia.org/wiki/MMORPG>.

^{xxxiii} *Id.*

^{xxxiv} See *id.*

^{xxxv} See MMORPG Gamelist, MMORPG, <http://www.mmorpg.com/gamelist.cfm>.

^{cxxxvi}“Massively multi-player online role-playing game,” Wikipedia, *supra*. See also *supra* note cxii & accompanying text.

^{cxxxvii}See “World of Warcraft,” Wikipedia, http://en.wikipedia.org/wiki/World_of_Warcraft. In January, 2008, Blizzard Entertainment, which owns *WoW*, announced it had 10,000,000 subscribers. See *World of Warcraft Reaches New Milestone: 10 Million Subscribers*, Blizzard Entertainment (January 22, 2008), <http://www.blizzard.com/us/press/080122.html>. In 2008, *Lineage*, the still-popular Korean-based MMORPG, had 1-3,000,000 subscribers, most of them in Korea. See “Lineage (video game),” Wikipedia, [http://en.wikipedia.org/wiki/Lineage_\(computer_game\)](http://en.wikipedia.org/wiki/Lineage_(computer_game)).

^{cxxxviii}See “World of Warcraft,” Wikipedia, *supra*.

^{cxxxix}See *id.* Prices vary, both for the software and for playing time, depending on the region one is in, e.g., North America, Europe, Australia, etc. See *id.*

^{cxl}See *id.* Azeroth has “two main continents, the Eastern Kingdoms and Kalimdor. Located to the northwest of Kalimdor are the Azuremyst and Bloodmyst Isles, and Teldrassil.” *Id.* Players who buy an “expansion pack” can also play on a new planet, Draenor. See *id.*

^{cxli}See *id.* There are three kinds of Non-Player Characters, or NPCs: “Friendly NPCs cannot attack friendly characters and vice versa. Hostile NPCs are either of the opposing faction or are mobs . . . and will freely attack any [Player Character] with whom they are hostile. Neutral NPCs will only attack if provoked.” See *id.*

^{cxlii}*Id.*

^{cxliii}See *id.*

^{cxliv}See *id.*

^{cxlv}See *id.* The Draenei and Blood Elf races are only available in the expansion pack. See *id.*

^{cxlvi}See *id.* Not all classes are available for each race. See *id.*

^{cxlvii}*Id.*

^{cxlviii}See *id.*

^{cxlix}See *id.*

^{cl}See *id.*

^{cli}See *id.* See also *Quests F.A.Q.*, *World of Warcraft*, <http://www.worldofwarcraft.com/info/faq/quests.html> (quests assigned by “questgivers,” non-player characters who assign quests and describe their objectives to players).

^{clii}See, e.g., *Make Lots of Gold in WoW While Leveling with Ease!!!*, PR-Inside (May 21, 2008), <http://www.pr-inside.com/make-lots-of-gold-in-wow-r600551.htm>.

^{cliii} See *id.* Among other things, *WoW* players can buy mounts, “new skills, updated armor and weapons, gryphon flights,” pets and trinkets. See *id.* See also Julian Dibbell, *The Life of the Chinese Gold Farmer*, *New York Times* (June 17, 2007), <http://www.nytimes.com/2007/06/17/magazine/17lootfarmers-t.html> (“Every World of Warcraft player needs” gold to “pay for the virtual gear to fight the monsters to earn the points to reach the next level”).

^{cliv} See *id.* See also World of Warcraft Money Making Guide, Got Warcraft?, <http://www.gotwarcraft.com/guides/items/money.php>. See also Julian Dibbell, *The Life of the Chinese Gold Farmer* (players can “make weapons, potions and similarly useful items to sell to other players or even gather the herbs and hides and other resources that are the crafters’ raw materials”).

^{clv} See Make Lots of Gold in *WoW* While Leveling with Ease!!!, *supra* (e.g., “killing tons (of Furbolgs”).

^{clvi} Julian Dibbell, *The Life of the Chinese Gold Farmer*, *supra*.

^{clvii} See World of Warcraft Money Making Guide, *supra*.

^{clviii} Julian Dibbell, *The Life of the Chinese Gold Farmer*, *supra*.

^{clix} See *id.* Gold farming is definitely lucrative for those who own the sweatshops where employees grind away to earn gold that is then sold to *WoW* players. See *id.* In 2007 it was estimated that gold farming operations employed 100,000 workers, mostly in China, and were responsible for producing “the bulk of all the goods in what has become a \$1.8 billion worldwide trade” in *WoW* gold and other virtual currencies and virtual goods. See *id.*

^{clx} See Julian Dibbell, *The Life of the Chinese Gold Farmer*, *supra*. See also *supra* note clix.

^{clxi} See, e.g., Julian Dibbell, *The Life of the Chinese Gold Farmer*, *supra* (noting the interaction between the virtual and real economies).

^{clxii} See, e.g., About PvP, *World of Warcraft*, <http://www.worldofwarcraft.com/pvp/>.

^{clxiii} Horde v. Alliance F.A.Q., *World of Warcraft*, <http://www.worldofwarcraft.com/info/faq/hordevalliance.html>.

^{clxiv} See, e.g., Newbie Guide to Fighting and Dying, *WoWWiki*, http://www.wowwiki.com/Newbie_Guide/Fighting_and_Dying.

^{clxv} See Death, *World of Warcraft*, <http://www.worldofwarcraft.com/info/basics/death.html>; “Durability,” *WoWWiki*, <http://www.wowwiki.com/Durability> (10% decrease on death).

^{clxvi} See Death, *World of Warcraft*, *supra*. In other MMORPGs, players lose their property and their experience/status when they die and are resurrected. See Newbie Guide to Fighting and Dying, *WoWWiki*, *supra*.

^{clxvii} See Death, *World of Warcraft*, *supra*.

^{clxviii} See *World of Warcraft*, Terms of Use, <http://www.worldofwarcraft.com/legal/termsofuse.html>. Many of the provisions deal with account creation and use of the game services and the exclusion of warranties and the limitation of liabilities.

^{clxix} See *id.* Section 5 also includes rules “related to usernames and guild designations.” See *id.*

^{clxx} See *id.* Section 5(B)(9) outlaws scam, i.e., participating “in any action that, in the sole and absolute opinion of Blizzard, results . . . in an authorized user . . . being ‘scammed’ or defrauded out of gold, weapons, armor, or any other items that user has earned through authorized game play in the Program”. *Id.* For a review of the similar rules enforced by other MMORPGs, see Andrew Jankowich, *EULAW: The Complex Web of Corporate Rule-Making in Virtual Worlds*, 8 Tul. J. Tech. & Intell. Prop. 1, 43-46 (2006).

^{clxxi} See *World of Warcraft* Terms of Use at Section 5(B)(11).

^{clxxii} *Id.* at Section 5(B)(1).

^{clxxiii} See Harassment Policy, *World of Warcraft*, <http://us.blizzard.com/support/article.xml?articleId=20455>.

^{clxxiv} See *id.*

^{clxxv} See *id.*

^{clxxvi} See *id.*

^{clxxvii} See *id.*

^{clxxviii} See *id.*

^{clxxix} See *id.*

^{clxxx} See Game Master Interaction Policy, *World of Warcraft*, <http://us.blizzard.com/support/article.xml?articleId=21503>. See also Game Master, WoWWiki, http://www.wowwiki.com/Game_Master (Game Masters “solve problems, disputes and sometimes punish people disobeying the Terms of Use policy”). For a review of the very similar disciplinary penalties and procedures enforced by other MMORPGs, see Andrew Jankowich, *EULAW: The Complex Web of Corporate Rule-Making in Virtual Worlds*, *supra* at 43-46.

^{clxxxi} See Account Penalties, *World of Warcraft*, <http://us.blizzard.com/support/article.xml?articleId=20221>. In April of 2006, Blizzard “bann[ed] more than 5,400” *WoW* accounts in an effort to deter violations. See Martin Davies, *Gamers Don’t Want Any More Grief*, *The Guardian* (June 15, 2006), <http://www.guardian.co.uk/technology/2006/jun/15/games.guardianweeklytechnologysection2>.

^{clxxxii} See Account Penalties, *World of Warcraft*, *supra*.

Other MMORPGS also use suspension or exclusion from the game as a sanction for outlawed behavior but one – Roma Victor – has gone a step further. In March, 2006, it crucified a player for violating the game’s rules against “ganking, or gang-killing new players as they first appear.” MMORPG Griefer Crucified In-Game as Punishment, MMORPG Blog (March 23, 2006), <http://mmorpg.qj.net/MMORPG-Griefer-Crucified-In-Game-As-Punishment/pg/49/aid/12179>. The player’s avatar was hung from a cross for seven days in the in-world village of Corstopitum. See *id.* The crucifixion was really just a way of

suspending the violator: As a Roma Victor spokesman explained, “since our . . . world is historically authentic, we feel that applying this punishment to . . . virtual wrongdoers is not only appropriate, but also adds to the gaming experience by resonating with classical history.” *Id.* (quoting Kerry Fraser-Robinson, CEO of the company that owns Roma Victor).

^{clxxxiii} *See id.* *See also* How to Stay in the Game (Part 2), Blizzard Support, <http://us.blizzard.com/support/article.xml?articleId=21507> (“Further violations will begin to increase the severity of the penalties . . . whether the new violations are similar to previous ones or completely different”).

^{clxxxiv} *See, e.g.,* Eliah Hecht, Harsher Penalties for AV AFKers, WoW Insider (January 11, 2008), <http://www.wowinsider.com/2008/01/11/harsher-penalties-for-av-afkers/>. *See also* Schnibblet, Is a Final Warning Truly Final?, *World of Warcraft* Customer Service Forum (May 26, 2008), <http://forums.worldofwarcraft.com/thread.html?topicId=1602233730&sid=1>; Iceeman, *Suspension??*, Unofficial *World of Warcraft* Forums (June 29, 2007), <http://www.worldofwar.net/forums/archive/index.php/t-399456.html>.

^{clxxxv} For a review of the very similar rules enforced by other MMORPGs, *see* Andrew Jankowich, *EULAW: The Complex Web of Corporate Rule-Making in Virtual Worlds*, *supra* at 43-46.

^{clxxxvi} *See World of Warcraft*, Terms of Use, *supra* at section 5(C).

^{clxxxvii} *See id.*

^{clxxxviii} *See supra* note clxxxiv.

^{clxxxix} *See World of Warcraft*, Terms of Use, *supra* at section 5(C). The End User License Agreement is not concerned with player activity within the game. *See* End User License Agreement, World of Warcraft, <http://www.worldofwarcraft.com/legal/eula.html>.

^{cxc} *See World of Warcraft*, Terms of Use, *supra* at section 5(C). *See, e.g.,* If you reported Papasito, speak up, WOW Realm Forums – Executus (May 2, 2008), http://forums.worldofwarcraft.com/thread.html?sessionId=E10279F3ACCDBB77DA5963DD4674F68D.app01_08?topicId=6286468680&sid=1&pageNo=1: (account “temporarily disabled for exploitation of the World of Warcraft economy or for being associated to accounts which have been closed for intended exploitation”).

^{cxci} Buying Gold, World of Warcraft, <http://www.worldofwarcraft.com/info/basics/antigold.html>.

^{cxcii} *World of Warcraft*, Terms of Use, *supra* at section 8.

^{cxci} Andrew Jankowich, *EULAW: The Complex Web of Corporate Rule-Making in Virtual Worlds*, *supra* at 37. 66.67% of the worlds also barred players from selling their accounts. *See id.*

^{cxci} *See id.*

^{cxcv} There is some flexibility in how one defines “MMORPG.” Some would consider virtual worlds like *Second Life* and HiPiHi to be MMORPGs, but I do not, as we will see in the next section.

^{cxvii}Andrea W.M. Louie, *Avatars in Virtual Worlds: How Free Are We to Play Superman?*, 11 No. 5 J. Internet L. 3, 9 (2007).

^{cxviii}See, e.g., Newbie guide, WoW Wiki, http://www.wowwiki.com/Newbie_guide. Even a character's "rest" is structured. See *id.*

^{cxix}See "Role-playing game," Wikipedia, http://en.wikipedia.org/wiki/Role-playing_game (in role-playing games players "assume the roles of fictional characters and collaboratively create or follow stories. Participants determine the actions of their characters . . . [which] succeed or fail according to a formal system of rules").

^{cx}See § III, *supra*.

^{cc}FAQ #2, *Second Life*, <http://secondlife.com/whatis/faq.php#02>.

^{cci}Daniel Terdiman, *Name that Metaverse*, CNET News (October 6, 2005), http://news.cnet.com/Name-that-metaverse/2100-1043_3-5890497.html.

^{ccii}Wagner James Au, *The Making of Second Life* xviii (2008).

