the changing profession

Second Life, Video Games, and the Social Text

STEVEN E. JONES

THE PROSPECT IS SUBLIME. OFF THE COAST OF THE MAINLAND ARE ISLANDS—IN FACT, SWEEPING ARCHIPELAGOES—INHABITED BY EDUCAtors and students. The residents have built massive modern classrooms, high-rises, clock towers, conference rooms, amphitheaters, auditoriums, and libraries among the evergreens, campuses with spacious lawns. To get to one of these islands, you can go directly from certain information kiosks or portals. Or, if you know the way and don't run into any invisible Plexiglas walls extending far up into the sky, you can just levitate, tilt into the wind, and fly there, while the landscape scrolls along below you like a map (which it is).

I'm describing not a real-world landscape but a digital one, the 3-D multiuser virtual environment *Second Life*, which was opened by Linden Lab in 2003, roughly a decade after the advent of the World Wide Web. In the past few years, some journalists, corporations, and academics have increasingly treated the proprietary platform *Second Life* as the end toward which the Web is evolving, sometimes in the belief that 3-D is inherently better than 2-D (or the "flat Web," as some fans refer to most of the rest of the network, as if it were the medieval flat earth) and often under the mistaken impression that this newest new thing is a self-contained and unitary virtual world set apart from the general chaos of the Web.[1] Intellectual, cultural, and financial capital is flowing into and out of Linden Lab's "metaverse," often because of an assumption that *Second Life* represents the "future of the Internet." On April Fool's Day 2008, the United States congressional Subcommittee on Telecommunications and the Internet held a hearing on the topic of online virtual worlds, focused almost exclusively on *Second Life*. Simulcast inside *Second Life*, the hearing took up questions such as the possibility that Islamic militants could use avatars inside the virtual world to recruit and plan terrorist attacks. The idea that this would be more likely or more effective in *Second Life* than on any number of existing "2-D" Web sites is a sign of the mystifying aura surrounding this platform.

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Cyberspace versus the Metaverse

Second Life has a prehistory. It was built through remediation of earlier technology platforms for interactive virtual spaces, from the text-based mazes of *Adventure* to the social spaces of MUDs (multiuser dungeons) and MOOs (MUDs object-oriented). Like these earlier platforms, *Second Life* is often understood in terms of the loaded concept of virtual reality, meaning total sensory immersion in a self-contained alternative world. In the popular imagination, virtual-reality environments often represent a disembodied second nature and raise fundamental questions about the nature of human subjectivity. These questions seemed especially urgent in the era from William Gibson's *Neuromancer* (1984) to *The Matrix* (1999) and N. Katherine Hayles's *How We Became Posthuman* (1999). As Hayles explains, during the first decade of the World Wide Web, much debate in the humanities arose in response to the notion that information was becoming dematerialized, "losing its body." When *Second Life* is described (as it often is) as another world where you can build anything you can imagine and be anything you desire, I hear echoes from the heroic era of cyberspace and virtual reality.[2] During the 1990s, Moore's law (referring to exponential growth in computing processor speeds) was often erroneously extrapolated to suggest that an inexorable increase in realism and immersion was the ultimate end of the evolution of the Web's interface. As a corollary, human subjectivity was assumed to be uncoupling from bodily constraints, a process symbolized by one of the defining images of *Second Life*—the animated flying avatar.

Flying avatars are fun, as I'd be the first to admit. But the overall experience of *Second Life* during any given session is much less totally immersive, self-contained, and disembodied than the uninitiated might have been led to believe. For example, to levitate, you have to use a keystroke or click a button on the interface framing your specialized browser. Then, while hanging suspended above the ground, you use the arrow keys, as in many video games, to move in one of four directions—just as when walking. You often see buildings forming out of pixilated graphic "primitives" as you fly past too quickly. There is a cartoon quality to this world, which is graphically anything but realistic. Sometimes you experience server lag, and your avatar hesitates to respond to keyboard commands. In any session, you may have to consult maps and signs to know which building is the one you are looking for. In fact, there are signs and labels and other forms of text everywhere. To communicate with other avatars, you mostly type on your keyboard as your avatar makes typing motions in the air, and then word bubbles appear above his or her head. Text hangs like a cloud of smoke in the air above a crowd of avatars. In other words, you necessarily remain at all times both in the world and out of it, controlling what happens by way of interface conventions. Although you become somewhat less conscious of the interface with extended time in the simulated world, it remains a little like watching what's going on in the reflection on your train window at the same time that you're aware of the city going past beyond the window—a multilayered experience of divided attention, at the threshold of the virtual world and the physical world.

