

“All in the Name of Research: Crossing the Boundary Between Work and Play”

Abstract

Virtual worlds offer a new space for ethnographic study that integrates the researcher's role as participant and observer. The necessity to engage in virtual worlds in a style similar to computer gaming, by means of creating/customising an avatar, mastering the computer controls and learning the social etiquette can sometimes blur the boundary between research and play. The qualitative nature of social science research always engenders ethical risks; this paper argues that despite the risks associated with entering a virtual world, the benefits result in authentic and credible findings that would otherwise be hard to gather. This paper examines the complications that emerge in virtual worlds and the methods employed to conduct research and reduce ethical risks within them, it then illustrates these issues by using *Second Life* as an example and focusing on the subculture of 'Furries'.

Keywords: Virtual Worlds, Second Life, Furry, Ethics, Research, Ethnography

Introduction

Virtual worlds are a new digital frontier for research, but as Grimes, Fleischman and Jarger (2009, 41) state in their article for the *International Journal of Internet Research Ethics* 'With the introduction of any new technology, there exist both new potential opportunities and new unforeseen ethical pitfalls.' Not only do virtual worlds offer an expansive avenue for study in and of themselves, but the social environments they facilitate enable new methods for examining the nature of human interactions and cultural formations. Research methodologies all entail a number of ethical considerations, especially in the instance of ethnographic studies; these are further complicated however, when the researcher crosses the boundary between the real world and those of the virtual. To avoid the complications that ensue, some researchers may choose to conduct purely theoretical work, utilising the vast amount of literature already available both online and offline; borrowing previously published and approved qualitative or quantitative research. This may prove effective in overcoming the ethical difficulty of tackling sensitive topics, most notably in my case, that of sexuality and embodiment for my PhD thesis. Nevertheless, in avoiding ethical

complications, the researcher must also recognize the potential loss associated in not exploring the social environments of virtual worlds first hand and understanding how they impact the cultures that they form.

Virtual worlds are a challenging environment with different rules and methods of interaction that must be mastered by those who enter them. It's however, not only the social dynamics of virtual worlds that pose a difficulty, but also the structure of the software and in world controls. Learning how to function within the virtual world environments that are currently available is similar to the transition from writing on paper to using your operating systems writing software on your personal computer. So, how should the researcher approach the social environment of virtual worlds? Are the vibrant cultural groups and diverse interactions that occur in *Second Life* (Linden Lab, 1999) part of a game, or instead, part of everyday 'real' life being transferred into new digital possibilities? How should the researcher present themselves in the virtual realm both in terms of interaction and visual presentation? Not all the relevant issues can be covered in this short paper, but some of the elements and ethical complications of virtual world research will be examined, drawing upon my own study of Furry subcultures.

Game, Reality or Virtual World?

While recognizing virtual worlds as fertile ground for research is evident, defining virtual worlds and distinguishing their characteristics can be more problematic. Virtual worlds have no current agreed definition, and as a result, both game based worlds such as massively multiplayer online role-playing games (MMORPGs) and more free-form, non-game oriented worlds, are included when using the term. As a result of this ambiguity in definition, how does a researcher know that *Second Life* is a virtual world and not an online game, when approaching it for research purposes? Further, as a consequence of defining it as either one or the other, does this impact upon the ethical issues encountered within the virtual worlds? Regardless of ethical consequences, the difference between free-form virtual worlds and MMORPGs results in complications for the ethnographic researcher, and those involved in studying the nature of the virtual environment as participants/members.

Currently I have only mentioned one virtual world, that of *Second Life*, and have posited the question of game or free-form theoretically without noting the other existing virtual world examples available online for consideration. Most internet users would be aware of the

existence of *Second Life* and also of Blizzard's popular *World of Warcraft* (2004), both of which generate considerable academic interest; neither however should be considered the only successful virtual worlds available of their style. In an attempt to successfully discover the virtual worlds currently available I searched and found two lists online, one from *TerraNova: A Weblog About Virtual Worlds* and another from *Virtual Worlds Review*. Both these sites included in their list of virtual worlds, those that could be considered MMORPGs or have gaming elements. The list includes: *Active Worlds*, *Club Penguin*, *EVE*, *Gaia online*, *Habbo Hotel*, *The Manor*, *Moove*, *The Palace*, *Second Life*, *Star Wars Galaxies*, *The Sims Online*, *There*, *Ultima Online*, *Whyville*, *World of Warcraft* and *Yohoho! Puzzle Pirates*.