^{cciii}*Id.*

^{cciv}"Metaverse," Wikipedia, <http://en.wikipedia.org/wiki/Metaverse> (quoting Neal Stephenson, *Snow Crash* 38 (1992)).

^{ccv}See Wagner James Au, *The Making of Second Life*, *supra* at 16-37.

^{ccvi}See *id.*

^{ccvii}*Id.* at 26.

^{ccviii}See *id.* at 26-27.

^{ccix}See *id.* at 26-29.

^{ccx}*Id.* at 30.

^{ccxi}*Id.* at 34 (emphasis in the original).

^{ccxii}*Id.* at 34-35.

^{ccxiii}See *id.* at 28-37. For the differences between *Second Life* and a MMORPG, see *Second Life* FAQ #2, <http://secondlife.com/whatis/faq.php#02>.

^{ccxiv}See, e.g., *Second Life Opens Public Beta*, GameZone Online (April 28, 2003), http://pc.gamezone.com/news/04_28_03_03_11PM.htm.

^{ccxv}*Second Life Opens Public Beta*, *supra* (quoting Philip Rosedale).

^{ccxvi}Kevin Maney, *The King of Alter Egos Is Surprisingly Humble Guy*, USA Today (February 24, 2007), http://www.usatoday.com/tech/news/2007-02-04-second-life-rosedale_x.htm.

^{ccxvii}*Id.*

^{ccxviii}*See, e.g.*, Tim Guest, *Second Lives: A Journal through Virtual Worlds* 50 (2007).

^{ccxix}*Second Life* FAQ #1, <http://secondlife.com/whatis/faq.php>.

^{ccxx}*Second Life* FAQ #2, <http://secondlife.com/whatis/faq.php#02>.

^{ccxxi}*See Teen Second Life*, <http://teen.secondlife.com/>.

^{ccxxii}*See* Terms of Use ¶ 2.2, *Second Life*, <http://secondlife.com/corporate/tos.php>. If a would-be Resident lives “in a jurisdiction where the age of majority is greater than 18 years old,” they are barred from joining *Second Life* until they reach the required age. *See id.*

Structurally and experientially, *Teen Second Life* is analogous to *Second Life*. *See* What Is *Teen Second Life*?, *Teen Second Life*, <http://teen.secondlife.com/whatis/faq>. There are, though, certain differences between them: The most obvious is age: to register for *Teen Second Life*, one must “provide identity verification,” a requirement meant to prevent adults from acquiring accounts. *See* “*Teen Second Life*,” Wikipedia, http://en.wikipedia.org/wiki/Teen_Second_Life. The requirement limits the demographics of the world, which is primarily composed of teens from the U.S. and Canada. *See id.* *Teen Second Life*’s virtual world is geographically smaller than the world of *Second Life*, its economy tends to be more modest in scope and in cost of virtual goods and, of course, the content is much more PG than in *Second Life*. *See id.*

^{ccxxiii}*See* “*Teen Second Life*,” Wikipedia, *supra*.

^{ccxxiv}For the purposes of analysis, I will assume that *Second Life* is not a MMORPG. I base that assumption on the cumulative effect of these differentiating characteristics discussed in the text, above. While *Second Life* involves role-playing, which is perhaps the defining characteristic of a MMORPG, role-playing in *Second Life* is at once less significant and qualitatively different from the role-playing common to traditional MMORPGS.

In a MMORPG, role-playing is the sole and entire purpose of participating in the online world; *Second Life* Residents play roles, but they do not have to. If a Resident chooses, she can participate in *Second Life* without playing any role other than herself (albeit in virtual form). If a Resident decides to play a new role in *Second Life*, she defines that role herself, writing on a blank slate; as we shall see, she can be pretty much anything she likes (human, animal, female, male, androgynous, adult, child, non-biological entity) and do pretty much anything she likes. In MMORPG, players must select their characters from a menu of pre-determined avatars, each of which has predetermined characteristics; a MMORPG player has some ability to customize his avatar, but only within limits.

And unlike *Second Life* Residents, MMORPG players are playing a game – *the* game. The game they play was created by the owner of the virtual world: It has predetermined roles, rules and an agenda. Players work to achieve certain structured objectives. I do not see *Second Life* as a game, but if participating in *Second Life* can legitimately be described as a game, it is not one game: Residents create

their own games, myriads of games, many of which are going on simultaneously. In that regard, again, *Second Life* is more analogous to the real-world than it is to a MMORG.

^{ccxxv}Memberships, Land, & Pricing, *Second Life*, <http://secondlife.com/whatis/pricing.php>.

^{ccxxvi}*See id.* See also Membership Plans, *Second Life*, <http://secondlife.com/whatis/plans.php>.

^{ccxxvii}*See id.*

^{ccxxviii}*See, e.g.,* “*Second Life*,” Wikipedia, http://en.wikipedia.org/wiki/Second_Life.

^{ccxxix}*See id.*

^{ccxxx}New Linden CEO Could Be Named within Weeks, Reuters/*Second Life* (April 21, 2008), <http://secondlife.reuters.com/stories/2008/04/21/new-linden-ceo-could-be-named-within-weeks/>. *See also* Astrid Zweynert, Cutting through the Clutter at OPA’s Global Forum, Reuters Blogs: Media File (May 15, 2008), <http://blogs.reuters.com/mediafile/2008/05/15/cutting-through-the-clutter-at-opas-global-forum/> (only 877,000 of the 13 million visit *Second Life* every month). Testifying before Congress in April, 2008, Linden Lab CEO Philip Rosedale said that *Second Life* had “approximately six million unique registered users, roughly 50,000-60,000 of whom are online or ‘in-world’ at any one time, and roughly 900,000 of whom have been in-world during the last 30 days. Our users exchange approximately \$850,000 worth of ‘virtual currency’ per day on our platform” Statement of Philip Rosedale, Founder and Chief Executive Officer – Linden Lab before the House of Representatives Committee on Energy and Commerce – Subcommittee on Telecommunications and The Internet (April 1, 2008), 2008 WL 854314 (F.D.C.H.).

^{ccxxxi}Eric Reuters, SL Posts Strong Economic Growth on Dwindling Enrollments, Reuters/*Second Life* (April 15, 2008), <http://secondlife.reuters.com/stories/2008/04/15/sl-posts-strong-economic-growth-on-dwindling-enrollments/>.

^{ccxxxii}*See id.* (*Second Life*’s economy is “growing at a rate of 15 per cent annually). In 2008, “*Second Life* achieved . . . a larger total economy than real-world nations such as Dominica or Micronesia.” *Id.* *See also supra* note ccxxx.

^{ccxxxiii}*See supra* § III(A).

^{ccxxxiv}*See, e.g.,* “*Second Life*” – Economy and Real Estate, Wikipedia, *supra*: “Residents regularly create new goods and services, and buy and sell them in . . . *Second Life* . . . There are also currency exchanges where Residents can exchange real world currencies for L\$. Though the exchange rate fluctuates, . . . it is reasonably stable at around L\$ 266 to one US dollar.”

^{ccxxxv}*See id.*

^{ccxxxvi}*See* Currency Exchange, *Second Life*, <http://secondlife.com/whatis/currency.php>; SL Currency Exchange, SL Exchange, <http://www.slexchange.com/modules.php?name=Currency>.

^{ccxxxvii}For examples of the items *Second Life* Residents can buy, *see* Marketplace, SL Exchange, <http://www.slexchange.com/modules.php?name=Marketplace> (virtual animals, apparel, art, “avatar accessories,” avatar appearance modifications, building components, gadgets, “home and garden” items,

“recreation and entertainment” items, scripts that improve Residents’ ability to create items or to interact with each other, services of varying types and vehicles). This is an external marketplace for *Second Life* commodities and services; Residents can, and usually do, purchase these items from businesses inside *Second Life*. See, e.g., Tim Guest, *Second Lives: A Journal through Virtual Worlds*, *supra* at 121-135. See also Wagner James Au, *The Making of Second Life* 85-101 (2008). For a description of the often lucrative commerce in *Second Life*, see Rob Hof, *My Virtual Life*, *Business Week* (May 1, 2006), http://www.businessweek.com/magazine/content/06_18/b3982001.htm.

^{ccxxxviii} See *supra* § III(A).

^{ccxxxix} See *supra* § III(A).

^{ccxli} Most avatars are human, but human avatars are often augmented with wings or other unusual appurtenances. See, e.g., “*Second Life*” – Appearance and Identity, Wikipedia, http://en.wikipedia.org/wiki/Second_Life#Appearance_and_identity. See also Day 45: Last Halloween with Wings, Mermaid Diaries (November 8, 2006), http://www.mermaiddiaries.com/2006/11/day-45-last-halloween-with-flexi-wings_08.html (wings “one of the common accessories”). The next most popular category of avatar is the furry. A furry is “an avatar that has both human and animal qualities”, like a “fox that has five fingers and walks on two legs.” Furry, *Second Life* Wiki, <http://secondlife.wikia.com/wiki/Furry>. A smaller percentage of avatars take non-biological form, such as a robot. See, e.g., Bashiri Mandelrot – Post 6 Robot, *Second Life Herald* (July 6, 2007), <http://www.secondlifeherald.com/slh/2007/07/bashiri-mandelb.html>.

^{ccxlii} See *Free Dove for Free Things*, *Second Life Herald* (June 15, 2007), <http://www.secondlifeinsider.com/2007/06/15/free-dove-for-free-things/>. Free Dove only offers clothing and modifications for human avatars.

Second Life Residents store clothing and other items in their personal inventory, which they can access by clicking a button on the screen they use when they are accessing *Second Life*. See, e.g., Inventory, Clothing, and Objects Guide, Mermaid Diaries (November 24, 2006), <http://www.mermaiddiaries.com/2006/11/clothing-objects-and-inventory.html>.

^{ccxliii} See, e.g., *The Various Ways to Get Freebies and Linden in Second Life*, Associated Content (June 5, 2007), http://www.associatedcontent.com/article/265616/the_various_ways_to_get_freebies_and.html.

^{ccxliv} New Residents can also take advantage of another peculiarity of *Second Life*: Money Trees are “found all over *Second Life*. Older *Second Life* residents donate money to newer residents by donating to the money trees. All a new resident has to do is pick the linden dollars . . . off the tree to create a balance in their account.” *Id.* For a demonstration, see *Second Life Money Tree*, <http://www.youtube.com/watch?v=p2hSTW5jvYE>. As the demonstration shows, established Residents cannot take advantage of Money Trees.

^{ccxlv} See, e.g., Tim Guest, *Second Lives: A Journal through Virtual Worlds*, *supra* at 79-96 (virtual Mafia), 121-146 (virtual riches), 171-188 (virtual sex) and 217-320 (virtual art).

^{ccxlv} See, e.g., Tim Guest, *Second Lives: A Journal through Virtual Worlds*, *supra* at 79-96. See also *Mafia Nightclub Opens in Second Life*, *Second Life Herald* (January 22, 2008), <http://www.secondlifeherald.com/slh/2008/01/mafia-nightclub.html> (“Non-profit hopes to promote crime and fun”). There is staged violence among Mafia families, but it does not result in actual injury except, as

noted later in the text, in combat areas. See note 230 & accompanying text, *infra*. See also Wagner James Au, The Making of *Second Life*, *supra* at 116. Au notes that the violence tends to be an “opt-in experience among dedicated role-players”, like members of *Second Life* mob families. See *id.* at 116. See, e.g., *Second Life* Mafia – Meeting the Mob, Janey’s Place in *Second Life* (December 16, 2007), <http://janeyspplace.wordpress.com/category/second-life-mafia-meeting-the-mob/>.

^{ccxlvii} See Combat Regions, *Second Life* Wiki, <http://secondlife.wikia.com/wiki/Combat> (“While *Second Life* allows the creation and usage of scripted weapons, usually a resident doesn’t take any damage by being hit by a bullet or falling from the sky”). See also Weapon, *Second Life* Wiki, <http://secondlife.wikia.com/wiki/Weapons> (“A weapon is a scripted object that . . . pushes . . . another object and/or avatars”).

^{ccxlviii} See, e.g., Combat Regions, *Second Life* Wiki, *supra*. See also New World Notes (August 18-22, 2003), http://secondlife.com/notes/2003_08_18_archive.php.

^{ccxlviii} Outlands, *Second Life* Wiki, <http://secondlife.wikia.com/wiki/Outlands>.

^{ccxlix} See *id.*

^{ccl} See *id.*

^{ccli} Jessie, *Second Life* Wiki, <http://secondlife.wikia.com/wiki/Jessie>.

^{cclii} See, e.g., Combat Regions, *Second Life* Wiki, *supra*.

