

<14>

## THE VIRTUAL EXPANSES OF CANADIAN POPULAR CULTURE

Derek Briton

Virtual Worlds are a very recent phenomenon on the cultural stage, and although Massively Multiple Online Games (MMOGs) and Massively Multiple Online Role-Playing Games (MMORPGs) comprised the first instances of virtual worlds, many non-competitive virtual environments now exist. Virtual worlds are an ongoing topic of interest and discussion on the Internet, and although the acronyms hardly roll off the tongue, this has not stifled their use: a Google search for “MMOG” yields 2.8 million results, for “MMORPG” 28.3 million. Since their inception in 2004,<sup>1</sup> the universe of virtual worlds has expanded dramatically, but the aim of this chapter is neither to provide an exhaustive list nor a definitive account of these cyber realities—if this were even possible.<sup>2</sup> It is, rather, to explore the extent to which virtual worlds have impacted Canadian popular culture,

and to find a way to rethink the implications and consequences of virtual worlds in a manner that avoids portraying players either as dupes of the military-entertainment complex<sup>3</sup> (a Media Studies 1.0 analysis) or socially irresponsible, apolitical aesthetes (a Media Studies 2.0 analysis)—to move beyond this either/or impasse.<sup>4</sup> Virtual worlds are considered in terms of three broad categories: (1) first-person-shooter, (2) role-playing/questing, and (3) socializing/community-building, and the chapter's focus is predominantly, but not exclusively, on three exemplary instances of this division: Bungie's *Halo 3* (*H3*), Blizzard Entertainment's *World of Warcraft* (*WoW*), and Linden Lab's *Second Life* (*SL*).

## Brave New Worlds

Set in the twenty-sixth century, *H3* stages an interstellar war between an alliance of alien races (the Covenant), and the defenders of humanity—the United Nations Space Command and a race of alien supporters (the Elites). Players can choose to play in “campaign” or “multiplayer” mode. In campaign mode, players assume the character of Master Chief, a cybernetically enhanced super soldier, and are assisted in their task by human and alien allies. In multiplayer mode, players engage in combat with other players. *WoW* is staged in the virtual world of Azeroth, and players can adopt a character (called an “avatar,” which is a digital embodiment of the player) of their choice, but must declare allegiance to one of two factions, Horde or Alliance, and join a collection of other players (a guild) to advance in the game. Players can explore the world's various realms (each of which has its own language) and can choose to 1) engage in open combat with one another, player versus player (PvP); 2) fight monsters and complete quests, player versus environment (PvE); or 3) role-play, which involves elements of PvP and PvE. *SL* is a virtual world comprising regions and islands that are rated according to content and activities. Subscribers, or Residents (who must be over 18 years of age), create an avatar and can then explore the world in various modes: on foot, by flying, in a variety of vehicles, or through teleportation. Residents interact with one another and can trade their creations and/or services to other Residents for Linden Dollars (currently, \$259 L = US\$1). *SL* is unique in that Residents, not the game's developers, have generated the majority of content. To accommodate players under the age of 18, *Teen Second Life*, was launched in February 2005.

## Population Counts

How virtual worlds calculate their inhabitants (subscribers/players) is a point of heated contention.<sup>5</sup> *SL*, for instance, counts every subscription created since its inception in 2003. *WoW*, on the other hand, counts only currently active (paying) users. Such disputes aside, the numbers remain staggering: as of April 2008, *WoW* declared over 10 million users paying at least US\$12 per month, and *SL* over 12.3 million free and premium subscriptions. On its U.S. release (25 September 2007), *H3* sold close to 2.4 million copies in the first 24 hours, for a total of \$174 million, and after the first week, total worldwide sales reached over \$300 million.<sup>6</sup> An X-Box 360 exclusive, *H3* also contributed significantly to sales of the gaming unit, doubling previous sales for a total of 17.7 million units as of January 2008. As of the same date, Microsoft calculated *H3* users numbered in excess of 8.1 million.<sup>7</sup> On Monday, 22 June 2009 (11:30 am, MST), the Bungie.com homepage displayed 102,765 *H3* players online, and a total “Campaign Kill Count” of 10,784,460,648—3,991,992,921 greater than the world’s estimated population of 6,792,467,727.

## Shifting Virtual Sands

But this does not mean the ruling triumvirate can afford to sit on their laurels. As of September 2008, Sulake’s *Habbo*,<sup>8</sup> a socializing/community-building virtual hotel for teens, surpassed *SL* in terms of total subscribers (over 100 million) and long-time industry leader, *WoW*, in terms of active users: “Habbo Hotel has the largest player base of any online game or virtual world (7.5 million per month), significantly surpassing *World of Warcraft* (4.5 million per month).”<sup>9</sup> And a June 2008 report by Strategy Analytics reveals these figures may be just scratching the surface, declaring that “over the next ten years some 22 percent of global broadband users will have registered for one or more virtual worlds resulting in a market approaching one billion registrants and an eight billion dollar services opportunity.”<sup>10</sup>

## Gamer Stereotypes

The appeal of Virtual Worlds is broad, but gamers are often stereotyped: “you need to be Asian to be good at video games ...all gamers are morbidly obese people who can’t stand daylight ...girls can’t play video games ...if you play *WoW*, you will

never get a date ...all gamers are way too hardcore.”<sup>11</sup> These stereotypes have been challenged with anecdotal evidence in the past, but a recent controlled study of a popular MMORPG, Sony Corporation’s *Everquest II*, reveals just how unfounded most are. The study, published September 2008 in the *Journal of Computer-Mediated Communication*, reveals a number of facts about gamers: average age 32 years, but more players are in their 30s than 20s; older players play more hours per week than younger, and the hours increase with age; 80.0 percent male to 19.2 percent female gender distribution, but female players play more hours per week than male; players incomes are approximately \$25,000 above U.S. average, as is their education level; Whites and Native Americans play at above average rates, but Asians, Blacks, and Hispanics/Latinos play below; players are generally healthier than the average population, with lower body-mass indexes, and older gamers are especially fit in comparison to their non-gamer counterparts. Such evidence, that gamers are in better physical health than the general population, that older gamers play more than younger, that female gamers play more than male, that Caucasians play more than Asians, and that players are motivated for social reasons, certainly dispel long-held stereotypes of gamers.<sup>12</sup>

## New versus Old Media

The popularity of virtual worlds has not escaped the attention of the “old” media, and several U.S. television networks have featured MMORPGs in prime-time TV shows in an attempt to cash in on their growing popularity. *The Comedy Network*, for example, took a satirical poke at MMORPGs in an episode of *South Park* entitled “Make Love, Not WarCraft,” which first aired 4 October 2006. The next day, NBC featured *Call of Duty* (a first-person-shooter MMORPG set in World War II), in an episode of *The Office* entitled “The Coup.” NBC followed this with an episode of *Law and Order: Special Victims’ Unit* entitled “Avatar,” which aired on 2 October 2007. The show featured underage sex in a virtual world (*Alternate You*) that bore a striking resemblance to *SL*. CBS, not to be outdone, explicitly featured *SL* in two episodes of *CSI: New York* (“Down the Rabbit Hole,” on 25 October 2007; and “DOA for a Day,” on 2 April 2008), and used Cisco Systems’ Telepresence technology and one of its recent corporate acquisitions, Electric Sheep, to promote and facilitate entry into *SL* so audience members could investigate and solve a specially-staged, in-world crime.<sup>13</sup> Not to be outdone, NBC also

featured *SL* on 25 October 2007, in another episode of *The Office* entitled “Local Ad.” Then, on 9 November 2007, another CBS series, *Numb3rs*, featured a MMORPG in an episode entitled “Primacy.” Although a virtual world has yet to make an appearance in the CBS series *NCIS*, special agent Timothy McGee, a junior investigator, is regularly teased by colleagues because he participates in a *WoW*-like MMORPG.<sup>14</sup> As for Hollywood, after some early delays due to financing, *Halo* and *WoW* movies are proceeding toward release dates in 2010. Of course, the *Matrix* trilogy, which debuted in 1999, had already done much to bring the idea of virtual worlds into the public’s consciousness.<sup>15</sup>

## Virtual Worlds and Canadian Popular Culture

Not surprisingly, the virtual-world phenomenon is influencing Canadian popular culture, and many Canadians have been quick to embrace the new possibilities. For instance, as early as November of 2006, Toronto indie band *Uncle Seth* performed at *C'est What* and simulcast their performance in *SL*. Suggesting, perhaps, that one of the band members had read a *Wired* article published two months earlier:

Move over, *MySpace*: Pop legends and aspiring rock stars are heading for an online outlet that’s more Sims than social networking. With thousands of bands now crowding the pages of *MySpace.com*, acts like Duran Duran and Suzanne Vega are turning to the online virtual world of *Second Life* to make themselves heard. Artists are creating avatars and using the game’s audio-streaming features to play “live” concerts on stages made of polygons.<sup>16</sup>

In fact, months before *Uncle Seth*, pianist Lang Lang had given a live performance in *SL*, as had three orchestras, one of which was the Liverpool Philharmonic.<sup>17</sup> In June 2007, *The Guardian* and Intel announced an ambitious, jointly hosted three-day music festival in *SL*, SecondFest, featuring headliners such as the Pet Shop Boys, Hadouken, and New Young Pony Club. The festival attracted over 15,000 spectators, and despite some technical difficulties was deemed a great success.<sup>18</sup>

And in Canada, as elsewhere, music and fashion are closely linked, so it’s no surprise that in February of 2007, Kate Trgovac, a social media and digital

marketer, announced “After a Fashion” ... a Canadian “Girl’s Night Out in Second Life.” Kate’s intent was to form a small group of Canadian women to explore *SL*. Shopping is the group’s *raison d’être*, but she was prepared to expand into other activities should the group so wish. This announcement was followed closely by a gallery of screen grabs illustrating what Kate’s *SL* avatar, Katicus Sparrow, would have worn had she attended the Oscars. These blog posts were immediately preceded by a report on an *SL* fashion show Kate had attended.<sup>19</sup> And let’s not overlook the presence of a donation-sponsored, quintessentially Canadian cultural icon in *SL*—Tim Hortons: “It’s run mostly on donations from residents, and calls itself the unofficial Canadian embassy.”<sup>20</sup> But it isn’t just Canadian music and fashion that is being impacted by the virtual-worlds phenomenon.

