

I, Avatar: Constructions of Self and Place in Second Life and the Technological Imagination

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On a recent evening, I received a call from a friend to come see a mutual friend's new house. After arriving by public transportation, I walked into the well appointed home. Music played on the sound system throughout the house as I looked around the living room, which was decorated in earth tones and rich fabrics. The couches were comfortable for lounging and had tasteful, contemporary upholstery. Being out in the suburbs, butterflies flew near the window box. Paintings decorated the walls, the handiwork of the owner's brothers. I complimented my host on her taste — she had designed the interior herself — and she smiled. As she went to attend to another guest who had arrived on the porch, I caught up with my friend whom I had first met at a social gathering a few weeks before. He told me of his recent luck winning at a trivia game at a local bar and showed off the new clothes he had bought with the winnings. After talking a while, I had to get to bed, so I said my goodbyes and left.

While I could have just been describing a mundane evening in almost any part of the world, the 'space' in which this particular evening occurred only exists in the memory and storage of a farm of servers outside San Francisco. But, the house was 'constructed' by my friend, and I did lounge in it on a lovely couch with my own (constructed) 'body' (See *Figure 1*).

Welcome to my *Second Life*

Second Life, a three-dimensional virtual world, launched in 2003, was intentionally designed to be an environment to be constructed by its users. "From the shape of their avatars¹ to the design of their homes, from how they spend their time to what types of affinity groups they form; *Second Life*'s design was focused on fostering creativity and self-expression in order to create a vibrant and dynamic world full of interesting content" (Ondrejka, 2004, p. 1). As such, it is unique among virtual worlds that exist today but represents a trend that its creators and others anticipate may eventually transform the Internet as graphics and network capability grow (Kushner, 2004).

Second Life grew out of the vision of the 'Metaverse' described in Neal Stephenson's novel *Snow Crash*. "Stephenson was the first to describe an online environment [The Metaverse] that was a real place to its users, one where they interacted using the real world as a metaphor

¹ Avatar is derived from the Sanskrit *avatara* and is meant to suggest "the idea of a kind of transubstantiation, the incarnation of life in a different form" (Tofts, 2003, p. 56). Avatar is the common term for representations, either textual or visual, of people's presence in a digital environment. In *Second Life*, avatars are three-dimensional and user constructed in almost every detail.

and socialized, conducted business and were entertained” (Ondrejka, 2004, p. 81). The developers of *Second Life* see their user-constructed world as the first step towards fulfilling this vision. This vision is to create a space where anyone can create and build an avatar body and



Figure 1. My Avatar in my friend's house, April, 2005.

dreamlike places that fulfill their desires, a world that will function as ‘real,’ transcending the bounds of flesh and circumstance of the actual, tangible world.

This article will discuss the historical and current discourses on the construction of spaces and selves, both real and ‘virtual,’ as well as the cultural and scientific construct of ‘virtual reality.’ It will also describe the accompanying dream of transcendence from the limitations of bodies and the ‘actual world’ that sits at the nexus of its discourse. Then, it will place *Second Life* into the context of the evolution of computer-enabled virtual worlds and analyze some of the economic, legal, psychological and philosophical implications of user-constructed virtual bodies and virtual spaces within a virtual world supported by ownership, property and tangible ‘real world’ economic value.

While *Second Life* captures the imagination of individuals who wish to create new lives free from societal and physical limitations of ethnicity, gender, geography, sexual orientation or status; it still manifests significant aspects of the society (American, capitalist, gendered) from which it sprung and therefore is more reflective than transcendent. However, since “it is now possible to work in a fantasy world to pay rent in ‘reality’” in places such as *Second Life*, user-created virtual worlds enable users to build virtual lives, with virtual bodies, virtual objects and virtual homes, that can have real, tangible value and meaning (Lastowka & Hunter, 2004, p. 11). *Second Life* represents, as Hillis describes, an example of “[virtual reality] as postmodern technology” because it blurs and fragments boundaries and senses of self and place and functions as a virtual microcosm for cultural, economic and identity recombination (1999, p. 164-165). In these new frontiers, avatars and the spaces they build will continue to challenge our concept of reality and humanity.

The Virtual and the Actual: Reality Through History

In order to get a sense of the meaning of virtual spaces for the human imagination, it is beneficial to discuss some particular discourses that led to the emergence of *Second Life*. Discussions of virtuality and virtual reality are found among academics across many disciplines including psychology (Fink, 1999), geography (Hillis, 1999), philosophy (Heim, 1998; Zhai, 1998), sociology (Schroeder, 1996), communication (Biocca & Levy, 1995), literature and cultural studies (Markley, 1996; Bender & Druckrey, 1994) and computer science (Çapın, 1999).

Since this article is most concerned with theories of the virtual in relation to the self and imagination of the world, the philosophical and psychological perspectives will frame the discussion. Throughout history, there have been differing views on what exactly was the real. Virtual reality lies in a discourse on reality and the position of human beings within it that has spanned from pre-modern times, through the Enlightenment and to the present. Human beings, enabled by technology, have increasingly become the central observers and constructors of their own reality. Virtual reality is the contemporary and future articulation of the philosophical and psychological question of how we define (and create) reality.

From the beginning of time, human beings negotiated between and through the actual and the virtual. Fink in *Cyberseduction* takes a broad view by defining the virtual as “something that exists in the mind without actual physical fact, form, or features ... virtual realities occur in inner

mental space, reflecting *internal* environments” (1999, p. 22). Heim describes the virtual as “not actually, but as if” and points to the origin of the word in the Latin *virtus* — defined as human power — implying that the virtual comes out of human creation rather than existing in the ‘actual’ of the physical world (1998, p. 220). Therefore, the virtual has existed in human acts of imagination and creation from the dawn of consciousness.

Ropolyi uses Heim’s definition as a stepping point for discussing the real and the virtual through history (2001, p. 168). In pre-modern times, the magic worldview (in which humans could harness supernatural forces and affect the world through symbol, ritual and spell) blended the real and the virtual without much concern. “The magic reality was constructed by will, in this way the mere construction of interrelations between the observed phenomena or between the experienced situations had an absolute primacy, without making distinctions between different kinds of interrelations” (Ropolyi, 2001, p. 170). In Greek thought, Plato’s conception of what was real and what was virtual could be seen as a reversal of how we construct the concepts today. He believed that the sensual world was imperfect because it was constantly in flux and not as real as the ‘perfect’ Forms (universal ideal types of which things we perceive in our world are merely imperfect expressions; e.g. there is a ‘perfect dog’ which exists in another world that any dog we see merely, and imperfectly, reflects) (Ropolyi, 2001, p. 172). Further, he speaks of humans seeing the world as if they watch shadows on the back wall of a cave. “The shadows cast by objects being moved before a fire. The real world is outside the cave, containing the patterns from which the objects were copied, and the principle of the good, whose analogue is the light of the sun” (Hillis, 1999, p. 39). In other words, what was perceived as real was actually the virtual because the perfect forms of the real universe — truth, light, knowledge — were beyond apprehension.