^{ccliii} See *id.* *Second Life* is divided into two types of areas: safe and unsafe. “A safe rating means you can wander around without fear of attack from other avatars . . . (unless you encounter grievers, residents who harass other users). An unsafe region allows residents to simulate combat”. Jonathan Strickland & David Roos, How *Second Life* Works: The Geography of *Second Life*, How Stuff Works, <http://electronics.howstuffworks.com/second-life1.htm>.

^{ccliv} Combat, Wiki *Second Life*, <http://wiki.secondlife.com/wiki/Combat>. “Damage” to an avatar “heals” gradually over time.” *Id.* A different system applies in “User Created Combat Systems,” areas Residents configure so combat can proceed under different rules. See *id.* These rules may outlaw certain types of weapons, allow Residents who have been killed to “respawn” a few minutes and/or make them more effective at killing or more resistant to dying. See *id.*

^{cclv} See *supra* note ccxlv & accompanying text. See, e.g., Business Opportunities, *Second Life*, <http://secondlife.com/whatis/businesses.php> (Residents are fashion designers, custom avatar designers, pet manufacturers, custom animation creators, machinima set designers, jewelry makers, writers, special effects designers and game developers). See also Rob Hof, *My Virtual Life*, *supra*.

^{cclvi} See *Second Life* FAQ #2, <http://secondlife.com/whatis/faq.php#02>. See also Terms of Service ¶ 3.1, *Second Life*, <http://secondlife.com/corporate/tos.php>.

^{cclvii} IP Rights, *Second Life*, http://secondlife.com/whatis/ip_rights.php. The “mechanics” of *Second Life* facilitate the protection of intellectual property rights, since they let a Resident “who creates an item and transfers it” to another Resident “decide whether to permit or prohibit that participant from copying or transferring the item.” Leandra Lederman, “*Stranger than Fiction*”: *Taxing Virtual Worlds*, 82 N.Y.U. L.

Rev. 1620 1641 (2007). See Permissions, *Second Life* Help, <http://secondlife.com/app/help/building/permissions.php>.

The Terms of Service also state that Linden Lab retains the “right to delete” a Resident’s “Content from [its] servers . . . for any reason or no reason”. Terms of Service ¶ 3.2, *Second Life*, *supra*. For an analysis of the impact this and other provisions of the Terms of Service may, or may not, have on Residents’ rights in their intellectual property, see, e.g., Steven J. Horowitz, *Bragg v. Linden’s Second Life: A Primer in Virtual World Justice*, 34 Ohio N. U. L. Rev. 223, 235-237 (2008).

^{cclviii}See, e.g., Alan Sipress, *Where Real Money Meets Virtual Reality, the Jury Is Still Out*, Washington Post (December 26, 2006), 2006 WLNR 22504925. See also *supra* § III(A). See also Rob Hof, *My Virtual Life*, *supra*.

^{cclix}See Use of CopyBot and Similar Tools a ToS Violation, *Second Life* (November 14, 2006), <http://blog.secondlife.com/2006/11/14/use-of-copybot-and-similar-tools-a-tos-violation/>.

^{cclx}Terms of Service ¶ 4.1, *Second Life*, *supra*.

^{cclxi}See *supra* § III(A) (WoW rules).

^{cclxii}See Terms of Service ¶ 4.1, *Second Life*, *supra*.

^{cclxiii}Community Standards, *Second Life*, <http://secondlife.com/corporate/cs.php>. The Standards apply in all areas of *Second Life*, including “the *Second Life* Forums, and the *Second Life* Website.” See *id.*

^{cclxiv}See *id.* (“the ‘Big Six’”). Intolerance consists of actions that “marginalize, belittle, or defame individuals or groups inhibit the satisfying exchange of ideas and diminish the *Second Life* community “. *Id.* As to harassment, the Standards note that “[g]iven the myriad capabilities of *Second Life*,” it “can take many forms” but includes communicating “or behaving in a manner which is offensively coarse, intimidating or threatening, constitutes unwelcome sexual advances or requests for sexual favors, or is otherwise likely to cause annoyance or alarm”. *Id.*

Assault consists of “creating or using scripted objects which . . . target another Resident in a manner which prevents their enjoyment of *Second Life*.” *Id.* Disclosure consists of sharing “personal information about a fellow Resident”, monitoring conversations, posting conversation logs, or sharing conversation logs without consent” *Id.* “Content, communication, or behavior which involves intense language or expletives, nudity or sexual content, the depiction of sex or violence, or anything else broadly offensive must be contained within private land in areas rated Mature” or it will constitute indecency. *Id.* Finally, disturbing the peace is defined by example: “Disrupting scheduled events, repeated transmission of undesired advertising content, the use of repetitive sounds, following or self-spawning items, or other objects that intentionally slow server performance or inhibit another Resident’s ability to enjoy *Second Life* are examples of Disturbing the Peace.” *Id.*

^{cclxv}*Id.*

^{cclxvi}*Id.*

^{cclxvii}*Id.*

^{cclxviii}There are *Second Life* Liaisons -- Linden Lab employees who “assist” Residents in-world. See Linden Liaisons, Wiki, *Second Life*, http://wiki.secondlife.com/wiki/Category:Linden_Liaisons. They do not assist Residents with “any type of abuse report follow up.” When and How to File an Abuse Report, Wiki, *Second Life*, http://wiki.secondlife.com/wiki/Help:When_and_how_to_file_an_Abuse_Report. But they may assist Residents who are the victims of repeated abuse. See Online Harassment, *Second Life*, <http://secondlife.com/policy/security/harassment.php> (“If a Linden Lab Liaison is available to help you, one will, but there are many Residents and few Liaisons”).

^{cclxix}See Online Harassment, *Second Life*, *supra*. See also When and How to File an Abuse Report, Wiki, *Second Life*, *supra*.

^{cclxx}When and How to File an Abuse Report, Wiki, *Second Life*, *supra*.

^{cclxxi}See Online Harassment, *Second Life*, *supra*.

^{cclxxii}See *id*.

^{cclxxiii}See *id*.

^{cclxxiv}See *id*. See also note cclxvii & accompanying text, *supra*. See also When and How to File an Abuse Report, Wiki, *Second Life*, *supra* (“Customer Service will determine the level of disciplinary action to be taken”).

^{cclxxv}Community: Incident Report, *Second Life*, <http://secondlife.com/support/incidentreport.php>.

^{cclxxvi}There was a dramatic increase in the number of reports being filed in the first three years of *Second Life*’s existence. See Daniel Linden, Abuse Reporting Begins Overhaul, *Second Life* (December 8, 2006) (“Linden Lab received . . . 43 Abuse Reports during my first week of work in 2003. Jumping forward to the end of 2006, the number is closer to 2,000 per day”).

^{cclxxvii}See *id*. (June 1, 2008 & June 10, 2008).

^{cclxxviii}See *id*.

^{cclxxix}See Griefer, *Second Life* Blog, <http://wiki.secondlife.com/wiki/Grieff> (grieff is “a *Second Life* resident who harasses other residents”). See also Tateru Nino, Who Are the Griefer’s?, *Second Life* Insider (November 3, 2006), <http://www.secondlifeinsider.com/2006/11/03/who-are-the-griefer/s>. Griefer’s are common in most, if not all, virtual worlds. See, e.g., “Griefing,” Wikipedia, <http://en.wikipedia.org/wiki/Wikipedia:Griefing>.

^{cclxxx}See, e.g., Gwyneth LLewelyn, From Welfare State to Laissez-Faire Capitalism, Gwynethllewelyn.net (June 17, 2007), <http://gwynethllewelyn.net/2007/06/17/from-welfare-state-to-laissez-faire-capitalism/>: “Griefer’s are . . . rampant, and there is almost nothing that can be done to prevent them. . . . Linden Lab’s Abuse Report system is totally unable to deal with this . . . situation, since it requires effective policing, which they’re not doing.”

See also Eloise Pasteur, Does *Second Life*’s Abuse Report System Need a Serious Overhaul?, Massively (January 15, 2008), <http://www.massively.com/2008/01/15/does-second-lifes-abuse-report-system-need->

[a-serious-overhaul/](#). See also No Justice in *Second Life*? – 1 Week Later, TG Journal (March 1, 2008), <http://tgjournal.net/?p=23>.

^{cclxxxii}Changes in Abuse Report Resolution, *Second Life* Blog (April 18, 2007), <http://blog.secondlife.com/2007/04/18/changes-in-abuse-report-resolution/>. For why it moved to this system, see Daniel Linden, Abuse Reporting Begins Overhaul, *Second Life*, *supra*.

^{cclxxxiii}See Changes in Abuse Report Resolution, *Second Life* Blog, *supra* (“response times . . . have been reduced from days to hours”).

^{cclxxxiiii}Introducing: Estate Level Governance, *Second Life* Blog (April 20, 2007), <http://blog.secondlife.com/2007/04/20/introducing-estate-level-governance/>. Estates consist “of one or more Private Islands or Regions”. “*Second Life*,” Wikipedia, http://en.wikipedia.org/wiki/Second_Life. See Land: Private Regions (Islands), *Second Life*, <http://secondlife.com/land/#>.

^{cclxxxiv}See Introducing: Estate Level Governance, *Second Life* Blog, *supra*. Estate owners can delegate the task of controlling abuse to one or more Estate Managers. See Estate Manager, Wiki, *Second Life*, http://wiki.secondlife.com/wiki/Estate_Manager (Estate Manager “is a land manager for a privately owned island”). See also *id.* (“An essential responsibility of an estate manager is to identify, and remove, griefers that may be attacking the island(s) they manage”).

^{cclxxxv}See Introducing: Estate Level Governance, *Second Life* Blog, *supra*.

^{cclxxxvi}Benjamin Duranske, Linden Lab Takes Big Step Toward Private Legal Systems and Governments in *Second Life*, Virtually Blind (April 25, 2007), <http://virtuallyblind.com/2007/04/25/linden-lab-takes-big-step-toward-private-legal-systems-and-governments-in-second-life/>. Another observer concluded that Linden Lab was “withdrawing . . . from intervening in *Second Life*” because it had grown “beyond the ability of Linden Lab to take care of millions upon millions of non-paying users.” Gwyneth LLewelyn, From Welfare State to Laissez-Faire Capitalism, Gwynethlllewelyn.net, *supra*.

^{cclxxxvii}See Introducing: Estate Level Governance - Responses, *Second Life* Blog, *supra*.

^{cclxxxviii}*Id.* at Response #104 (Chadrick Linden).

^{cclxxxix}*Id.* at Response #22 (Chadrick Linden). See also *id.* at Response # 53 (“No . . . owner would be able to keep you there, the tools . . . will allow you to make your own choices”).

^{ccxc}*Id.* at Response #22 (Chadrick Linden).

^{ccxci}See Woodbury University, <http://www.woodbury.edu/s/131/index.aspx>. Many colleges and universities have established a presence in *Second Life*. See Educational Uses of *Second Life*, *Second Life* in Education, <http://sleducation.wikispaces.com/educationaluses>.

^{ccxcii}Pixeleen Mistral, Woodbury University Island Destroyed, *Second Life* Herald (July 1, 2007), <http://www.secondlifeherald.com/slh/2007/07/woodbury-univer.html> (as noted earlier, Estates are also known as Islands).

^{ccxciii}*Id.*

^{ccxciv} *Id.* (quoting “virtual eviction notice”). For more on the violations that resulted in the “eviction,” see Pixleen Mistral, Interview with Woodbury University’s Edward Clift, *Second Life Herald* (July 3, 2007), <http://www.secondlifeherald.com/slh/2007/07/interview-with-.html>. Something similar seems to have happened to the Satyr sim (Estate) in 2006. See Pixleen Mistral, Crocodile Tears in Baku, *Second Life Herald* (September 25, 2006), http://www.secondlifeherald.com/slh/2006/09/crocodile_tears.html.

^{ccxcv} See *supra* note cclxxxix & accompanying text.

^{ccxcvi} See *supra* notes cix - cxi & accompanying text.

^{ccxcvii} See *id.*

^{ccxcviii} See Wagner James Au, The Making of *Second Life*, *supra* at 85-101 (romance and sex); Tim Guest, Second Lives: A Journal through Virtual Worlds, *supra* at 121-146 (buying property and furniture, virtual word) and 217-320 (art and music); note ccxcix, *supra* (education). See also Sports in *Second Life*, *Second Life Adventures*, <http://sl-adventures.com/photosS.html>; *Second Life Travel Guide*, <http://www.landmarkisland.com/>; Welcome to SL Dogs!, Sldogs.com, <http://www.sldogs.com/>; Shona Crabtree, *Finding Religion in Second Life’s Virtual Universe*, Washington Post (June 16, 2007), <http://www.washingtonpost.com/wp-dyn/content/article/2007/06/15/AR2007061501902.html>.