## Canadian Businesses in Second Life

On 25 September 2007, Davis LLP became the first Canadian law firm to open an office in *SL*. Launched by a group within the firm that focuses on intellectual property, technology, and video-game law, the initiative seems not entirely unfitting. The group’s press release states: “the Davis lawyers present in Second Life are represented by avatars and the virtual office features a lobby, a library with topical legal information, a recruiting centre, and a secure boardroom.” The virtual law office is impressively furnished and clients have a choice of six virtual lawyers to consult.<sup>21</sup> But Davis LLP is not alone. In November 2007, Canada Post opened an outlet to serve online shoppers,<sup>22</sup> and in February 2008, *CBC News* reported that a Vancouver-based developer had set up shop in *SL*, noting: “while many businesses are experimenting in Second Life, Global Condocenter bought an island and began development with a definite plan in mind.” The result: “a virtual condo shopping mall... helping condo developers promote their properties to buyers around the world.”<sup>23</sup>

But a number of businesses have found the cost of maintaining a virtual presence in *SL* difficult to justify when compared to alternative forms of advertising/promotion. Duncan Riley of TechCrunch, for example, notes that the advertising “cost for business on Second Life is insane: simply even for the very best, the figures don’t add up.”<sup>24</sup> Riley concedes, however, that “Second Life doesn’t rely on corporations for revenue and the decline of corporations on Second Life doesn’t really matter all that much to Linden Lab,” and that “once the last

corporation leaves Second Life, the user-generated metaverse will continue, and in some ways may even end up being better off.”

## From Reaching Out to Looking Within

The significant cost of maintaining a presence in *SL* for promotional/advertising purposes has no doubt contributed to a number of early adopters closing shop (American Apparel, AOL, and Pontiac, for example). But a number of large corporations are attracted to *SL* not because of its marketing or sales promise but its ability to facilitate in-house communication and collaboration. Compared to hosting large conferences and paying for accommodation and travel expenses, buying and maintaining an *SL* island is relatively inexpensive. In April 2008, for instance, Sun Microsystems, after its acquisition of *MySQL*, hosted a twelve-hour corporate meeting on one of its seven *SL* islands (only two of which are open to the public), bringing hundreds of old and new employees together, and “high-tech titan IBM, which has nearly 387,000 employees in 170 countries... [has] about 5,000 workers visit Second Life and other virtual worlds to conduct meetings, train new employees and hold orientation sessions.”<sup>25</sup> IBM’s move into *SL* is of particular note because it was premised on the stipulation that the virtual environment be hosted on the corporation’s own servers, a significant change that allows IBM to manage its own security protocols; a move that will no doubt pave the way for greater corporate use.

In addition to Sun and IBM, over one-hundred large corporations, the like of Ben & Jerry, Best Buy, Cisco Systems, Dell, H&R Block, Reuters, and Toyota, have a presence in *SL*. What such corporations are also discovering is that *SL* can be invaluable for staging simulations that would otherwise require large capital outlays for start-up technology and/or infrastructure in a real-world setting. The virtual world is also proving an invaluable corporate recruitment tool for executive search agencies. TMP Worldwide Advertising & Communications, for example, established an *SL* island early in 2007, and others, such as Career Builders, and Accenture, one of the world’s largest recruitment agencies, soon followed.<sup>26</sup> But not only corporate recruiters are looking to *SL* to meet their staffing needs, as evidenced by the launch of two in-world law-enforcement recruitment campaigns: Vancouver Police, in June 2007, and the Western Australian Police in September 2008.<sup>27</sup>

## Virtual Degrees

No surprise, then that the communicative, collaborative, simulation, and recruitment potential of *SL* should attract the attention of Canada's colleges and universities, a number of whom were early to establish a presence in *SL*. Mohawk and Loyalist Colleges were among the first, but LaSalle soon followed, announcing its presence in December of 2006 with the opening of *Eduisland*. Later, in February 2007, Mohawk firmly established its presence with an *SL* island of its own. But of the three colleges, LaSalle's foray into *SL* was the most ambitious, launched with the promise to relocate all of its distance education offerings to the virtual domain, "technology permitting."<sup>28</sup> But it was Canada's westernmost province, British Columbia, that staged perhaps the most spectacular entrance into the world of *SL* so far, with the simultaneous launch of a new Centre for Digital Media and a Masters of Digital Media Program in both the real and virtual world of *SL*, in the presence of Premier Gordon Campbell.<sup>29</sup> The presence and participation of educators in the *SL* is now such that in 2008 a dedicated education track (SLED) was included for the first time in the annual Second Life Community Conference.

## Pre-tween Virtual Worlds

The popularity of virtual worlds with tweens and teens is difficult to dispute, given the remarkable success of Sulake's *Habbo* and other tween/teen sites. "Tween" is a term invented by marketers for children 8–12 years of age. No longer children but not yet teens, tweens are in search of a firm identity and are very image conscious. Their desire to appear sophisticated leaves them open to marketing techniques that treat them as independent, mature consumers who no longer require parental guidance.<sup>30</sup> *Gaia*, for instance, boasts over 100,000 in-world economic transactions per day, over 7 million unique users each month, over 1 billion total posts to member forums, over 100,000 auction transactions per day, and the highest average visit-time of similar social networking sites.<sup>31</sup> *Gaia*, which is more properly an avatar-based social-networking site, furthered this success with the addition of a "unifying game storyline plot inside the world," a MMOG named *zOMG*, which launched in open beta on November 6, 2008.<sup>32</sup> But virtual worlds that cater to pre-tween users are proving equally successful, and one of the most popular originated in Canada, *Club Penguin*.

Launched in October 2005, *Club Penguin* was meticulously designed to provide a safe online environment for pre-tweens. Players assume a penguin avatar to navigate and interact in the virtual Antarctic world, but conversations between players are monitored, and communication restricted to choices from prepared scripts. The success of the venture (4.7 million unique visitors in June of 2007, a 159 percent increase over 2006) proved sufficient to attract the attention of the Walt Disney Company, who acquired *Club Penguin* in August 2007 for \$350 million and a promise “to pay the founders, three fathers based in Kelowna, British Columbia, up to \$350 million more by the end of 2009 if the site meets growth targets.” This is an example, *The New York Times* suggests, of Old Media “being forced to rethink how they reach young people, who often do not see television as the door to the world of movies, toys and video games,” and Disney’s acquisition of *Club Penguin* is clearly an effort to avoid “falling behind on the Web as children flock to an array of upstart sites.”<sup>33</sup>

## Virtual Addiction

The proliferation of virtual worlds has given some great cause for concern, others for celebration, but the one thing dystopian and utopian critiques have in common is their almost singular focus on the player. Any kind of “success,” in virtual worlds, whether competitive, commercial, or social demands a considerable outlay of online time, which some insist can result in addiction. In fact, addiction seems to be becoming the central focus of concern, surpassing even exposure to violence. Initially, many linked the rash of school shootings in the U.S. and worldwide from the mid-70s on to excessive violence in video and online games, but it has proven impossible to establish a firm connection.<sup>34</sup> The gaming blog, *GamePolitics*, for instance, notes how TV psychologist, Dr. Phil McGraw, host of pop psychology show *Dr. Phil* (who initially declared a clear link between playing violent games and engaging in violent behaviour when interviewed on *CNN’s Larry King Show* on 17 April 2007, one day after the Virginia Tech shootings), changed a scheduled show on violence in games to game addiction, a much less contested target.<sup>35</sup> The show aired 20 October 2008, and featured “ExGamer,” a self-confessed game addict “whose real name is Brad ... a 40-year-old Canadian in recovery from a nine-year compulsive online gaming habit, including, but not limited to, up to 80 hours per week playing more than sixteen different massively

multi-player online role playing games.” Brad hosts *Exgamer.net* with the help of Maschinca, “a 44-year-old wife and mother of two teenagers who resides in the Netherlands... [and] is recovering from excessive gaming in the World of Warcraft (WoW).”<sup>36</sup> This was the first *Dr. Phil* show to feature MMORPG addiction, but a previous show that aired 3 December 2007, entitled “Shocking Teen Trends,” did include a segment devoted to MMO addiction: “Virtually Addicted.” The segment comprised an interview with a 13-year-old girl and her mother, who believed her daughter was addicted to a socializing/community-building virtual world for teens—*There.com*.

## Dystopian versus Utopian Visions of Virtual Worlds

Virtual worlds that cater to the pre-tween audience have been the subject of some of the most damning criticisms. Dystopian critics of pre-tween virtual worlds focus on their competitive and currency-driven focus, noting that although most offer free entrance, full participation is limited to paying members, and those without full access often feel themselves social outcasts. Players must pay a monthly subscription to gain the right to “earn” or purchase in-world attire, accoutrements, and “pets.” Moreover, some sites, such as *WebKinz*, also require the purchase of a real toy to gain entrance. In May of 2008, Consumer Reports Web Watch published an ethnographic study of how young children interact with online websites, “Like Taking Candy From a Baby,” that confirms the competitive nature, monetary focus, and consumerist ethos of pre-tween virtual worlds.<sup>37</sup> Critics also note that, spurred by the desire to acquire more possessions as quickly as possible, many pre-tweens have resorted to cheating the system:

Across the Internet, blogs, message boards and even video clips on YouTube.com offer preteens tips and tricks on how to steal coins at ClubPenguin.com or cheat their way to a higher salary at Whyville.net. ...To some educators, the cheating is yet another example of a competitive culture looking for shortcuts to get ahead. Worse, these cheaters can be as young as 8, and by unfairly learning how to obtain the biggest igloo on the block, it could foreshadow cheating in other aspects of life, they say.<sup>38</sup>

The fear is that pre-tween virtual worlds are little more than “marketing plans to hook children on brands, to teach them how to shop and to turn them into... ‘gimme machines’,”<sup>39</sup> and some critics lament that developers have “lowered the point of entry to social-networking sites from middle school to elementary school, opening up young children to a type of interaction that even tweens and teenagers often find overwhelming and hurtful.”<sup>40</sup> There’s also the fear that pre-tweens will develop an obsession with virtual worlds that deters them from non-virtual forms of interaction with peers, where they’ve traditionally learned hands-on, practical skills. One parent, concerned that her son is obsessed with *Club Penguin*, limits his access to weekends and wonders, “if children weaned on computer games will grow up to know how to do anything beyond point and click.”<sup>41</sup> Addiction to virtual worlds is, of course, also an issue for the K–12 audience.