Pre-modern religious belief and mythology also intermingled the real and the virtual. Reality was considered on a higher level than what people experienced as actual. “The life of human beings [in pre-modern thought] is performed in the ‘vale of tears,’ in the shade of the world ... The complete earthy (*sic*) life takes place in the realm of virtuality or in other words, everything is virtual in some sense—the only exception is God” (Ropolyi, 2001, p. 172). In this pre-Enlightenment era, people did not necessarily believe that humans could grasp the truth of the world through what was measurable and experienced, so what was imagined (which from today’s lens would be considered, on some level, virtual) was what was real, and what was

perceived and tangible (what we would generally call real today) was what was virtual. In other words, God and the angels, who could only be experienced in prayer, were more real than any object that a person saw in front of their eyes because human sight was inherently fallible due to the ‘sinful and imperfect’ nature of the world in which they lived.

The scientific revolution of early modernity, while not removing the belief in real higher realms, sought answers to the question of what reality was by the experience and observation of the ‘natural’ world. The use of the senses, supported by technologies that enhanced them, shifted the construction of reality from the mythological to the logical, scientific and observable: from what Armstrong describes as the move from *mythos* (myth) to *logos* (logic) as the centering approach to understanding the world (2001). The physical, rather than the metaphysical, became the locus of reality.

Vision, in particular, supported by such technologies as the *camera obscura* (which projected a mirror-image of the actual world onto a wall through a pin-hole in a darkened room providing, what some would say, a perfect monocular view of reality), the telescope and others, began to define the real. Thinkers, like Descartes, sought answers in the world through the use of optics to view what was considered an objective truth (Crary, 1990). This “Cartesian tradition [accorded] primacy to sight in a way that conceptually privilege[d] the eye over the human body of which it [was] still a part, and ma[de] the eye a metaphor of the mind” (Hillis, 1999, p. 94). Descartes and Enlightenment thought will color the ideas expressed throughout this article. Most significant to Enlightenment thinkers was the idea that what was seen, touched, observed and measured became the seat of reality rather than some far-off ‘other-world.’

According to Crary, Late Modernity changed the place of the observer through the scientification of sight and the introduction of new visual technologies. Crary places vision within a historico-cultural discourse from the seventeenth to nineteenth century. Originally, the observer, being a point within a plane of vision that was tangible, external, and independent of the viewer (Crary, 1990), objectively saw the truth of the world from a monadic viewpoint (from the *camera obscura*). However, in the nineteenth century, the observer became an active participant in the construction of a subjective reality. The perception of this reality relied on the particularities of the human visual system, now rationalized, the interaction with tools (magic lanterns, thaumatropes, phenakistiscopes, zootropes, kaleidoscopes and stereoscopes), and the products of this rationalization (Crary, 1990). These interactions allowed for the creation of

images that were disconnected from the tangible (Crary, 1990). Through the mediation of technology, alternate visions were created that did not rely necessarily on anything actual, but rather by tricking the eye. In the same way, later technologies — like film, television, or the computer screen — created 'realistic' images from beams of light, chemicals, electrical impulses, and ones and zeros.

Now, in the so-called post-modern era, people are inundated by flickering images that purport to reflect reality but are at the same time constructed subjectively by the senses of the observer. Hillis expands on Crary's thesis in seeing "the 'perfect vision' of the *camera obscura*, the fantasy of the magic lantern, and the different immersive qualities of the stereoscope and the panorama" standing as "precursive cultural and material technologie (*sic*)" to the formation of the discourse on virtual reality and virtual environments (Hillis, 1999, p. 30-31). The 'virtualization' of the world has been a process that has been shaping scientific and cultural discourse over a great length of time.

Western humanity from its cultural beginnings gathered its understandings of the real from beyond its ability to see and observe, that is, in the Divine. The modern experiment, however, sought 'truth' by seeking answers in the tangible, observed, measured, empiric, visual, actual world, a pursuit aided by optical technologies. This experiment furthered understandings of the way vision worked and how to create visual experiences — plays of sound and light, magic lanterns and stereoscopes, and later photography and film — that mediated the actual world and/or created realistic virtual images. In the contemporary moment, Western thought is informed by a history of seeking the transcendent, finding truth in the seen and the increasingly developed technological ability to create more visually (and aurally, and, eventually, more fully sensually) rich constructions of artifice and simulacra. It is into this context that the discourse of virtual reality and virtual worlds developed in its contemporary sense.

Dreams of Virtual Reality

The positioning of [virtual reality] as a *new* technology, the *next* thing, expresses a transcendental yearning to deny both history and the necessary limits that attend and organize material realities and their accompanying forms (Hillis, 1999, p. 30)

All possible sensory frameworks that support a certain coherence and stability of perception have equal ontological status for organizing our experiences. This principle will be able to lead us to go "behind" the alleged physical space and see why the spatial

configuration we are familiar with is just one among many possibilities of sensory framework. (Zhai, 1998, p. 2)

Virtual reality is the technology, discourse and dream in which *Second Life* rests.

Technologically, virtual reality is defined as:

a technology that convinces the participant that he or she is actually in another place by substituting the primary sensory input with data received and produced by a computer ... The “as-if” quality of virtuality becomes a pragmatic reality when the virtual world becomes a workspace and the user identifies with the virtual body and feels a sense of belonging to a virtual community (Heim, 1998, p. 220-221).

Heim, in his *The Metaphysics of Virtual Reality*, describes seven different concepts that guide the field of study as well as the accompanying cultural construction of virtual reality: simulation (realism and three-dimensionality); interaction (ability to engage in the environment and with others in it); artificiality (even broader than Fink’s definition of the virtual and similar to Baudrillard’s concept of our world being completely saturated by simulacra and the hyperreal (Baudrillard, 1981)); immersion (use of hardware to simulate sensory experience, like a virtual reality headpiece or tactile glove); tele-presence (a feeling of presence in a remote (or virtual) place and/or control of a remote robot agent); full-body immersion (kinesthetic tracking of body movement by a computer); and networked communications (interaction with others via the Internet) (1993). To achieve virtual reality status, a technology does not have to fulfill all seven concepts. Virtual technologies are characterized as ‘strong’ virtual reality or ‘weak’ virtual reality in relation to these seven categories. For example, a text-based chat room may be highly interactive but not immersive and therefore would be considered weak. However, if that chat space were a three-dimensional graphic environment that encompassed the vision of its users it would be considered a stronger type. This proliferation of definitions has made virtual reality a veritable catch-all phrase.

