

Friendship, Closeness and Disclosure in Second Life

Don Heider, Loyola University Chicago, USA

Adrienne L. Massanari, Loyola University Chicago, USA

ABSTRACT

3-D virtual realms offer places for people to go interact, play games, and even do business. As these realms themselves become more sophisticated, the number of participants grows and the level and type of social interactions change. Meanwhile, scholars race to try to keep up. There is a growing, but still developing literature about interaction in virtual world. This paper explores communication and social intimacy in one such world, Second Life. In this paper, results of a four year ethnography in Second Life reveal findings that refute earlier research on computer-mediated communications, and support others while offering new findings to contribute to the growing body of knowledge.

Keywords: Avatars, Computer-Mediated Communication, MMOG, Online Game, Second Life, Social Interaction, Virtual World

SECOND LIFE AND STUDIES INTO OTHER VIRTUAL ENVIRONMENTS

"Most friendship is feigning, most loving mere folly."

William Shakespeare, As You Like It

Second Life (SL) is a sophisticated offshoot of early text-based MUDs (multi-user dungeons) and MOOs (MUD, object oriented) that allows multiple players to connect and interact in online environment. As of 2008, around 90,000 active subscribers use Second Life regularly (Woodcock, 2008). Unlike many of the more

popular MMOGs (massively-multiplayer online games), like *World of Warcraft*, SL it is more of a virtual world [a "synchronous, persistent network of people, represented as avatars, facilitated by networked computers" (M. W. Bell, 2008)] than a videogame per-se, as there are no formal rules or goals for interactions within the environment, nor are there NPCs (non-player characters) with whom a player must interact to solve puzzles or achieve goals within the environment. Instead, Second Life encourages user participation through content creation (Herman, Coombe, & Kaye, 2006), and the "goal" for most players is both the exploration of this vast environment and social interaction with others.

Early discussions of text-based virtual environments/online games often tried to counter the popular media's construction of these spaces

DOI: 10.4018/jgems.2010070104

as somehow “not real” or without real-world consequences (Dibbell, 1998; Turkle, 1995). And yet, work by many of these scholars tended to fall into same trap of claiming that “in virtual reality, you are whatever you say you are” (McRae, 1996, p. 245) – an argument that has since been problematized by others who note that “real world” issues of race, gender, and power still mark the interactions that happen online (Gonzalez, 2000; Kolko, 2000; Nakamura, 2000, 2002; Silver, 2000).

While *Second Life* is not traditionally considered a game, much of the work within the game studies field offers important insights into understanding the interactions that occur in virtual environments. The variety of topics covered recently within the field of game studies underscores Aarseth’s (2006) suggestion that games deserve broad examination in-and-of themselves: in-game economics (Castronova, 2003, December 2001); the media’s framing of virtual environments (Squire, 2002); how games can be read as cultural artifacts (Greenfield, 1994) and from a textual studies perspective (Jones, 2008); what we learn when playing (DiSalvo, Crowley, & Norwood, 2008; Gee, 2003; Simkins & Steinkuehler, 2008); how sexuality and race and gender are inscribed in popular games (Cassell & Jenkins, 1998; Consalvo, February 2003); the discourse around gaming addiction (Golub & Lingley, 2008); and fan-based modifications (mods) of games (Postigo, 2007). These studies seek to understand games and virtual environments as important cultural artifacts – ones that both reflect and challenge commonly held beliefs about what goes on during our face-to-face (FTF) interactions with others.

CMC AND INTERPERSONAL RELATIONSHIPS

Early scholarship on computer-mediated communication (CMC) argued that the lack of nonverbal cues would not foster relationships as deeply as face-to-face communication would (Thurlow, Lengel, & Tomic, 2004), despite an-

ecdotal evidence that it was possible to create deep community ties and forge strong bonds with others online (Baym, 1998; Rheingold, 1993; Turkle, 1995). Models such as social presence theory (Short, Williams, & Christie, 1976) and media richness theory (Daft & Lengel, 1986) emphasized that the lack of paralinguistic cues in CMC would necessarily lead to much less effective and less efficient communication. Much of the early press coverage reinscribed this discourse, emphasizing the inherent superiority of offline communication and suggesting that online behavior little impact on individuals in the “real world” (Bell, 2001).

These theoretical models were later rejected as reductionist oversimplifications in favor of offering more nuanced perspectives regarding online interpersonal communication. These perspectives included the social information processing model, which suggests that both CMC and FTF interaction are equally driven by the same “relational motivators” (Walther, 1992). Some of these motivators, such as our desire to be liked by our conversational partners, mean that over time CMC can facilitate the development of deep emotional bonds between individuals. Walther (1996) terms this kind of communication “hyperpersonal,” and suggests that it is likely to occur “when users experience commonality and are self-aware, physically separated, and communicating via a limited-cues channel that allows them to selectively self-present and edit; to construct and reciprocate representations of their partners and relations without the influence of environmental reality” (p. 33).

As Nancy Baym (2006) argues, the idea that CMC offers fewer social cues than FTF interactions is still important to current online interpersonal research, but the emphasis has shifted away from simple comparisons between the two mediums. Instead, research has focused on deepening our understanding of how individuals work around and/or integrate these potential limitations into their interpersonal communication online. For example, Walther’s social information processing theory argues that individuals will adjust their interactions

given the limitations of online communication – especially if it's predominately text-based (Walther, Loh, & Granka, 2005).