^{ccxcix} There are other online environments that can in varying degrees be defined as virtual worlds. See Virtual Worlds List by Category, Virtual Worlds Review, <http://www.virtualworldsreview.com/info/categories.shtml>. The analysis in § IV focuses only on *Second Life* for two reasons: One is scope; it would be unmanageable to attempt to describe and analyze all the candidates for virtual world status. The other reason is more substantive: *Second Life* has clearly gone further than any of the others in creating a complex, sophisticated and immersive virtual environment. The three extant worlds discussed in this section have also been reasonably successful in this regard; and it is likely HiPiHi will be at least as successful as *Second Life*. It is, I submit, logical to assume that if an analysis is valid for *Second Life* and its current competitors, it will be equally applicable to the lesser worlds that already exist.

^{ccc} Duncan Riley, *HiPiHi Opens Its Doors to the Public*, TechCrunch (April 21, 2008), <http://www.techcrunch.com/2008/04/21/hipihi-opens-its-doors-to-the-public/>. See also Tangos, *Hipih: China’s Second Life*, China Web2.0 Review (March 10, 2007), <http://www.cwrblog.net/524/hipihi-chinas-second-life.html>.

^{ccci} See “The Sims,” Wikipedia, http://en.wikipedia.org/wiki/The_Sims.

^{cccii} See *supra* notes cx - cxi & accompanying text.

^{ccciiii} See *id.*

^{ccciv} See “The Sims,” Wikipedia, *supra*.

^{ccciv} See “The Sims,” Wikipedia, *supra*.

^{cccvi} See “The Sims,” Wikipedia, *supra*. See also “Massively multiplayer online game,” Wikipedia, <http://en.wikipedia.org/wiki/MMOG>. *The Sims Online* probably qualified as a game under the definitions

given earlier because there was some conflict among players in their pursuit of money, employment and the other necessities of life in the game.

^{cccvii} See The Sims Online, PC Magazine (October 28, 2003), <http://www.pcmag.com/article2/0,1895,1306205,00.asp>.

^{cccviii} See, e.g., Review: The Sims Online, Gamespot (December 18, 2002), <http://www.gamespot.com/pc/rpg/simsonline/review.html>.

^{cccix} See *id.*

^{ccc} See *id.* Homes in *Second Life* are optional, more of an affectation or amusement than a necessity. And *Second Life* avatars have no physical needs.

^{cccx} See *id.* Some locations were “virtual sweatshops, with . . . sims all but chained to an assortment of odd money-making machines.” Tom Chick, The Sims Online Review, Firing Squad (February 6, 2003), http://www.firingsquad.com/games/the_sims_online_review/.

^{cccxi} See, e.g., Tom Chick, The Sims Online Review, Firing Squad, *supra*.

^{cccxi} See *id.*

^{cccxi} See *id.* There were reports of crime in *The Sims Online*. A professor said he found a brothel offering child prostitution, but it closed. See, e.g., Hiawatha Bray, *Justice Has Its Price in Sim World*, The Boston Globe (January 14, 2004), http://www.boston.com/news/globe/living/articles/2004/01/14/justice_has_its_price_in_sim_world/. There was a Sims Mafia, which provided clients with “protection” and, for a time, prostitutes, but it was not a serious undertaking. See *id.* There were no weapons in *The Sims Online* and no way for characters to strike each other. See *id.* In 2005, the Sims Mafia moved to *Second Life*, where it continues to be more of a theatrical performance than a criminal enterprise. See Tim Guest, *Second Lives: A Journal through Virtual Worlds*, *supra* at 79-96.

^{cccxi} Wagner James Au, *The Making of Second Life*, *supra* at 42 (quoting “Bel Muse”).

^{cccxi} See “The Sims,” Wikipedia, *supra*.

^{cccxi} See “EA-Land,” Wikipedia, http://en.wikipedia.org/wiki/EA_Land.

^{cccxi} See *id.*

^{cccxi} For a description of *Teen Second Life*, see *supra* note ccxxi & accompanying text.

^{cccxi} There are also virtual worlds for “children and pre-teenagers”, but since there seems to be no potential for crime to occur in these worlds, we will not include them in our analysis. See, e.g., Club Penguin, <http://www.crunchbase.com/company/ClubPenguin>; Barbie Girls, <http://www.crunchbase.com/company/BarbieGirls>.

^{cccxi} See Habbo – Where Else?, Sulake, <http://www.sulake.com/Habbo/>; What Is There – FAQ for Parents, <http://www.there.com/parentInfo.html>. For *Teen Second Life*’s age requirements, see *supra* note ccxxi &

accompanying text. *There* says it is “for ages 13 and up.” What Is There – FAQ for Parents, *supra*. *Habbo* says 90% of its users are between 13 and 18. See *Habbo – Where Else?*, Sulake, *supra*. Both worlds seem to rely on the disaffection that presumably comes with increased maturation to winnow out older users.

See, e.g., *Habbo Hotel #5*, Urban Dictionary, <http://www.urbandictionary.com/define.php?term=Habbo+Hotel>.

^{cccxxii} See, e.g., “There,” Wikipedia, <http://en.wikipedia.org/wiki/There>.

^{cccxxiii} See *supra* notes cccxxv - cccxxvii & accompanying text.

^{cccxxiv} See What Is There? – FAQ, There, <http://www.there.com/help.html>.

^{cccxxv} See *id*.

^{cccxxvi} What Is There?, There, <http://www.there.com/whatIsThere.html>.

^{cccxxvii} See, e.g., James Fudge, GameShark Talks to There.Com about Its Unique Gaming and Social Destination, GameShark (September 1, 2006), <http://www.gameshark.com/pc/home/262/THERE-Interview.htm>.

^{cccxxviii} See What Is There – FAQ for Parents, *supra*.

^{cccxxix} *Id*.

^{cccxxx} Terms of Service (TOS): Behavior Guidelines, There, http://info.there.com/idx/32/183/article/Terms_of_Service_TOS_Behavior_Guidelines.html.

^{cccxxxi} See What Is There – FAQ for Parents, *supra*.

^{cccxxxii} See *supra* note cclxxv & accompanying text.

^{cccxxxiii} See “There,” Wikipedia, [http://en.wikipedia.org/wiki/There_\(internet_service\)](http://en.wikipedia.org/wiki/There_(internet_service)) (1 million members). See, e.g., An Analysis of MMOG Subscription Growth – Version 23.0, MMOGCHART.Com (April, 2008), <http://www.mmogchart.com/analysis-and-conclusions/> (at “its peak in January 2005 the game had . . . 17,000 subscribers,” but it has been impossible to track its size since There became free to play in October, 2005).

^{cccxxxiv} *Habbo*, <http://www.Habbo.com/>.

^{cccxxxv} See *Habbo Hotel*, Virtual Worlds Review, <http://www.virtualworldsreview.com/Habbohotel/> (*Habbo* site “uses a hotel metaphor as its theme”). See also Get the Facts on *Habbo*, What They Play (April 8, 2008), <http://www.whattheyplay.com/features/get-the-facts-on-Habbo/>.

^{cccxxxvi} “*Habbo*,” Wikipedia, http://en.wikipedia.org/wiki/Habbo#The_website.

^{cccxxxvii} See Get the Facts on *Habbo*, What They Play, *supra*.

^{cccxxxviii} See Get the Facts on *Habbo*, What They Play, *supra*.

cccxxxix *See* Get the Facts on Habbo, What They Play, *supra*.

cccxl *See* Get the Facts on Habbo, What They Play, *supra*.

cccxli *See* Get the Facts on Habbo, What They Play, *supra*.

cccxlii Get the Facts on Habbo, What They Play, *supra*.

cccxliii Get the Facts on Habbo, What They Play, *supra*.

cccxliv *See* Habbo – Where Else?, Sulake, *supra*.

cccxlv The Habbo Way, Habbo, <http://www.Habbo.com/help/51>. *See also* Terms of Use, Habbo, <http://www.Habbo.com/help/68>.

cccxlvi The Habbo Way, Habbo, *supra*. Bans are temporary or permanent; the length of a ban is in part a function of the violation involved. *See* Bans, Habbo, <http://www.Habbo.com/help/55>.

cccxlvii The Habbo Way, Habbo, *supra*.

cccxlviii Parents Guide – Is My Child Safe on Habbo?, Habbo, <http://www.Habbo.com/help/67>.

cccxlix *See id.*

ccccl *See id.*

ccccli *See* Law Enforcement, Habbo, <http://www.Habbo.com/help/73>.

cccclii “Virtual Theft” Leads to Arrest, BBC News (November 14, 2007), <http://news.bbc.co.uk/2/hi/technology/7094764.stm>.

ccccliii *See id.*

ccccliv *See id.*

cccclv *See id.*

cccclvi “Dawn of Society”: HiPiHi Enters Public Beta Testing, HiPiHi (April 21, 2008), http://www.hipihi.com/news/trends_placard015e.html.

cccclvii *See id.*

cccclviii *See id.*

cccclix *See* Wagner James Au, A First-hand Look at a Chinese *Second Life*, HiPiHi, Gigaom (August 25, 2007), <http://gigaom.com/2007/08/25/hipihi/>.

cccclx What is HiPiHi, HiPiHi, http://www.hipihi.com/index_english.html.

^{ccclxi} See Wagner James Au, *First Looks at a “Chinese Second Life,”* GigaGamez (March 5, 2007), <http://gigagamez.com/2007/03/05/first-looks-at-a-chinese-second-life/>. See also *supra* § III(B)(1).

^{ccclxii} See *id.* See also Surfdaddy Orca, HiPiHi World: A Visit to Virtual China, The Seventh Sun http://www.theseventhsun.com/1207_hiPiHi.htm.

^{ccclxiii} The Chinese Clone of *Second Life*: HiPiHi, Singapore Entrepreneurs (February 28, 2007), <http://sgentrepreneurs.com/innovation-technology/2007/02/28/chinese-clone-second-life-hipihi/>.

^{ccclxiv} See *id.*

^{ccclxv} See *id.*

^{ccclxvi} See *id.*

^{ccclxvii} See *id.*

^{ccclxviii} See *id.*

^{ccclxix} See *id.*

^{ccclxx} Surfdaddy Orca, HiPiHi World: A Visit to Virtual China, The Seventh Sun, *supra*.

^{ccclxxi} See Wagner James Au, A First-hand Look at a Chinese *Second Life*, HiPiHi, *supra*.

^{ccclxxii} See *id.*

^{ccclxxiii} See An Informal Meeting with Xu Hui, CEO of HiPiHi, Singapore Entrepreneurs (August 28, 2007), <http://sgentrepreneurs.com/singapore-entrepreneurs/2007/08/28/an-informal-meeting-with-xu-hui-ceo-of-hipihi/>.

^{ccclxxiv} See, e.g., HiPiHi – The Baidu Phenomenon Hits *Second Life*?, Web Marketing China (March 11, 2007), <http://thats-china.com/?p=33>.

^{ccclxxv} See, e.g., *Not Much Life in China’s Virtual Worlds*, Business Week (May 5, 2008), http://www.businessweek.com/technology/content/may2008/tc2008055_089117.htm. See also Vivian Yeo, *Making a Play for China’s Online Games*, Business Week (March 19, 2008), http://www.businessweek.com/globalbiz/content/mar2008/gb20080319_354505.htm (China’s online gaming market worth about \$970 million, with over 36 million gamers)

^{ccclxxvi} Kaiser Kuo, China’s Virtual Worlds: Good Bet in Spite of Inauspicious Beginnings, Digital Watch (May 6, 2008), <http://digitalwatch.ogilvy.com.cn/en/?p=255>. See also Wagner James Au, *First Looks at a “Chinese Second Life,”* GigaGamez, *supra* (“very used to `repatriating’” virtual currency to real-life).

^{ccclxxvii} See, e.g., Jonathan Adams, *Roam Un-Free*, Newsweek (July 30, 2007), <http://www.newsweek.com/id/32898>.