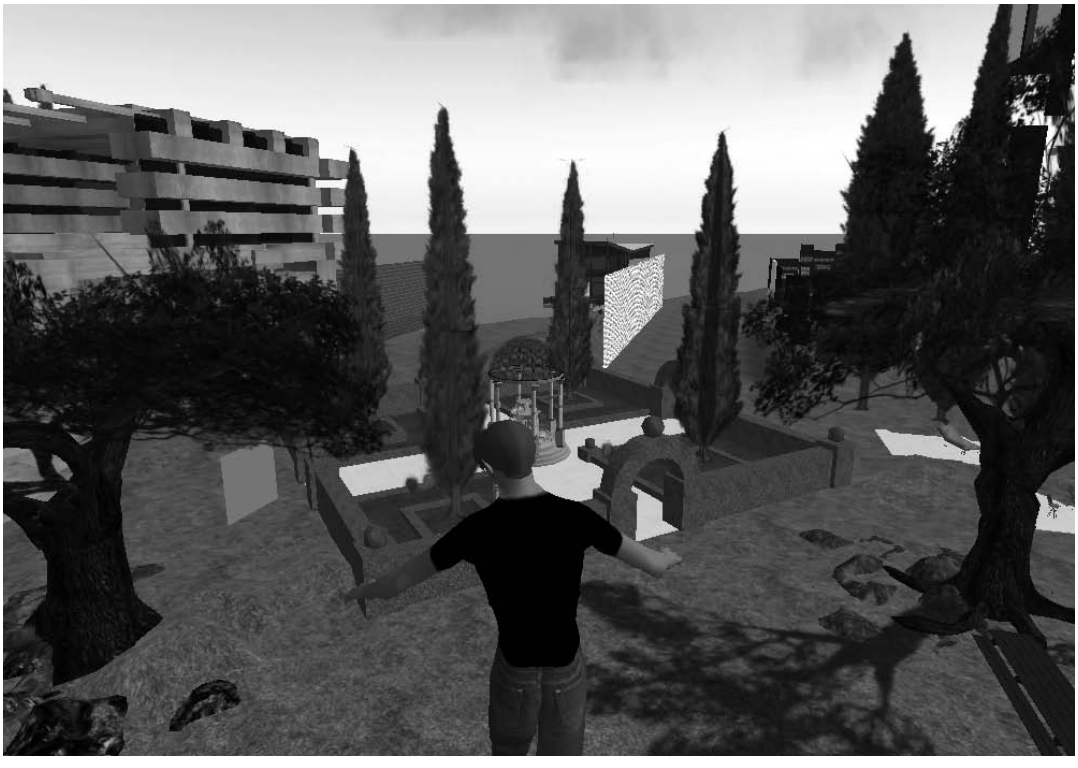
Neal Stephenson's novel *Snow Crash* (1992) was the inspiration for *Second Life*, and the virtual world is often known by the name of his fictional network: the metaverse. Unlike William Gibson's earlier invented network, cyberspace, which resembles the abstract architecture of a government and financial database, Stephenson's metaverse is a good deal like a MUD or an early video game. Gibson's cyberspace is vast and lonely. Stephenson's metaverse is full of bars and private houses, motorcycles to ride and other avatars with whom to interact. Gibson's lone hackers have to break into the network. Residents of Stephenson's metaverse sometimes own property there or, if they can't afford it, log in from

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cheap public accounts using graphically inferior avatars. Denizens move fluidly in and out of the metaverse, opportunistically pursuing quests and engaging in fights both in and out of the virtual world, in a style clearly based on video games. Economically, cyberspace and the metaverse are images of capitalism. But Gibson's is a vision of monolithic corporate control, whereas Stephenson's is of a marketplace of jostling forces (complete with warlords, tribal enclaves, and rampant viruses). The tension between these different perspectives on the social economy of *Second Life* is still playing itself out—for example, with in-world protests over the recent news that Linden Lab was arranging special pricing of land to favor corporate "builds" (as constructed objects are called). But the key technological difference between these two fictional models is indicated by the prefix in *metaverse*. Just as metadata are data about data, the metaverse is a universe of networked activities attached to—and encoded in meaningful correspondence with—the material universe of physical objects and social relations.