Many other recent studies in this area rely heavily on Erving Goffman's (1959) work on self-presentation as a performance involving what he terms frontstage and backstage behaviors. Goffman's suggestion that individuals constantly engage in impression management in their interactions with others has been particularly influential for researchers interested in the relationship between CMC and identity (Bechar-Israeli, 1995; boyd, 2007; Huffaker & Calvert, 2005; Liu, 2007). One of the key features of most online interactions is that they occur asynchronously, which allows individuals the luxury of time to focus on impression management and engage in potential self-censorship (Walther, 1996). In addition, the pseudo-anonymous nature of most online communities – where individuals use the same username/avatar to interact with the environment over time – allows for some reputational and other contextual clues about the person's prior interactions to shape future conversations with others (Donath, 1999). Thus, CMC provides important tools for self-expression and impression management that both mirror and challenge our understandings of how identity is performed in offline contexts.

SELF-DISCLOSURE IN CMC

Altman and Taylor's (1973) theory of social penetration suggests that individuals must engage in a process of self-disclosure if their relationships are to deepen beyond superficial interactions. Typically, self-disclosure is reciprocal early on in relationships where we seek some affinity with the other – meaning we are likely to disclose personal information about ourselves when our conversational partner also discloses such information. Altman and Taylor argued that our personalities are analogous to the layers of an onion; the outer layers contain superficial demographic information (race/ethnicity, gender, appearance) and our superficial

likes and dislikes, while the protected inner layers contain much more personal information about our values, goals, aspirations, and beliefs. Social penetration theory suggests that we will gradually reveal these deeper layers of the “onion”/personality over time—that is, assuming we wish to have more than a superficial relationship with the other person. CMC presents significant challenges to this theory. Online environments, with their lack of physical contextual cues, strip away most of the outer layers of the personality that we may use to establish affinity and liking with others. Instead, we establish trust in our relationships and disclose information about ourselves without most physical cues being readily apparent.

In terms of FTF communication, researchers have long suggested that there are quantifiable differences in the type, amount, and quality of self-disclosure between same-gender conversational partners. However, recent meta-analysis of self-disclosure research (Dindia, 2002) suggests the difference in the ways in which men and women disclose information is actually minimal, and that the quality and type of self-disclosure between same- and different-gendered conversational partners varies little (Ferris & Roper, 2002). The content of the information exchanged may impact these findings, however. For example, a recent study of adolescents suggested that both the level of anonymity guaranteed within a particular online environment and the gender of the individual may impact a person's willingness to engage in self-disclosing behavior with others – with males being generally more likely to disclose information of a sexual nature online than females, especially if the interactions remain fully anonymous (Chiou, 2006).

Another important factor impacting our willingness to engage in online self-disclosure is if the relationship has the potential to traverse the online/offline boundary. As one of Henderson and Gilding (2004) observe in their investigation of how trust forms in computer-mediated interpersonal relationships, our levels of self-disclosure are higher online—especially if there's little chance of a FTF meeting. When

describing one of their informant's perspectives on the issue, they write: "Leanne was... more likely to disclose online than in 'real life' because online friends "supposedly" live far away' and 'your problems aren't going to really come back to you every time you physically see the person'" (Henderson & Gilding, 2004, p. 499). So, our desire to self-disclose is altered not only by whether or not it is occurring via CMC or through FTF communication, but the medium of our anticipated future interactions (Ramirez, Jr. & Zhang, 2007).

THE IMPACT OF AVATARS ON SOCIAL INTERACTION WITHIN VIRTUAL ENVIRONMENTS

Much of the work regarding interpersonal relationships online focuses on predominately text-based mediums, such as e-mail, instant messaging (IM), Internet Relay Chats (IRC), and message boards/newsgroups. As Kollock and Smith (1999) note, online communication "strips away many of the cues and signs that are a part of face-to-face interaction. This poverty of signals is both a limitation of resource, making certain kinds of interaction more difficult but also providing room to play with one's identity" (p. 9). Avatars—or "any visual representation of a user in an online community" (Hemp, 2006, p. 50)—can provide additional contextual clues regarding an individual's online identity that may be apparent in solely text-based CMC. One would also assume that this additional physical information (representing the personality's outer layers) might encourage us to engage in a kind self-disclosure online that mirrors that which occurs FTF. However, the role that avatars play in these interactions is complex. Despite our assumption that more realistic avatars are likely to result in greater levels of self-disclosure between individuals, and increase the possibility that we can "trust" our conversation partners more, research suggests otherwise. For example, an early experimental study into avatars showed that photographs within virtual workgroups did not actually increase the levels of affinity be-

tween communication partners in the long-term (Walther, Slovacek, & Tidwell, 2001)—suggesting it is actually the textual interaction between individuals, rather than basic physical cues—that potentially strengthens the bond between CMC partners. A more recent study supported the idea that individuals tend to disclose more information when interacting with less realistic-looking avatars (low similarities in form) than with photorealistic representations of the other individual (such as a live digital camera feed) (Bailenson, Yee, Merget, & Schroeder, 2006). Clearly, the mediating effect that avatars might have on individuals' willingness to self-disclose in an online environment like Second Life has yet to be fully understood.