In the education realm, where K–12 issues typically play out, variants of the analyses Miller describes as Media Studies 1.0 and Media Studies 2.0 vie for the support of educators and parents. Lowell Monke, author of *Breaking Down the Digital Walls: Learning to Teach in a Post-Modern Age*, is an outspoken critic of electronic media, and is convinced children become addicted to video and online games.<sup>42</sup> In a 2003 presentation to an international education conference, for instance, Monke warns that “TV, and most likely, all other video screen activities, possess all of the same clinically identifiable characteristics required to classify them as addictive substances,” and further cautions educators: “Don’t be surprised if some day BEJ (or a more scientific label) is added to LD, BD, ADD and ADHD as a psychological malady in children.”<sup>43</sup>

Marc Prensky, on the other hand, author of *Don’t Bother Me Mom—I’m Learning!* and an advocate of all things digital, argues that we are witnessing a fundamental transformation in how children think and learn, and insists that “*our students have changed radically. Today’s students are no longer the people our educational system was designed to teach*”; moreover, “there is absolutely no going back” (emphasis in original).<sup>44</sup> Prensky contrasts “digital natives,” students who have grown up with the new digital technologies, with “digital immigrants,” teachers and adults who struggle with the new digital medium and lexicon, and who have an “accent” that impedes their ability to interact and communicate with “native speakers.” More radically, Prensky claims “today’s students *think and process information fundamentally differently* from their predecessors,” noting “these differences go far further and deeper than most educators suspect or realize.” He

concludes: “It is very likely that *our students’ brains have physically changed*—and are different from ours—as a result of how they grew up. But whether or not this is *literally* true, we can say with certainty that their *thinking patterns* have changed” (emphasis in original).<sup>45</sup>

Such antithetical analyses of the virtual appear irresolvable, evidenced by the ongoing debate in the education literature between representatives of Monke and Prensky’s position.<sup>46</sup> But what if the focus is widened beyond the implications and consequences of virtual worlds for players to include others the virtual-world phenomenon may be affecting? Miller, for instance, contends that a focus on exploited labour, the central element of a Media Studies 3.0 perspective, may be the way to move beyond the Media Studies 1.0 and 2.0 antinomy.

## Virtual World Labour Practices

In 2006, an article published in the *Canadian Journal of Communication* offered an insightful glimpse into the exploitative labour practices of the North American electronic gaming industry.<sup>47</sup> The paper “examines the conditions that generated the crisis in video game labour exposed by *ea\_spouse* and the variety of responses this exposure has elicited from both game corporations and game workers”—“*ea\_spouse*” being the significant other of an overworked Electronic Arts (EA) employee, EA being the largest employer in the sector and among Fortune’s “100 Best Companies to Work For.” The report contends that “Youthful enthusiasm, home-away-from-home workplaces, stock options, the risks of leaving, macho bravado, and a cool corporate culture... are among the softly coercive elements of video game companies’ culture of extreme work,” but also acknowledges that employees do have the right to organize and could, thereby, compel employers to provide wages and conditions in excess of the minimal legislated standards of the industry. Employers in many other industries, after all, pay above legislated minimum wage levels. The authors conclude, in fact, that worker exploitation is not peculiar to the electronic gaming industry, noting “how similar their problems of long hours, boundary-less toil, and workplace burnout are to those suffered by an apparently very different group of workers—academics.” It would seem, then, that North Americans engaged in the production of virtual worlds are no more susceptible to exploitation than workers in any other industry. That workers in the electronic gaming industry are particularly susceptible to exploitative labour prac-

tices is certainly not something that should be overlooked, but there is nothing inherently exploitative in virtual-world production processes. But what of those who don't enjoy the right to organize and the protection of North American labour legislation?<sup>48</sup>

## The Virtual World Precariat

If virtual worlds have a precariat,<sup>49</sup> it would seem the “gold farmers,” those who play games in crowded workshop “farms” for long hours and minimal wages to earn virtual rewards (in-world gold, accoutrements, and items) that their employers sell to more affluent players for real currency, would be prime candidates. In fact, the trading of virtual goods is now a worldwide phenomenon. For instance, in October 2007, South Korea introduced legislation “to punish online traders that manage the profit-driven trading of online game items and game currencies into real money.”<sup>50</sup> Although the Korean electronic gaming industry remains skeptical of the government's ability to enforce the legislation, two in-game traders were found guilty and fined a total of 8 million Won (US\$8,000) on 27 February 2008. Since the two had traded items from the virtual world *Lineage II* and made more than 20 million Won in profit between May and July of 2007, the judge decided “their trades were illegal because the amount of money they handled was huge enough.” At the trial, the Korea Game Development and Promotion Institute testified that in excess of 830 billion Won was expended on online game items in 2006, and that over 1 trillion will be expended in 2008.<sup>51</sup>

Traders may earn huge profits, critics argue, but it is their employees who pay the price—the “gold farmers” who have to spend long hours in packed workshops replicating mundane, in-world tasks. Gold farms are now predominantly based in China, and U.S. gamers, who lack time to play but not money to spend, are the major purchasers of their virtual products. But an in-progress documentary on gold farmers, produced and directed by University of California, San Diego, Ph.D. candidate Ge Jin, reveals that Chinese gold farmers (who are predominantly young males) value the opportunity to play games that would otherwise be unavailable to them, welcome the chance of employment doing something that they like (in a very competitive labour market), and enjoy working, living, and eating in close proximity with colleagues they can have fun with.<sup>52</sup> One 23-year-old “farmer” interviewed by *The New York Times*

states: “I make about \$250 a month, which is pretty good compared with the other jobs I’ve had. And I can play games all day.”<sup>53</sup> And one of Ge Jin’s interviewees, Xiong Xiong, states, “We are playing at the highest level, not just for money but also for fun. When so many people are playing together, it’s important to have fun. There is a sense of achievement.” In fact, when the workshop that employed Xiong Xiong closed its doors, he invited three colleagues to live with him at his home so they could continue gold farming cooperatively, sharing whatever revenue they were able to earn: “Here we don’t have employer or employee. If we can make money, we share it. If we can’t, at least we are happy playing together.”

It appears, then, that gold farmers involved in the production of virtual goods for North American gamers are no more exploited than millions of Asian workers involved in the production of material goods for North American consumers, perhaps even less so, because they enjoy their work so much that even at the end of a twelve-hour shift conducting repetitive tasks to earn gold, they spend their free-time playing games. As one (unidentified) interviewee puts it: “Sometimes after we finish the tasks of the day, we also want to enjoy the game a little. We want to play with foreign gamers, form groups, and take some quests together.” What these workers wish more than all else is respect from North American gamers, and to be identified not as “Chinese farmers” but professional gamers. Surprisingly, according to some, game workshops provide a valuable community service, employing disenfranchised youth who would otherwise be gang members involved in nefarious activities: “Changmao was a member of a gang in a small town called Lishui. Some residents in Lishui say that the town feels a lot safer ever since the emergence of gold farms and there are less unemployed youngsters wondering around and looking for fights. He started working in a gold farm one year ago. Now he is persuading other gang members to join him to fight virtual enemies.”<sup>54</sup>

But employing low-cost, overseas labour is not restricted to MMORPGs. In 2006, for instance, the Illusion Factory, a special effects company based in Southern California, started outsourcing *SL* projects to highly skilled Vietnamese workers who create 3-D environments for a fraction of what it would cost to hire U.S. workers.<sup>55</sup> But as with the Chinese gold farmers, the question of whether these Vietnamese workers are being exploited is not easily resolved. For instance, one designer, who suggests his salary of US\$1,000 per month is average among his

colleagues, notes that this is a lot of money in Vietnam, since \$300 per month is considered a good salary, and although he works an average of twelve hours per day, he professes to love his work. It may appear, certainly, that these Vietnamese workers are being exploited because they earn much less than their U.S. counterparts, but the Illusion Factory argues otherwise, insisting its motives to hire overseas workers were first humanitarian and developmental—an opportunity for the developed world to contribute to the less developed—and that lower labour costs are a fortuitous by-product.<sup>56</sup>

Clearly Chinese gold farmers and Vietnamese designers view themselves as profiting from the virtual fruits of their very real labour. In an ideal situation, these professional gamers and designers would work fewer hours and be better recompensed, but the same can be said of millions of other workers worldwide. One can argue that workers in the South are being exploited by employers in the North, but classical Marxism long warned of this predicament: labour's struggle must be international, not national, because national gains will always be undermined by capital's flow to nations who do not share in those gains. Until North American labour establishes fair pay and working conditions in all North American workplaces, and until those same conditions are established worldwide, capital will continue to seek workers who do not share those gains. In fact, this is exactly what happened with gold farming, which was a predominantly North American industry until overseas entrepreneurs entered the lucrative market.<sup>57</sup> In sum, there is nothing *inherently* exploitative about virtual world labour practices, and an analysis with labour as its central focus does not appear to move us beyond antithetical views on the subject. However, a labour-centred perspective does provide a richer analysis, because it allows us to include such questions as those raised by Ge Jin's documentary: "How big will this virtual economy become? Who owns the virtual properties in the game worlds? What will IRS say about your income from virtual trades? Can we tell the virtual from the real after all? How do we distinguish work from play?"<sup>58</sup>

But if a central focus on exploited labour cannot move us beyond the seeming deadlock on the subject, what kind of analysis might? Perhaps one that focuses not on excluded labour, but on exclusion per se, a perspective, it turns out, that virtual worlds are inherently suited to teaching. As we have seen, contrary to popular opinion, those who choose to participate in virtual environments are not solitary loners who are disengaged socially and politically, and, in fact, the proclivity

of gamers to protest opens the door to a perspective on virtual worlds that focuses not on what they include, but what they exclude.