That this social world includes even commercial and legal relations was made abundantly clear during the CopyBot scandal of 2006, when a cloning program was written by a group of programmers named libsecondlife, at first with the support of Linden Lab. Its source code was released and then retooled within *Second Life*, with the result that residents who had paid for objects or created their own objects to use or sell found them unprotected against rampant duplication. Peter Ludlow, a journalist who wrote for an in-world newspaper, saw the CopyBot affair as "a key moment in the evolution of Second Life" and reacted with a tabloid alarm expressing real anxiety:

> The era of utopian self-expression insulated from the exigencies of the wider Web was clearly over. But how much sway the real world would have remained to be seen. The real world and the virtual world were colliding like never before, and it was anyone's



The author's avatar visiting an educational site in *Second Life*.

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> guess whether the energy released in that collision would be too destructive for the metaverse to handle. (Ludlow and Wallace 262)

Is Ludlow equating the "wider Web" with the "real world" in his crisis scenario? Or does his use of "wider" as a qualifier suggest that *Second Life* might after all be a subset of the Web, over and against the real world? Perhaps he envisions worlds in three layers—virtual world, wider Web, and real world. The confusion is typical of a good deal of popular discussions of *Second Life*. The CopyBot incident was only a vivid reminder of the already-existing state of affairs. Early adopters' feelings notwithstanding, *Second Life* has always been deeply penetrated by the exigencies of the real world, including the Web. As Kari Kraus has recently shown, the CopyBot incident highlights the persistence of intellectual-property disputes inside *Second Life*, where objects can be more restricted than copyright laws allow, since creators can set permissions to prevent moving, modifying, copying, or transferring—the kind of restrictions on an owner's rights that are "normally either unregulated or protected by law in real life" (2). As Kraus shows, *Second Life* residents who purchase a virtual copy of a book to read in-world, for example, might very well be less able "legally" to annotate or share that book than they would be if they had purchased a paper copy from their university bookstore.

Despite this sort of difference in its codes, both legal and programming, the publicity generated by the CopyBot affair, as well as the very existence of critical analysis like Kraus's, demonstrates that *Second Life* cannot really remain separate from the wider world of intellectual-property laws and the debates surrounding them. *Second Life* has never been a world apart. To begin with, it has always been part of the Web, which after all provides its infrastructure. The clearest reminder of this dependency is the system of *Second Life* URLs (slurl.com), which show up in *Google* searches as Web pages from which one can jump straight into particular locations in *Second Life* (clicking a link launches the *Second Life* client program). But the worldliness of *Second Life* is perhaps most evident in the exchangeability of in-world and real-world currencies. In *Second Life* and in almost all massively multiplayer online role-playing games, such as *World of Warcraft*, fungible goods and services and currency (in *Second Life*, "Lindens") can be purchased with dollars on *eBay* and can be exchanged across the border of the virtual world and the real world (Castronova).

The Metaverse and the Social Text

Instead of being a world apart from material reality, the metaverse of *Second Life* is best understood as intertwined with larger trends often referred to under the heading of "Web 2.0." Reflecting a change in perspective among Internet developers and users, Web 2.0 amounts to a greater stress on the importance of rich metadata (often using XML—extensible markup language) and of combinations of marked-up data objects and scripts such as AJAX (asynchronous JavaScript and XML). In general, the trend is toward a more modular, recombinatory approach to texts, images, and other objects available on the Web, as exemplified by popular social-networking sites. Web 2.0 is a flexible platform on which to configure variously designed (and often user-created or user-enriched) services. *Google Maps*, *Facebook*, *Flickr*, *YouTube*, *Wikipedia*, and podcasts are familiar examples. Wherever possible, sites enlist users in tagging objects, relying on bottom-up "folksonomy" versus top-down taxonomy, on the benefits of "collective intelligence" that have been discussed by the media theorist Henry Jenkins, for example (27). Such schemes recognize that every use of an object on the network represents a node in the history of the object, and the object itself is the totality of its history of uses. The goal is to build on that history to enable ongoing, multiple, dynamic recombinations. It's a way of leveraging

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what computers do so well—recording and tracking complex interactions in great detail—making the computer a partner in the collective acts of marking, sharing, combining, and editing. Human agency and machine intelligence are thereby interrelated by design.