In the presence of such mixed lists of virtual worlds let us explore an all encompassing definition and its implications for ethnographic research. Mark Bell, who remarks that there is currently no agreed upon definition for virtual worlds, suggests the following; 'A synchronous, persistent network of people, represented as avatars, facilitated by networked computers' (2008, 2). While this definition is functional for clarifying the elements that contribute to a virtual world's existence, it does not help the researcher in differentiating between such examples as *World of Warcraft* and *Second Life*, which clearly have contrasting characteristics in regards to the activities and rules that apply in the virtual environment. Ralph Schroeder further suggests a definition that focuses on the activities and social structure within the world;

Virtual worlds can therefore be distinguished from online gaming and Massively multiplayer online roleplaying games in that they are...online places for socializing. Put the other way around, online games are a subset of virtual worlds; namely, those where the activity revolves around gaming activities...games are primarily designed to foster accumulating points or reaching new levels and the like, whereas social spaces have no such focus. (2008, 2)

In this definition Schroeder acknowledges the fact that online games can function additionally as social spaces, and I would add that likewise, the virtual worlds that are predominantly social spaces nevertheless engage game qualities. *Second Life*, for example, does not have any 'end point', 'win conditions' or degree of completion, that are traditional elements of game design, but it does have game-like qualities that effect the social space. For

the participants of *Second Life* there is a degree of complexity and skill in the mastering of virtual world movement, which can be considered analogous to the mastery of game controllers such as that of the *Xbox* or *Playstation*, a pivotal game skill that is required for success. The embarrassment of failing to use a poseball or other animation object correctly, or falling instead of flying at great heights due to the lack of a flight feather in *Second Life*, can cause considerable social discomfort. Similarly, when playing *Doom 3* on the *Xbox* if the user cannot manipulate their avatar to open a locked door or duck successfully when being attacked, it is unlikely they will reach the next level! There is no 'win condition' in *Second Life*, but there is success of both social and financial incentive, that is dependent upon the participant's mastery of the virtual world. Content creation or modification in world, such as the making of avatar accessories or parts, the ability to clothe your avatar in a fashionable way, all facilitate a user's success in social interaction. This success is therefore reliant upon the participant's ability to manipulate the virtual world, to master its building methods and interactive rules, similar to skill levels found in traditional games but with a focus that is far more social in nature. Therefore despite the distinctions between social and gaming emphasis in virtual worlds, the blurring of notions of game play with social communication, generates additional factors for the researcher in attempting participant observation or other forms of ethnographic study.

The less stringent nature of the game-like elements of virtual worlds such as *Second Life*, in comparison to the strict leveling aspect of *World of Warcraft*, (which categorizes players based on experience and skill, restricting movement in-world and access to materials and game equipment), can make investigation easier for the researcher. This can be illustrated by a scenario in which the researcher may wish to investigate higher level players within a virtual world such as *World of Warcraft*, but rapidly encounters difficulty in accessing and relating to those players due to the gameplay restrictions of experience and skill required for leveling. Heidi McKee discovered this when talking to Constance Steinkuehler who experienced this exact scenario in a game called *Lineage*,

In *Lineage*, if you're not at least level 48 (the highest level at the time was 52) no one above that level even wants to talk to you. So the hard-core of the hard-core, the core of the community, doesn't give you the time of day. (McKee and Porter 2009,122)

This statement indicates the necessity for any researcher of such game oriented virtual worlds to be proficient at gameplay. The researcher cannot stand on the sidelines and look in, he or she must enter the virtual world, and in this case, submit to the rules of the game. For ethnographic research, the researcher needs to become an authentic member of the virtual community in order to observe and communicate with its members. In the interview cited above, Steinkuehler further explains the amount of time and dedication required for a researcher to reach the levels required for her to access the community, remarking ‘...8-10 hours a day at first. And level 48-49 would be a month of work playing every night’ (McKee and Porter 2009, 122).