^{ccclxxviii} China’s HiPiHi Hopes to Be a Better Virtual World, Today@PC World (October 10, 2007), <http://blogs.pcworld.com/staffblog/archives/005657.html>.

ccclxxxix *See id.*

ccclxxx *See id.*

ccclxxxix An “augmented reality world” is a Metaverse-style world like *Second Life* and *HiPiHi*. These worlds offer what is essentially a reality-plus experience. Unlike traditional MMORPGS, they take place in a world that is fundamentally similar to ours: This world is populated by “normal” people (who may assume nonhuman form) who for the most part pursue traditional endeavors, i.e., making money, creating and sustaining a home, socializing with others, traveling, having sex, getting married, making art, playing sports, etc. In an augmented reality world, the virtual corporeal reality is more elastic than reality in the real-world, which means the occupants of these worlds have abilities real-world humans do not, such as the ability to fly. The world, though, is at base an augmented version of the world we inhabit. It does not include creatures from fantasy nor does it incorporate magical principles found in fantasy. It is not a recreation of an historical period or a movie. As I noted earlier people play roles in augmented reality worlds, but the roles they play are variations on the kinds of roles people play in the real-world; they are not scripted roles drawn from some fantasy.

ccclxxxix *See id.*

ccclxxxix Gartner Says 80 per cent of Active Internet Users Will Have a “*Second Life*” in the Virtual World by 2011, Gartner (April 24, 2007), <http://www.gartner.com/it/page.jsp?id=503861>.

ccclxxxiv *See id.*

ccclxxxv *Id. See, e.g.,* HiPiHi Announces Global Strategy, Investment from ngi, Virtual Worlds News (August 20, 2007), <http://www.virtualworldsnews.com/2007/08/hipihi-announce.html> (part of HiPiHi’s global strategy is cooperating with other virtual worlds to implement technical standards that will let users “interact and transact between different virtual worlds”).

ccclxxxvi *See supra* note cciv & accompanying text.

ccclxxxvii Gartner Says 90 Per Cent of Corporate Virtual World Projects Fail within 18 Months, Gartner (May 15, 2008), <http://www.gartner.com/it/page.jsp?id=670507>.

ccclxxxviii *See id. See, e.g.,* Mary K, Pratt, *Have Your Avatar Call My Avatar: Doing Business Virtually*, Computerworld (June 23, 2008), http://www.computerworld.com/action/article.do?command=viewArticleBasic&articleId=318544&intsrc=hm_list.

ccclxxxix *Just Ahead: The Web as a Virtual World*, Business Week (August 13, 2007), http://www.businessweek.com/magazine/content/07_33/b4046064.htm.

cccx *See id.*

cccxci *See id.* In July, 2008, Linden Lab announced that *Second Life* avatars had been transferred to a virtual world operated by IBM. *See Avatars Teleport Away From Second Life*, The Wall Street Journal (July 8, 2008), <http://blogs.wsj.com/biztech/2008/07/08/avatars-escape-second-life-leave-clothes-behind/>.

^{cccxcii}Gartner Says 80 per cent of Active Internet Users Will Have a “*Second Life*” in the Virtual World by 2011, Gartner, *supra*.

^{cccxciii}*See* Tim Guest, *Second Lives: A Journal through Virtual Worlds*, *supra* at 260.

^{cccxciv}*See id.* at 266-267.

^{cccxcv}Gartner Says 80 per cent of Active Internet Users Will Have a “*Second Life*” in the Virtual World by 2011, Gartner, *supra*.

^{cccxcvi}*See supra* § I.

^{cccxcvii}*See id.*

^{cccxcviii}*See* Susan W. Brenner, *Cybercrime Metrics: Old Wine, New Bottles?*, *supra* at 24-30.

^{cccxcix}*See id.*

^{cd}*See id.*

^{cdi}“Public” areas are the sectors of cyberspace one can access without having to enter a Metaverse -- a virtual world access to which requires creating a user account and an avatar. *See supra* § III. “Public” areas are the sectors we can explore with our own personas; “private” areas are those that require us to assume a distinct persona, one that exists only within the confines of that area, or virtual world. *See supra* § III.

^{cdii}Government Should Extend Legislation into Virtual World, Says Fraud Watchdog, The Fraud Advisory Panel (May 1, 2007) (quoting Steven Philippsohn, Chairman of the Fraud Advisory Panel’s Cybercrime Working Group).

^{cdiii}*See supra* § IV.

^{cdiv}*See supra* § IV.

^{cdv}*See, e.g.*, Randal C. Picker, *Cybersecurity: Of Heterogeneity and Autarky* in *The Law and Economics of Cybersecurity* 117 (ed. by Mark F. Grady & Francesco Parisi, 2005) (“Cybercrime is just crime over the Internet”).

^{cdvi}*See supra* § I.

^{cdvii}*See supra* § II.

^{cdviii}*See, e.g.*, Michael D. Schmitt, Note, *Prohibition Reincarnated? The Uncertain Future of Online Gambling Following the Unlawful Internet Gambling Enforcement Act of 2006*, 17 S. Cal. Interdisc. L.J. 381, (2008); Chuck Humphrey, State Gambling Law Summary, <http://www.gambling-law-us.com/State-Law-Summary/>

^{cdix}*See, e.g.*, James N. Brenner, Note, *Betting on Success: Can the Unlawful Internet Gambling Enforcement Act Help the United States Achieve Its Internet Gambling Policy Goals?*, 30 Hastings Comm. & Ent. L. J. 109, 112-115 (2007).

^{cdx} See, e.g., Joseph Audal, Quincy Lu & Peter Roman, *Computer Crimes*, 45 Am. Crim. L.Rev. 233, 268 (2008).

^{cdxi} See *supra* § IV.

^{cdxii} See, e.g., “Mind uploading,” Wikipedia, http://en.wikipedia.org/wiki/Mind_transfer.

^{cdxiii} See *supra* § IV.

^{cdxiv} See *supra* notes ccxxxv - ccxxxvi & accompanying text.

^{cdxv} Cf. *Content Theft in Second Life*, SL iReports – CNN (March 2, 2008), <http://secondlife.blogs.cnn.com/2008/03/02/content-theft-in-second-life/> (describing theft of what may be intellectual property).

^{cdxvi} As we saw earlier, a Dutch teen-ager was prosecuted for stealing virtual furniture in *Habbo*. See *supra* notes cccli - ccclv & accompanying text. The furniture, like the jacket hypothesized in the text above, had a monetary value in the real world, so the theft constituted an in-game cybercrime. See *id*.

^{cdxvii} Thefts of much larger sums have not resulted in prosecution. See, e.g., DarkLife Robbed – Developer Blames Open Source SL, *Second Life Herald* (February 25, 2007), http://www.secondlifeherald.com/slh/2007/02/darklife_robbed.html.

^{cdxviii} See *supra* notes ccxxxi - ccxxxii & accompanying text.

^{cdxix} See Wagner James Au, *The Making of Second Life*, *supra* at 151-152; Tim Guest, *Second Lives: A Journal through Virtual Worlds*, *supra* at 138-139. See also Anshe Chung’s Dreamland, <http://dreamland.anshechung.com/>.

^{cdxx} See *supra* notes ccxxxi - ccxxxii & accompanying text.

^{cdxxi} See *supra* note ccxxxvii. See also Adam Turner, *eBay Exempts Second Life from Ban on Selling Virtual Items*, IT Wire (January 31, 2007), <http://www.itwire.com/content/view/9063/53/>.

^{cdxxii} See Adam Turner, *eBay Exempts Second Life from Ban on Selling Virtual Items*, *supra*. The exemption is also, no doubt, attributable to the fact that *Second Life* Residents own the virtual property they create. See *supra* § II(B)(1).

^{cdxxiii} See *id*.

^{cdxxiv} See Julian Dibbell, *Play Money: Or, How I Quite My Day Job and Made Millions Trading Virtual Loot* (2006).

^{cdxxv} See *supra* notes cccli - ccclv & accompanying text. *Habbo* has good reason to take virtual theft seriously: Unlike most MMORPGS, *Habbo* relies on the sale of virtual property, instead of paid subscriptions, for its revenue. See Wagner James Au, *Why Virtual Theft Should Matter to Real Life Tech Companies*, GigaOm (November 18, 2007), <http://gigaom.com/2007/11/18/why-virtual-theft-should-matter-to-real-life-tech-companies/>. Since *Habbo* has been “phenomenally” successful, other virtual

worlds are utilizing the same model. *See id.* That means they need to ensure the security of user-purchased property or face the possibility of “a sudden devaluation of their virtual economy”. *Id.* And while this problem may be more significant in worlds that utilize the *Habbo* model, it is also likely to be significant in any virtual world – including *Second Life* – that relies on in-world commerce for at least part of its revenue stream.

^{cdxxvi} *See, e.g., Student Arrested for Robbing Another Player Inside an Online Game*, Information Week (August 22, 2005), <http://www.informationweek.com/news/security/showArticle.jhtml?articleID=169500364>.

^{cdxxvii} *See, e.g., Mark Ward, Does Virtual Crime Need Real Justice?*, BBS News (September 29, 2003), <http://news.bbc.co.uk/2/hi/technology/3138456.stm>.

^{cdxxviii} *See Oli Welsh, US Police Refuse to Investigate MMO Theft*, EuroGamer (February 4, 2008), http://www.eurogamer.net/article.php?article_id=91991.

^{cdxxix} *Id.* *See Earnest Cavalli, Police Refuse to Aid in Virtual Theft Case*, Wired (February 4, 2008), <http://blog.wired.com/games/2008/02/police-refuse-t.html> (“Blaine, Minnesota police”).

^{cdxxx} *See John Brewer, When a Virtual Crook Struck This Gamer, He Called Real Cops*, St. Paul Pioneer Press (February 1, 2008), 2008 WLNR 1985337.

^{cdxxxi} *See Oli Welsh, US Police Refuse to Investigate MMO Theft*, EuroGamer, *supra*. *See also* John Brewer, *When a Virtual Crook Struck This Gamer, He Called Real Cops*, St. Paul Pioneer Press (if the perpetrator “didn’t steal any value, he didn’t commit a crime”). The police’s refusing to investigate may also have been a matter of prioritizing scarce resources; since cybercrimes require special expertise and often a great deal of time to investigate, smaller police forces are often disinclined to pursue them.

^{cdxxxii} Chris Gourlay & Abul Taher, *Virtual Jihad Hits Second Life Website*, Times Online (August 5, 2007), http://www.timesonline.co.uk/tol/news/world/middle_east/article2199193.ece. As the title indicates, law enforcement agencies are also concerned about terrorists’ using *Second Life* and similar worlds to plan or even rehearse terrorist attacks. *See id.* Europol has “recruited security consultants” to advise it on “the use of *Second Life* for fraud and terrorism.” *See id.*

^{cdxxxiii} *See Government Should Extend Legislation into Virtual World, Says Fraud Watchdog*, The Fraud Advisory Panel (May 1, 2007).

^{cdxxxiv} Attorney General Michael B. Mukasey Delivers Remarks at the CSIS Forum on Combating International Organized Crime, FDCH Capital Transcripts (April 23, 2008), 2008 WLNR 7551268.

^{cdxxxv} Adam Pasick, *FBI Checks Gambling in Second Life Virtual World*, Reuters (April 4, 2007), <http://www.reuters.com/article/technologyNews/idUSHUN43981820070405?pageNumber=1&virtualBrandChannel=0>.

^{cdxxxvi} *See id.*

^{cdxxxvii} Rachel Konrad, “*Second Life*” Bans Gambling, ABC News (August 2, 2007), <http://abcnews.go.com/Technology/wireStory?id=3438941>. *See* Wagering in *Second Life*: New Policy,

Blog, *Second Life* (July 25, 2007), <http://blog.secondlife.com/2007/07/25/wagering-in-second-life-new-policy/>.

^{cdxxxviii} See Rachel Konrad, “*Second Life*” Bans Gambling, ABC News, *supra*.

^{cdxxxix} In 2008, Linden Lab CEO Philip Rosedale told Congress he asked the FBI to investigate cybercrime in *Second Life*. See Eric Reuters, *Rosedale Discloses FBI Griefing Probe to Congress*, Reuters – *Second Life* (April 1, 2008), <http://secondlife.reuters.com/stories/2008/04/01/rosedale-discloses-fbi-griefing-probe-to-congress/>.

^{cdxl} See, e.g., Marc D. Goodman, *Why the Police Don’t Care about Computer Crime*, 10 Harv. J. L. & Tech. 465, 477-491 (1997).

^{cdxli} See *supra* § III.

^{cdxlii} See *supra* § II(B)(2). The “jurisdiction” in question would be the jurisdiction where the victim resides and the jurisdiction where the perpetrator resides, if the two are in different locations. See, e.g., Susan W. Brenner & Bert-Jaap Koops, *Approaches to Cybercrime Jurisdiction*, 4 J. High Tech. L. 1, 10-21 (2004). It could also be the location of the virtual world or MMORPG, i.e., the location of the servers hosting the virtual environment. See *id*.

^{cdxliiii} We take up the issue of virtual rape in § IV(B)(2), *infra*.

^{cdxliv} See, e.g., 18 U.S. Code § 1030(a)(5)(B)(iii)-(iv). See also Conn. Gen. Stat. Ann. § 53a-301(a); Mich. Comp. Laws Ann § 750.543p(1). The text refers to cyberterrorism statutes, which could be used to prosecute those who used a virtual environment to cause death, injury and/or property damage in the real-world for political reasons. If someone used such an environment to inflict these or other hard “harms” for personal reasons, they could be prosecuted under traditional criminal statutes. The only distinctive factor in this scenario is the use of non-traditional methods to inflict the harms,” but as noted earlier, the method is generally irrelevant in defining and assessing criminal liability. See *supra* notes cdi - cdx & accompanying text.