Other work focuses on the ways in which avatar behavior connects to physical behavior outside the gaming/virtual environment. For example, recent research suggests that offering visual cues within virtual environments connecting players' behaviors to their avatars' movement (for example, having the avatar mime typing when an individual is chatting with another player) improves coordination between players (Moore, Gathman, Ducheneaut, & Nickell, 2007). Additionally, a study conducted in Second Life found that certain FTF nonverbal behaviors, such as the physical distance between individuals having a conversation, are often mirrored within the game world (Yee, Bailenson, Urbanek, Chang, & Merget, 2007). Studies such as these suggest that perpetuating a simple "real world vs. game world" dichotomy is overly simplistic, as the on- and offline world come together within and through player/avatar interactions.

Avatar behavior is critical to the notion of copresence, or our sense of being with other individuals inside the virtual environment (Bailenson et al., 2006). Zhao (2003) argues that to successfully become immersed in the virtual environment, and truly experience copresence, requires a suspension of disbelief on the part of players. Thus, avatars serve an important function within worlds like Second Life—both as expressions of individual identities, and as agents of copresence. To be a truly effective

nt (and maximize a sense of copresence in the virtual environment), Bailenson, Merget, and Schroeder (2006) argue that an avatar needs to share either high levels of behavioral or form characteristics with the individual controlling it. So, while some level of continuity between an individual's offline behavior and her avatar's actions is likely to increase our sense of copresence online, and possibly lead to more meaningful relationships with other users, there is a point at which too much realism actually detracts from an individual's willingness to disclose information more about themselves.

METHOD

This research is the result of four years spent immersed in Second Life; a 3-d virtual world created and operated by Linden Lab. The primary researcher spent an average of 10-20 hours a week in the world totaling over 3,000 hours of observation time. The advantage of an ethnographic approach is being able to witness firsthand social behavior and interaction. As Lindlof states it: "The validity of participant observation derives from *being there* (his emphasis) (1995, p. 135)." As Tom Boellstorff has written about going to understand places like Second Life: "Actual-world sociality cannot explain virtual world sociality (2008, p. 63)." Thus he argues, "do we, the only way to understand social interactions in a virtual world is to accept these worlds on their own terms. Thus one of the best ways to gain an understanding of them is to be immersed in them."

When the primary researcher first entered Second Life, there was a strong anti-research sentiment among residents. Apparently a number of researchers had entered the world initially and people were worn out from inquiries. This led to a Linden Lab policy that stated all research proposals had to be pre-approved by the company, led the researcher to initially keep his research identity anonymous. Eventually Linden lifted the company's research approval requirements. As the primary researcher became

more familiar with people in world, he revealed his identity as a college professor and researcher. All of the people quoted in this piece were aware they were being interviewed for research; still we chose to give their avatars pseudonyms for added protection.

The researcher participated in many different sub-groups in the world in an effort to gain an understanding of a broad cross section of the different activities and participants involved in Second Life. Over a dozen different avatars and accounts were used to collect data through participant observation. Different avatars were created primarily to be able to blend into Second Life's many diverse subgroups. There are groups such as elves (people who role play based upon an amalgam of literature about elves), doms/subs (the most popular of these groups were based on a series of novels by John Norman), and furies (where people live through avatars that resemble real and fictitious animals) to name but a few. However, the bulk of the research done for this piece was done in what we call the mainstream culture of Second Life, which is where the majority of the residents spend the bulk of their time, and these are areas not ruled by or associated with any specific set of sub-group rules or beliefs.

The primary researcher took classes, played games, worked in several in-world businesses, operated his own small business, joined a number of groups and frequented popular in-world destinations to gain a better understanding of day-to-day life in this virtual world. The method used was that of ethnography, where the researcher as best as they can, takes on characteristics, habits, and nuances of the local culture in order to gain a better understanding of the world being studied (Adler & Adler, 1987).

Conversational interviews were conducted with hundreds of residents on a variety of topics over the four year research period. The researcher built a social network by finding a few residents who served as initial guides and helpers upon first entering the world, then contacts were added from there, more or less in what's often called snowballing (Berg, 2004, p. 171). On the topic discussed in this article,

more in-depth interviews were done with 30 residents. The interviews were open ended, primarily because the researchers have found that unstructured interviews in participant observations often lead to more depth and breadth of responses (Fontana & Frey, 1994). Interview varied in length from 30 minutes to just over an hour.

Because of the length of time spent in Second Life, data was gathered on several different areas of inquiry surrounding questions about identity, communication and social relationships. This article represents findings in just one of those areas.

DISCUSSION

In his book "Social Relationships," David Argyle sets out four well-established variables of friendship: proximity, similarity, rewardingness, and self-disclosure (Argyle, 1998). Places like Second Life (SL) offer new variations on these established variables.