## Virtual World Protests

Entrance into any virtual world requires acceptance of the developer's End User License Agreement (EULA). EULAs are designed to protect the intellectual, copyright, patent, property, database, and all other rights of the developer and are densely written in a legalese few outside the legal profession understand; yet players must signify their agreement with EULAs every time they engage in play.<sup>59</sup> Developers exercise total control over EULAs, and although there is a movement toward defining a democratically-based process of establishing and amending EULAs,<sup>60</sup> a number of protests against developers who either fail to exercise power, or choose to do so arbitrarily, have been initiated. Linden Labs, for instance, initially hosted a free play/speech zone, the Outlands, within *SL* where weapons and violence were allowed, even encouraged. But this precipitated in-world protest and eventually close-quarter combat between pro and con Gulf War supporters, resulting in many "deaths" and significant virtual property damage. As a result, Linden closed the Outlands. Soon after, in August 2003, protests against the *SL* in-world tax system resulted in members re-enacting the tax protest that precipitated America's break from English rule—tea crates and signs of protest were strewn across the virtual landscape. Linden, again, reconsidered its position.<sup>61</sup>

Such protests are not peculiar to *SL*, however. In July 2006, "what some are describing as 'the largest political protest gathering in a virtual world game ever' occurred within the Chinese Massively Multiplayer Game *Fantasy Westward Journey*." Chinese gamers protested the imprisonment of one player's avatar and the dissolution of his 700-player guild (The Alliance to Resist Japan) because of what the developers insisted was anti-Japanese sentiment. Subsequent actions by the developers resulted in a massive in-world protest: "almost 10,000 player/protestors on the first day. The 'Summer Palace' server group, where much of the protest occurred, was almost overwhelmed when 80,000 players joined the protest—a huge increase over the 20,000 users the server normally accommodated."<sup>62</sup>

More recently, in September 2008, players of *Spore*, a much anticipated single/multiplayer hybrid game, began protesting against Electronic Arts' decision to embed Digital Rights Management (DRM) software into the game and to restrict

each purchaser to only three installations, in an effort to thwart piracy.<sup>63</sup> According to the *Financial Times*, irate gamers protested by awarding the game a single-star rating out of a possible five on Amazon.com (as of 22 June 2009, 2663 of 3227 reviews rate *Spore* one-star). Initially, Amazon and other online retailers began clearing the negative reviews, but Amazon repented and re-instated them after customer complaints. *Spore* players have also resorted to using the game itself to express their malcontent by designing creatures that express their ire: for example, “Donald Ronald Sop—Description: the Donald Ronald Sop, or DRM for short, is an incredibly stupid creature that should be wiped from the face of the earth,” “Space Police—Description: Ready to destroy consumers in all galaxies, 3 shots and you’re dead,” and “EA Sux—Description: Maxis rules, but EA Sux!”<sup>64</sup> Players are also protesting by downloading illegal copies of the game that bypass the draconian DRM and installation restrictions.<sup>65</sup> On 19 September 2008, Ars Technica reported that EA had relented, but wondered if it was too little too late; and five days later, Today.com reported that a class action lawsuit against EA had been launched in California.<sup>66</sup>

Even though dystopian critics of the virtual often label those who participate in virtual worlds as socially and culturally disengaged, gamers continue to be involved in active protests, and not just against game developers, as player-initiated protests against political, corporate, and cultural opponents prove. In January 2007, the French *Front National*, the political party of Jean-Marie Le Pen, arrived in *SL* to establish a new virtual headquarters. Their arrival was immediately protested, initially with peaceful demonstrations of their presence, but later with violent opposition accompanied with gunfire and explosions. Within two weeks, the *Front National* had abandoned its new headquarters and vacated *SL*.<sup>67</sup> In November 2006, *SL* Residents voted to ban public relations and marketing firms from over four hundred islands because of “flack” publicity campaigns that identify retailers and corporations as being “the first” to offer services pioneered by *SL* Residents.<sup>68</sup> And in September 2007, a day-long protest organized by Italian workers against their employer, IBM, resulted in over 2000 protesters from thirty countries joining their campaign and IBM reinstating the lost benefits that triggered the protest.<sup>69</sup> As *The Economist* notes, “The Internet allows expressions of discontent to be aggregated, giving workers the opportunity to stage protests without actually going on strike.”<sup>70</sup>

On 7 October 2008, Trade Unions staged an International Day of Action in *SL*. The day focused on rights at work, solidarity, and ending poverty and inequality.

On 20 February 2007, the *Second Life Herald* reported, “Protesters from a wide variety of groups converged on the Capitol Hill sim today to speak out against the proposed attacks on Iran. Word spread from one group to the next organically, and suddenly the sim went from completely unoccupied to full in less than fifteen minutes.”<sup>71</sup> And finally, in July 2007, People for the Ethical Treatment of Animals (PETA) and fashion designer Stella McCartney (daughter of Paul McCartney), invited Residents to join them at *SL*’s inaugural annual anti-fur protest.<sup>72</sup> It would seem, then, that a significant number of gamers are far from socially and culturally disengaged. But to find analyses of virtual worlds that focus on the principle of exclusion per se, we have to turn to less orthodox protests that have emerged in *H3* and *WoW*.

## Innovative Forms of Protest

In October 2007, *The Chronicle of Higher Education* reported that Peter Ludlow, a then University of Toronto (now Northwestern University) philosophy professor and *SL* Resident (Urizenus Sklar), accused Linden Labs, and the developers of other virtual worlds, of behaving like Greek gods. In an interview with MIT Press<sup>73</sup>, Ludlow states:

What you get in all of these games is a kind of Greek-god method of running the show. There’s no really set established policy, but they refuse to be completely hands off, too. So they reach in like Greek gods reaching down from Mount Olympus, and they dabble in stuff and screw around and get involved to bail out their friends.

No stranger to controversy, professor Ludlow, before joining *SL*, had been ejected from *The Sims Online* for expressing opinions not to the liking of Electronic Arts. It was, however, one such god-like decision from Blizzard Entertainment (BE) that resulted in an innovative and particularly striking “protest” to a change in *WoW*. In a beta of *WoW*, seemingly to BE’s dismay, gamers discovered it was possible for players from the two warring factions, Alliance and Horde, to communicate in “leetspeak”—a combination of ASCII letters and numbers initially devised by programmers to mask their programming comments from prying eyes, but later adopted by Bulletin Board System (BBS) users (typically known as hackers) to

defeat attempts (text filters) to censor their discussion of forbidden topics. BE's next update of *WoW* removed this possibility. In response, Tristan Pope, a student of theatre in New York, produced an in-world video, a "machinima," entitled "Not Just Another Love Story." Pope's protest was to demonstrate to BE that they can neither control the ways in which *WoW* is used nor restrict collaboration between Horde and Alliance players. The short video depicts a troll and human who fall in love and eventually engage in coitus, which Pope emulates with the same range of movements characters normally employ to engage in combat (fundamental avatar movements BE cannot remove). The video ends with members of Alliance and Horde in a vast dance extravaganza. Pope's protest does not involve a call for BE to allow members of warring factions to communicate, *but to demonstrate that the ways in which those who run the system envisage its use are always underdetermined and that those without power to implement system change can always subvert the proscribed use.* Pope's machinima ends with the statement: "You Can Take Away Our Leet, But You Can't Take Away the Love."<sup>74</sup>

"Machinima," using the scenery and characters of virtual worlds to produce videos, began with the introduction of the first-person-shooter game, *Quake*. In fact, the first videos produced this way were called "Quake Movies." The Quake Movie "Diary of a Camper" is usually credited as being the first ever machinima production.<sup>75</sup> As virtual worlds proliferated and 3-D game engines progressed, so did the number and production quality of machinima. *Red vs. Blue: The Blood Gulch Chronicles* was introduced in 2003 as a parody of first-person-shooter games, militaristic living, and science fiction films—the series is now in its seventeenth chapter. Staged in *Halo*, produced by Rooster Teeth, and distributed via the Internet, *Red vs. Blue* proved immensely popular (20,000 downloads the first day) and is credited with firmly establishing machinima as a legitimate artistic genre.<sup>76</sup> But the aim is not to recount the history of machinima, but rather to set the stage for a particular machinima production that reveals how virtual worlds are particularly well suited to help gamers develop a perspective that focuses on exclusion.

## Playing the System

*This Spartan Life* (*TSL*) is a machinima series created by Bong & Dern Productions, and produced and directed in *Halo* by Chris Burke.<sup>77</sup> Burke's character, Damian Lacedaemion, hosts a talk show in *Halo's* sparse, largely inhospitable environment and interviews guests with an interest in the innovative uses of virtual worlds. Both humorous and entertaining, the show features skits and tours of the *Halo* virtual environment, and a troupe of performers (The Solid Gold Elite Dancers) who use combat moves to perform choreographed "dances." Early shows were often interrupted by real *Halo* players, who inadvertently stumbled onto the "sound stage" and engaged the host and guest(s) in combat, requiring the interlopers to be dispatched before the show could proceed. The possibility of the sound stage being usurped eventually by a very skilled young gamer who could not be so easily dispatched was incorporated into later versions of the show with the appearance of "Mr. Poopy Doo Doo," no doubt an allusion to *Halo* prodigy, "Lil Poison," who started gaming at age two, played his first tournament at age four, and was signed to a professional contract at age eight!<sup>78</sup>

In a special edition of *TSL*, Kurt Andersen, host of the weekly U.S. arts and culture radio show *Studio 360*, interviews Burke, who reveals his motivation for allowing the tables to be turned on *TSL*:

This is a great opportunity for us because we've always felt that online gaming is a really interesting development in communication that non-gamers might want to learn about. To put it in a little perspective, the game we're in now, *Halo 2*, has logged in cumulative hours on X-Box Live, over 10,000 years worth of games. All those people interacting in a virtual space for all those hours is creating a mighty dense chunk of popular culture that will impact the world at large in ways that we're just beginning to understand. These are some of the things we like to talk about on *This Spartan Life*.<sup>79</sup>

Burke next explains to Andersen how he and his colleagues were able to devise the "virtual camera" they use to capture episodes of *TSL*: "In a first-person-shooter game like this, you always see the gun in front of you. But some resourceful gamers figured out a way to drop that gun, thereby giving them a clear view to record their game play, or comedy skits that they write, or in our case a talk show."

More to the point, however, relinquishing the weapon requires “no physical hacks of any kind; it’s literally just within the game play. It’s just a little bit of trickery that was not intended by the game designers,” so any gamer can record videos in the same manner. It is in multiplayer mode, Burke explains, that *Halo* offers the greatest opportunity for innovative uses: “It’s more like a big sandbox . . . you can just go in there and do other stuff, talk, hang out, so it kind of becomes a social space, an online social space, which is a very interesting development for gaming.”