^{cdxlv} See Brenner, *Toward A Criminal Law for Cyberspace: Distributed Security*, *supra* at 49-75.

^{cdxlvi} See *id*. at 80-81.

^{cdxlvii} See, e.g., Tim Guest, *Second Lives: A Journal through Virtual Worlds*, *supra* at 114.

^{cdxlviii} See *supra* §§ IV & IV(A). For a survey of these “harms,” see *supra* § II.

^{cdxlxi} See *supra* §§ IV & IV(A).

^{cdli} They encompass the confines of cyberspace because these “areas” are defined conceptually, not geographically. When a new generally-accessible website is added, its functionality makes it part of the “public” areas of cyberspace; and when a new MMORPG or virtual world is added, its functionality makes it one of the “private” areas of cyberspace.

^{cdlii} The definition is a conceptual, not an operational, definition. As such, it *can* encompass the use of computer technology (and cyberspace) to inflict any “harm” that has been outlawed by a modern nation-

state. Whether the use of computer technology to inflict a particular “harm” is a crime in a given state depends upon the law in that jurisdiction.

^{cdlii}Fantasy crime could occur in a MMORPG like *WoW*, but, so far, it seems to be more common in virtual worlds like *Second Life* and, to a lesser extent, *The Sims Online*. See *supra* note cccxiv.

^{cdliii}See *supra* § IV(A).

^{cdliv}See, e.g., United Nations General Assembly, Declaration of Basic Principles of Justice for Victims of Crime and Abuse of Power, Annex ¶¶ 1-2, A/RES/40/34 (November 29, 1985). There can be multiple perpetrators and/or multiple victims, and “harms” can be inflicted simultaneously or sequentially. “Harm” can also be inflicted indirectly, as when a perpetrator destroys property belonging to someone else; in scenarios like this, the victim is not “harmed” directly in the way a murder victim is “harmed,” but still sustains a proscribed “harm” at the hands of the perpetrator.

^{cdlv}See generally Mark M. Lanier & Stuart Henry, *Essential Criminology* 13-22 (1998).

^{cdlvi}See *supra* § II(B)(1) (e.g., adultery, fornication, statutory rape).

^{cdlvii}See *supra* § II(B)(1) (e.g., illegal gambling and drug use).

^{cdlviii}See *supra* § II(B)(3).

^{cdlix}See *supra* note xcvi.

^{cdlx}See *id.* See also *supra* notes lxxiv - lxxv.

^{cdlxi}See § II(B)(2), *supra*.

^{cdlxii}See *supra* notes lxxxviii - xc & accompanying text.

^{cdlxiii}See *Fanning v. Chace*, 17 R.I. 388, 22 A. 275, 275 (R.I. 1891). Also, criminalizing thoughts would have little deterrent effect and could be manipulated and abused. See Joshua Dressler, *Understanding Criminal Law* § 9.01(B) (3d ed. 2001); John Hasnas, *Ethics and the Problem of White Collar Crime*, 54 Am. U. L. Rev. 579, 588 n. 17 (2005).

^{cdlxiv}I am not including a treatment of crimes targeting systemic “harm” of the type analyzed in § II(B)(3), *supra*, because as far as I can tell virtual worlds have no need for such crimes. Avatars do not need to be concerned about the purity of the substances they consume or the air they do not breathe; and they have no reason to be concerned about injury caused by faulty products or services. Concerns such as these may arise as virtual worlds increase in complexity, but it would be premature to speculate about how crimes targeting systemic “harms” may evolve in this context. In § IV(B)(2), *infra*, I a different kind of systemic “harm,” one more analogous to the “harms” encompassed by traditional crimes.

^{cdlxv}See *supra* notes cdxxxvii - cdxxxix & accompanying text, *supra*.

^{cdlxvi}See *supra* § IV(A).

^{cdlxvii}See *supra* § III(B)(1).

^{cdlxviii}There could be a correlate real-world “harm” if someone were to win and, say, not pay taxes on their in-game income.

^{cdlxix}*See, e.g.,* Gambling Returns to *Second Life*, Dusan Writer’s Metaverse (July 1, 2008), <http://dusanwriter.com/?p=655>.

^{cdlxx}These funds would come from the stipend Premium Account holders receive or from funds the Resident earned through working or other activities in *Second Life*. *See supra* § III(B)(1).

^{cdlxxi}*See, e.g.,* Erik Luna, *Traces of a Libertarian Theory of Punishment*, 92 Marq. L. Rev. 263, 271 (2007).

^{cdlxxii}Seclimine, <http://www.seclimine.com/home.html>.

^{cdlxxiii}*See* Warren Ellis, *Second Life Sketches: News from Nowhere*, Reuters – *Second Life* (February 16, 2007), <http://secondlife.reuters.com/stories/2007/02/16/second-life-sketches-news-from-nowhere/>; Gideon Television, Helping You to Lead the Way, YesbutNobutYes (September 10, 2006), http://www.yesbutnobutyes.com/archives/2006/09/helping_you_to.html.

^{cdlxxiv}*See* Products, Seclimine, <http://www.seclimine.com/products/seclimine.html>. It also offers a disclaimer: “This is not a real drug. . . . All feelings . . . are the result of a hypnotic . . . and suggestion. This is for entertainment purposes only while in *Second Life*.” *Id.*

^{cdlxxv}*See* Gideon Television, Helping You to Lead the Way, *supra*; Business Opportunities, Seclimine, <http://www.seclimine.com/businessopportunities.html>. As with everything in *Second Life*, recreational drug use is inexpensive; the most powerful version of Seclimine costs 30 Linden Dollars (less than a quarter) for 1 dose and 300 Linden Dollars (about \$1.50) for 12 doses. *See* Products, Seclimine, *supra*.

^{cdlxxvi}The risk of fund depletion is further reduced by the inexpensiveness of the drug. *See supra* note cdlxxv.

^{cdlxxvii}*See, e.g.,* Bonnie Ruberg, *Peeking up the Skirt of Online Sex Work*, The Village Voice (August 8, 2007), <http://www.villagevoice.com/2007-08-28/columns/peeking-up-the-skirt-of-online-sex-work/> (“literally thousands of online escorts”).

^{cdlxxviii}*See supra* § III(B)(1).

^{cdlxxix}*See, e.g.,* Store, Xcite! Online, <http://www.getxcite.com/store.php>. *See also* Mitch Wagner, *Sex in Second Life*, Information Week (May 26, 2007), <http://www.informationweek.com/news/software/hosted/showArticle.jhtml?articleID=199701944>.

^{cdlxxx}*See id.*

^{cdlxxxi}*See id.*

^{cdlxxxii}*See id.* *See also* Bonnie Ruberg, *Peeking up the Skirt of Online Sex Work*, *supra*. Female avatars make up most of *Second Life*’s prostitutes, but up to half of the female avatars in *Second Life* are operated by men. *See id.*

^{cdlxxxiii} See *id.* See, e.g., Lexa Dryke, *The Working Girls of Second Life*, The Looking Glass (July 9, 2007), http://www.slookingglass.com/index.php?option=com_content&task=view&id=54&Itemid=154.

^{cdlxxxiv} See, e.g., Tim Guest, *Second Lives: A Journal through Virtual Worlds*, *supra* at 180-186 (\$3 for an hour); Lexa Dryke, *The Working Girls of Second Life*, *supra* (2500 Linden Dollars -- or \$10 -- an hour is “high-priced”).

^{cdlxxxv} Bonnie Ruberg, *Peeking up the Skirt of Online Sex Work*, *supra*.

^{cdlxxxvi} See *supra* § III(B)(1).

^{cdlxxxvii} But see Destiny Welles, *The Ins and Outs of a Second Sex Life*, The Register (January 9, 2007), http://www.theregister.co.uk/2007/01/09/good_sex_in_second_life/page2.html (emotional abuse may be used to keep some in virtual prostitution).

^{cdlxxxviii} See, e.g., Brian Fay, *Review of Sex, Drugs, Death, and the Law*, 58 N.Y.U. L. Rev. 1231, 1235 (1983) (reason prostitution and drug use “are criminalized is that, according to common morality, they are immoral”).

^{cdlxxxix} See *Miller v. California*, 413 U.S. 15, 23-24 (1973). Child pornography can be criminalized, but we will address that issue in the next section.

^{cdxc} See *supra* § II(B)(1).

^{cdxci} See, e.g., Tara Sena-Becker, *Arrange Your Cyber-Wedding*, Suite 101 (March 6, 2008), http://weddingservicesreceptions.suite101.com/article.cfm/cyber_weddings.

^{cdxcii} See, e.g., Alexandra Alter, *Is This Man Cheating on His Wife?*, Wall Street Journal (August 10, 2007), <http://online.wsj.com/public/article/SB118670164592393622.html>.

^{cdxciii} 11 Delaware Code Ann. § 1001.

^{cdxciv} See, e.g., *Davis v. Beason*, 133 U.S. 333, 342 (1890) (bigamy destroys “the purity of the marriage relation” and disturbs “the peace of families”).

^{cdxcv} See, e.g., Adam Reuters, *Savage Love on Second Life “Adultery,”* Reuters – *Second Life* (May 2, 2007), <http://secondlife.reuters.com/stories/2007/05/02/savage-love-on-second-life-adultery/>; Alexandra Alter, *Is This Man Cheating on His Wife?*, Wall Street Journal (August 10, 2007), *supra*.

^{cdxcvi} See Wagner James Au, *The Making of Second Life*, *supra* at 96-103.

^{cdxcvii} See *supra* notes xlv - xlv & accompanying text.

^{cdxcviii} See, e.g., Gabrielle Viator, Note, *The Validity of Criminal Adultery Prohibitions after Lawrence v. Texas*, 39 Suffolk U. L. Rev. 837 (2006). Such statutes would also be impossible to enforce: Many would ignore them, assuming, no doubt correctly, that police would not be able to enforce the laws with any degree of efficacy. See *id.* at 859-860.

^{cdxcix} See *id.* at 860.

^dSee, e.g., Joseph A. Colquitt, *Rethinking Entrapment*, 41 Am. Crim. L. Rev. 1389, 1397 n. 51 (2004) (quoting Edwin Kiester, Jr., Crimes With No Victims 3-4 (1972)).

^{di}Simulated alcohol use seems to exist, but does not seem to be a predominant aspect of the *Second Life* experience. See, e.g., Wagner James Au, A Day in the Life of *Second Life*, Notes from a New World (January 8, 2004), http://secondlife.com/notes/2004_01_05_archive.php.

^{dii}See *Lawrence v. Texas*, 539 U.S. 558, 571-572 (2003).

^{diii}"Harm." WordNet 3.0. Princeton University, <http://dictionary.reference.com/browse/harm>.

^{div}See *supra* note cdlxiii & accompanying text. See also § II, *supra*.

^{dv}See Susan W. Brenner, *Is There Such a Thing as "Virtual Crime"?*, 4 California Criminal Law Review 1 ¶¶ 39-50 (2001).

^{dvi}I may be able to mitigate the consequences of my loss by purchasing a surrogate, but that in no way eradicates the zero-sum "harm" I sustained as a result of the theft. I have not returned to the status quo ante; I have merely reconciled myself to the loss.

^{dvii}If the replacement jacket costs more than the original, one could argue that I have sustained a zero-sum-plus loss, i.e., I have lost more than the value of the original jacket. It seems to me the correct conclusion is that I sustained a zero-sum loss consisting of the price I paid for the original jacket, which I no longer have. Since I have the replacement jacket, I do not see how either this jacket or its cost can be considered a loss.

^{dviii}Fraud and extortion are property loss crimes because money is property; when the "harm" inflicted is a loss of money, the analysis is even simpler because money is a consummately fungible commodity. The "harm" to someone who loses money to a fraudster or an extortionist is not the loss of particular currency; it is the loss of a particular sum, which will be remediated only if the police seize the funds from the perpetrator.

In property destruction crimes like arson, the analysis is functionally analogous to the "harm"-loss analysis in the text above. If an arsonist destroys a commercial building on my property, I cannot recover the building; I can replace it by constructing another, but that will probably cost me at least as much as the old building was worth. Here, too, I sustain a zero-sum loss. When the property loss is less than total – as with most vandalism – I lose the quantum of value that has been depreciated by the damage. I can either accept that loss or remediate it and thereby sustain the consequential loss consisting of the expenditure of the funds needed to do so.

^{dx}"Finite." Dictionary.com Unabridged (v 1.1). <http://dictionary.reference.com/browse/finite>.

^{dx}See, e.g., DaVinci – Mona Lisa, SL Exchange, <http://www.slexchange.com/modules.php?name=Marketplace&file=item&ItemID=664571>.