Take, for instance, *proximity*. People in SL come from all corners of the U.S. and a large array of other countries including the U.K., France, Holland, Germany, Brazil, Mexico, Australia, China, Japan, South Korea, Turkey, and Israel, to name but a few. What computers have done is allow people from disparate locales to be in proximate locations with the aid of the technology. Second Life is certainly a prime example of this. Thus the idea of proximity has changed when it comes to friendship. One can certainly still be friends with the next-door neighbor. But virtual worlds such as Second Life now also allow one to become friends with someone is only virtually proximate.

Similarity, as seen now through the frame of a virtual setting, raises some interesting new questions as well. There of course are some built in similarities between people in a virtual world, because those participating in these places all are willing and interested to try spending time in a virtual environment. You can also tell a number of things based on decisions made by

people in these environments. Where do they spend time? What appearance did they choose for their avatar? How do they behave in these virtual settings? All of these have rough parallels in real world settings. But all of these pertain to choices people make once they enter a virtual world such as SL. In real life, some things are not so easily effected by choice—especially physical appearance or where time is spent. These may be governed by a complex grid of things like genetic predisposition or economic mobility. So one could argue that the freedom of choice, the ease of options may help people more easily find people with similar outlooks than perhaps in everyday life. In SL, for instance, if you see an avatar with whickers, an elongated snout, claws and a tail, this may tell you something about the person's interest in furry culture, a genre in SL built around living as an animal. Second Life allows people, through avatars, to be more overt about interests and choices.

Rewardingness means roughly what rewards or positive results you get from the time you spend in a relationship. It can be something as simple as; when you call a friend, do they call you back? Second Life offers an atmosphere where you can choose to answer people or not. Though generally, even though almost all messages are typed, not spoken, people will most often respond, like they might in real life conversation. The ability too, to keep track of messages and answer is easier in SL than often in real life. And because of the ease of carrying things in a stored inventory in a virtual world, giving people something instantly is much easier than in real life. People often pass friends and acquaintances items, such as clothing, gadgets, or animations. These are just two examples of the kinds of rewards gained from building relationships in SL.

What we're most interested in is that fourth category of *self-disclosure*. In observations over these four years we noticed a significant difference in people's willingness to self-disclose than in normal everyday real life encounters, and thus, social relationships often have a different

quality in Second Life than in a non-virtual world. The rest of this article will explore the idea of *self-disclosure* in Second Life.

MORE FRIENDS, CLOSER FRIENDS, FASTER

One is struck when entering SL at the amount and level of complexity of social relationships. It is largely a social world, with a tremendous amount of social interaction. For instance, many people have taken on partners (there is an option where to get "partnered" with another avatar wherein their name will appear within your profile, it's the Second Life form of getting married) and these partners rarely denote a relationship outside of the virtual world.

In other instances, people join families, groups of people unrelated outside of SL who then take on roles of father, mother, grandfather, aunt, cousin, etc. To remain a member in good standing in one of these family groups takes some work and attention. Often they are made up of fifteen or more people and just learning who all the people are and what their role is (sister, father-in-law, etc.) takes some time. Then often people come and go, adding to the level of complexity. And just like a real family there are the rivalries, jealousies, dysfunctions, infighting, so to know at any given time who is and isn't getting along almost requires a flow chart.

Others people in SL have formed groups around an interest (live music, art, a particular sexual practice, fans of a movie, etc.) and these groups may meet regularly and even purchase a plot of land where they can be together on a regular basis.

In the midst of these social relationships, we experienced firsthand, and also heard from many varied respondents, that people got closer to one another as a more rapid pace than in real life relationships, and people self disclosed much more.

Omg yes, within my first few months in world I couldn't believe what people were telling me

*about their lives. Especially when I was working at the club, people would come in and we would strike up a conversation in IM and before long I was hearing their life stories in incredible detail. (Xeke Howe interview *Avatars were assigned pseudonyms to protect the respondent's identity)*

Howe also reported that people were disclosing to him many intimate details about their lives without him necessarily reciprocating. This would contradict Altman and Taylor's theory of social penetration, which posits that people disclose more as their conversational partner reveals more.

It felt like at times what it might like to be a bartender or hairdresser and hear people's stories all the time, or maybe even what it might be like to be a priest and hear confession. (Howe interview)

Hearing confession may be an apt analogy, given the anonymity of that religious practice in real life and the anonymity of virtual worlds such as SL. All of the thirty people we interviewed in world on this topic agreed that there was a phenomenon wherein people established more inmate friends at a rate faster than they had experienced in their lives outside of Second Life. This led us to want to identify this phenomenon, and to think about why it occurs in a virtual world.

FACTICIUS CONTINGO

For purposes of discussion, we have decided to call this phenomenon of strong, close relationships which develop in virtual realms *facticius contingo*, Latin meaning to touch someone closely in an artificial realm.

We would argue that four different factors contribute to *facticius contingo* to provide the necessary means for such a phenomenon to take place. They are: *anonymity, time compression, lack of physical appearance, and word dependence.*

Anonymity

Second Life is an anonymous world. When you join, you make up whatever first name you choose and then pick a last name from a rotating list of choices. Each avatar, once created, has a profile – a set of pages anyone can see if you simply click on them. Each member chooses what, if anything, to write in these few, small pages. People often write something about their avatar. There is one page titled 1st life, meaning people's life outside of the virtual world. Very few people offer much information about their real lives on this page. There is a space for a real photo of yourself, but again, it is fairly unusual to see a real photo of the person behind the avatar.