In her recent book on electronic literature, N. Katherine Hayles outlines a general trend toward binding human beings and computers together in recursive, "dynamic heterarchies characterized by intermediating dynamics" and sees this relation as fostered by what some have called "augmented reality": the fact that computers are increasingly "moving out of the box into the environment though ubiquitous computing, embedded sensors and actuators, mobile technologies, smart nanodevices embedded in a wide variety of surfactants and surfaces, real-time sensors and data flows" (*Electronic Literature* 47–48). For Hayles this scenario is a harbinger of "a new kind of subjectivity characterized by distributed cognition, networked agency that includes human and non-human actors, and fluid boundaries dispersed over actual and virtual locations . . ." (37). "[P]eople and machines are both embodied, and the specifications of their embodiments can best be understood in the recursive dynamics whereby they coevolve with one another" (129). In response to the same trend toward augmented reality, Bruce Sterling projects a coming "Internet of things," based on RFID (radio-frequency identification) tags and metadata attached to physical objects, connected by WiFi in networks. This new kind of network will rely on conceiving of objects as existing in relation to their users over time. In this future Internet of things, Sterling suggests, each metatagged object (marked with metadata but also physically tagged with an RFID chip, say) would be encoded in ways that reveal its existence as a node in a social network, the nexus of various sets of "technosocial interactions that unite people and objects" (22). In fact, as Sterling argues, when "[p]roperly understood, a thing is not merely a material object, but a frozen technosocial relationship" (68).

This should sound familiar to historically minded scholars, and particularly to textual scholars. Textual theorists such as D. F. McKenzie and Jerome McGann have argued that the texts we study are best conceived of as nodes of social relations. Texts are the cumulative histories of their own receptions. The social-text theory of textual transmission, therefore, focuses not on static and isolated verbal objects but on dynamic discourse fields composed of interacting verbal, graphic, bibliographic, cultural, ideological, and social forces. A text, according to this theory, is a switch or node in the network of these forces, the place where meanings are dynamically generated. In this sense, McKenzie called for a sociological understanding of textuality and for a broader definition of the social text—as any recorded form of "verbal, visual, oral, numeric data, in the form of maps, prints, and music, of archives of recorded sound, of films, videos, and any computer-stored information" (13). Note that he imagines the social text in the form of *data* and that he envisions it as mapped onto the networked objects of the wider physical world. He famously asked "if there is any sense in which the land—not even a representation of it on a map, but the land itself—might be a text" (39). (This question had serious political implications, for example, when it came to the textuality of the physical landscape as it was mapped and interpreted by competing parties to a treaty in New Zealand.) The object of bibliography and textual studies was for McKenzie a field of data-rich events unfolding in the world: "physical forms, textual versions, technical transmission, institutional control, their perceived meanings, and social effects" (13).

McGann has argued that McKenzie "would have found that his 'social text' approach to scholarly work was greatly and practically advanced by the resources of digital technology" ("Database" 1592). And McGann has for over a decade extended his own long-term investigations of the social text into the realm of digital media, using as a test bed his Rossetti Archive,

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for example ("From Text"). He advocates a "quantum poetics" in which texts are seen not as "discrete phenomena" but as non-self-identical events that include the position and engagement of the scholar (*Radiant Textuality* 228–31). We will achieve this perspective, he predicts, by "exposing the fault-lines of interpretational methods that implicitly or explicitly treat any part of the study process as fixed or self-identical," but also by developing new interpretive practices and tools, including tools derived from games: "Models for these kinds of tools descend to us through our culture in games and role-playing environments" (164).

Games of Meaning

A number of recent scholars have begun to explore the relation of textual studies and video games. Matthew Kirschenbaum brilliantly applies a method he calls textual forensics to new-media objects of various kinds, including gamelike interactive fictions such as *Mystery House*. In the first book in the new series they are editing at MIT Press, Platform Studies, Nick Montfort and Ian Bogost look at the material conditions for the reception of games for the classic Atari VCS (Video Computer System) of the 1980s. My own recent book (2008) argues for the relevance of a social-text approach to understanding the meanings of video games as collectively constructed by their designers, publishers, marketers, players, and fans. From a different perspective, McGann and Johanna Drucker's *Ivanhoe* project is a practical experiment developed to use dynamic digital simulations in a gamelike environment to explore the ongoing reception histories of literary works (see Rockwell). *Ivanhoe* provides dynamic visualizations on a pie chart of the critical "moves" any group of players make in collectively interpreting or rewriting a selected literary text (an early version was played with Walter Scott's *Ivanhoe*). It's also a kind of role-playing game (RPG). Players must play in character, whether as a character chosen from the text in question, a critic, a book dealer, a historical figure, or someone purely imaginary. The goal is to establish the relation of the character to the text and to its multiple versions and competing interpretations. The graphics represent moves of multiple players and the collective effect of their moves on the discourse field as a whole.

