

## WHY DO I FALL FOR THE ELF, WHEN I AM NO ORC MYSELF? THE IMPLICATIONS OF VIRTUAL AVATARS IN DIGITAL COMMUNICATION

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### ABSTRACT

Various recent research on online avatars debated their authenticity in terms of representing the individuals that manage them. Seemingly users would construct an enhanced or idealized presence of themselves online, yet fail to realize that others also do so when seeking information of other users through their avatars. This phenomenon becomes even more curious inside online video game spaces, since video game avatars are already expected to be unrelated with their players but are still seen as sources of information about them. This study approaches the issue as a communication problem and tries to explain the process through Berger's Uncertainty Reduction Theory (URT). Merging URT with various other nonverbal and visual communication approaches, it is debated how video game avatars – seemingly unrelated or arbitrarily related entities with their users – become information sources about them. Additionally to elaborate further on the process, the relationship between self and avatars is also analyzed. To create this link, semiotic theories of Saussure and Lacan were expanded and a new approach was proposed. Saussure's signification process and Lacan's chains of signification were adapted into digital avatars to define an on-going feedback loop between the video game avatars and the self.

### KEYWORDS

Video games; digital games; avatars; uncertainty reduction theory; semiotics

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### INTRODUCTION

In the summer of 2014, Zilla van der Born, a Dutch doctorate student / artist, went on a long trip to Southeast Asia, namely to Phuket, Luang and Prabang. During her trip she took photos of some of the places she had visited, food she had tasted and various other things she had done and shared them over her social media accounts. She had even made Skype conversations with her family from her hotel room. Yet in reality Ms. van der Born had actually never left her home town of Amsterdam, all of her photos were arranged ruses and her Oriental hotel room was simply a part of her house re-docrated. When approached by New York Times about why she composed such a deception, she simply remarked "*I did this to show people that we filter and manipulate what we show on social media [...] we create an online world which reality can no longer meet.*" (Flanagin, 2014).

Ms. van der Born never really visited Southeast Asia, yet her social media avatar so convincingly did and made her followers believe in it. It could be argued that, from now on, it seems more probable that her followers would be skeptical about the information that she shares online — but even more curious, since they had already been doing the mentioned *filter and manipulation* themselves for their own social media avatars, why

did they fall for the deception so easily in the first place? In other words, while people are aware that, as Donath describes “*in the disembodied world of the virtual [...] identity is also ambiguous*” (Donath, 1999: 27), why would they insist on seeking to understand real identities by looking at virtual avatars?

In Ms. van der Born’s case, the selection of Facebook for this performance may not be incidental. Several studies proposed that Facebook had the potential to render its users unhappy and upset by making them compare their lives with their friends’ lives (Burke *et al.*, 2010; Kross *et al.*, 2013). This seem to happen because users tend to filter and manipulate the narrative of their lives to form an idealized self inside the social network (Manago *et al.*, 2008). However why couldn’t being aware of this process (implementing it oneself), assure the user of noticing it in others.

This study approaches this question from an unlikely source in the form of a communication theory; the theory of uncertainty reduction — and inside a very special form of virtual worlds; the video game spaces. In video game spaces, this phenomenon becomes even more curious as video games exclusively invite their users to create and control avatars that are unlike themselves, yet users seem to seek clues about other players through their avatars, which they would be aware for certain, to be imaginary constructs.

#### THE ROLE OF AVATARS IN UNCERTAINTY REDUCTION

If one was to look up the word “avatar” inside the texts written before 80s, the definitions that would surface would most likely be associated with the word’s Hinduist origin, such as “*the descent of God in creaturely form*” (Newbigin, 1978: 2). Similarly, virtual spaces are created by man and avatars seem to be the tools of their descent into these worlds, in forms that are unlike (almost creaturely) themselves — since “*avatars are usually, though not exclusively, humanoid*” (Morningstar & Farmer, 1991: 274). Ironically, during the emergence of virtual spaces, the avatars’ roles of representing real users seem to have been misinterpreted — since in many cases the avatars represent the *presence* of a user but not exclusively the *identity* of the user itself. Moreover, there seems to be no practical way to limit the number of avatars a user can own inside the virtual spaces in general, or inside a same virtual space in particular. For many virtual worlds (and sometimes for video games) the genuine commodity seems to be the number of avatars and not particularly how do they relate (or not relate) to real users. This brings avatars to a strange position where they completely forfeit their roles of representing real-world identities, and take on the mission of constructing new, virtual ones.