But it is Burke’s exchange with a *TSL* guest, McKenzie Wark, who teaches media and cultural studies at New York’s New School University, that offers a key for understanding the truly radical potential of virtual worlds. Wark, the author of several books on cultural studies, most recently *Gamer Theory*,<sup>80</sup> suggests the world has progressed through two stages of development (topical and topographical) and is entering a third (topological) stage wherein we will all become “gamers” performing in an imperfect “gamespace.”<sup>81</sup> The topical refers to the fabric of the ancient world (“little spaces that are very, very imperfectly and tenuously connected”), the topographic to the industrial (“where railway and telegraph start to sort of thread it together”), and the topological to the emergent virtual world (“a sense in which every place and everything in it is connectible to everything else”).<sup>82</sup> Wark’s primary interest is virtual worlds that presage the topological, virtual environments within which gamers can begin to “think through our culture, what it means to be in that kind of topological space.”<sup>83</sup>

## World as GameSpace

Wark, in fact, contends a sense of “world as gamespace” already exists and is evident in such laments as “work is a rat race,” “politics is a horse race,” and “the economy is a casino.” The problem, he maintains, is that although the world is becoming more game-like, the rules are not clear, and the odds are stacked in favour of the Enrons of the world, not the ordinary person—a state of affairs Wark attributes to the efforts of the military-entertainment complex. By comparison, he notes, “actual computer games, seem, you know, really a kind of blessed world. At least you know where you stand and that to me is one of the reasons that they might be so popular.” Wark, in fact, turns Plato’s metaphor of the cave on its head and argues that virtual worlds (the cave) are no longer the shadowy reflection of an ideal world that exists outside the cave, but the ideal to which an

increasingly algorithmic, but imperfectly implemented, world is aspiring. Consequently, Wark argues that virtual environments provide the best opportunity to explore and understand the increasingly topological world that is emerging. Contra Plato, Wark suggests: “the thing to do is not try to get out of the cave but stay in it to try to explore this world, this game world that we’re in, and try to see how that might be more true to the world outside of it than anything else.” Wark’s point is that “if the world outside is becoming more and more game-like, then this [the game world] is, in fact, the most real thing there is because it’s got almost perfect form of what it would be like to live in a world that’s been turned into one enormous gamespace.”<sup>84</sup>

Increasingly, then, the world that confronts us is an emergent, totalizing gamespace hosted by a military-entertainment complex that aspires to the algorithmically governed perfection of a virtual world. Consequently, Plato’s idea of leaving the illusory world of the cave, the virtual, in pursuit of the ideal has to be turned on its head—the ideal to which the emergent gamespace aspires is now that of the algorithmically governed virtual world. What Wark proposes is that we all become gamers of the kind Bernard Suit, in *The Grasshopper: Games, Life and Utopia*, describes as “triflers.”<sup>85</sup> According to Suit, triflers are one of three kinds of game players: 1) triflers, who play according to the rules but not the aim of the game; 2) cheats, who play according to the aim but do not follow the rules; and 3) spoilsports, who follow neither the rules nor the aim of the game. Trifling, for instance, is clearly what led to the discovery of machinima—disregarding the aim of a first-person-shooter game (*Quake*) but following its rules of movement and communication to discover alternative uses for the 3-D environment. A more popular gaming term is “glitching,” but a “glitcher” is more properly someone who exploits flaws or “glitches” in a game’s programming code to achieve something the programmers never intended. It is their ability to support trifling and glitching, however, that makes virtual worlds particularly well suited to teaching a form of analysis that focuses on exclusion—initially on aspects and uses of the game that were excluded from the developer’s intent, but later on the more general concept that *exclusion is the principle on which systematic integrity is founded*. A focus on exclusion *per se* facilitates the move beyond the binary stalemate of antithetical perspectives on virtual worlds, or any system for that matter. It is unfortunate that Wark chooses to forego a psychoanalytic reading of gamespace in *Gamer Theory* (“I have sworn off the strong brew of a psychoanalytic reading of gamespace”<sup>86</sup>)

because the work of French psychoanalyst Jacques Lacan reveals the truly radical potential of exploring the unintended aspects and uses of virtual worlds.

## The Virtual and the Real

In the opening of *TSL* Episode 2, Module 4, one of the characters, by way of introducing the guest, Marty O'Donnell, exclaims, "Closer my brothers and sisters, we Spartans and Elites only inhabit this universe. There are those beings who came before us and worked the void that was into the world that now is." The statement is a tongue-in-cheek reference to O'Donnell's status as a sound engineer with Bungie, *Halo's* developer, but it offers a key to Lacan's often-misunderstood notion of the Real:

We have the Real as the starting point, the basis, the foundation of the process of symbolization ... that is, the Real which in a sense *precedes* the symbolic order and is subsequently structured by it when it gets caught in its network," but "the Real is at the same time the product, remainder, leftover, scraps of this process of symbolization, the remnants, the excess which escapes symbolization and is as such produced by the symbolization itself.<sup>87</sup>

Lacan's Real, then, is analogous to the mass of possibilities that constitute a virtual world (its millions of lines of programming code and intricately worded EULA—its Symbolic Order), *as well as* all the possibilities the process of symbolization (instituting the programming code and EULA) must exclude to maintain an appearance of integrity and consistency. The essential nature of any system, then, its "essence," is not a function of what it includes, but what it must *exclude* to maintain its appearance of integrity and consistency.<sup>88</sup> What that exclusion comprises, of course, remains a mystery, even to those who developed the system. So, analogous to the psychoanalyst who looks beyond the apparent integrity of her analysand's conscious mind for explanations of troublesome symptoms, one must look beyond the stated intent of programmers (glitching) and developers (trifling) to identify the radical potential of virtual worlds. This is why, as Wark suggests, gamers (all of us, in fact!) should be encouraged to explore the innards of virtual worlds and engage in glitching and trifling to expose the hidden price of their

professed consistency. Through practice of these principles in a virtual environment, gamers will come to understand the same practices can be generalized to all systems and will then be able to use their newfound knowledge in other contexts—to interrogate the systems of the non-virtual world. And if, as Wark suggests, the world system is moving closer and closer to an algorithmically governed, totalizing gamespace, such analytical skills will be crucial.

It would seem, then, that what we need to grasp the implications and consequences of virtual worlds fully is a Psychoanalytic Studies 1.0 perspective. That is not to suggest a psychoanalytic approach will provide definitive answers, for the point is that the answers remain to be found. And given that we are not dealing with an individual psyche, there is no single truth to discover, as in a clinical analysis, as each glitcher and trifler will be searching to unearth that which “liberates” her or him from the system’s totalizing logic—its Master Signifier.<sup>89</sup> What is most important, in fact, is not to teach a definitive answer (another Master Signifier) but *identification with the principle of exclusion* per se:

The duty of the critical intellectual—if, in today’s “postmodern” universe, this syntagm has any meaning left—is precisely to occupy all the time, even when the new order stabilizes itself and again renders invisible the hole as such, the place of this hole, i.e., to maintain a distance toward every reigning Master Signifier.<sup>90</sup>

What is liberating about identifying with the exception to distance ourselves from the Master Signifier, Žižek explains, is that although we “are passively affected by pathological objects and motivations,” we who possess “the minimal power to accept (or reject) being affected in this way.” It is we, in fact, who possess the power to “retroactively determine the causes allowed to determine us, or, at least, the *mode* of this linear determination.” What we understand as freedom or liberty, then, is “inherently retroactive: at its most elementary, it is not simply a free act which, out of nowhere, starts a new causal link, but a retroactive act of endorsing which link/sequence of necessities will determine me.”<sup>91</sup> Glitching and trifling, then, can reveal unanticipated possibilities that remain only to be acted upon to release their liberating potential, acts that break with present patterns, and in so doing redeem the past and reveal new possibilities. Glitching and trifling, in fact, may be the only “authentic,” truly innovative acts that remain open to us, acts

that we engage in within the parameters of the existing system but which serve, retroactively, to undermine the system's integrity. Žižek, in fact, argues that this "is the most succinct definition of what an authentic *act* is: in our ordinary activity, we effectively just follow the (virtual-fantasmatic) coordinates of our identity, while an act proper is the paradox of an actual move which (retroactively) changes the very virtual "transcendental" coordinates of its agent's being."<sup>92</sup>

Glitching and trifling, of course, may not always result in the liberating effects of an act, since some of the alternative uses trifiers discover may well be consistent with the aim of the system, but the practice of *identifying with the exception*, with that which the system's apparent integrity masks, is an important critical skill to practice, and has resulted in some spectacular virtual creations if not fundamental change.<sup>93</sup>

## Notes

1. "Maze War (also known as The Maze Game, Maze Wars, or simply Maze) was the first networked, 3D multi-user first person shooter game. Maze first brought us the concept of online players as eyeball 'avatars' chasing each other around in a maze)." DigiBarn Computer Museum. "The DigiBarn's Maze War 30 Year Retrospective," <http://www.digibarn.com/history/04-VCF7-MazeWar/index.html> (accessed 20 June 2009). Wikipedia currently lists 211 MMORPGs in existence. See Wikipedia, "List of Massively Multiple Online Role Playing Games," [http://en.wikipedia.org/wiki/List\\_of\\_MMORPGs](http://en.wikipedia.org/wiki/List_of_MMORPGs) (accessed 20 June 2009).
2. Raph Koster, designer of *Star Wars Galaxies* and a leading figure of the gaming world, points out that although "the core systemic characteristics of virtual worlds include synchronous communication, spatial simulation, multiple simultaneous users, and use of publicly visible profiles (aka avatars)," their peripheral characteristics are expanding. Koster's point is that "virtual worlds are their own thing, and they have more in common with media than with message. They are more like television than like *I Love Lucy*. They are more like newspapers than like *The New York Times* or *The Weekly World News*. They have more in common with 16mm film than with *Casablanca* or *Fahrenheit 9/11*." Raph Koster. Raph Koster's Website. "Categories of Virtual World," 2 October 2007, <http://www.raphkoster.com/2007/10/02/categories-of-virtual-world/> (accessed 20 June 2009).
3. The term, military-entertainment complex, made its first media appearance in 1994: "Hollywood wants to get into multi-media, even if few there understand what it is. Computers can deliver interactivity not possible before. The main moves so far have been towards new graphically-sophisticated computer games and Location Based

Entertainment (LBES). These were important at this year's Siggraph computer graphics convention in Orlando, Florida. The process has been helped by Western military funding drying up with the end of the cold war. The switch of resources from battle-field simulations to theme park rides was described as the beginning of a new "military-entertainment complex." Bob Swain. "Specially Effective Fun," *The Guardian* (UK), (no section) 25 August 1994.