^{dxi}See "Primitive," *Second Life* Wiki, <http://wiki.secondlife.com/wiki/Prim>. See, e.g., Tim Guest, *Second Lives: A Journal through Virtual Worlds*, *supra* at 3-4, 13-16 (Resident created a replica of the Twin Towers in *Second Life*, which he repeatedly destroyed to reproduce the Towers' collapse on 9/11; his avatar carried the script for recreating the Towers in his pocket).

^{dxiii}"Infinite." Dictionary.com Unabridged (v 1.1). <http://dictionary.reference.com/browse/infinite> ("unbounded or unlimited").

^{dxiii}And that "harm" may be minimal. *See note dxi, supra.*

^{dxiv}See Creation Portal, *Second Life* Wiki, http://wiki.secondlife.com/wiki/Clothing_Tutorials.

^{dxv}Rape exemplifies its own "harm" and serves as an example of sexually-oriented activities some regard as morally and/or legally problematic. *Second Life*, for example, has a thriving and very visible BDSM (Bondage & Discipline, Dominance & Submission, Sadomasochism) community. *See, e.g.,* Second Life BDSM Role Play Sims, Virtual BDSM, http://www.virtual-bdsm.com/bdsm_roleplay.html. And it has slavery, which is often sexually oriented. *See* Slave Nia's Second Life, <http://niapreez.blogspot.com/>; Chained Beauty Slave Auctions, HV Metal Shop, <http://www.hvmetalshop.com/hvmetalshop/phpBB3/viewtopic.php?f=17&p=13>. Murder exemplifies the ultimate personal "harm," and, in so doing, serves as an example of battery and other assault "harms," though we will touch on an extreme form of BDSM later in this section. *See, e.g.,* Wendell Homer, *Art of Darkness – Capture Roleplay*, Second Life Herald (October 3, 2007), <http://foo.secondlifeherald.com/slh/2007/10/art-of-darkness.html> (describing one avatar's brutally beating another).

^{dxvi}*See* § III(A), *supra*.

^{dxvii}Julian Dibbell, *A Rape in Cyberspace*, The Village Voice (December 1993), <http://www.juliandibbell.com/texts/bungle.html>.

^{dxviii}*See id.* In real life, Mr. Bungle was a university student, as were most of the participants in Lambda MOO. *See id.*

^{dxix}*See id.*

^{dxix}*See id.*

^{dxxi}*See id.*

^{dxxi}*See id.*

^{dxxi}*See id.*

^{dxxiv}*See* "A Rape in Cyberspace," Wikipedia, http://en.wikipedia.org/wiki/A_Rape_in_Cyberspace.

^{dxv}*See* Belgian Police Patrols Second Life to Prevent Rape, Second Life Insider (April 21, 2007), <http://www.secondlifeinsider.com/2007/04/21/belgian-police-patrols-second-life-to-prevent-rape/>.

^{dxv}*See, e.g.,* Darius Sartre, How Exactly Does "Virtual Rape" Even Occur in Second Life?, VTOR (May 4, 2007), <http://www.vtoreality.com/2007/how-exactly-does-virtual-rape-even-occur-in-second-life/909/>.

^{dxv}*See* Comment #4 – Diana Allandale (May 6, 2007) to Darius Sartre, How Exactly Does "Virtual Rape" Even Occur in Second Life?, *supra*.

^{dxviii}See *id.*

^{dxix}See Regina Lynn, *Virtual Rape Is Traumatic, But Is It A Crime?*, Wired (May 4, 2007), http://www.wired.com/culture/lifestyle/commentary/sexdrive/2007/05/sexdrive_0504 (noting the emotional trauma virtual rape can inflict on those immersed in their virtual lives).

^{dx}If not, then virtual rape would presumably be dealt with in-world, as with Lambda MOO. It could probably be sanctioned, for example, under *Second Life*'s community standards and/or terms of service. See *supra* notes cclx - cclxiv & accompanying text, *supra*.

^{dxxi}See Comment #4 – Diana Allandale (May 6, 2007) to Darius Sartre, How Exactly Does “Virtual Rape” Even Occur in Second Life?, *supra*.

^{dxiii}See *supra* § III(B)(1).

^{dxiii}See, e.g. *Meadows v. Commonwealth*, 178 S.W.3d 527, 532 (Ky, App. 2005).

^{dxiv}See, e.g., Model Penal Code § 213.1.

^{dxv}Some might argue that an assault consummated via bytes and pixels does not qualify as sexual intercourse under the definitions used in rape statutes. The definitions assume physical sexual intercourse between two human beings, not avatar on avatar encounters. See, e.g., La. Stat. Ann. § 14:41. Since this argument really goes to the type and magnitude of the “harm” inflicted in virtual rapes, it is subsumed by the analysis presented later in the text, above.

^{dxvi}Kimberly Kessler Ferzan, *A Reckless Response to Rape: A Reply to Ayres and Baker*, 39 U.C. Davis L. Rev. 637, 655 (2006). See also *Coker v. Georgia*, 433 U.S. 584, 611-12 (1977) (Burger, C.J., dissenting).

^{dxvii}Deborah M. Golden, *It's Not All in My Head: The Harm of Rape and the Prison Litigation Reform Act*, 11 Cardozo Women's L.J. 37, 60 (2004).

^{dxviii}I accept this hierarchy of “harms” for the purposes of analysis. One could, for example, reasonably object to the assumption that rape necessarily inflicts more severe “harm” than other crimes involving physical injury.

^{dxix}See Regina Lynn, *Virtual Rape Is Traumatic, But Is It A Crime?*, *supra* (effects of virtual rape can be emotionally “devastating”). See also May 6, 2007 Comment by Robbie on Benjamin Duranske, Reader Roundtable: “Virtual Rape” Claim Brings Belgian Police to Second Life, Virtually Blind (April 24, 2007), <http://virtuallyblind.com/2007/04/24/open-roundtable-allegations-of-virtual-rape-bring-belgian-police-to-second-life/>:

Embodied consciousness is where a human . . . becomes so naturalised in an environment - whether it is . . . operating an online character, . . . or any other technological interaction . . . - that . . . the technology acts as a mental extension of their body. . . . [A] person can become incredibly involved with their online equivalents, to the point where they suffer real emotional damage from an unfair exploitation of their character.

^{dxl} See *supra* note cdlxiii & accompanying text. It would also be empirically unmanageable, since every slight, every insult, every harsh word could support prosecution.

^{dxli} See *supra* note lxxxvii & accompanying text. Since harassment – criminal and otherwise – often has a sexual component, it seems the appropriate predicate for our modified offense. See, e.g., Hiro Pendragon, Virtual Rape: Seriously? Seriously, Second Tense (May 7, 2007), <http://secondtense.blogspot.com/2007/05/virtual-rape-seriously-seriously.html>. Stalking can have a sexual component, but is also often prompted by other motives. See, e.g., Paul E. Mullen, et al., *A Study of Stalkers*, 156 Am. J. Psychiatry 1244, 1244-1249 (1999). Using harassment is also consistent with *Second Life*'s community standards, which include sexual advances in the category of harassment. See *supra* note cclxiv & accompanying text.

^{dxlii} See, e.g., Shataina, The Inevitably Named "Rape in RPGS," GameGreene (March 22, 2005), <http://www.gamegreene.com/node/447> (consensual rape in MMORPGs). See also Second Life: Rape for Sale, Gawker, <http://gawker.com/news/second-life/second-life-rape-for-sale-222099.php>; Many Ways to Rape, Living in the Metaverse (March 6, 2007), <http://metaverse.acidzen.org/2007/many-ways-to-rape>,

^{dxliii} Wendell Holmer, *Art of Darkness – Capture Rolepla*, *supra*. As we saw in § III(B)(1), the Residents of *Second Life* can select avatars that have human, animal or even non-biological form. Sex between human-style avatars and animal avatars is not uncommon.

^{dxliv} *Id.* When this incident occurred, Residents communicated by text.. By 2007, they could communicate orally. See The Second Life Voice Viewer Is Live!, Second Life, <http://blog.secondlife.com/2007/08/02/the-second-life-voice-viewer-is-live/>.

^{dxlv} See, e.g., *State v. Camara*, 113 Wash. 2d 631, 636-637, 781 P.2d 483, 486 (Wash. 1989).

^{dxlvi} See, e.g., Paul H. Robinson, *Criminal Law Defenses: A Systematic Analysis*, 82 Colum. L. Rev. 199, 208 & n. 24 (1982).

^{dxlvii} Artemis Fate, Comment on Wendell Holmer, *Art of Darkness – Capture Roleplay*, *supra* (October 4, 2007).

^{dxlviii} Many Ways to Rape, Living in the Metaverse, *supra*.

^{dxlix} Many Ways to Rape, Living in the Metaverse, *supra*.

^{dl} See *id.* (quoting Avalon Birke, Director of the Counseling Center in Second Life).

^{dli} See Stephen F. Rohde, *Killer Defense*, 23-APR L.A. Law. 29, (2000); L. Lin Wood & Corey Fleming Hirokawa, *Shot by the Messenger: Rethinking Media Liability for Violence Induced by Extremely Violent Publications and Broadcasts*, 27 N. Ky. L. Rev. 47, 51-55 (2000).

^{dlii} *Hess v. Indiana*, 414 U.S. 105, 109 (1973). See, e.g., *Byers v. Edmondson*, 826 So.2d 551, 556-557 (La. App. 2002). See generally *Zamora v. State*, 361 So.2d 776 (Fla. App. 1978).

^{dliii} See Dispute Resolution, Terms of Service, Second Life, <http://secondlife.com/corporate/tos.php>.

^{dliiv} See Peter S. Jenkins, *The Virtual World as a Company Town: Freedom of Speech in Massively Multiple*

On-Line Role Playing Games, 8 J. Internet L. 1-5 (2004).

^{dlv}Conduct can constitute speech protected by the First Amendment. *See, e.g., Hurley v. Irish-American Gay, Lesbian and Bisexual Group of Boston*, 515 U.S. 557, 571 (1995). But the First Amendment does not protect criminal conduct, even when it involves speech. *See, e.g., Hill v. City of Houston, Tex.*, 789 F.2d 1103, 1121 (5th Cir. 1986). *See also* *Arcara v. Cloud Books, Inc.*, 478 U.S. 697, 707 (1986); *Ohralik v. Ohio State Bar Ass'n*, 436 U.S. 447, 456 (1978). So if virtual rape is mere conduct, i.e., non-expressive activity, it is outside the First Amendment; it is also outside the First Amendment if it incorporates expressive activity or other speech into conduct involved in committing a crime. *See* U.S. Department of Justice, Report on the Availability of Bombmaking Information (April 1997), <http://www.cybercrime.gov/bombmakinginfo.html>.

^{dlvi}*Byers v. Edmondson*, *supra*, 826 So.2d at 557.

^{dlvii}*See id.*

^{dlviii}*See* note dlvi, *supra*.

^{dlx}*See supra* note dlvi & accompanying text.

^{dlx}*See Byers v. Edmondson*, *supra*, 826 So.2d at 555-556.

^{dlxi}*See* note dlvi, *supra*.

^{dlxii}*See, e.g.,* Robert Wright & Jack Balkin – Plausible Reality, Bloggingheads.tv, <http://bloggingheads.tv/diavlogs/388?in=34:09&out=00:39:27> (Balkin's argument).

^{dlxiii}*See id.*

^{dlxiv}*See, e.g.,* consciouscat, First Amendment in Second Life, Forum (October 11, 2007), <http://forums.bloggingheads.tv/phorum/read.php?1,15963,15967#msg-15967>.

One way to see this is to consider a Matrix-like scenario which includes distinct, real consciousnesses that are hooked up to each other via computer (which creates . . . a common virtual world). In such a world, if I hit some guy Phil, my intention to do so results ultimately in a representation reaching Phil's brain (from the central computer, say) -- which in turn creates for Phil visual experiences of 'my hand' moving, sensations of pain, etc.

The fact that all I've really done . . . is initiate a flow of information from my brain (via computer) to Phil's brain . . . doesn't mean that in such a Matrix world there can be no speech/non-speech distinction. There can be. . . after all, there's still a principled distinction between hitting Phil and calling him a jerk. It's just that the distinction ultimately has to be cashed out in representational terms.

^{dlxv}*See* note dlvi, *supra*. *See also* *Byers v. Edmondson*, *supra*, 826 So.2d at 555-556.

^{dlxvi}*See supra* § II(B)(2).

^{dlxxvii} See *supra* note dlxiv.

^{dlxxviii} See *supra* notes ccxlvii - ccliv & accompanying text.

^{dlxxix} See *supra* notes ccxlvii - ccliv & accompanying text.

^{dlxxx} See, e.g., *Everyone Gangs up on the Alliance Navy*, Second Life Herald (April 15, 2007), http://foo.secondlifeherald.com/slh/2007/04/everyone_gangs_.html.