Although inside social media and other web spaces, certain solutions like single sign-on technologies try to narrow the confusion of avatar representation, they come together with their own crisis (Sun *et al.*, 2010). As opposed to other virtual spaces that invite their users to create avatars that could represent (thus bear a likeness of) them or in cases such as Facebook and Google Plus that encourage their users to utilize their real-world identities; video game spaces steer them to create (or take control of) fictional avatars that could orient them in fictional worlds. It should also be noted that this study

uses the term video games in a wide context ranging from PC games, TV console games, browsers games (including games played over browsers within platforms like Facebook) and mobile games. Some of these games do not contain multiplayer or online capabilities and the avatars created within these games are only accessible or experienced by the player and no one else. However more and more games seem to have multiplayer and online capabilities and the experiences in them, as Taylor observes, apart from existing online, can turn into “*unique experiences in blurring the boundaries between game and non-game space, off- and online lives, avatars and ‘real’ identities and bodies*” (Taylor, 2006: 1).

Then, it seems possible to talk about communication between avatars that meet inside a virtual world and debate how the information they can or can't convey may relate to real world identities. It has been suggested that users spend time on and make various different choices while designing their avatars (Ducheneaut *et al.*, 2009; Lim & Reeves, 2009). Thus, video game avatars may be accepted to be adorned with conscious or unconscious nonverbal visual cues, bestowed by their users/creators. Having met an avatar inside a digital world, the individual automatically perceives these nonverbal cues almost without any cognitive effort as “*cognitive processes associated with nonverbal communication [...] occur without conscious awareness*” (Lakin, 2006: 59). These unconscious cognitive efforts translate the nonverbal cues supplied by the virtual avatar into social rules and stereotypes. In fact, Nass and Moon (2000) suggest that individuals apply human social categories — such as gender, politeness, reciprocity — mindlessly while trying to comprehend computer agents. Combining these approaches indicate that the nonverbal visual cues associated with video game avatars — how alien they might seem — are automatically translated into social categories inside the minds of individuals who meet them, with no cognitive effort at all. Moreover, it has also been shown that “*the more nonverbal cues are at odds with verbal ones, the more adults rely on the nonverbal cues*” (Burgoon *et al.*, 2011: 242). Merging this suggestion with the previous proposition results in an even more drastic conclusion; not only individuals automatically and unconsciously translate the visuality of avatars into their personal terms, but they also have the tendency not to believe otherwise contradicting information. Such as, after the owner of a female avatar telling others that he is, in fact, a male, the player/avatar may still continue to be treated as a female and enjoy gendered benefits inside online games “*such as attention and gifts lavished by other males*” (Ratan *et al.*, 2012: 7). This resonates the dilemma mentioned in the beginning of this work, although the players “[*run*] *back and forth across invisible gender boundaries [...] to enhance [game] performance*” (Nardi, 2010: 172) and obviously would be aware that others might be doing the same, they would still copy their social patterns in terms of interaction between the genders of avatars (sometimes even when given information proves otherwise).