Virtual worlds that are structured around gameplay require the researcher to consider several factors. The researcher must be able to dedicate time to master the game elements separate to their research goals. Although they may accumulate knowledge from their game playing, this mastery means they are pulled into more than just study, as they become authentic participants in the gamer community. As a consequence of this dual involvement in the virtual world, it may be that the researcher is involved in actions during their gamer capacity, which could prove problematic. Most notably being involved in the defeat or damage to another player that they may wish to interview later! Another factor is that in some cases the success of the study undertaken is dependent upon the researcher’s gaming skill; if Steinkuehler was unable to reach the higher levels herself, for example she would have been unable to talk with those members of the community she was so eager to access.

In a similar vein to the complications encountered in game oriented virtual worlds, those that have a social focus such as *Second Life* also present difficulties for the researcher. As mentioned previously, there is still a level of play required in social oriented virtual worlds; and Sarah Robbins advises the following caution to researchers,

Be a native to the space. You simply cannot underestimate the way the mechanics of the environment will mitigate what you can do and what you can gather...You've got to understand how the environment works...Another thing is to be in the space long enough to feel comfortable in your own avatar — in your own skin...Race doesn't matter in *Second Life*. Gender doesn't matter. What people will discriminate against is birth date. They'll look at your profile and say, "You've only been here a week. I'm not talking to you — you

don't know what's going on." Unless that's what you want to research, you don't want to have a brand-new avatar because people will not want to talk to you. (McKee and Porter 2009,122)

While game oriented virtual worlds require the dedication of the researcher to attain set goals, those more social environments require a similar expenditure of time and effort to attain competency with the culture and social structure, which can only be gathered from authentic experience. Whether studying specific communities within world, or in general, the researcher must be versed in social etiquette, have knowledge of such trivial matters as in-world jokes, and present their avatar as one suitably attired and constructed. Robbins mentions the stigma attached with newbie (new avatars) in her above statement, these avatars are easily recognizable in world as they wear basic clothing and accessories; in *Second Life* even the way you walk or stand can give away your newbie status! Likewise, the inequality presented in Steinkuehler's statement earlier regarding the *Lineage* level system, (with the core of the community being at higher levels), is mirrored in social worlds where the elite include those with better quality avatars that have been personalised through skill or money and extended time and experience in-world.

Further on I describe in detail the nature of social worlds such as *Second Life*. I use the example of Furry subculture, and observe that Steinkuehler and Robbins statements apply. Even in virtual worlds that do not place emphasis on gaming interactions there is still a discreet measurement of user competency, skill and cultural understanding. The researcher must illustrate their capabilities in this area if they are expected to a) produce credible findings and b) be accepted as a credible researcher and member of the community they are working with.

Mixing Game-play and Research

It is evident that the virtual world researcher must juggle two apparently contrasting roles for ethnographic study; that of game player and professional researcher. Researchers handle this multiple role element in a number of ways: some demarcate their time in world between player and researcher while another may decide to create multiple avatars for different roles, though this can have drawbacks. Other researchers decide to take a more permeable approach, allowing each role to adapt fluidly to the environment and situations they find themselves in. For authenticity I endorse the latter approach for many reasons, some of

which are articulated by Lisa Galarneau,

If you know Constance Steinkuehler's work, she makes the point around ethics and participant-observation. In these environments, you know "we're gamers first and researchers second." I think that's a really important distinction in the way we think about our participation in these environments, but there is a lot of blurriness around what we would do as a player and what we do as a researcher. As shown by the fact that some of our most important research epiphanies come from moments when we're not even aware that we're researchers at that moment — in the best sort of ethnographic tradition. (McKee and Porter 2009, 127)