The founding dream of virtual reality was envisioned in a speech given by Ivan Sutherland, considered one of the founding researchers in the field, in 1965. The “‘Ultimate Display’ would be ‘connected to a digital computer ... a looking glass into a mathematical wonderland ... The ultimate display would ... be a room within which the computer can control the existence of matter ... With appropriate programming such a display could literally be the Wonderland in which Alice walked” (Hillis, 1999, p. 8). Biocca and Levy describe the drive

behind this dream as the search for the “essential copy” and the desire for “physical transcendence” (1995). “Seeking the *essential copy* is to search for a means to fool the senses — a display that provides a perfect illusory deception. Seeking *physical transcendence* is nothing less than the desire to free the mind from the ‘prison’ of the body” (Biocca & Levy, 1995, p. 7). These goals follow from the historico-cultural discourses of the primacy of vision and mind/body dualism that came before. The Ultimate Display advocated to re-create a world as a better place and to re-create the body, digitized and customizable, as a perfect self.

Critics have reacted to this vision with joy and trepidation. Hillis concludes his critical discussion of virtual reality as cultural discourse with the admonition to never forget the promises of technological visions past, as well as the persistent place of the body.

The promise and hype of [virtual reality] and [Internet technologies] more generally is part of an ideology of the future, produced in an amnesia and loss of history that forgets the broken promises of past technologies such as the “universal educator” (TV) and “too cheap to meter” (nuclear power). Metaphors of progress and evolution work to suggest that bodies and places are always incomplete, partial, and by *necessity* thereby flawed ... if understanding can always only be partial, and if the mind is also flesh, then answers cannot lie solely within the transcendent light and reflected images inside [virtual reality] head-mounted display (Hillis, 1999, p. 211).

Hillis posits that while virtual reality and virtual environments are “factual” and experienced sensually, they are, most importantly, socially produced but try to “masquerade as brute facts” (Hillis, 1999, p. 52). In other words, virtual reality tries to act as an aspect of the world that doesn’t need an institutional understanding but just “is” — like “snow on Mount Everest” (Hillis, 1999, p. 52). The virtual dream, then, is dangerous because it tries to replace brute reality with one constructed only of light and mirage.

On the other side of the spectrum, Zhai, while attending to the risks of virtual reality, holds a more positive vision. “With the invention of [virtual reality] we are beginning to reach a stage of meta-physical maturity such that we can see through, without destructive disillusionment, the trick of the alleged materialistic thickness (1998). We welcome it as an occasion for our participation in the Ultimate Re-Creation” (Zhai, 1998, p. 173). Zhai argues that our very concept of space is based in vision, therefore our understanding of the world, even what is “material,” depends upon the nature of our sensory framework (1998). In other words, it is the limits of our physical senses that construct what space and matter mean to us. Virtual reality is therefore inherently good “in both experiential and transcendent senses” because it allows us to

envision the world and recreate it beyond the bounds of our current conceptions of the real (Zhai, 1998, p. 153). We are capable of experiencing it as a new reality, since what we call reality now is constructed by the senses alone (Zhai, 1998).

Writing from evolutionary psychology theory, Fink takes a different tack. In some sense, it really does not matter whether something is real or virtual because human beings are “programmed to assume that what appears real *is* real. It is a powerful and automatic assumption. Consequently, simulations of people and environments easily deceive our Stone Age brains ... We can’t and don’t overcome the assumption that what appears real *is* real, because we don’t want to, don’t need to, or don’t gain anything by it” (Fink, 1999, p. 128-129). To Fink, we constantly experience the virtual, so virtual reality is just another technology that enables interaction and engagement that we experience as real, even if it may not be tangible, because it elicits a response from our brain and our bodies. Virtual reality is not entirely good or bad, but one of many virtualities in our lives.

It seems productive to take the middle ground with Heim who argues for “virtual realism,” which he defines as “the pragmatic interpretation of virtual reality as a functional, non-representational phenomenon that gains ontological weight through its practical applications. Virtual realism steers a course between the idealists who believe computerized life represents a higher form of existence and the down-to-earth realists who fear that computer simulations threaten ecological and local values” (Heim, 1998, p. 220). We must avoid the pipedreams of transcendence and perfection that feed the fantasy of the Ultimate Display, but we cannot also discount virtual reality as just smoke and mirrors. “Virtual entities are indeed real, functional, and even central to life in coming eras. Part of work and leisure life will transpire in virtual environments” (Heim, 1998, p. 44). Heim goes on to describe several characteristics of what it means to practice this view which include: criticism, avoiding exaggeration, seeing virtual worlds as parallel to the actual, not a replacement of it, and a pragmatic sense that “realism in [virtual reality] results from pragmatic habituation, livability, and dwelling” (Heim, 1998, p. 46). By coupling Fink’s assessment of how humans psychologically construct the real with Heim’s philosophical centrism, one can take on a truly realistic view of the virtual.

Second Life is not what virtual reality purists would describe as an immersive virtual world because it does not engage the user through virtual reality goggles or tactile interfaces. However, it still resides squarely in the discourse of virtual reality because it provides a high

level of interactivity and tele-presence within a parallel world that allows for the construction of place and self. Within *Second Life*, there is tangible value and meaning for its users, particularly by enabling them to build and create. Before discussing the world of *Second Life* and its avatars in more detail, it is important to place this virtual place and these bodies/selves within a discursive context.

The Palace of Fates, English Gardens and Cyberspace

Virtual worlds existed prior to the advent of computer technology conceptually and practically. Steinhart posits that Gottfried Wilhelm Leibniz envisioned a virtual reality system in his description of the “Palace of the Fates” in his *Theodicy* in which the narrator was shown the “totality of all possible worlds” organized within a series of halls and rooms (1997). “In many respects, the totality of possible worlds is thus like a computer program, particularly a [virtual reality] program, and each possible world is like an execution path” (Steinhart, 1997, p.134). Leibniz envisioned access to possible worlds — virtual worlds — organized upon and accessed by lines of causation based on changing variables (e.g. What if Lincoln was never assassinated?). Conceptually, virtual places have existed in the imagination in forms that resemble the contemporary for centuries.