This easy shift between genders and virtual bodies in video games seem to both liberate and complicate communication at the same time. Fantone observes that “*as gendered subjects, to have a virtual body to play with is a liberating appropriation of a space not designed for us*” (Fantone, 2003: 51). She concludes that in the relatively safe space of the virtual, it is seemingly possible to exoticize the body and gender, without fear from

“*oppositional gaze and subversive practices*” (51). This outlook may especially be defining a gender playground for queer identities, however Schröder observes that even for cis-genders the liberation may be valid since; “*while in real life concepts of masculinity are, as with all kinds of identity, contested and are subject to constant changes some players seem to use fictional role-playing games to perform archetypical versions of masculinity*” (Schröder, 2008). Ironically this means that while queer identities can be experimenting with in-game gender in various ways, so could heterosexual identities construct hypermasculine or hyperfeminine avatar forms. In this light, the communication between a female elf avatar and a macho-male orc avatar, played both by male players who are aware of other’s real-life identities, is a process full of communication curiosities. Not only creating a reverse-gender virtual avatar is an experimentation in gender communication, but the player may also try out different levels of the stereotypes of one’s own gender. The resulting process would have both interpersonal and intrapersonal connotations, and this study will approach the interpersonal side using the Uncertainty Reduction Theory.

Berger and Calabrese (1975) defined the Uncertainty Reduction Theory (URT) as to understand the procedures of communication between previously unacquainted strangers when they first meet. According to this theory the unacquaintance is a source of intensive stress and both parties will rely on various communication methods to gather information about the other and struggle to reduce this stress from their side. Seemingly this is adaptable to online meetings with virtual characters inside virtual worlds. It has already been suggested that individuals begin by assessing nonverbal visual cues about the other’s avatar and almost unconsciously embed these cues into their own interpretation of social values. Also mentioned was the proposal that verbal cues might be overlooked or even forgotten in time, in favor of visual cues — which means the individual is willing to look past the real identity of the user and could be content in focusing only on the avatar instead. Among axioms proposed by URT are those such as self-disclosure and information seeking, both of which may be transformed in online acquaintances — the user may never need to reveal about her real self or the other party may never feel the need to learn about the real identity behind the avatar. However approaches such as finding mutual likes and dislikes and exploring similarities, (in spite of information originating from the individual identity) may merge with the visual cues of the avatar to construct a new entity.

To understand how uncertainty reduction relates with the digital avatars it is also possible to mention the rendition of the theory by Clatterbuck (1979) which expands the theory in terms of the available data. According to this explanation, if individuals fail on some axioms of information gathering, they tend to build confidence by relying on whatever information is present at hand. This relates to the previous inferences about digital avatars; although avatars may fail to convey the usual nonverbal cues such as body language and facial mimics, the users steer for whatever information is readily available about them. Understandably, expanding the avatars’ communicative sentiment seems to be the driving force behind the ongoing work in developing facial and body language of avatars for the video game industry (Taylor, 2002). Providing better facial and body

language to digital avatars would seemingly be more useful in uncertainty reduction situations, if not particularly in aligning the identity of the user with the avatar.

Gudykunst carries the uncertainty reduction theory into the domain of cultural communication (1995) which may have different implications for video game communities. As much as large scale multiplayer games contain “*collaborative play [...] ranging from lightweight encounters with strangers to highly organized groupings with well-known friends*” (Nardi & Harris, 2010: 397), they also contain competitive factions (Poor, 2014) formed of players from various geographies and cultures. The presence of cooperative and competitive groups also results in visual nonverbal cues within avatars that originate from group affiliations that might have an effect on uncertainty reduction processes. To elaborate on the instances of meeting the avatars of opposing factions in an online game and assessing dangers and outcomes, Babrow’s (1992) approach of valence and ambiguity may be merged with URT. About Babrow’s approach, Berger himself concludes that “*when positive outcomes are associated with low probabilities and negative outcomes with high probabilities, [integration becomes difficult and] communication is both a potential source of problematic integration experiences as well as a resource for dealing with them*” (Berger, 2005: 424). Ironically, some games like World of Warcraft limit the in-game verbal communication between factions that renders the situation even more problematic. In these cases of meeting an avatar of the opposing faction, the players again have to rely on whatever information is at hand for uncertainty reduction about the opposing avatar and based on this information they would try to assess whether or how much of a danger they are in. These may include various methods such as assessing the mood of the opposing faction player through examining movement patterns (for example in World of Warcraft, jumping “up and down” is offered as a communication tool, sometimes for marking a particular space among friends (Newon, 2011), or simply as an expression of being bored — which may indicate danger, since a bored player might be more inclined to attack and initiate action), respecting personal space or even through observing the combination of race and profession of the avatar (if the player assumes or experienced that some races or professions may be more aggressive than the others).