As conceptually innovative as *Ivanhoe* is in the humanities, this form of modeling—mapping the actual and possible moves of avatar characters in relation to one another, in a shared digital space that visualizes the results of moves as a set of feedback loops—is what video games already do, at a more sophisticated level, in terms of their computational power and the power of their visualizations. *World of Warcraft*, for example, like *Second Life*, is run across a grid of servers, each hosting at any given time a small subset of the game's massive community and keeping records of players' actions in the game. Or consider *Spore*, the "massively single-player" evolution and space-exploration game designed by Will Wright, creator of *The Sims*. *Spore* exists in a proliferation of parallel universes, copies of which are stored on the computers of individual players, who may populate and shape planets and upload the results to a grid of *Spore* servers for downloading by all. Exploiting a social-networking model, the game relies on distributed content creation by players and asynchronous content sharing, a kind of time-shifted social interaction that the developers call the "pollination process" (Shaw; see Jones 150–73). As I play *Spore*, I can download and encounter other players' creatures, cities, and planets and interact with them inside my copy of the game, destroying them, cooperating with them, and so on, without altering the other players' own copies of their creatures, objects, and worlds. And in turn I can pollinate the *Spore* universe with my own creations. The *Spore* servers supply constantly updated "metaverse" statistics. In this case, the term refers to game metadata telling me, for example, that my

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planet in a particular galaxy has been blown up by another player (or many other players), and giving particulars of the encounter. But this destruction is visited only on a copy of my planet; the planet will still be there in my game the next time I play. Wright has said that this model offers the benefits of playing online—"all the people building the world collectively together"—but without the drawback that "the fourteen-year-old can kill you or that you've invested all this time in your planet and somebody comes along and blows it up" (as happens frequently in *World of Warcraft*).

Even these mainstream video games represent sophisticated ideas of what it means to enable on a digital platform the dynamic, networked, collaborative construction of the social text, broadly conceived. Like McKenzie's readings of the textual, marked nature of an Australian geographic landscape or of maps in general, these games treat their "maps" (their game environments) as texts, which is to say not as narratives in the limited sense but as sites for collective acts of meaning making (in the form of gameplay), including self-conscious modeling and visualization of those acts. At its best, *Second Life* is potentially gamelike in this sense, as a simulated landscape of textualizable events. Too few of the educational (and corporate) residents, however, understand or exploit this strength, in part because they are under the sway of an ideology of virtual reality as a transcendent and otherworldly experience. Gamers know better. Consider the hybrid, transmedia form of the alternate-reality game (ARG), in which ad hoc teams of players engage in elaborate acts of meaning making in the real world, using Web sites, payphones, cellphones, and even mailed physical objects as tokens and sources of information. The game world in this case overlaps with the (marked-up) real world, physical spaces and objects encoded with their geographic locations and tagged in various ways to enable dynamic social interactions. A larger textual narrative is thereby collectively constructed from clues hidden in plain sight. ARGs have been used as viral marketing campaigns for films and for Microsoft's video game *Halo 2* (Jones 76–82). The creator of "I Love Bees," the ARG for *Halo 2*, later organized a game with global aspirations (and global funding), tied to the 2008 Olympics and sponsored in part—to the consternation of some of her fans—by MacDonald's (McGonigal). Instead of sustaining the illusion of a virtual world apart, an island of immateriality, the digital network in an ARG is always only one part of a larger, impure, social network, and the goal is a marked text dynamically mapped onto and embodied in the world.

The Network Is Everting

In closing, I want to return to the invention of cyberspace. William Gibson has said that he was inspired by video games—not by playing them, but by watching others play them. The idea of cyberspace came to him while he observed "the body-language" of kids playing early arcade games in the 1980s, leaning into their painted fiberboard and glass consoles pinball-style, pushing the buttons, and—so Gibson assumed—longing to "reach right through the screen and get with what they were playing with," to merge with the game, to inhabit the virtual space behind the glass (*No Maps*). His fiction projected a dark future in which computer networks would make such transcendence infinitely easier to achieve and immersive, an imagined experience that retained something of the opacity of Gibson's vicarious, voyeuristic arcade experience.

The idea of arcade players as disembodied and immersed in the virtual space of the game "behind the screen," while perhaps loosely based in a feeling many gamers have experienced at times of being temporarily absorbed in the game, is at best a misleading partial truth. Video gameplay (and this was especially true in an arcade of the 1980s) is necessarily a hybrid experience, bodily as well as mental.