Stewart and Nicholls describe another virtual world, albeit one located in tangible reality. English gardens in the nineteenth century strove to create an ideal for “natural beauty” inspired by the paintings of landscape artists (Stewart & Nicholls, 2002, p. 91). In other words, the idea of real nature was informed more by the virtual image of the painter rather than actual nature, and gardeners designed spaces to reflect this virtual space within the natural world. “Just as a painter need not be constrained by ‘reality’ in creating the most ‘natural’ landscape — this can be eliminated, that can be added; this can be highlighted, that can be muted — so a gardener/architect can craft a multi-perspectival view of the landscape” (Stewart and Nicholls, 2002, p. 94). The boundaries between natural/artificial, real/virtual, even nature/culture were blurred by these spaces, but they still were experienced as real. The authors posit that computer-mediated virtual worlds can function in positive ways just as these artificial natural spaces engaged and inspired the English. “We ought to be much less concerned about whether something is virtual or actual and more interested in the type of virtuality possessed by certain

actualities” (Stewart and Nicholls, 2002, p. 96). This similarity between these metaphorical landscapes and virtual worlds resonates with Hillis as well (1999).

While instances of virtual spaces have existed before, it is computer technology and its surrounding cultural constructs that formed our conception of virtual worlds of light, which exist in computer nodes where we too can place ourselves. In the discourse of literature and culture, William Gibson’s *Neuromancer* established the cyberpunk genre and first defined the now ubiquitous term ‘cyberspace’ (Neal Stephenson’s *Snow Crash*, that has so inspired the creators of *Second Life*, is another example of cyberpunk writing). Hayles argues that *Neuromancer* follows discourses in cybernetics and information science, as it saw both personhood and place as made up of patterns of information (Hayles, 1999, p. 36-38). In terms of this discussion of space, it is the ‘matrix’ that becomes the landscape of cyberspace. “Cyberspace is created by transforming a data matrix into a landscape in which narratives can happen ... Narrative becomes possible when this spatiality is given a temporal dimension by the pov’s [point of view’s] movement through it” (Hayles, 1999, p. 38). Landscape is made up of data, which is made up text and numbers, of language written through light. Out of that language, worlds are then created. The current Internet does not necessarily have this sense of landscape because it is made up primarily of text, sound and image. Three-dimensional virtual worlds more accurately depict Gibson’s vision of a geography of cyberspace because it has a form that can be experienced more as a ‘place.’

Virtual places have been a part of the actual and the imagined throughout history. In the current cultural context, computers and networks offer a new frontier to construct alternative worlds in more ‘realer-than-real’ ways, akin to the English gardens two hundred years before. The historical context of the use of imagined and experienced virtual spaces, as well as cyberpunk dreams of making the cyberspace/matrix/Metaverse into a reality, frames the imagination of *Second Life*’s creators and users. In fact, *Second Life* takes the production of virtual spaces further by allowing the users to be the gardeners themselves, landscaping their world as they wish it to be.

Cartesian Minds and Virtual Bodies

Several avenues of discourse on the body in relation to virtual reality are valuable to discuss in light of virtual worlds: Cartesian mind/body dualism, the fragmentation of identities in postmodernity, and the avatar as a cultural construct and an extension of the body of the user.

Descartes saw a duality between an immaterial mind and a material body. To Descartes the incorporeal mind interfaced with the body through the pineal gland in the brain where it then responded to the stimuli that the body presented to it through the senses (Descartes, 1646/1989, p. 36). In that sense the body functioned as a machine for the immortal soul. “Descartes argues that humans are spirits that occupy a mechanical body, made of extended substance, and that the essential attributes of humans are exclusively attributes of the spirit (such as thinking, willing and conceiving) which do not involve the body at all” (Burnham and Fieser, 2001). Further, Descartes believed that the human mind contained all truth but that the body limited the ability of human beings to perceive and find truth (Noble, 1997, p. 144). While the denial of the body was seen in Western thought before Descartes, he rationalized this idea through deduction, observation and logic: the tools of the Enlightenment.

Penny argues that Descartes contributions greatly affected the formation of the discourse of virtual reality. The matrix that virtual worlds are mapped upon is a mathematical Cartesian grid (Penny, 1994, p. 236). Virtual reality also gives primacy to the eye because it is primarily experienced through screen technology. Most importantly, “[virtual reality] reinforces Cartesian duality by replacing the body with a body image, a creation of mind (for all ‘objects’ in [virtual reality] are a product of mind). As such, it is a clear continuation of the rationalist dream of disembodied mind, part of the long Western tradition of the denial of the body. Augustine is the patron saint of cyberpunks” (Penny, 1994, p. 243). Virtual reality, then, becomes a means for the mind to rise above the corporeal body. “Virtual technologies encourage belief that they constitute a ‘transcendence machine’ within which the imaginative self might escape its privatized physical anchor and live in an iconography of pleasure” (Hillis, 1999, p. 172). Morse describes this process of splitting from the body as an act of denial. “The seduction and playfulness of virtual reality are based on this very disparity between organic and virtual bodies — its power to erase the organic from awareness, if only partly and just for awhile” (Morse, 1994, p. 180).

Virtual worlds feed societal fantasies developed within the mind/body discourse of transcending the deficiencies of human flesh. *Second Life*, which allows complete customization of avatar bodies, promises to give users a second skin that can improve on the corporeal and be changed like a suit of clothes. If one buys into the mind/body duality, it is easy to be seduced into building the ideal body with a few mouse clicks and to holding that body in higher regard

than one's own embodied flesh. The virtual body becomes the preferred vessel for the non-corporeal mind which is the essence of self.

Hayles argues, however, that one cannot forget the body within cyberworlds. Rather, she sees virtual technologies, as well as other "posthuman" technologies, as challenging the boundaries that the Cartesian duality creates not just between the mind and the body but the person and the environment. "Only if one thinks of the subject as an autonomous self independent of the environment is one likely to experience panic ... [about losing the body]" (Hayles, 1999, p. 290). Rather, "it is not a question of leaving the body behind but rather of extending embodied awareness in highly specific, local, and material ways that would be impossible without electronic prosthesis" (Hayles, 1999, p. 291). The modern tendency to create dichotomies between mind/body, nature/culture, human/machine and reality/virtuality is problematic in that it encourages fear of technology as well as fantasies of transcendence like the *The Ultimate Display*. Likewise, Stewart and Nicholls prefer a phenomenological approach that "insists that the space inhabited by human beings is partly defined by our distinctive form of embodiment. The space in which we act, as Erwin Straus puts it, is an expansion of our 'body scheme'" (Stewart & Nicholls, 2002, p. 87). In this way, avatars become extensions of self within virtual space where interactivity, creativity and commerce can derive real meaning rather than simply being a Cartesian mind loosed in the ether. But the nagging question remains: what does it mean to be oneself?