#### **A SEMIOTIC MODEL FOR VIDEO GAME AVATARS**

So far, the information carried within an avatar was approached from the standpoint of the receiver as a tool for uncertainty reduction. Since it was established that the avatars could hardly be said to be representing real-world identities of their users, one is left with the question of what would they really represent for their users / creators. To a stranger an avatar could be a communicative source of information, yet what about what it might mean for the self. To understand avatar communication or miscommunication, it seems important to also underline this process.

Several studies have addressed the relation between digital avatars and the self, based on self-presence and self-contruality (Jin & Park, 2009), telepresence and social presence (Schultze & Leahy, 2009) and self-verification and self-enhancement

(Messinger *et al.*, 2008). To answer a similar question in a previous study about social media avatars, I have proposed a model based on the combination of semiotic theories of Saussure and Lacan (Sengün, 2014). The model begins with Saussure's dualism of *signifier and signified* (2001) in semiotics, which defines a perfect matching of sound and sound-image in a language — a process which is called *signification*. For Saussure, the unique signification cases between the word “dog” and the animal, as well as the word's sound and the symbols that make it up, are completely arbitrary and most of the time are only hold together by social consensus. However if one was to argue that an avatar was a signifier of the self (signified), it seems impractical to reproduce Saussure's approach, since their relation may hardly be accepted as arbitrary or unique. Instead Lacan's interpretation of signification as a chain process which states that “*it is in the chain of the signifier that the meaning ‘insists’ but that none of its elements ‘consists’ in the signification of which it is as the moment capable*” (Lacan, 1986: 743) is more relevant. Lacan's approach states that signification is not a process of perfect duality but rather like a chain, in which each form of signification is a signifier for something else.

The chain of signification is connected to the idea of self in two ways. On one hand to form a self is “*to fix, to stabilize, to stop the chain of signifiers*” (Klages, 2014). This indicates that the formation of self is possible by deciding upon the significations of concepts in life and by trying to form a stationary framework of reference. On the other hand, the chain of signification is frail, and is especially sensitive to the gaze towards and from the others (Lacan, 1992). Thus, if one was the only human being in existence, her avatar would be exactly like her, since she had no *other*, to gaze at or be gazed upon.

Merging these inferences in the light of avatars, it is possible to arrive at a model. The existence of others results in individuals creating avatars not in their likeness, but in the likeness of desires created by looking at others — the avatar is not constructed by the self but co-constructed by the self and the others. Additionally, as put by Vicdan and Ulusoy “*the construction of these bodies and the experiences lived through them in [virtual worlds] are nevertheless affected by [selves] and vice versa*” (Vicdan & Ulusoy, 2008: 2). This indicates that, the process could also have feedback to the self and thus create consequences of change in the self. Since the stabilization of self is already fragile, the creation / existence of an avatar may disrupt and result in the re-organization of the chain of signification for the self. Then, each avatar is transformed into a space for the self, to assess the self.

This study would like to expand this model into video game avatars as they seem to have differentiated denotations and connotations from other forms of digital avatars. Before discussing avatars and identities in video games however, a brief introduction to video game analysis may be in order. Nitsche describes five different analytical planes for video games (2008); rule-based, mediated, fictional, play and social. The rule-based plane contains the rules of the game system as well as the software code, AI and/or physics engine that implement these rules. The mediated plane consists of the visual outlet of the game and mostly breeds cinematic and visual studies. The fictional plane on the other hand is a different output than the mediated plane — Nitsche proposes that even

if the players could see the output of the game in the mediated plane, in their minds a richer fictional world combining their expectations from the game also endures. The play plane operates under the study of play and its meaning. The social plane is the interaction of the player with the other players, be it in the physical proximity or online.