This means when you meet someone and get to know them, there is a big difference between that meeting in real life and a virtual life. In real life if you meet someone at work or in your neighborhood, chances are good you will see that person again, often frequently. You may even have a continuing relationship with them. Thus, it's most often in everyday life, common *not* to initially disclose too much information about yourself other than the superficial facts. Telling someone about a past indiscretion or embarrassing episode most likely won't happen because of the fear people have about how they might be perceived and received in the future. In SL, you have the choice whether you want to ever see that avatar again in the future.

Interviewer: do you get closer to people in sl, faster, than in rl?

Kayleen Kinski: yes

Interviewer: so why is that?

Kayleen Kinski: cause you cant see them!

Kayleen Kinski: lol

Interviewer: so how does that help?

Kayleen Kinski: cause you dont have to face them, look them in the eye, meet them again if you dont want to

Kayleen Kinski: all of the above

Kayleen Kinski: they're just ships in the night

One person described it as a similar situation as to when you sit someone on a plane and

you strike up a conversation and talk for two hours, freely, often because you know you will never see the person again. The anonymity of SL plays a large part in people's willingness to self-disclose and that self-disclosure itself is a key link in why people may get closer in this setting. This also supports what other researchers have discovered, such as Henderson and Gilding (2004) who found that levels of self-disclosure increase if there is little chance of meeting face-to-face. This level of anonymity adds a dimension of comfort and sense of safety when it comes to self-disclosure in Second Life.

Time Compression

Anyone who has spent time in a 3-d virtual world knows that time can fly by. It's not difficult to enter one of these realms and lose all track of time. In Second Life, there is a sun and moon and days cycle through, but at a pace about three times faster than the real life lunar cycle. Although you can reset the day and night cycle, it's not common among residents to do so. This may have something to do with the effect described by Zhao (2003), of people in these environments suspending belief to become immersed in the world and be truly co present. Csikszentmihalyi (1975) has also described Flow Theory, wherein people have complete and energized focus in an activity such as a game. This may also help to explain the quick passing of time.

In this way, the acceleration of days and nights is reflected in relationships. In SL when you spend say an hour with someone, it feels as if you have been with them for considerably longer. People you've known for a week, you feel as if you have known them for months. A year in one of these places seems like several years. Why is this so? It may be due to the fact that the primary activity for most people in these places in social interaction. That social interaction comes in the form of words. There are plenty of activities in SL, animations that replicate a broad range of activities from riding in a balloon, to racing down a ski slope, sky diving, or firing weapons. But all of it seems

bit empty done alone. So the primary activity in Second Life is communicating, even when there are other on-screen activities taking place.

Take for instance, the example of a dance club. In real life if one goes out dancing, even with friends, communication is somewhat difficult because of the loud volume of music. To be heard you often have to shout. In SL dance clubs the music can blare, but you can still "hear" people because almost conversation is typed and appears on screen. So a dance club becomes a highly social place where there a group conversation going onscreen in "public" plus often people are conducting "private" conversations by typing message to other avatars in IM.

In work, in social settings, at home, those conversations are generally shorter and often interrupted by other activities. This may account for why two hours talking to someone in SL may seem to residents like 8 hours in real life. Or why having a relationship with someone for a week may seem like a month. "The way time feels here, it just intensifies whatever connection you feel for someone, its hard to describe, but it happens a lot" (Amy Oletta interview).

There's another part to the time-compression factor contributing to people getting closer, faster in this virtual world. This also means that friendships and other relationships might end more rapidly. Like a meteor, they burst into existence, burn with intensity, and then are gone:

Researcher: do you get closer to people, faster here than in rl?

kelly Grey: yes i think so

kelly Grey: and then more intense

kelly Grey: and then faster break-ups

Researcher: why is that do you think?

kelly Grey: cause there is no real physical contact

kelly Grey: it is just words

kelly Grey: and when someone gets tired

kelly Grey: they can easily disappear

Based on observations, it's not uncommon to see people partner and un-partner in a few weeks. Even with a high divorce rate in the real world, the rate with which partners split

in SL appears to be much more frequent and much more rapid. The primary researcher had over a dozen acquaintances and friends in SL who were partnered and un-partnered multiple times over just the course of a year. This isn't always the case of course, and some people did stay together for longer stretches of time and even eventually meet face-to-face. But based on observations this was by far the exception.

Lack of Physical Appearance

Initially researchers believed that the lack of physical presence would impede computer mediated communication. They suspected that the lack of social cues, facial expressions, gestures, etc. would limit the depth and quality of interaction. What they hadn't counted on is that often the lack of those social cues, plus the lack of seeing the appearance of a person might not hinder but instead facilitate interaction. Often times the presence of an avatar rather than the presence of a real person gives people the opportunity to fill in the blanks with their own imagination.

Interviewer: do you think people get closer here faster than rl?

Zelda Moore: yes

Interviewer: why

Zelda Moore: because in rl you are judgmental of a person and their appearance

Zelda Moore: here its a clean slate

Interviewer: is that all there is to it?