4. Miller argues that "Media Studies 1.0 is misleadingly functionalist on its effects and political-economy side, and Media Studies 2.0 is misleadingly conflictual on its active-audience side"; therefore, "to transcend these pitfalls, we need Media Studies 3.0": an analysis "animated by collective identity and power, by how human subjects are formed and how they experience cultural and social space." See Toby Miller, Chapter 1 of this volume, page 43).
5. Cf. Christian Renaud, "Mass Extinctions and the New Math," CISCO Virtual Worlds: Networked Virtual Environments and Virtual Worlds, 1 October 2007, [http://blogs.cisco.com/virtualworlds/comments/mass\\_extinctions\\_and\\_the\\_new\\_math/](http://blogs.cisco.com/virtualworlds/comments/mass_extinctions_and_the_new_math/) (accessed 20 June 2009); and Raph Koster's Website, "Categories of Virtual Worlds," 2 October 2007, <http://www.raphkoster.com/2007/10/02/categories-of-virtual-world/> (accessed 20 June 2009).
6. No longer a niche market, global revenues from gaming have surpassed those of the movie and music industry: "Worldwide, the game industry in 2007 was about \$41.9 billion. This number is expected to grow 9.1 percent annually to \$48.9 in 2011 and \$68 billion in 2012, making it the fastest-growing component of the media sector worldwide. ...According to *NPD Sales* data, the United States video game industry grew 43 percent to a "record-shattering" \$17.9 billion in 2007 plus \$910.7 million in PC game sales. 2008 is expected to see a large increase in sales to around \$24 billion. Since 2005's record \$10.5B to 2008's expect \$24B, the industry has seen remarkable growth of 150 percent in just 4 years. ...It surpassed the U.S. movie and music industry in 2005 and 2007 respectively. In the 2008, the UK industry blew past the music industry and is expected to top DVD sales in the near future." WikiGaming, Video Game Industry. [http://vgsales.wikia.com/wiki/Video\\_game\\_industry#Worldwide\\_game\\_industry](http://vgsales.wikia.com/wiki/Video_game_industry#Worldwide_game_industry) (accessed 20 June 2009). (*NPD's* 11 June 2009 statistics, however, reveal industry sales in the U.S. are down 23 percent to \$863 million in May 2009 compared to \$1.12 billion in May 2008, undoubtedly attributable to the global recession).
7. See Brendan Sinclair, "MS: 17.7 Million 360s Sold," GameSpot, 3 January 2008, <http://www.gamespot.com/news/6184291.html>; James Brightman, "Estimate: Halo Sells 2.34 Million Units on Day One," GameDaily, 28 September 2007, <http://www.gamedaily.com/articles/features/estimate-halo-3-sells-234-million-units-on-day-one/70978/?biz=1>; Emma Boyes, "Halo 3 Scores \$300 million in first-week sales," GameSpot, 4 October 2007, <http://www.gamespot.com/news/6180380.html?sid=6180380> (accessed 20 June 2009).

8. “Originally launched in 2000 as a two-room space made to promote a Finnish pop group, Sulake was surprised to find the place swamped by international players who couldn’t even speak the language; they retooled and expanded as *Hotel Goldfish*, then re-dubbed to become *Habbo Hotel*.” James Wagner, “Weekend Feature: The How of *Habbo Hotel*,” Gigaom, 8 September 2007, <http://gigaom.com/2007/09/08/how-habbo-hotel-got-this-big/> (accessed 20 June 2009).
9. Stephanie Barish, “In the Sandbox with Raph Koster,” Indiecade, 30 September 2008, <http://www.indiecade.com/index.php?/blog> (accessed 20 June 2009).
10. Harvey Cohen and Barry Gilbert, “Market Forecasts for Virtual World Experiences: From *Habbo Hotel* to *Second Life* and Beyond—2008 to 2017,” Strategy Analytics, 4 June 2008, <http://www.strategyanalytics.com/default.aspx?mod=ReportAbstractViewer&a0=3988> (accessed 20 June 2009).
11. Britney Zilz, “Top Five False Gaming Stereotypes,” GotGame.com, 5 September 2008, <http://news.gotgame.com/gaming-stereotypes-and-reality/7709/> (accessed 20 June 2009).
12. Williams, Dmitri, Nick Yee, and Scott E. Caplan, “Who Plays, How Much, and Why? Debunking the Stereotypical Gamer Profile,” *Journal of Computer-Mediated Communication* 13:4 (September 2008) 993–1018: <http://www3.interscience.wiley.com/cgi-bin/fulltext/121394419/HTMLSTART?CRETRY=1&SRETRY=0> (accessed 20 June 2009).
13. Welcome to Virtual CSI: New York, “The CSI: Virtual Experience,” [http://alpha.cbs.com/primetime/csi\\_ny/second\\_life/](http://alpha.cbs.com/primetime/csi_ny/second_life/) (accessed 20 June 2009).
14. Television series that have featured virtual worlds in the order cited:
  - South Park*, Episode 147, “Make Love, not Warcraft,” first broadcast 4 October 2006 by The Comedy Network. Directed by Trey Parker; written by Trey Parker and Matt Stone.
  - The Office*, Episode 31, “The Coup,” first broadcast 5 October 2006 by NBC. Directed by Greg Daniels; written by Paul Lieberstein.
  - Law and Order: Special Victims’ Unit*, Episode 902, “Avatar,” first broadcast 2 October 2007 by NBC. Directed by David Platt; written by Jonathan Greene.
  - CSI: New York*, Episode 76, “Down the Rabbit Hole,” first broadcast 24 October 2007, by CBS. Directed by Christine Moore; written by Peter M. Lenkov and Sam Humphrey.
  - CSI: New York*, Episode 86, “DOA for a Day,” first broadcast 2 April 2008 by CBS. Directed by Christine Moore; written by Peter M. Lenkov and John Dove.
  - The Office*, Episode 56, “Local Ad,” first broadcast 25 October 2007 by NBC. Directed by Jason Reitman; written by B.J. Novak.
  - Numb3rs*, Episode 407, “Primacy,” first aired 9 November 2007 by CBS. Directed by Chris Hartwill; written by Julie Hebert.
15. *The Matrix* (1999), *The Matrix Reloaded* (May 2003), *The Matrix Revolutions* (November 2003). Directed and written by Larry and Andy Wachowski.

- Hollywood, California. Distributed by Warner Bros. and Village Roadshow Pictures.
16. Robert Andrews, "Second Life Rocks (Literally)," *Wired*, 15 August 2006, <http://www.wired.com/techbiz/it/news/2006/08/71593> (accessed 20 June 2009).
  17. This article is interesting because it also highlights some of the discrepancies regarding the nature of "live" performances in Second Life. Anne Midgette, "Watching a Cyber Audience Watch a Real Orchestra Perform in a Virtual World," *The New York Times*, Music, 18 September 2007, [http://www.nytimes.com/2007/09/18/arts/music/18seco.html?\\_r=1&oref=slogin](http://www.nytimes.com/2007/09/18/arts/music/18seco.html?_r=1&oref=slogin) (accessed 20 June 2009).
  18. Aleks Krotoski, "The Guardian Gets a Second Life," *The Guardian*, Games Blog, <http://www.guardian.co.uk/technology/gamesblog/2007/jun/20/theguardiangame> (accessed 20 June 2009).
  19. Kate Trgovac, The Misadventures of a Marketer and Her Avatar, Katicus Sparrow, in Second Life, "Announcing 'After a Fashion' ... a Canadian 'Girl's Night Out' in Second Life," and "Katicus Goes to the Oscars," My Virtual Life: KaticusSparrow.com, 21 and 25 February 2007, [http://mynameiskate.typepad.com/secondlife/2007/02/index.html#\\_jmp0\\_](http://mynameiskate.typepad.com/secondlife/2007/02/index.html#_jmp0_) (accessed 20 June 2009).
  20. Akela Talamasca, "Tim Hortons Needs Timbits!" *Second Life Insider*, 27 May 2007, [http://www.secondlifeinsider.com/2007/05/27/tim-hortons-needs-timbits/#\\_jmp0\\_](http://www.secondlifeinsider.com/2007/05/27/tim-hortons-needs-timbits/#_jmp0_) (accessed 20 June 2009).
  21. Davis LLP: Legal Advisors since 1892. "Davis LLP is First Canadian Law Firm to Open Office in Second Life," 25 September 2007, [http://www.davis.ca/en/news/Davis-LLP-is-First-Canadian-Law-Firm-to-Open-Office-in-Second-Life#\\_jmp0\\_](http://www.davis.ca/en/news/Davis-LLP-is-First-Canadian-Law-Firm-to-Open-Office-in-Second-Life#_jmp0_) (accessed 20 June 2009).
  22. Chantal Todé, "Canada Post Launches in Second Life," DMNews, 1 November 2007, <http://www.dmnews.com/Canada-Post-launches-in-Second-Life/article/98946/> (accessed 20 June 2009).
  23. Luigi Benetton, "Virtual Realty," *CBC News*, In Depth, Canadian Business, 7 February 2008, <http://www.cbc.ca/news/background/canbiz/condos.html> (accessed 20 June 2009).
  24. Duncan Riley, "Will the Last Corporation Leaving Second Life Please Turn Off the Light," *Tech Crunch*, 14 July 2007, <http://www.techcrunch.com/2007/07/14/will-the-last-corporation-leaving-second-life-please-turn-off-the-light/> (accessed 20 June 2009).
  25. Alana Samuels, "Strait-laced in the Real World, Workers Do Business in Fantasy Guise in a Parallel Reality on the Web," *Los Angeles Times*, Business, 10 May 2008, <http://articles.latimes.com/2008/may/10/business/fi-secondlife10> (accessed 20 June 2009).
  26. Kathleen Schalch, "Virtual Recruiting for Real-World Jobs," *NPR*, Digital Culture, 22 August 2007, <http://www.npr.org/templates/story/story.php?storyId=13851345> (accessed 20 June 2009).