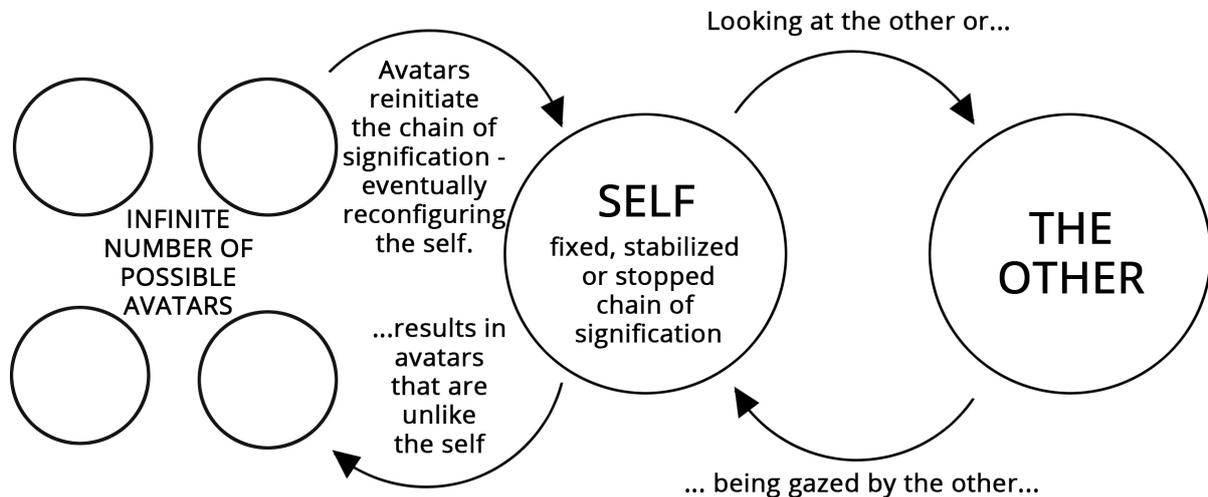


Figure 1. A combination model of Saussure and Lacan's semiotic theories from the light of digital avatars.

It seems agreeable that video game avatars mostly operate on the mediated, the fictional and the social planes within the model. On each of these planes avatars would have different functions. Continuing from the previous Saussurian/Lacanian model, an avatar inside the mediated plane is disconnected from the self (almost an *other*). Most of the time, its visual distinctiveness constitutes the signifier of the player. Yet as the player begins to control the avatar inside the fictional world, the avatar transforms into an extension of his or her *self*, and eventually fades into the fictional plane. The player may begin to affiliate more meaning into the avatar's actions in his mind (the fictional) than what it actually does on the screen (the mediated). On the social plane, however, avatars dictate how players are perceived by the others (as discussed previously). Tardini and Cantoni (2005) discusses this social plane in two parts; the playing community and the player's community. The playing community encompasses the social interaction inside the game world through avatars, such as fighting, solving puzzles, building, etc.. The player's community on the other hand is the social interaction of players outside the game world. Popular games will have discussion boards and online communities where players will also own different avatars than inside the game.

According to Gee (2003), the identity of a video game player could be debated under three distinct forms; the real person, the virtual character and the projective identity. The real person is the player herself and the characteristics of this person will not disappear even when controlling an avatar, which is the virtual character. Gee describes the projective identity as a bridge between these two entities in which "[the player] can transcend the limitations both of [the other two identities]" (Gee, 2003: 66). In this light the

projective identity is coherent with the fictional plane of Nitsche. In parallel to the model offered by this study, the projective identity could correspond to the neverending signification loop between the self and the avatar — another virtual mind-space where the self communicates with itself through the created avatar.

Video game avatars also have different inferences in terms of realism than most other digital avatars. A Facebook picture may be a more realistic representation of a physical person, yet since video game avatars are also active and animated entities, they could convey limited body language and actions. Poole (2000) argues that players do not play video games for realism, but because they allow the players to do things that they cannot do in real life . This could be correlated into the offered model; in this light it seems possible to confirm that players would rather create avatars that are unlike themselves and who can do things that they could not in real life. Possibly to meet this tendency video game designers create idealized versions of fictional characters because as Crawford puts it;

“A game is not merely a small simulation lacking the degree of detail that a simulation possesses; a game deliberately suppresses detail to accentuate the broader message that the designer wishes to present. Where a simulation is detailed a game is stylised.” (Crawford, 1984: 9)

Thus in online worlds, players will usually have the option to create idealized avatars, where characters are athletic, stylish, physically appealing and possessing in-human characteristics (see Figure 2).