Zelda Moore: well you i think emotions play more in sl

Interviewer: why

Zelda Moore: well

Zelda Moore: the fantasy of not really seeing or knowing the other person

Interviewer: what does that do

Zelda Moore: the mystery

Zelda Moore: of it all

Interviewer: your imagination

Zelda Moore: yes

Avatars, of course, have their own appearance. But few have any imperfections. Given

that an avatar is the result of a series of choices, they do serve a symbolic role, as do the choices we make in normal life about our appearance. SL gives you much more opportunity for those choices. Bailensen, Yee, Merget, and Schroeder (2006) found that people tend to disclose more when interacting with less realistic avatars. Though people in SL may have created an avatar that somehow resemble their real life appearance, few favor photo realism. So in this way, people not seeing a photo or cam representation of whom they are interacting with likely increases their comfort to disclose more about themselves. An interesting area for further study would be to do a more in-depth comparison the impact of real life and avatar appearance on social interactions.

Just Words

Imagine a world where all you do is talk to people *all* the time. You've imagined what used to be a MOO or MUD and what now 3-d virtual worlds are. Given the amount of conversation, it's difficult to talk to someone for long and not begin telling things about yourself or self-disclosing. What we say and think is tied closely to who we are. That includes details like how old we are, where we live, our gender, religious beliefs, social position, vocation, etc. It's almost impossible to sustain a conversation of any length without eventually telling people more and more about yourself.

People can and do keep some personal details out of conversation, but it's not the norm. As has been discussed in earlier research (Heider, 2009) the majority of people in Second Life build avatars that resemble themselves and their behavior also reflects who they are in real life. So given the amount of talk that makes up time in SL, it's no surprise then that there is considerable self-disclosure and often at a faster rate than we might experience in our daily lives.

But for some all the talking has another effect, even to bring out their conversational skills after they spend time in SL and go back to their normal existence:

Leyla Luhr: I've found that my RL people skills have improved from being here. you?

Interviewer: hmmm

Interviewer: im a bit pushy in rl

Interviewer: maybe its helped my tolerance?

Leyla Luhr: SL has certainly made it easier for me to talk to people

Interviewer: interesting

Interviewer: why do you think so?

Leyla Luhr: SL is like being parachuted into the middle of a very fun and close party. How would you feel?

Leyla Luhr: I felt incredibly insecure

Leyla Luhr: and then I realised that all I needed to do was stop thinking about myself

Interviewer: nods

Leyla Luhr: and just talk from the heart to the people I met

So spending time in a world where talking is the primary activity both contributes to the speed people may get close, and it may have other effects as well, including for at least one person, a heightened ability to talk comfortably with strangers in a social setting.

CONCLUSION

Technology has, for some time, had an impact on human communication. The telegraph and telephone changed the way a person could get a message to another person over great distances and communicating via telegraph or telephone had different qualities related to the medium. More recently email and instant messaging have brought another dimension to human contact as has the internet in general and as we have examined in this study, virtual online world specifically.

After spending four years observing and participating in human interactions in a virtual space, the authors sought to understand how human relationships might be different in a world such as Second Life. More research is needed in this and other areas related to virtual worlds. Research and theory in this area are still developing.

Early theory about how computers might affect communication predicted less effective and less meaningful interaction. But we found in some cases, just the opposite, where people in disparate locales formed close relationships in ways that might not occur through face-to-face interactions.

As virtual realms continue to develop and evolve, researchers begin to get a better understanding what it means to spend time in these places. In this piece we have begun to try to address some of the qualities of social relationship in one virtual world, Second Life. We suggest that *anonymity, time compression, lack of physical appearance, and word dependence* all contribute to a phenomenon wherein people at a rapid rate get close to other people, a phenomenon we are calling factitious contingo.

One thing is clear after spending four years in SL that is these places continue to be important to the people who choose to participate. They are more than places people go to be amused or entertained. People develop social interactions they find meaningful, compelling and gratifying. As one informant said:

Kayleen Kinski: but now i have two lives
Kayleen Kinski: most of the time sl is on but
im doing stuff in rl anyway
Interviewer: is this place as important to you
as rl?
Kayleen Kinski: hmm, not
Kayleen Kinski: no*
Kayleen Kinski: but it would be hard to give up
Kayleen Kinski: i'd have to go thru withdraw-
als for a bit

REFERENCES

Aarseth, E. (2006). How we became postdigital: From cyberstudies to game studies. In Silver, D., & Massanari, A. (Eds.), *Critical cyberculture studies* (pp. 37-46). New York: NYU Press.

Adler, P., & Adler, P. (1987). *Membership Roles in Field Research*. Thousand Oaks, CA: Sage Publications.

Altman, I., & Taylor, D. (1973). *Social penetration: The development of interpersonal relationships*. New York: Holt, Rinehart and Winston.

Argyle, M. (1998). *Social Relationships*. London: Blackwell Publishing.

Bailenson, J. N., Yee, N., Merget, D., & Schroeder, R. (2006). The effect of behavioral realism and form realism of real-time avatar faces on verbal disclosure, nonverbal disclosure, emotion recognition, and copresence in dyadic interaction. *Presence (Cambridge, Mass.)*, 15(4), 359-372. doi:10.1162/pres.15.4.359

Baym, N. (1998). The emergence of on-line community. In Jones, S. G. (Ed.), *CyberSociety 2.0: Revisiting computer-mediated communication and community* (pp. 35-68). Thousand Oaks, CA: Sage.