A further reason for an authentic approach is the virtual harm it is possible to inflict on the social ecology by breaking the magic circle as noted by Grimes, Fleischman and Jaeger (2009). The magic circle defines '...the boundaries, rules, and acceptable behavior, which allow a game to exist' (2009, 42). They explain that,

Breaking the magic circle would involve something contrary to this agreed upon standard and would take the 'fun' out of the game. For example, in a game of poker, if a player is found to be cheating by using hidden cards, the circle is broken and the game ceases to be fun. (Grimes, Fleischman and Jaeger 2009, 42)

Although as stated previously, *Second Life* and other virtual worlds are sometimes not strictly games, there is nevertheless a similar element of play pertaining to them. They are virtual worlds that are spaces outside of reality where users suspend disbelief in a similar way to films and television shows. An example of the magic circle can be found in the Furry culture within *Second Life*; some members are strictly against the presence of human avatars as they destroy the perceived point in being a fur in a world where you can alter your physical shape to represent what you really wish to be. This is similar to other social communities and cultures on *Second Life* where a participant is required to be 'in character' all the time, in terms of not only appearance and dress but also language and interaction. All these traits abide with the role-play conditions set out by group. Failing to abide by these rules may get you banned or ejected from their location/community.

The variety of communities that exist in virtual worlds like *Second Life* also raises issues relating to gameplay. Although, as discussed, *Second Life* is itself not a game, that is not to say that games are not played within the virtual world. As mentioned, some communities participate in role-play, a continuation of the *Dungeon and Dragons* style text based game that became popular when the Internet introduced MUD's (Multi-User Domains) allowing participants to enter a text based chat environment that revolved around a fantasy game. In *Second Life* certain areas are focused specifically on role-play and avatars are required to be in character at all times. This may require modifying avatars methods of speech and social etiquette, wearing specific clothing or body parts (for example you may be a slave or a pirate, a dragon slayer, a werewolf or vampire) and using meter attachments that measure damage and skill. Unlike game oriented virtual worlds, *Second Life* participants who engage in these role-play communities, are required to create, maintain, and manage the game.

Additional Factors

As well as the complexities of virtual worlds arising from their inherent gameplay characteristics, there are additional factors affecting ethnographic research undertaken in worlds such as *Second Life*. These factors originate from the historical beginnings of social environments offered by the Internet. Grimes, Fleischman and Jaeger explain that,

Virtual worlds have their historical beginnings in MUDs and MOOs, which were early text-based multi-user environments that combined role-playing with social chat rooms...The early academic research into MUDs and MOOs has helped shape how researchers ethically approach virtual worlds. (2009, 41)

This historical shaping indicates a difficult step in moving from text-based representations of bodies and subjects in simple chat logs, to fully visualised subjects with whom face-to-face ethnography occurs. In the rich graphical virtual worlds that currently exist, study is no longer language centered, but also visual. Researchers traditionally view text-based environments as a space, while visual environments have become more person based and thus viewed as a place. This shift has altered ethical attitudes. McKee and Porter write,

The position that sees MMOGs and virtual worlds as places — particularly as real places rather than as simulated places — views ethical issues of harm and risk differently from a view that sees them as spaces. Researchers taking the

former perspective tend to see the game or simulated world as a real place, and, thus, treat avatars and players in such worlds as also real. (2009, 118)

As a result of this transition from space to place, participants in virtual environments invest much more into the personalisation of a graphical avatar compared to a simple chat room nametag; money, time and skill goes into the creation of a socially successful avatar on *Second Life*, with different avatar types and styles indicating social or cultural group membership and position.

The addition of visual representation with text-based interaction results in personal opinions being generated without the need for any interaction to occur. For example, an observing researcher can instantly identify elements of social and cultural standing in *Second Life* by viewing an individual avatar without any interaction having occurred, simply based upon their body and clothing. Members of role-play communities can be identified by the presence of health and skill meters over their heads, while others can be identified by their clothing, be it a skimpy slave outfit which illustrates their association with Gor, or pale skin and dark clothing stained with blood identifying them as a vampire. However, in such a visual environment the researcher must be able to identify all the social and cultural elements that contribute to the existence of that avatar; in other words, the researcher must comprehend the symbolic or semiotic framework of the virtual world culture, and those subcultures that exist within it.