27. Chantal Eustace, "vPD: Virtual Police Department," *Vancouver Sun*, 29 May 2007, <http://www.canada.com/vancouvernews/news/story.html?id=0c37d98d-c54f-44d3-9e72-0c19cf828565&k=56002&cp=1> (accessed 20 June 2009); Tim Best, "Binary Culture Launches the WA Police into Virtual Worlds," *Binary Culture*, 19 September 2008, [http://www.binaryculture.com.au/stepforward/BinaryCulture\\_media\\_release\\_19-08-08](http://www.binaryculture.com.au/stepforward/BinaryCulture_media_release_19-08-08) (accessed 20 June 2009). Furthermore, as the Eustace interview with a Vancouver Police representative notes, police are aware that they may be called upon to enter virtual worlds in the near future, and that resolving in-world disputes will be no simple matter. In fact at least once such instance has already occurred. See Regina Lynn, "Virtual Rape is Traumatic, but is it a Crime?" *Wired*, Commentary, 4 March 2007, [http://www.wired.com/culture/lifestyle/commentary/sexdrive/2007/05/sexdrive\\_0504](http://www.wired.com/culture/lifestyle/commentary/sexdrive/2007/05/sexdrive_0504) (accessed 9 October 2007).
28. Tony Walsh, "Canadian Colleges Make 'Second Life' Leap," *Phantom Compass, Clickable Culture*, 16 February 2007, [http://www.secretlair.com/index.php?/clickableculture/entry/canadian\\_colleges\\_make\\_second\\_life\\_leap/](http://www.secretlair.com/index.php?/clickableculture/entry/canadian_colleges_make_second_life_leap/) (accessed 20 June 2009).
29. Centre for Digital Media: Masters of Digital Media Program. "Premier Campbell and Dr. Sinclair Officially Launch Leading-Edge Media Centre," 15 September 2007, <http://mdm.gnwc.ca/content/premier-campbell-and-dr-sinclair-officially-launch-leading-edge-digital-media-centre> (accessed 20 June 2009).
30. "In 2005, there were approximately 2.5 million tweens in Canada and their average annual income was CA\$1155. This means they controlled CA\$2.9 billion of their own money in addition to influencing another CA\$20 billion in family purchases. This financial power differentiates tweens from earlier generations; never has this age group exercised such influence. The generation is populous enough to ruin a brand it does not like or catapult another to success by adopting it." Maïthé Levasseur. "Familiar with Tweens? You Should Be..." The Tourism Intelligence Network, 9 February 2007, <http://tourismintelligence.ca/2007/02/09/familiar-with-tweens-you-should-be/> (accessed 20 June 2009). On 13 October 2008, DMNews reported that TPB Media Services now offers a new marketing list, the "Pretty Woman Parents of Tweens and Teens with E-mail Addresses," which includes 850,000 email addresses and costs \$150 million. DMNews, "Mothers of Tweens and Teens List Available," 13 October 2009, <http://www.dmnews.com/Mothers-of-tweens-and-teens-list-available/article/119408/> (accessed 20 June 2009).
31. Gaia Online, About Us, <http://corp.gaiaonline.com/about> (accessed 20 June 2009).
32. N. Evan Van Zelfden, "Casual Connect: Gaia Online's Trojan Horse MMO," *Game Daily*, 25 July 2008, <http://www.gamedaily.com/articles/news/casual-connect-gaia-onlines-trojan-horse-mmo/?biz=1>; Earnest Cavalli, "Gaia Online Launches zOMG Beta," *Wired Blog Network*, 25 July 2008, <http://blog.wired.com/games/2008/07/gaia-online-lau.html> (accessed 20 June 2009).

33. Brooks Barnes, "Disney Acquires Web Site for Children," *New York Times*, Business, 2 August 2007, <http://www.nytimes.com/2007/08/02/business/02disney.html?th&emc=th> (accessed 20 June 2009).
34. Wikipedia "School Shootings" lists forty-two school shootings in the U.S., eight in Canada, and seventeen worldwide between 1976 and September 2008, [http://en.wikipedia.org/wiki/School\\_shooting](http://en.wikipedia.org/wiki/School_shooting) (accessed 20 June 2009).
35. "Dr. Phil Blames Video Games for Virginia Tech Massacre," GamePolitics.net, 17 April 2007, <http://www.gamepolitics.com/2007/04/17/dr-phil-blames-video-games-for-virginia-tech-massacre> (accessed 20 June 2009).
36. ExGamer.net, About Us, [http://exgamer.net/blog/?page\\_id=217](http://exgamer.net/blog/?page_id=217) (accessed 20 June 2009).
37. Warren Buckleitner, "Like Taking Candy From a Baby: How Young Children Interact with Online Environments." An Ethnographic Study for Consumer Reports WebWatch, 6 May 2008, <http://www.consumerwebwatch.org/pdfs/kidsonline.pdf> (accessed 20 June 2009).
38. Eric Benderoff, "Cheating a Real Problem in Club Penguin's Virtual World," *Chicago Tribune*, 8 March 2007, <http://www.chicagotribune.com/news/nation-world/chi-0703080167mar08,0,7203137.story> (accessed 20 June 2009).
39. Mirenya Navarro, "Pay Up, Kid, or Your Igloo Melts," *New York Times*, 28 October 2007, [http://www.nytimes.com/2007/10/28/fashion/28virtual.html?\\_r=1&oref=login](http://www.nytimes.com/2007/10/28/fashion/28virtual.html?_r=1&oref=login) (accessed 20 June 2009).
40. Caitlin Flanagan, "Babes in the Woods," *The Atlantic Online*, July/August 2007, <http://www.theatlantic.com/doc/200707/myspace/4> (accessed 20 June 2009).
41. See note 31.
42. R. W. Burniske and Lowell Monke, *Breaking Down the Digital Walls: Learning to Teach in a Post-Modern Age* (New York: State University of New York Press, 2001).
43. Lowell Monke, "Why Do You Want to Take the Computer Away from My Child? Rethinking the Relationship Between Young Children and Technology," paper presented at Encuentro Internacional de Educación y Preescolar, Monterey, Nuevol León, México, 22–24 May 2003, [http://www.cendi.org/interiores/encuentro2003/ponencia/p\\_monke.htm](http://www.cendi.org/interiores/encuentro2003/ponencia/p_monke.htm) (accessed 20 June 2009).
44. Marc Prensky, *Don't Bother Me Mom—I'm Learning!* (St. Paul, Minnesota: Paragon House, 2006).
45. Marc Prensky, "Digital Natives, Digital Immigrants," MarcPrensky.com, Writings, <http://www.marcprensky.com/writing/Prensky%20-%20Digital%20Natives,%20Digital%20Immigrants%20-%20Part1.pdf> (accessed 20 June 2009).
46. For example, Craig A. Anderson, Douglas A. Gentile, and Katherine E. Buckley, *Violent Video Game Effects on Children and Adolescents: Theory, Research, and Public Policy* (Oxford: Oxford University Press, 2006); John Palfrey and Urs Gasser, *Born Digital: Understanding the First Generation of Digital Natives* (Jackson, Tennessee:

Basic Books, 2008).

47. Nick Dyer-Witherford, and Greig de Peuter. "'EA Spouse' and the Crisis of Video Game Labour: Enjoyment, Exclusion, Exploitation, Exodus," *Canadian Journal of Communication* 31: 5 (2006), <http://www.cjc-online.ca/index.php/journal/article/viewArticle/1771/1893> (accessed 20 June 2009).
48. Our current focus is, of course, upon immaterial as opposed to material labour, for as Dyer-Witherford and Peuter, op.cit., note: "The game industry, like other digital businesses, is dependent on a manufacturing work force located in maquiladoras and free-enterprise zones in Central and South America, Eastern Europe, Southeast Asia, and China... At the depths of gaming's hidden abodes of production lie links to activities such as the mining of columbine tantalite (a rare mineral used in game consoles and other high-tech commodities) in the Congo and Egypt. The dependence of digital play on this highly exploited assembly and extraction work must be remembered, lest we fall right back into the above-mentioned problem of ethereality—and, in so doing, forget that it is not just glamorous, but also deadly, labour that makes digital play possible."
49. See Chapter One of this volume, pages 35–53, "A Future for Media Studies: Cultural Labour, Cultural Relations, Cultural Politics," by Toby Miller.
50. Cho Jin-seo, "Ban on Cyber Asset Trading Clouds Game Industry," *The Korea Times*, Biz/Finance, 5 October 2007, [http://www.koreatimes.co.kr/www/news/biz/biz\\_view.asp?newsIdx=2660&categoryCode=123](http://www.koreatimes.co.kr/www/news/biz/biz_view.asp?newsIdx=2660&categoryCode=123) (accessed 20 June 2009).
51. Park Si-soo, "Court Outlaws Cashing Online Game Items," *The Korea Times*, Nation, 27 March 2008, [http://www.koreatimes.co.kr/www/news/nation/2008/03/113\\_21485.html](http://www.koreatimes.co.kr/www/news/nation/2008/03/113_21485.html) (accessed 20 June 2009).
52. *Chinese Farmers in the Gamedom*, A Work in Progress by Jin Ge, aka Jingle. <http://www.chinesegoldfarmers.com> (accessed 20 June 2009).
53. David Barboza, "Ogre to Slay? Outsource It to Chinese," *New York Times*, Technology, 9 December 2005, <http://www.nytimes.com/2005/12/09/technology/09gaming.html?ex=1291784400&en=a723d0f8592dff2e&ei=5090> (accessed 20 June 2009).
54. See note 52.
55. Wagner James, "Outsourcing the Metaverse," *New World Notes*, 2 November 2006, [http://nwn.blogs.com/nwn/2006/11/outsourcing\\_the.html](http://nwn.blogs.com/nwn/2006/11/outsourcing_the.html) (accessed 20 June 2009).
56. Ibid.
57. Edward Castronova, "How a Gold Farm Works," *Terra Nova*, [http://terranova.blogs.com/terra\\_nova/2006/01/how\\_a\\_gold\\_farm.html](http://terranova.blogs.com/terra_nova/2006/01/how_a_gold_farm.html) (accessed 20 June 2009).
58. See note 52.
59. BUT EULAs also provide developers with a simple means to silence players who are overly critical or raise thorny issues because the complex EULAs are routinely broken by players, normally with no consequence. *The Boston Globe*, for instance, notes of one such banished player: Peter Ludlow, a philosophy professor at the University of