Me, Myself and Avatar: Fractured Identities and Schizoid Postmoderns

The Cartesian view of self strived for a unitive mind in control of its body and world. However, contemporary understandings of the self acknowledge that people play multiple roles in their lives.

A single person's identity embodies multiplicity. You possess many sectors within your personality and play numerous roles in your life — such as child, parent, student, employee, neighbor, friend. Cyberspace offers a niche for each of these specific facets of selfhood. Some people even talk about how we can "deconstruct" ourselves online (Suler, 2000).

However, there can be dangers in this fragmentation of self, particularly if one suffers from problems of integration at the start. "Without any principle of coherence, the self spins off in all directions. Multiplicity is not viable if it means a shifting among personalities that cannot

communicate. Multiplicity is not acceptable if it means being confused to the point of immobility” (Turkle, 1995, p. 258). The ability to construct any avatar one wishes online amplifies this dissociation because of the anonymity it allows (Fink, 1999, p. 209). Hillis, to no surprise at this point, states “if spatial and identity polyvalency are to be the pluralist ‘norms’ in cyberspace, a resulting sense of unreality may promote extreme disorientation” (Hillis, 1999, p. 188). In the pursuit of losing one’s body, one has the potential of losing one’s mind as well.

Virtual worlds, like other technologies, can have positive and/or negative psychological effects on the user. The exploration of identities online can be beneficial as well as potentially harmful. Turkle sees potential for online worlds to function as a space for people to work out issues of identity through their avatar selves and their interaction with others (Turkle, 1995). Ford sees virtual worlds as an opportunity for the paralyzed, and others with disabilities, to be able to interact online in ways they cannot in ‘actual life’ that are potentially beneficial. The paralyzed user can interact in a virtual world where they will not be stereotyped since they can eliminate the visible markers of disability that stigmatize them in real life (Ford, 2001). Virtual reality theorist Brenda Laurel looks at the relationship of self to avatar as that of the actor to role. Within the virtual world avatar bodies and identities allow the user a type of agency, the ability to “act within a representation” (Hillis, 1999; Tofts, 2003). In user-created virtual worlds, this agency is only increased as actors, with fully articulated bodies, also become producers (and prop-makers and set designers) functioning from a Gibsonian ‘pov’, which “constitutes the character’s subjectivity, by serving as a positional marker substituting for the absent body” (Hayles, 1999, p. 37). It is the performative self embodied in flesh and pixels (melded in one of Haraway’s cyborg configurations or as a McLuhanian medium that extends the senses through technology) that engages as an actor in spaces where it expresses and interacts (Horrocks & Appignanesi, 2003; Graham, 2002).

To return to Hillis’ description of virtual reality as postmodern technology, virtual worlds rest within a discursive space that have been constructed upon the struggle between the strengthening and blurring of boundaries of corporeality and transcendence, the real and the virtual, where and nowhere, and the unitive and multiplicitous self. It is this tension that makes virtual reality and virtual worlds so compelling to the contemporary imagination. It is within this space that *Second Life* came into being and further challenges boundaries through its unique configuration as a place of creativity, interactivity, construction of self and tangible economy.

Second Life as the Evolution of Virtual Worlds

Second Life is a virtual world — a 3D online persistent space totally created and evolved by its users. Within this vast and rapidly expanding place, you can do, create or become just about anything you can imagine. Built-in content creation tools let you make almost anything you can imagine, in real time and in collaboration with others. An incredibly detailed digital body ('Avatar') allows a rich and customizable identity. A powerful physics simulation running on a backbone of hundreds of connected computers and growing with the population allows you to be immersed in a visceral, interactive world that as of April 2005 covers more than 12,000 acres and 20,000 owned plots of land. The ability to design and resell 3D content, combined with the ability to own and develop land and a microcurrency, which can be exchanged to real money, means that you can build a real business entirely within Second Life. (Linden Labs, 2005b)

Second Life is a virtual world comprised of, as of April 2005, 25,000 residents from more than 50 countries (Linden Labs, 2005d). By December 2005 the population of Second Life had reached more than 100,000 users due in part to a change in policy, which allows new users to obtain an initial basic membership for free, as well as increased media coverage about the service. (See *Figure 2*). *Second Life* not only grew out of a particular cultural discourse but also out of an ancestry of publicly available virtual worlds, marrying the user creativity and sociability of text-based Multi-User Dungeons/Domains (MUDs) with the graphic richness of Massively Multi-Player Role Playing Games (MMORPGs). MUDs and MMORPGs contributed greatly to what *Second Life* is today, and sets *Second Life* apart from other currently available virtual worlds.

While differing significantly from *Second Life* in that they are text-based, many MUDs were and continue to be constructed primarily by their users (Lastowka & Hunter, 2004; Turkle, 1995). Bellman and Landauer saw this as a positive aspect of MUDs that at the time delineated them from other forms of entertainment.

Text-based MUDs allow people the freedom of word pictures, something we can't imitate in any graphical environment. Text-based MUDs have a much richer and more dynamic visual imagery than, say, movies or games, because it is customized by each player's imagination ... (MUDs) are also great equalizers: all people ... can become builders in a very short amount of time. In fact we've seen examples of eight- or nine-year old children, who were raised in inner cities and were nearly illiterate, become, within a short amount of time, able to build up a whole environment (Bellman & Landauer, 2000, p. 101).

Further, MUDs allow users, through the use of text, to construct themselves as whoever they wish to be. “You can be whoever you want to be. You can completely redefine yourself if you want. You can be the opposite sex. You can be more talkative. You can be less talkative. Whatever” (Turkle, 1995, p. 184).



Figure 2. Partial land map, resident population (which has now surpassed 100,000), in world population, and daily economic transactions in *Second Life*. Source: *Second Life Homepage* <www.secondlife.com> Accessed December 15, 2005.

MMORPGs provide users with graphically rich environments in which they take on the role of characters within ‘sword & sorcery’ fantasy or science fiction role-playing games. Woodcock estimates that even excluding some of the large South Korean MMORPGs, that there are more than 5 million active subscribers of MMORPGs worldwide, with 2 million of them participating in *World of Warcraft*, the largest American-based MMORPG alone (2005). Other MMORPGs include *Star Wars Galaxies*, *Ultima Online*, *Lineage*, *Everquest*, *EVE Online*, and *Project Entropia*. MMORPGs are generally three-dimensional graphic spaces in which users have avatars that they control within an environment, a quality shared with *Second Life*. Unlike

Second Life, though, these worlds are usually games where characters need to ‘level’ (to gain experience by killing monsters or taking on quests in order to gain a higher rank) to gain in skills and power (Lastowka & Hunter, 2004). “Despite the socializing that takes place in these *D&D* type worlds, the clear goal in each is to become a more powerful avatar” (Lastowka & Hunter, 2004, p. 27). *Second Life*, on the other hand, has no goal other than socializing, commerce and creativity. While many MMORPGs allow a certain type of crafting, that is, the creation of objects within the game, this content is designed by the game developers and is part of the larger player goal of becoming more powerful as an avatar (Ondrejka, 2004).