A further complication that exists as a result of the visual medium relates to privacy and the distinction between public and private spaces. As discussed, avatars are extremely personalised in *Second Life* and can become easily identified and linked to an individual without the presence of a nametag. *Linden Lab* (the creators of *Second Life*) have a system which allows users to create an almost limitless amount of customisations and appearances that can be applied to their avatar even if they are a novice user. Veteran residents, whose skills are more advanced, can create custom content including body parts, clothing, accessories, skins, hairstyles, eyes and much more. One result of this is that a *Second Life* resident can be more unique in appearance than a real world individual! Brookey and Cannon state in their research,

Although Linden Lab, the creative force behind SL, has established some rules

and guidelines, users are able to build their own buildings, create their own clothing and accessories, and are usually at liberty to shape this virtual world in any way they see fit...Given the liberty available in SL, users have the opportunity to create new relationships, and create those relationships in new and different ways. Some SL users are taking advantage of this liberty to refigure gender and sexuality;...We see SL as a valuable space in which to study gender and sexuality in cyberspace, because unlike traditional forms of print, film, or television media...SL users are primarily responsible for the content. (2009, 145-146)

As a direct consequence of this liberty of expression, if a researcher screen captures events occurring in the virtual world, the researcher needs to make an informed ethical decision about whether they are infringing on the rights or privacy of any avatars displayed, especially in consideration of the nature of their research topic. A further follow on effect is the issue of public and private space in a virtual world. For example what is public if nearly all content and land is created and owned by specific individuals even if any resident is allowed to enter? There is no easy answer to this question and it is up to the researcher to assess this issue, relying once again on their first hand knowledge of that virtual world to inform their decision.

Second Life and Furry Subculture

The example of Furry subculture illustrates the issues raised so far in this paper and provides specific insight into *Second Life*. Classifying the Furry culture on *Second Life* is complex, as many members have different beliefs (some of which are formed primarily offline) as to what a Fur is. The personal experience I have gathered of this community suggest that it is one dominated by gay or bisexual males and sexually liberated individuals who do not necessarily align themselves with traditional notions of gender. Nevertheless, the subculture should in no way be defined simply by its member's sexual orientation or beliefs, as it also includes those who enjoy the artistic and expressive potential of Fur avatars. These players find the avatars attractive within world, and enjoy the opportunity in world to represent themselves as they feel they truly are. Other players simply come across the group and enjoy it. In his study of gameplay in virtual worlds Sergio Van Pul describes Furries as,

... a liberal, fun-loving bunch. They like to experiment and to create wacky stunts and spectacles to amaze other people. Because of their very obvious

physical appearance it's easy for furies to find each other and knit together in intimate social groups, even though each often has a slightly different idea about what it actually means to wear fur and a tail. (Van Pul, n.d.)

As Van Pul describes, Furies have an obvious physical appearance which helps them identify and bond together as a social group, therefore, any researcher who does not meet this physical criteria will find it hard to penetrate the core of this social community. This is a situation similar to that observed by Steinkuehler in her *Lineage* research, although where the key to successful interaction in *Lineage* relies upon leveling, in *Second Life* it relies upon creating the appropriate physical appearance which requires both skill and money.

Money, skill and a sense of fashion and creativity are key ingredients to creating a successful Fur avatar in *Second Life*. As a researcher or general participant in the virtual world of *Second Life*, it is undesirable though possible, to survive without money or income for the use of purchasing clothes or undertaking activities. The virtual world currency of *Second Life* is Lindens and can be bought using real world exchange rates or alternatively earned in-world. As the *Second Life* website states, 'Although the exchange rate is subject to change, one US Dollar is typically about 250-300 Linden dollars' (Linden Labs, Shop:Learn). The purchase of a professional furry avatar costs between 500-3000 Lindens, though the average price is 1000-1500. Instead of the purchase of professional avatars, users can either utilise what is termed a 'Freebie' or free avatar (these sometimes sell for 1L or are free) to create a suitable look or they can try their hand at creating their own customised creation. There are no clear cut lines however, between professional, freebie and customised avatars as many members of the community will mix and match to create something they really like.