Baym, N. (2006). Interpersonal life online. In L. A. Lievrouw & S. Livingstone (Eds.), *The handbook of new media* (Student ed., pp. 35-54). Thousand Oaks, CA: Sage.

Bechar-Israeli, H. (1995). From <Bonhead> to <LoNehEAd>: Nicknames, play, and identity on Internet Relay Chat. *Journal of Computer-Mediated Communication*, 1(2). Retrieved from <http://jcmc.indiana.edu/vol1/issue2/bechar.html>.

Bell, D. (2001). *An introduction to cybercultures*. London: Routledge.

Bell, M. W. (2008). Toward a definition of "virtual worlds" (Electronic Version). *Journal of Virtual Worlds Research*, 1. Retrieved December 21, 2008, from <http://journals.tdl.org/jvwr/article/view/283>

Berg, B. (2004). *Qualitative Research Methods for the Social Sciences* (5th ed.). Boston: Pearson.

Boellstorff, T. (2008). *Coming of Age in Second Life: An Anthropologist Explores the Virtually Human*. Princeton: Princeton University Press.

Boyd, D. (2007). Why youth (heart) social network sites: The role of networked publics in teenage social life. In Buckingham, D. (Ed.), *MacArthur Foundation Series on Digital Learning - Youth, Identity, and Digital Media Volume*. Cambridge, MA: MIT Press.

Cassell, J., & Jenkins, H. (1998). *From Barbie to Mortal Kombat: Gender and computer games*. Cambridge, MA: The MIT Press.

Castronova, E. (2001, December). *Virtual Worlds: A First-Hand Account of Market and Society on the Cyberian Frontier* (No. 618).

- Castronova, E. (2003). On virtual economies (Electronic Version). *Game Studies*, 3. Retrieved December 22, 2008, from <http://www.gamestudies.org/0302/castronova/>
- Chiou, W.-B. (2006). Adolescents' sexual self-disclosure on the Internet: Deindividuation and impression management. *Adolescence*, 41(163), 547-561.
- Consalvo, M. (2003, February). *It's a queer world after all: Studying The Sims and sexuality*. New York: GLAAD Center for the Study of Media and Society.
- Csikszentmihalyi, M. (1975). *Beyond Boredom and Anxiety: Experiencing Flow in Work and Play*. San Francisco, CA: Jossey-Bass.
- Daft, R. L., & Lengel, R. H. (1986). Organizational information requirements, media richness and structural design. *Management Science*, 32(5), 554-571. doi:10.1287/mnsc.32.5.554
- Dibbell, J. (1998). *My tiny life: Crime and passion in a virtual world*. New York: Henry Holt and Company, Inc.
- Dindia, K. (2002). Self-disclosure research: Knowledge through meta-analysis. In Allen, M. (Ed.), *Interpersonal Communication Research: Advances Through Meta-analysis* (pp. 169-185). Mahwah, NJ: Lawrence Erlbaum Associates.
- DiSalvo, B. J., Crowley, K., & Norwood, R. (2008). Learning in context: Digital games and young black men. *Games and Culture*, 3(2), 131-141. doi:10.1177/1555412008314130
- Donath, J. S. (1999). Identity and deception in the virtual community. In Smith, M. A., & Kollok, P. (Eds.), *Communities in cyberspace* (pp. 29-59). London: Routledge.
- Ferris, S. P., & Roper, S. (2002). Same and mixed-gender intimacy in a virtual environment. *Qualitative Research Reports in Communication*, 47-55.
- Fontana, A., & Frey, J. (1994). Interviewing: The Art of Science. In Denzin, N., & Lincoln, Y. (Eds.), *Handbook of Qualitative Research* (pp. 361-376). Thousand Oaks, CA: Sage Publications.
- Gee, J. P. (2003). *What video games have to teach us about learning and literacy*. New York: Palgrave Macmillan.
- Goffman, E. (1959). *The presentation of self in everyday life*. New York: Doubleday.
- Golub, A., & Lingley, K. (2008). "Just like the Qing empire": Internet addiction, MMOGs, and moral crisis in contemporary China. *Games and Culture*, 3(1), 59-75. doi:10.1177/1555412007309526
- Gonzalez, J. (2000). The appended subject: Race and identity as digital assemblage. In Kolko, B. E., Nakamura, L., & Rodman, G. B. (Eds.), *Race in cyberspace* (pp. 27-50). New York: Routledge.
- Greenfield, P. (1994). Video games as cultural artifacts. *Journal of Applied Developmental Psychology*, 15, 3-12. doi:10.1016/0193-3973(94)90003-5
- Heider, D. (2009). *Living Virtually; Researching Virtual Worlds*. New York: Peter Lang.
- Hemp, P. (2006, June 1). Avatar-based marketing. *Harvard Business Review*, 48-57.
- Henderson, S., & Gilding, M. (2004). 'I've never clicked this much with anyone in my life': Trust and hyperpersonal communication in online friendships. *New Media & Society*, 6(4), 487-506. doi:10.1177/146144804044331
- Herman, A., Coombe, R. J., & Kaye, L. (2006). Your Second Life? Goodwill and the performativity of intellectual property in online gaming. *Cultural Studies*, 20(2/3), 184-210. doi:10.1080/09502380500495684
- Huffaker, D. A., & Calvert, S. L. (2005). Gender, identity, and language use in teenage blogs. *Journal of Computer-Mediated Communication*, 10(2). Retrieved from <http://jcmc.indiana.edu/vol10/issue2/huffaker.html>.
- Jones, S. E. (2008). *The meaning of video games*. London: Routledge.
- Kolko, B. E. (2000). Erasing @race. In Kolko, B. E., Nakamura, L., & Rodman, G. B. (Eds.), *Race in cyberspace* (pp. 213-232). New York: Routledge.
- Kollok, P., & Smith, M. A. (1999). Communities in cyberspace. In Smith, M. A., & Kollok, P. (Eds.), *Communities in cyberspace* (pp. 3-25). London: Routledge.
- Lindlof, T. (1995). *Qualitative Communication Research Methods* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Liu, H. (2007). Social network profiles as taste performances. *Journal of Computer-Mediated Communication*, 13(1). <http://jcmc.indiana.edu/vol13/issue1/liu.html>.