Second Life is also similar to three other major non-leveling online virtual worlds: *Sims Online*, *There*, and *ActiveWorlds*. *Sims Online* is similar in that its primary goal is socializing, buying, and building. Since it is based on *The Sims* computer game, however, its interface is cartoonish and lacks the “fine control of other online worlds” (Costas, 2003). Further, the opportunities for creativity are limited. *There* provides a similarly graphically-rich world like *Second Life* including detailed avatars and lush three-dimensional geographies with physics and gravity (so balls drop and cars accelerate) (Kushner, 2004). While some customization can be done in terms of clothing and property, “in general, *There* is about hanging out and chatting; you can do a variety of things — walk a Labrador, race dune buggies, play paintball — but the activities serve primarily as conversation ice breakers. It is a welcoming community that seems less about winning and more about friendship. *There* bills itself as a service, not a game” (Baig, 2003). This differs from *Second Life* in that user-creation is not a significant component of the world of *There*, though it is available to some extent. As such, *There* could be considered more accessible, but *Second Life* remains the potentially more interesting virtual world (or Metaverse) of the two. Lastly, *ActiveWorlds* is the granddaddy of virtual worlds, developed out of a project called *AlphaWorld* in 1995 (mauz.info, 2005). *ActiveWorlds* is user constructed, but made up of separate worlds owned by individuals rather than a connected, growing land. It also lacks certain levels of customization, scripting and a functioning economy (Oz, 2005). *ActiveWorlds* has been studied as a site for user creativity (Hudson-Smith & Schroeder, 2002) and education (Bailey & Moar, 2001) with mixed results.

It is the relative ease and power of building that greatly sets apart *Second Life* from others in the genre. The tools of *Second Life* have allowed a multiplicity of user-created forms based on the concept of atomistic construction, a concept that “relies on simple, easy to manipulate pieces

that can be combined into large and complex creations” (Ondrejka, 2004, p. 90). Like the MUDs before it, *Second Life*'s 'narrative space' is also defined by text, a scripting language that functions to give behaviors to avatars and graphical objects working underneath the surface: code, like DNA, for the objects and people in the world (Ondrejka, 2004). It is this combination of atomistic construction and scripting that has fostered the creativity of the residents of *Second Life*.²

Csikszentmihalyi says “creativity is a central source of meaning in our lives ... [and] when we are involved in it, we feel that we are living more fully than during the rest of life” (Hollister, 2005). It is by giving its users tools for creativity that *Second Life* gives the users' experience particular meaning and makes the world more interactive and realistic. It is by engaging its users in the act of creation that *Second Life* provides opportunities that are not necessarily available in real life. Acts of creation in *Second Life* may not be the *same* as the majority of acts of creation in actual life (e.g. creating clothing in *Second Life* is done with graphics programs rather than thread and cloth), but they certainly involve skills like graphic design, three dimensional modeling, and programming which are also found in the actual world and take time to develop and master. *Second Life* creates a new type of producer-consumer (prosumer), similar to the thousands of people who are mixing their own music, making their own movies or publishing their own art or texts on the Internet. What is different is that this creation happens in a parallel virtual world bounded by a sense of geographical space and virtual community. However, the boundary between the actual and the virtual is not solid. Like the border of any other land, money flows back and forth across this demarcating line and brings exchange value to both sides.

Money Makes the (Virtual) World Go 'Round

Virtual worlds have a history of economic activity. Castronova studied the exchange of avatars as goods in *Everquest*. Because *Everquest* is a leveling game, some players are willing to buy powerful previously played avatars from other players in order to avoid the often tedious work of killing weak monsters, carrying out simple quests and gathering treasure that low level

² *Snapzilla* is a photosharing site for *Second Life* that holds abundant examples of the types of avatars, objects, and places that are being created in *Second Life*. <<http://www.sluniverse.com/pics/>>

characters must do to gain strength in the world. He found that the average price for avatars on sale was \$333.00 (Castronova, 2004, p. 187). In another study, he found that:

the economy of Norrath [the virtual world of *Everquest*] as a whole is slightly larger than that of Bulgaria. The effective hourly wage was \$3.42 per hour, a figure significantly higher than the hourly wage of workers in India or China. Trade occurs regularly between Norrath and the United States, and foreign exchange between the Norrathian currency and the U.S. dollar is highly liquid as a result (Lastowka & Hunter 2004, p. 39).

While *Second Life*'s economy is not as large, its currency, "Linden Dollars," did exchange for approximately \$1 to every 266 Linden Dollars as of December of 2005 on the LindeX currency market on the *Second Life* website (Linden Labs, 2005a). "Some inhabitants are already making more than \$100,000 a year in real-world money by selling digital wares constructed inside the world or running full-fledged role-playing games" (Borland, 2005).

This is a basic description of how it works: in *Second Life*, all users can purchase items using Linden Dollars (which they receive either as a stipend or buy on the currency exchanges) in stores and kiosks in the world where objects are displayed for sale. By hitting a 'pay' button the buyer transfers money to the seller and receives an item in return (e.g. a shirt, a vehicle or a weapon). A person who creates an object can set it 'for sale' with various levels of permissions (whether the object can be copied, transferred or modified). In addition, users can buy land from Linden Labs or from private owners or developers. Users pay fees on land of a certain acreage that they have over time (like a property tax). So, goods and land exist in the world that have real asset value to the users of the system.

The debate over the value of virtual property is a larger issue, but that it is going on at all and that virtual properties hold real economic value for users of virtual worlds is significant in terms of the construction of virtual worlds as a type of reality. Lastowka explored in a recent *California Law Review* article several conceptions of property from the political philosophies of Bentham, Locke and Hegel (2004). Within the Western, capitalist tradition, property has been an important part of personhood. Government protects it through property law. It becomes an extension of one's self because people are judged by their clothes, their house and car, among other things. By giving virtual avatars virtual property, particularly property that is created out of their own 'work' (à la Locke), simulation, interactivity and meaning (through a sense of ownership and accomplishment) increase.

The developers of *Second Life* recognized this and built property rights into the system.