Figure 1 illustrates a 'freebie' avatar (right), commonly known within the Furry community as the 'Uchi Cat', which has been modified by myself to create a more unique and personalized representation (left). The base avatar, without any customisations, is nevertheless quite detailed with hair and colourable eyes representing a high standard 'freebie' avatar which explains its popularity within the community. By comparing the two examples of the 'Uchi Cat' shown below it is evident that even a base 'freebie' avatar can be made distinctly unique when combined with other custom content such as hair, clothes and additional accessories that can either be purchased or found for free in-world. The personalized avatar (left) becomes visibly unique when compared to the base version, further reinforcing the notion

that ethical issues regarding privacy, especially in the instance of image capture in virtual worlds, requires reflection by the researcher.

Figure 1.



Of course, to have knowledge that the 'Uchi Cat' exists and is popular, the researcher would need to become familiar with the Furry culture or other *Second Life* residents who may have knowledge of the community. It is also important to note that presenting yourself as a Furry avatar with no clothes or modification will probably not get you very far in the community. Regardless of these issues with the use of a base avatar the researcher can prevent damage occurring to the social ecology of the community, that is, the magic circle can remain intact for the participants.

Figure 2 is an example of a paid Furry avatar that costs approximately 1000L. These avatars display a high degree of skill in their creation, with detailed body features and skin textures that are produced exclusively for them by a virtual world resident. For those residents of *Second Life* that make Furry avatars, there is a level of respect and fame, (not to mention financial profit) within the culture that establishes them in a similar position to that of higher level players in game oriented worlds. In the sense that game oriented virtual worlds require the participants to spend ever increasing amounts of time to improve their level and skill status, likewise, social worlds present an ever increasing skill curve that dictates the

resident's ability to create content, increase social standing, personalize their avatar and make money.

Figure 2.



Paid avatars usually come in a variety of colours, but some users may create custom skin colours to alter the look of an avatar, while maintaining the other physical elements, as seen in Figure 3 (right avatar in white and red). Furthermore, fur avatars do not tend to walk around naked all the time. Clothing a fur avatar can require additional skill for the owner in regards to the overlapping attachment points on the body where clothes or other appendages, such as tails, are connected. An example of this is the attachment of a skirt for an avatar, which often connects to a stomach point. This point is a popular spot for tails to attach to and as a result of this conflict, if a Fur wants to wear a skirt and a tail, they will need to modify the build of their avatar.

Figure 3.



The visible physical characteristics of Furry avatars also allow a knowledgeable researcher to identify the sexual preference of some residents, along with other individual traits. Many Furs will attach genitals that indicate both male and female gender, for both function and an aesthetic appearance, but also to illustrate that they are openly attracted to both males and females, and to ensure both male and female attraction toward them. Functioning genitals, whether male or female, often require separate purchase and custom fitting though in rare instances they come as part of a Furry avatar body set. Furthermore a Fur avatar is not necessarily just a 'look', like an outfit, it can also indicate an individual's preferred animal species for example, fox avatars often find other fox avatars attractive, dragons other dragons, horses other horses and so forth.

Like some other communities on *Second Life*, Furry culture has other common traits with gaming, especially in their use of Head's Up Displays (also known as HUDs). HUDs are used for customization of avatars within virtual worlds, such as Second Life, altering things such as physical appearance and the way an avatar walks or visually expresses itself. HUDs can also be used to operate weapons in role-play environments or to measure health and skill. Conversely, for those who like to make love, not war, they are also used to control genitals and sexual stimulation in sexual role-play in-world. Animation style HUDs in Second Life are called AO's (or animation overrides) as they alter the default basic movements of avatars

equipped by *Linden Labs*. AOs allow more varied and fluid movement and are often created using motion capture technology to increase realism. Newbie avatars can often be recognised by the way they walk in world, which is without an AO, but also veteran users can be awkwardly placed if they equip the wrong AO for a situation. AOs can be programmed with specific movements that are common to certain communities, such as vampires or werewolves, Goreans, Mermaids, Cyborgs and even Dolls. If you want to become an authentic member of a community you need to have the right moves, literally!