- McRae, S. (1996). Coming apart at the seams: Sex, text, and the virtual body. In Cherney, L., & Weise, E. R. (Eds.), *Wired women: Gender and new realities in cyberspace*. Seattle: Seal Press.
- Moore, R. J., Gathman, E. C. H., Ducheneaut, N., & Nickell, E. (2007, April 28-May 3). *Coordinating joint activity in avatar-mediated interaction*. Paper presented at the Human Factors in Computing Systems (CHI 2007), San Jose, CA.
- Nakamura, L. (2000). "Where do you want to go today?": Cybernetic tourism, the Internet, and transnationality. In Kolko, B. E., Nakamura, L., & Rodman, G. B. (Eds.), *Race in Cyberspace* (pp. 15-26). New York: Routledge.
- Nakamura, L. (2002). *Cybertypes: Race, ethnicity, and identity on the Internet*. New York: Routledge.
- Postigo, H. (2007). Of mods and modders: Chasing down the value of fan-based digital games modifications. *Games and Culture*, 2(4), 300-313. doi:10.1177/1555412007307955
- Ramirez, A. Jr, & Zhang, S. (2007). When Online Meets Offline: The Effect of Modality Switching on Relational Communication. *Communication Monographs*, 74(3), 287-310. doi:10.1080/03637750701543493
- Rheingold, H. (1993). *The virtual community: Homesteading on the electronic frontier* (1st ed.). Reading, MA: Addison-Wesley.
- Short, J., Williams, E., & Christie, B. (1976). *The social psychology of telecommunications*. London: Wiley.
- Silver, D. (2000). Margins in the wires: Looking for race, gender, and sexuality in the Blacksburg Electronic Village. In Kolko, B. E., Nakamura, L., & Rodman, G. B. (Eds.), *Race in cyberspace* (pp. 133-150). New York: Routledge.
- Simkins, D. W., & Steinkuehler, C. (2008). Critical ethical reasoning and role-play. *Games and Culture*, 3(3/4), 333-355. doi:10.1177/1555412008317313
- Squire, K. (2002). Cultural framing of computer/video games [Electronic Version]. *Game Studies*, 2. Retrieved December 22, 2008, from <http://www.gamestudies.org/0102/squire/>
- Thurlow, C., Lengel, L., & Tomic, A. (2004). *Computer mediated communication: Social interaction and the Internet*. London: Sage.
- Turkle, S. (1995). *Life on the screen: Identity in the age of the Internet*. New York: Simon and Schuster.
- Walther, J. B. (1992). Interpersonal effects in computer-mediated interaction: A relational perspective. *Communication Research*, 19(1), 52-90. doi:10.1177/009365092019001003
- Walther, J. B. (1996). Computer-mediated communication: Impersonal, interpersonal, and hyperpersonal interaction. *Communication Research*, 23(3), 3-43. doi:10.1177/009365096023001001
- Walther, J. B., Loh, T., & Granka, L. (2005). Let me count the ways: The interchange of verbal and non-verbal cues in computer-mediated and face-to-face affinity. *Journal of Language and Social Psychology*, 24(1), 36-65. doi:10.1177/0261927X04273036
- Walther, J. B., Slovacek, C. L., & Tidwell, L. C. (2001). Is a picture worth a thousand words?: Photographic images in long-term and short-term computer-mediated communication. *Communication Research*, 28(1), 105-134. doi:10.1177/009365001028001004
- Woodcock, B. (2008). *MMOG Active Subscriptions: 0-120,000*. Retrieved December 23, 2008, from <http://www.mmogchart.com/Chart3.html>
- Yee, N., Bailenson, J. N., Urbanek, M., Chang, F., & Merget, D. (2007). The unbearable likeness of being digital: The persistence of nonverbal social norms in online virtual environments. *Journal of CyberPsychology and Behavior*, 10, 115-121. doi:10.1089/cpb.2006.9984
- Zhao, S. (2003). Toward a taxonomy of copresence. *Presence (Cambridge, Mass.)*, 12(5), 445-455. doi:10.1162/105474603322761261