While the argument that virtual goods are property might be flawed when applied to content created by the game developers, it is clear that content built using atomistic construction is property and needs to be treated as such ... In November 2003, *Second Life's* terms of service were changed to allow users to retain real-world intellectual property rights to their virtual creations. The results of this decision will be closely watched in the years to come (Ondrejka, 2004, p. 95).

When coupled with the brisk trade in virtual land in the world, virtual property exchange within a framework of real world rights provides an environment that parallels the free-market, consumer culture of the actual world.

Second Life is not an idyllic world, unless one envisions a capitalist paradise. From observation of *Second Life*, it is clear that, as in the real world, American consumerism (of a virtual sort) is everywhere. One cannot walk down the virtual street without being barraged by virtual vending machines selling virtual wares or seeing virtual advertisements for virtual casinos. As in American culture, it is this commerce that allows the system to be viable, but it also means that money can become the root of both good and evil.

Second Life has its own cartels that make money from selling virtual guns and virtual drugs (Fatale, 2005). While this can be seen as harmless, it does cause 'virtual crime.' A review of the "Police Blotter" shows that most violations of the terms of service (which function as the basic social law in *Second Life*) were for some sort of weapons use (Linden Labs, 2005c). While the costs of such acts to the victim are generally minor, it does take away from the victim's quality of life in that world. *Second Life's* economy simulates class stratification as well, as those with the means to buy virtual land and goods are able to exert influence and power within that world. *Second Life* 'land barons' often own entire 'sims' (sections of the world) or private islands that are their own constructed paradises. As with the real world, because of the monetary investment that these residents make within the world, it can be speculated whether they then have more influence in terms of how the community is governed as a result.

Through ownership of land and objects, *Second Life* encourages a sense of place and self. It is this economic and creative level that adds tangible economic and artistic value to the social meaning of interaction in *Second Life*. To maintain virtual realism, this does not replace the actual world, but it does create a parallel world in which users find meaning and experience in a

type of reality that has ramifications for their actual world lives beyond identity exploration and social interaction.

I, Avatar: Observations of Virtual Bodies in *Second Life*

Second Life is a society of its own with diverse residents involved in a large number of activities. They have a multiplicity of identities within real life and in *Second Life*. The identities that residents of the world have matter because many users spend a great deal of time existing in these roles as virtual actors. This time is valuable to the user because it gives them economic and creative returns as well as opportunities for identity exploration.

As *Second Life* is a relatively new world, there are no currently available studies of how much time users spend in the world on average. However, Kolo and Baur's study of *Ultima Online* can allow a starting point for speculation. They found that 46% of players could be considered frequent or heavy players, averaging more than five sessions a week in the world, with more than half of that percentage averaging more than three hours per session (2004). When the time-consuming process of creation is factored into *Second Life*, it can be speculated that a significant percentage of users of *Second Life* are spending a great deal of time in that world.

As mentioned earlier, *Second Life* has become a space for entrepreneurial endeavor, with some users making the equivalent of an excellent real world income through the selling of virtual goods. Obviously, this implies that *Second Life* has become a significant part of those users' lived world. The virtual body becomes the new suit for the office or the uniform when going on duty. It is through work, by Heim's definition of virtual reality earlier, that the virtual body gains more and more meaning and value. Again, one cannot equate the virtual body with the real body, but the virtual body does extend the real body into a virtual space in which it engages in activity with meaning and tangible value.

These virtual bodies hold other implications beside what they 'do' within the world. As actors in the actual world, humans perform with the corporeal bodies that they have. They are judged by them and engage in the world through them. Avatars function in the same way in virtual worlds. What differs is that in a virtual world one can slip out of a skin as if changing clothes. With a click of the mouse a user can be a little girl, a firefighter or Prince Charming. "There are more than 150 unique sliders for altering an avatar's traits, from foot size to eye

color” (Baig, 2003). Unlike the real world, *Second Life* users are not stuck with the body that they are given, but can remake or create their body however they wish.

Within other virtual worlds, it has been found that players generally describe themselves as they would like to be in an act of wish fulfillment to become either the portrait of culturally-accepted beauty or a fantastical transcendent (or mysterious) character (Lastowka & Hunter, 2004). For example, in *Everquest*, females are more likely to pick the wispy wood elf (who starts out in a slinky bikini) for their avatar than the Shrek-like ogress (Yee, 2001). Nakamura, in her study of race and online identity construction, found that users tend to assume that users are ‘white’ and when racial avatars are constructed in text or graphics they correspond to particular dominant cultural archetypes (2002). In other words, avatar construction tends to conform to cultural standards of what is considered attractive or normative, and since the majority of users of online worlds are male, white and bourgeoisie, their particular cultural view impacts the virtual space.

To illustrate this, I can speak from my experience within *Second Life*. These observations are purely anecdotal and speak to the need for further study. In my observation, virtual bodies in *Second Life* are generally of two types: normative and fantastic. Those who possess bodies that are normative look and dress in a simulation of what people in the real world look and dress (See *Figure 3*). However, both female and male bodies are highly gendered, with large breasts or broad shoulders. While there are some people who have bodies that seem to reflect who they are in real life (the occasional grey-haired man in shorts with a receding hair line, or the short, paunchy woman with glasses in a nerdy t-shirt), the majority of normative avatars strive for a certain ideal of physical beauty. Furthermore, of the normative avatars, they seem to generally be white or tanned with Caucasian features. While *Second Life* offers users avatar sets that reflect ethnic diversity, most users opt for an avatar that conforms to the ideal of beauty in American culture that is 20-something, toned/buxom and white. Whether this is due to the demographics of users or some attempt at conformity to a social norm, or both, is unclear and merits further study.



Figure 3. My current avatar in *Second Life*, an example of a 'normative' body.

The other type of avatar that I encountered within *Second Life* would be considered fantastic (See *Figure 4*). There are fairies, Jedi Knights and animal/human hybrids throughout the world. Some of these avatars are strictly performative, conforming more strictly to the concept of actors playing roles. *Second Life* becomes the ultimate game of dress-up. However, for some people, the avatar becomes an opportunity to express deeper personal identities that require radical reconfiguration of bodily space. For example, within *Second Life* there is a relatively visible community of people who call themselves 'furries.' Furries are a subcultural people who feel a connection to or wish to be a particular animal, real or fantastic.

As one *Second Life* resident puts it: "For me, it's just the way I feel inside, something I'd like to be. But not necessarily a real squirrel." A popular definition of a furry is someone who has a special connection with an animal, real or imaginary ... "I'd really like to be a cartoon squirrel." Some furries would hate to be a cartoon, though (Au, 2005).