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And many video games in our own time play on this hybridity by foregrounding the player's body movements: dancing on electronic pads, manipulating a plastic guitar, pulling physical triggers, performing the motions of skiing or driving or kung-fu fighting. Nintendo's popular Wii platform is all about highlighting the somatic interface. Players swing and poke and swipe the Wiimote controller, usually standing in front of the screen. But even using the conventional joystick-and-button controls requires a physical as well as mental engagement, and it's common to see players at home or in arcades twisting and leaning into their consoles or control pads, dancing, or playing drum or guitar controllers. Gibson's muses, those 1980s arcade gamers, were more likely to have been trying to master and manipulate the physical fiberboard, glass, and plastic consoles of their games than seeking an out-of-body transcendence in cyberspace. He began with observations of the gamers' body language, and only afterward did he interpret the grabbing and leaning and bumping as signs of an urge to escape to the imaginary disembodied "space behind the glass." Video gameplay in popular accounts (Gibson's is only a famous early one) is often falsely depicted as a disembodied immersion in virtual reality, when the real thing usually demands mixed attention, cool in its detachment and aware of the game and its always at least partly haptic or somatic interface.

In what looks like a return of repressed materiality, Gibson suggests in his latest novel, *Spook Country* (2007), set in the present moment, that "cyberspace" is now "everting"—being "turned inside out" and mapping itself onto the external material world. The totality of networks, in this view, forms the hybrid reality of a grid imposed on the natural world by GPS satellite data, for example, linked up through RFID tags and WiFi. Instead of a sublime cyberspace apart from the world, this everted network has the constructed, plastic feel of the material world as artists experience it, as a possibility space tagged with metadata. The primary artistic practice depicted in the novel is locative art, which uses "spatially tagged hypermedia" to create "annotated environments" by overlaying crafted images and data onto geographic locations. The plot of *Spook Country* turns on a major political demonstration (or prank) that looks like an act of terror but turns out to be more like a work of performance art. An ad hoc group of interested parties with various kinds of expertise, mental as well as physical, including "geohacking" and martial arts, come together and cooperate to "mark [up]" a shipping container full of cash by shooting irradiating capsules into it at long range. That goal is blocked by many obstacles, including homeland-security laws, and requires the use of special tools and skills. In fact, the more you think of it, the more the "prank" at the heart of the novel appears to be an alternate-reality game. Or a demonstration of Sterling's Internet of things. Or an example of the dynamism of any networked social text. At one point, the protagonist imagines a powerful character watching the action through satellite feeds from surveillance cameras on a large screen in his office—"[t]he world as video game" (344).

This formulation carries plenty of sinister implications. Cyberpunk fiction and film codified the mood into a tech-noir aesthetic, and, after Jean Baudrillard's remarks on the Persian Gulf War, for example, we now, in an era of total security, conventionally understand any comparison of reality to video games as an ominous metaphor for techno-hegemony, the production of the culture industry, what the game theorist McKenzie Wark refers to as the "military-entertainment complex." For Wark, the "real world appears as a video arcadia divided into many and varied games" (005). His term for the logic linking the game world and the real world is "allegorithm" (30)—an allegorical correspondence controlled by rule-driven processes, or algorithms. Ironically, Gibson offers a slightly more hopeful perspective on technology, power, and the possibilities of resistance, drawn

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perhaps from his interest in street-level uses of technology, hackers' and artists' and fans' appropriations. In his recent work, he also sees the world as a game world, but in the sense that it is a grid on which meanings, though constrained, can be socially constructed, and he therefore recognizes possibilities for creative expression and community implied in the otherwise dark prospects opened by the everted network. A game space is not an infinite virtual reality, never an island of disembodied consciousness, but is instead a possibility space in multiple dimensions, one whose objects are deliberately marked up or metatagged by human intelligence, which is certainly constrained but is also capable of recombinatory acts of meaning making. In that sense, video games offer humanists serious models for potential networked events of their own—embodied, intermediated, and out in the world.

Notes

1. There are of course exceptions, including educators who understand that "no virtual world is an island" and connect *Second Life* to the "wider Web" (e.g., Joseph 11).

2. This metaphysical, sublime view of virtual reality is historically connected to William Gibson's invention of cyberspace in the 1980s, as Matthew Kirschenbaum suggests in a discussion of interface essentialism in media studies (34–35) and as I develop below.

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