^{dlxxxi} Neal Stewart, *The W-Hat Birthday: Cake, Ice Cream and Murdered-Hooker Bloodbath*, Second Life Herald (April 29, 2005), http://foo.secondlifeherald.com/slh/2005/04/the_what_birthd.html. See *supra* note cdlxxxi & accompanying text (pose balls).

^{dlxxxii} Neal Stewart, *The W-Hat Birthday: Cake, Ice Cream and Murdered-Hooker Bloodbath*, Second Life Herald (April 29, 2005), http://foo.secondlifeherald.com/slh/2005/04/the_what_birthd.html. See *supra* note cdlxxxi & accompanying text (pose balls).

^{dlxxxiii} *Dolcett Play: Broadly Offensive? Naw, It's What's for Dinner*, Second Life Herald (June 10, 2007), http://www.secondlifeherald.com/slh/2007/06/dolcett_play_br.html.

^{dlxxxiv} See *supra* note cdlxxxii.

^{dlxxxv} See, e.g., Wendell Holmer, *Greta Ghia Is a Roaster*, Second Life Herald (March 4, 2008), <http://foo.secondlifeherald.com/slh/2008/03/greta-ghia-is-a.html>. For the process of butchering someone killed in Dolcett play, see, e.g. *My Little Dolcett Girl*, *Memoirs of a Second Life Slut* (August 2, 2007), <http://secondlifeslut.wordpress.com/2007/08/02/my-little-dolcett-girl/>.

^{dlxxxvi} See *Losing One's Head*, *Memoirs of a Second Life Slut* (August 2, 2007), <http://secondlifeslut.wordpress.com/2007/08/02/losing-ones-head/>:

I arrived in a very dark . . . place. . . . part rape house, part slaughter house. After knocking me around . . . he strung me up by my feet and slit my throat. . . . I was . . . gurgling on my own blood and I could see it pooling . . . on the floor. When he released me, He bound my hands and forced me to lean over a block of wood. I begged . . . him not to kill me. . . . I kept begging . . . as the ax swung down and . . . my avatar's head was gone, replaced with a bloody stump . . . spewing blood.

For a torture murder, see *My Little Dolcett Girl*, *Memoirs of a Second Life Slut*, *supra*.

^{dlxxxvii} See *supra* notes ccxlvii - ccliv & accompanying text. And torture is not torture, at least not in the conventional sense, because avatars cannot feel pain. See *id*.

^{dlxxxviii} See, e.g., *Sanders v. State*, 7 P.3d 895, 894-895 (Wyo. 2000); *Gentry v. State*, 625 N.E.2d 1268, 1273 (Ind. App. 1993).

^{dlxxxix} 40 Am. Jur. 2d Homicide § 105 (“The right to life . . . is inalienable”).

^{dlxxx} See § IV(B)(2)(b)(ii)(A), *supra*.

^{dlxxxxi} Comment by Sweet Jesus (March 4, 2008) on *Greta Ghia Is a Roaster*, *supra*.

^{dlxxxii} See § IV(B)(2)(b)(ii)(A), *supra*. If that assumption is invalid, and everything that occurs in *Second Life*, then the First Amendment would protect virtual murder unless it falls into one of the exceptions that deprive speech of such protection. See *id.*

^{dlxxxiii} See § IV(B)(2)(b)(ii)(A), *supra*.

^{dlxxxiv} See *supra* note dlxxxii. The analysis developed above should apply here, as well. See § IV(B)(2)(b)(ii)(A), *supra*.

^{dlxxxv} See, e.g., *State v. Pino*, 2008 WL 2779225 *5 (Ohio App. 2008) (inciting the commission of a crime constitutes aiding and abetting); *United States v. Hays*, 62 M.J. 158, 162 (U.S. Armed Forces 2005) (inciting the commission of a crime constitutes solicitation). Liability would attach even though the commission of one virtual murder did not result in the commission of others. See Model Penal Code §§ 2.06(3)(a)(ii) & 5.02. The conceptual premise could also be based on the international law offense of publicly inciting genocide. See, e.g., Jane E. Stromseth, *Pursuing Accountability for Atrocities after Conflict: What Impact on Building the Rule of Law?*, 38 Geo. J. Int'l L. 251, 268 n. 34 (2007).

^{dlxxxvi} See, e.g., Roxanne Christ & Farnaz Alemi, *Clean Games*, 31-MAY L.A. Law. 42, 44-46 (2008); Gregory Kenyota, Note, *Thinking of the Children: The Failure of Violent Video Game Laws*, 18 Fordham Intell. Prop. Media & Ent. L.J. 785, 802-803 (2008).

^{dlxxxvii} See *supra* note ccxxiv.

^{dlxxxviii} See, e.g., *My Little Dolcett Girl*, *supra*.

^{dlxxxix} “Ageplay,” Wikipedia, <http://en.wikipedia.org/wiki/Ageplay>.

^{dx} *Id.* See also Tateru Nino, *Thoughts on Ageplay*, Second Life Insider (March 4, 2007), <http://www.secondlifeinsider.com/2007/03/04/thoughts-on-ageplay/>.

^{dxci} As we saw in § III(B)(1), Residents in *Second Life* are adults, so the only children are adults using a childlike avatar.

^{dxcii} *Ageplay in Second Life: Interview with Jailbait Manager Emily Semaphore*, Second Life Herald (January 28, 2007), http://www.secondlifeherald.com/slh/2007/01/ageplay_in_seco.html.

^{dxci} See *id.*

^{dxci} See *id.*

^{dxcv} See Pixeleen Mistral, *Alliance Navy Landowner SL Incest/Ageplay?*, Second Life Herald (June 7, 2008), <http://foo.secondlifeherald.com/slh/2008/06/alliance-navy-m.html>; Pixeleen Mistral, *Intersexed Avatar Children Hard to Find*, Second Life Herald (February 15, 2007), http://foo.secondlifeherald.com/slh/2007/02/intersexed_avat.html.

^{dxevi} See Pixeleen Mistral, *AgePlay Sex Groups Grow 1% per Week*, Second Life Herald (March 9, 2007), http://www.secondlifeherald.com/slh/2007/03/ageplay_sex_gro.html.

^{dxcvii} See, e.g., Tateru Nino, *Sky News Targets Sexual Ageplay in Second Life Again*, Massively (March 3, 2008), <http://www.massively.com/2008/03/03/sky-news-targets-sexual-ageplay-in-second-life-again/>.

^{dxcviii}*Paedophiles Target Virtual World*, Sky News (October 31, 2007), <http://news.sky.com/skynews/Home/Sky-News-Archive/Article/20082851290719>.

^{dxci}*Id.*

^{dc}*See, e.g., Pedophiles Lure Kids in Virtual Online World*, WorldNetDaily (October 31, 2007), <http://www.worldnetdaily.com/index.php?fa=PAGE.view&pageId=44299>.

^{dci}*Ageplay in Second Life: Interview with Jailbait Manager Emily Semaphore, supra.*

^{dcii}*Ageplay in Second Life: Interview with Jailbait Manager Emily Semaphore, supra.*

^{dciii}*See, e.g., Ga. Code Ann. § 16-6-4(a)* (molestation consists of activity with a child under 16).

^{dciv}*See, e.g., Cal. Penal Code § 647.6(a)(2).*

^{dcv}*See notes dxlviii - dxlix & accompanying text, supra. See, e.g., Virtual Pedophilia in Second Life Causes Concern*, CTV (November 4, 2007), http://www.ctv.ca/servlet/ArticleNews/story/CTVNews/20071104/second_life_071104/20071104/; Katrina Tandino Post, SL Exchange (July 12, 2008), <http://www.slexchange.com/modules.php?name=Forums&file=viewtopic&t=58063&postdays=0&postorder=asc&start=60&sid=>. *See also* Caliadris Pendragon, Age Play Rights and Risks, Second Life Insider (August 15, 2006), <http://www.secondlifeinsider.com/2006/08/15/age-play-rights-and-risks/>.

^{devi}Daniel Terdiman, *Phony Kids, Virtual Sex*, CNET (April 12, 2006), http://news.cnet.com/Phony-kids%2C-virtual-sex---page-2/2100-1043_3-6060132-2.html.

^{devii}535 U.S. 234 (2002).

^{deviii}535 U.S. at 253.

^{dcix}535 U.S. at 256.

^{dcx}535 U.S. at 253.

^{dcxi}*See, e.g., Eloise Pasteur, Transcript of the German Piece about Age Play*, Second Life Insider (May 11, 2007), <http://www.secondlifeinsider.com/2007/05/11/transcript-of-the-german-piece-about-age-play/> (German prosecutor declares video of ageplay is child pornography banned by German law).

^{dcxii}Virtual child pornography is illegal in other countries. In 2007, German officials announced that they were investigating sexual ageplay in an effort to apprehend and prosecute those responsible; if convicted, they could be imprisoned “between three months and five years.” *See German Prosecutors Pursue Child Porn in “Second Life,” DW-World.DE* (August 5, 2007), <http://www.dw-world.de/dw/article/0,2144,2481582,00.html>. *See also* Jan Libbenga, *Dutch Demand Ban of Virtual Child Porn in Second Life*, The Register (February 21, 2007), http://www.theregister.co.uk/2007/02/21/dutch_demand_ban_on_virtual_child_porn/.

In May, 2007, Linden Lab announced that neither ageplay nor real child pornography would be tolerated in *Second Life*. Robin Linden, *Accusations Regarding Child Pornography in Second Life* (May 9, 2007),

<http://blog.secondlife.com/2007/05/09/accusations-regarding-child-pornography-in-second-life/>. This announcement seems to have been prompted by a German investigation into whether real child pornography was being traded in *Second Life*. See, e.g., Kate Connolly, *Germany Investigates Second Life Child Pornography*, *The Guardian* (May 8, 2007), <http://www.guardian.co.uk/technology/2007/may/08/secondlife.web20>. In November, after the Wonderland story appeared, Linden Lab issued a “clarification” in which it explained that sexual ageplay “has been disallowed in recognition of our Community Standards . . . and international laws”. Ken D. Linden, Clarification of Policy Disallowing “Ageplay,” *Second Life Blog* (November 13, 2007), <http://blog.secondlife.com/2007/11/13/clarification-of-policy-disallowing-ageplay/>. Some perceived Linden Lab’s actions as efforts to accommodate foreign laws banning virtual child pornography. See, e.g., Foreign Laws, Ageplay, Etc. . . ., Lliani, *The Second Life Of*. . . (May 16, 2007), <http://lillani.wordpress.com/2007/05/16/foreign-laws-ageplay-etc/>.

That may not be the end of the story. In March, 2008, the owner of the Wonderland area in *Second Life* was exploring the possibility of moving it to a new site -- Litesim.com – that was scheduled to go live later in 2008. See Eric Reuters, *Ageplay Sim Eyes New Grid*, Reuters – Second Life (March 11, 2008), <http://secondlife.reuters.com/stories/2008/03/11/ageplay-sim-eyes-new-grid/>. “Moving off the Second Life Grid would allow Wonderland autonomy from Linden Lab, which has banned ageplay within its borders.” *Id.* And, of course, ageplay still survives in other areas of *Second Life*. See, e.g., Pixeleen Mistral, *Alliance Navy Landowner SL Incest/Ageplay?*, *supra*. See also Community: Incident Report, Second Life (July 5, 2008) (ageplay violation – warning issued), <http://secondlife.com/support/incidentreport.php>.

^{dexiii} 535 U.S. at 253.

^{dexiv} See, e.g., Caroline Meek-Prieto, *Just Age Playing Around? How Second Life Aids and Abets Child Pornography*, 9 NC JOLT Online Ed. 88 (2008).

^{dexv} “Forbidden Planet,” Wikipedia, http://en.wikipedia.org/wiki/Forbidden_Planet.

^{dexvi} *Id.*

^{dexvii} *Id.*

^{dexviii} *Id.*

^{dexix} *Id.*

^{dexx} *Id.*

^{dexxi} *Id.* The astronauts realize the beast attacking them is created by the scientist’s subconscious, a product of his hostility toward the intruders. He is fatally injured in a struggle with the monster; the astronauts leave, after setting the machine to destroy itself and the planet. See *id.*

^{dexxii} See, German Penal Code §§ 86 & 86a, <http://www.iuscomp.org/gla/statutes/StGB.htm#86>. See also Council of Europe, Additional Protocol to the Convention on Cybercrime, (CETS 189) (January 28, 2003), <http://conventions.coe.int/Treaty/en/Treaties/Html/189.htm>.

^{dcxxiii}Putting one's violent virtual fantasies online is not a crime, even when they involve a "real," identifiable victim. *See* United States, v. Alkhabaz, 104 F.3d 1492, 1495-1496 (6th Cir. 1997).