Figure 4 is an example of a customization HUD used for adjusting elements of Furry avatar appearance. These HUDs are commonplace and often included with the purchase of a Furry avatar, though their degree of intricacy varies with the creator. While HUDs such as these can alter a number of physical features, such as wing movement, hand position, tail actions and so forth, even this level of built in customisation does not prevent residents from further adding details or adjustments to their avatar. This is perhaps indicative of Sarah Robbins comment about being comfortable in your own skin; an owner often desires to add elements to avatars in order to express personal identity. This is something that cannot be sold with a mass consumed avatar that can be purchased and customised only via the use of a built in HUD.

Figure 4.



Members of the fur community often have signature styles, for example a preference for a certain colour, a tattoo, symbols, or accessories. Amongst other things their attributes are used to signify identity and can be seen on various styles of avatar to denote that they are a single resident. These finely detailed elements, as seen in Figure 5, may take months to complete, as they are painstakingly added to an avatar based on skill level and newly acquired content. Through this customization however, an avatar develops a unique identity easily recognised without the presence of their nametag.

Figure 5.



Conclusion

The degree, to which residents of virtual worlds go to in order to create a socially acceptable presence within their chosen community, is apparent in the Furry subculture of *Second Life*. Money (both real world and virtually earned), time and effort are required by users in order to create a personalized presence that can function as a marker of social standing, skill level, and even sexual preference. These factors and attributes can be deciphered by a knowledgeable researcher who has become acquainted with the *Second Life* culture.

Virtual world research, whether undertaken as ethnographic study or otherwise, entails not

only extensive ethical considerations but also additional factors that are unforeseeable without firsthand knowledge of the environment. To successfully conduct a study of any virtual world, the researcher may need to blur the boundary between player and academic, but this is itself an aspect of the environment. The ethical considerations required in such research are also part of these virtual worlds, and for any academic to produce credible, authentic and ethical findings, they must fully acquaint themselves not only with the culture they wish to study, but with the technology and structured environment in which it occurs.

Works Cited

- Bell, M. W. 2008. Toward a Definition of 'Virtual Worlds'. *Journal of Virtual Worlds Research* 1 (1). <http://jvwresearch.org> (accessed January 11, 2010).
- Book, B. 2003. *Virtual Worlds Review*. <http://www.virtualworldsreview.com/index> (accessed January 11, 2010).
- Brookey, R. A., and Cannon, K. L. 2009. Sex Lives in Second Life. *Critical Studies in Media Communication* 26 (2): 145-164. <http://www.informaworld.com> (accessed October 6, 2009).
- Grimes, J.M., Fleischman, K. R., and Jaeger, P. T. 2009. Virtual Guinea Pigs: Ethical Implications of Human Subjects Research In Virtual Worlds. *International Journal of Internet Research Ethics* 2 (1): 38-56. <http://ijire.net> (accessed January 11, 2010).
- Linden Labs. n.d. *Shop: Learn*. <http://secondlife.com/shop/learn/> (accessed January 11, 2010)
- McKee, H. A., and Porter, J. E. 2009. *The Ethics of Internet Research: A Rhetorical, Case-Based Process*. New York: Peter Lang Publishing.
- Pul, S. A. n.d. *Exploring Second Life: Play in a Virtual World*. <http://student-kmt.hku.nl/~sergio/wordpress/thesis0.8.doc>. (accessed January 11, 2010)
- Schroeder, R. 2008. Defining Virtual Worlds and Virtual Environments. *Journal of Virtual Worlds Research* 1 (1). <http://jvwresearch.org> (accessed January 11, 2010).
- Terra Nova: A Weblog about Virtual Worlds*. n.d. <http://terranova.blogs.com/> (accessed January 11, 2010)
- Wheaton, H. *Second Life Images* [All Images in Paper]. 2009.