In *Second Life*, furries can actually configure their virtual selves to conform to the mental image that they have of what they consider their true self. Additionally, they can construct places (like



Figure 4. Myself in a 'Frog Prince' avatar, an example of a 'fantastic' body.

nightclubs or forest cities) for the community to gather and to be able to freely express themselves. In the imagination world of *Second Life*, the material flesh is transcended.

I'm a furry in real life, though we have some limits as to what we can do in real life...I'm rather tall and overweight in real life. I like to be small and cute, when I can be. My real body feels awkward and strange compared to the body of my fantasy ... Like most furries, I can't remember ever being different (Au, 2005).

Some might recoil at this type of self-description because it may not necessarily be considered 'normal.' What can be said is that *Second Life* allows a misunderstood group to find a safe place for exploration and meaning, and because of this they have thrived and contribute greatly to the life of the virtual community-at-large. Virtual furries are an example of the post/human "monstrosities" that Graham argues challenge our ontological categories of nature/culture, human/animal/machine and body/environment (2002). *Second Life* allows new configurations of self that fulfill wishes and fantasies. Whether this is healthy or not generally depends on the individual and their ability to juggle performative selves. Turkle found in MUDs a variety of

integrative and dissociative issues related to digital identity (1995). Since *Second Life* combines the graphical richness of MMORPGs with the customization of MUDs, it merits further study as to whether the presence of three-dimensional avatars within three-dimensional spaces further complicates psychological issues of identity online (and in the actual world) by enabling or encouraging a fracturing of self or transcendent, disembodied fantasies.

Virtual bodies in *Second Life*, then, represent both a tendency of the technology to reflect the culture in which it exists as well as being seen by some as a means of transcending an unsatisfying body or life. The bodies are extensions of self in the virtual world and can express multiple aspects of self. However, it should be noted that the designers of *Second Life* have made some decisions that may lead to more integrated virtual identities within this world. Unlike Frankenstein's monster, *Second Life* avatars have names and choose from a selection of 'family names' (though family names do not seem to have much impact on interactional patterns) (Graham, 2002). This name is always visible above the avatar, no matter what its body looks like. From my observation, most people in *Second Life* do choose to stick with a particular avatar gender, shape and face, though it may be in constant flux (new clothes, new tattoos, higher quality 'skin,' or jewelry). This relative permanence of form does not necessarily mean that this avatar then reflects the offline self (as in *Everquest*, users may choose to present female/male through the choice of a gendered avatar and an ambiguous name), but it does mean that the performative self online may be in this case more static (Lastowka & Hunter, 2004, p. 67). Again, further study is required into how subjects map self onto virtual bodies as well as the relation of dynamic and static presentation in avatar culture in *Second Life*. What is clear is that user-constructed avatars provide another means of identity construction that nests well with current trends toward people becoming consumer/producers. *Second Life* is the ultimate 'rip, mix and burn' of reality which allows for the construction of postmodern, blended spaces and bodies.

Concluding Thoughts

Virtual worlds and virtual reality are compelling cultural constructs in which technology, bodies and society meet to form hybrid forms of reality that cross and challenge ontological boundaries of meaning. *Second Life* is a contemporary example of the type of space that has the potential to be more important in the lives of an increasing percentage of people. Because individuals derive meaning and value from virtual place, property, creativity and bodies, virtual

worlds cannot be dismissed as they have been demonstrated to exist as pragmatic types of reality. While a critical view must take into account the extremes of transcendence and nihilism that the technological imagination gives to these technologies, what is most important is to deal with these realities as they exist today and as they potentially will exist in the future.

What of the future? Virtual worlds will continue to challenge boundaries especially through how they may converge with advances in interface technology. According to Phillip Rosedale, founder of *Second Life*:

longer term, I think interface technologies that allow really interacting with others and touching the world you are immersed in, will bring BIG changes in the way we experience these things. The various technologies that can rapidly acquire facial expressions from an inexpensive camera are probably a nearer term example of that future. Imagine how much easier and fun it would be to communicate in a world where, just for example, something as simple as the movement of your character's eyebrows could follow those of your own! (Kosak, 2005).

How could developments such as interfaces that let the disabled move cursors or monkeys move robotic arms over the Internet through brain impulses potentially change the level of immersion in virtual spaces (Meredith, 2005; Khamsi, 2004)? How might the experience of the world become more immersive as head-mounted displays become lighter weight and more readily available (The Ohio State University, 2002)? Or, more profoundly, how will the real and the virtual blur even more when technology develops to the point where neurons can be manipulated directly to create sensual experience, taking the sensual interfaces of the body out of the loop, as Sony has conceptually patented? "The technique suggested in the patent is entirely non-invasive. It describes a device that fires pulses of ultrasound at the head to modify firing patterns in targeted parts of the brain, creating 'sensory experiences' ranging from moving images to tastes and sounds" (Hogan & Fox, 2005). History has taught us that things thought impossible today are very possible in the future. At the time that they come into being, we will still be wrestling with issues of binaries and boundaries in the search for what it means to be in reality and what it means to be human.

Even without the types of interface technologies described above, virtual worlds are becoming an increasingly important phenomenon right now. Between April and December of 2005, *Second Life* tripled in size with a growth curve closer to that of the adoption of a communication technology rather than that of a game. In recent comments at the Second Life

Community Convention held on October 9, 2005 at the New York Law School in New York City, Philip Rosedale discussed how as a company Linden Labs is envisioning *Second Life* not as a game, or even as a world, but more as a platform, which they hope will become as ubiquitous as instant messaging and cell phones are today (Terdiman, 2005). What this means is that many more people may be visiting virtual spaces for a variety of reasons both economic and cultural at such a rate that it will become a commonplace occurrence. Resultantly, the virtual world may grow so large that Linden Labs will not be able to house all the servers it resides on. This may lead to a distributed network of *Second Life* segments distributed throughout the world but at the same time connected in one geographic system. This implies the possibility of the creation of a potentially endless new geography, a second world that runs in parallel to the one occupied materially by people and their corporeal bodies. Whether this alternative space will be open to all or liberatory in any way remains to be seen, but it seems that it is not a matter of whether but a matter of when that the Metaverse will come to fruition.

This article acknowledges the growing importance of virtual places and virtual bodies as parallel geographies and performative extensions of self without losing sight of groundedness in actuality and embodiment in the flesh. For the moment (and the foreseeable future), bodies still matter, as does the actual world. Yet, as technologies continue to challenge these conceptions, it will be increasingly important to take a critical position, grounded in further research within these virtual spaces, to demonstrate that we understand the discourses that entwine our categories of the virtual, the real, of self and of place. A true understanding will ensure that instead of being distracted by godhood and monstrosity, we can ever seek the human in whatever form it takes.

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