- Michigan who's researching a book about online gaming, also runs a weblog, alphavilleherald.com, that covers *Sims Online* news. The weblog featured an interview with a man called "Evangeline" who claimed to run a brothel inside the game, one that featured simulated child prostitution. "My first thought was [*Electronic Arts*] might want to do something to clean up the game," said Ludlow. Instead, Ludlow was ejected from the game last month for publishing links to his weblog inside the game—a violation of the rules. "Justice Has Its Price in Sim World," *The Boston Globe*, Boston.com News, 14 January 2004, [http://www.boston.com/news/globe/living/articles/2004/01/14/justice\\_has\\_its\\_price\\_in\\_sim\\_world/](http://www.boston.com/news/globe/living/articles/2004/01/14/justice_has_its_price_in_sim_world/) (accessed 29 October 2008).
60. See, for instance, Building a Better EULA, a player-initiated (Erik Bethke), developer supported wiki "to explore the future of digital rights in virtual spaces," [http://www.bettereula.com/index.php?title=Main\\_Page](http://www.bettereula.com/index.php?title=Main_Page) (accessed 20 June 2009); and Erik Bethke and Erin Hoffman, eds., *Settlers of the New Virtual Worlds* (Charleston, South Carolina: BookSurge Publishing, 2008).
61. Wagner James, "The War of the Jessie Wall, Part I of X," SecondLife.com, Notes, 7 July 2003, [http://secondlife.com/notes/2003\\_07\\_07\\_archive.php](http://secondlife.com/notes/2003_07_07_archive.php) (accessed 20 June 2009), and Wagner James, "Tax Revolt in Americana!" New World Notes, 12 September 2003, [http://nwn.blogs.com/nwn/2003/09/tax\\_revolt\\_in\\_a.html](http://nwn.blogs.com/nwn/2003/09/tax_revolt_in_a.html) (accessed 20 June 2009); [http://nwn.blogs.com/nwn/2007/01/stronger\\_than\\_h.html](http://nwn.blogs.com/nwn/2007/01/stronger_than_h.html) (accessed 20 June 2009).
62. Henry Jenkins, "National Politics Within Virtual Game Worlds: The Case of China," Aca-Fan, 2 August 2006, [http://www.henryjenkins.org/2006/08/national\\_politics\\_within\\_virtu\\_1.html](http://www.henryjenkins.org/2006/08/national_politics_within_virtu_1.html) (accessed 20 June 2009).
63. Chris Nuttall, "Spore Hit by DRM Protest," *Financial Times*, FT Tech Blog, 8 September 2008, <http://blogs.ft.com/techblog/2008/09/spore-hit-by-drm-protest/> (accessed 9 October 2009).
64. Game Culture, "DRM Evolved: Spore Users Create Creatures to Voice Their Displeasure," 15 September 2008, <http://www.gameculture.com/node/759> (accessed 20 June 2009).
65. *The Washington Post* reports: "If we can learn anything from the troubled launch of Spore, a videogame many people have been looking forward to for years, it is that binding products with digital rights management (DRM) restrictions hurts more than it helps. Spore... is expected to sell 2 million copies in September alone, and is currently the No. 3 best-selling game on Amazon. But it also has one of the worst ratings on Amazon... because of a concerted campaign by fans protesting its DRM. It has also been downloaded an estimated 500,000 times on BitTorrent, and is well on its way to becoming the most illegally downloaded game ever." Erick Schonfeld, "Spore and the Great DRM Backlash," *The Washington Post*, Washingtonpost.com, Technology, 14 September 2008, <http://www.washingtonpost.com/wp-dyn/content/>

- article/2008/09/14/AR2008091400885.html (accessed 20 June 2009).
66. Ben Kuchera, "EA Relents, Changes Spore DRM. Too Little, too Late?" *Ars Technica*, New Desk, 19 September 2008, <http://arstechnica.com/news.ars/post/20080919-ea-relents-changes-spore-drm-too-little-too-late.html> (accessed 20 June 2009); Tor Thorsen, "EA Sued Over Spore DRM," *GameSpot*, 24 September 2008, [http://www.today.com/external.php?url=http://www.gamespot.com/news/6198136.html?part=rs&tag=gs\\_news&subj=6198136&reffurl=http://www.today.com/view/ea-sued-over-spore-drm/id-2927760/](http://www.today.com/external.php?url=http://www.gamespot.com/news/6198136.html?part=rs&tag=gs_news&subj=6198136&reffurl=http://www.today.com/view/ea-sued-over-spore-drm/id-2927760/) (accessed 20 June 2009).
  67. Wagner James, "Fighting the Front," *New World Notes*, 15 January 2007, [http://nwn.blogs.com/nwn/2007/01/stronger\\_than\\_h.html](http://nwn.blogs.com/nwn/2007/01/stronger_than_h.html) (accessed 20 June 2009).
  68. Urizenus Sklar, "Residents of 400 Dreamland Sims Vote to Ban PR and Marketing Flacks!!!!" *Second Life Herald*, 11 November 2006, [http://www.secondlifeherald.com/slh/2006/11/pr\\_flacks\\_banne.html](http://www.secondlifeherald.com/slh/2006/11/pr_flacks_banne.html) (accessed 20 June 2009).
  69. Wagner James, "International Union Protesters Converge on IBM," *New World Notes*, 2007, <http://nwn.blogs.com/nwn/2007/09/international-u.html> (accessed 20 June 2009).
  70. *The Economist*, Industrial Relations, "On Strike, Virtually," 13 March 2008, [http://www.economist.com/business/displaystory.cfm?story\\_id=10853751](http://www.economist.com/business/displaystory.cfm?story_id=10853751) (accessed 20 June 2009).
  71. Onder Skall, "SL Capitol Hill Anti-War Protests," *Second Life Herald*, 20 February 2007, [http://www.secondlifeherald.com/slh/2007/02/sl\\_capitol\\_hill.html](http://www.secondlifeherald.com/slh/2007/02/sl_capitol_hill.html) (accessed 20 June 2009).
  72. Associated Press, *MSNBC*, Technology and Gadgets, "Designer Takes Anti-fur Protest to Virtual World," <http://www.msnbc.msn.com/id/19506442/> (accessed 20 June 2009).
  73. *The Chronicle of Higher Education*, The Wired Campus, "Philosopher: Second Life Run by 'Greek Gods'," 16 October 2007, <http://chronicle.com/wiredcampus/article/2458/philosopher-second-life-run-by-greek-gods> (accessed 20 June 2009).
  74. Internet Archive. "Not Just Another Love Story," 2005, <http://www.archive.org/details/notjustanotherlovestory> (accessed 20 June 2009).
  75. Machinima.com. "Diary of a Camper," 1996, <http://www.machinima.com/film/view&id=15043> (accessed 20 June 2009).
  76. Red vs. Blue. <http://rvb.roosterteeth.com> (accessed 20 June 2009).
  77. *This Spartan Life*. <http://www.thisspartanlife.com> (accessed 20 June 2009).
  78. Ross Miller, "The 8-year-old Professional Halo Player," *Joystiq*, 14 July 2006, <http://www.joystiq.com/2006/07/14/the-8-year-old-professional-halo-player/> (accessed 20 June 2009).
  79. Halo, West Side Story, Meshell, "Studio 360's Kurt Andersen Interviews Damian," 21 September 2007, <http://www.studio360.org/episodes/2007/09/21> (accessed 13 October 2009).

80. McKenzie Wark, *Gamer Theory* (Boston: Harvard University Press, 2007).
81. See note 29, and *Gamer Theory* for a full exposition of Wark's position on gamespace.
82. *This Spartan Life*. "Episode 4, Module 3: McKenzie Wark Interview," [http://www.thisspartanlife.com/episodes/1004\\_mod3.php](http://www.thisspartanlife.com/episodes/1004_mod3.php) (accessed 20 June 2009).
83. *Ibid.*
84. Bernard Suits, *The Grasshopper: Games, Life and Utopia* (Peterborough, Ontario, Broadview Press, 2005).
85. See note on page 010 of the online version of Wark's *Gamer Theory Version 2.0*, at Future of the Book: <http://www.futureofthebook.org/mckenziewark/gametheory2.0/?cat=1&paged=2> (accessed 20 June 2009).
86. Slavoj Žižek, *The Sublime Object of Ideology* (London: Verso, 1989): 169.
87. For those averse to psychoanalysis but inclined to mathematics, Gödel's incompleteness theorem reveals why a system can never claim internal consistency: "Gödel showed that within a rigidly logical system such as Russell and Whitehead developed for arithmetic, propositions can be formulated that are undecidable or undemonstrable within the axioms of the system. That is, within the system, there exist certain clear-cut statements that can be neither proved or disproved." Carl B. Boyer, *A History of Mathematics* (New York: Wiley, 1968): 655.
88. The Master Signifier is that which, at once, provides a system of meaning with its apparent consistency and masks what the system must exclude to maintain its apparent consistency.
89. Slavoj Žižek, *Tarrying with the Negative: Kant, Hegel, and the Critique of Ideology* (Durham, North Carolina: Duke University Press/London: Verso, 1989): 2.
90. Slavoj Žižek, "Deleuze and the Lacanian Real," Lacan.com, <http://www.lacan.com/zizplato.htm> (accessed 20 June 2009).
91. *Ibid.*
92. See, for instance, a pleasurably disturbing but spectacular machinima shot in *SL*, Wagner James, New World Notes, 22 May 2007, [http://nwn.blogs.com/nwn/2007/05/your\\_tube\\_your\\_.html](http://nwn.blogs.com/nwn/2007/05/your_tube_your_.html); the striking model of an amazingly complex algebraic system, an E8 Polytope, Wagner James, "Universe in the Metaverse: Garrett Lisi Explores an E8 Polytope in Second Life," New World Notes, <http://nwn.blogs.com/nwn/2008/10/universe-in-the.html>; and the award-winning, collaborative, open architecture system, "Wikitecture," David Sokol, *Architectural Record*, October 2008, <http://archrecord.construction.com/archrecord2/work/0810/wikitecture.asp> (accessed 20 June 2009).