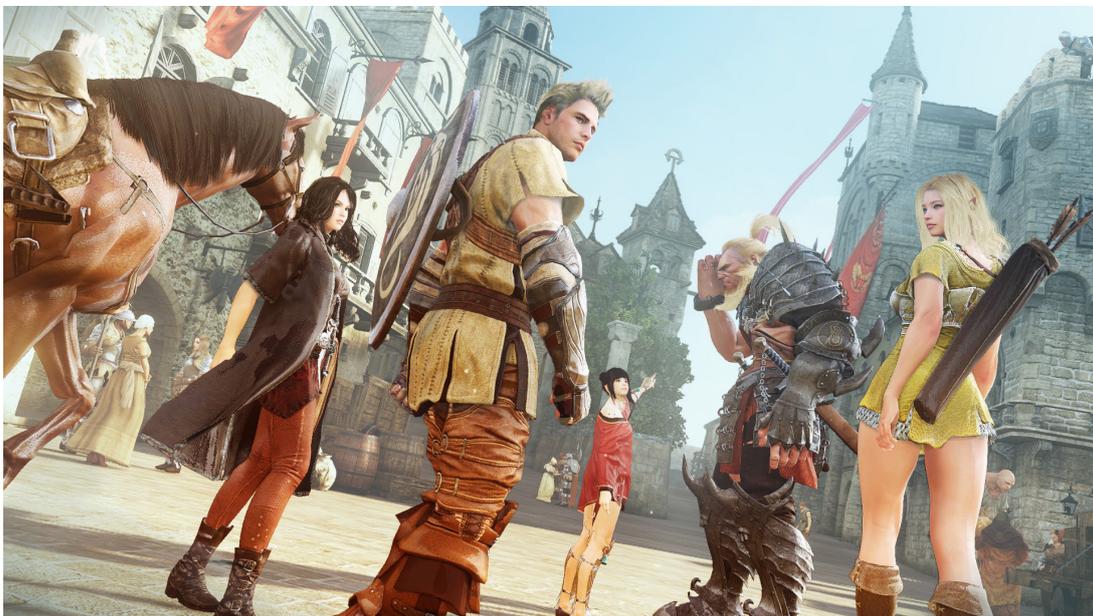


Figure 2. Black Desert is a massively multiplayer online game where players control excessively good-looking avatars inside a fantasy world. This is representative of many other online games. (Black Desert promotional image ©Copyright 2014 by Pearl Abyss, <http://black-desert.com/media/>)

Since users do not have total freedom in creating avatars in video games (they could only create avatars which are logical within the game world and allowed by the game), limitations and design choices by the game producers come into question. In the

empirical study mentioned before, Ducheneaut *et al.* (2009: 1160) concludes that “users create a digital identity that looks close to Western ideals: leaner, younger, more fashionable versions of themselves” and “users tend to see their avatars as having an idealized version of their own personality”. As a result, some studies focus on sociological, racial, gender and ethnic implications of (or their lack of) the spectrum of available options for avatars in video games and cyberspaces (Kafai *et al.*, 2010; Nakamura 2002; 2009). Another analytic study on World of Warcraft avatars by Pace, concludes that the avatar options of the game “remediates cultural interfaces, facilitate the transcoding of races into (usually negative) cyber types” and “players themselves are associating real life with virtual races, often times with negative results” (Pace, 2008: 2501). In the game, fictional races such as orcs, dwarves and trolls are associated with real world cultures (for examples trolls speaking with a Jamaican accent while dwarves speak with a Scottish accent). Within this discussion the avatar options inside a fictional world, become signifiers of racial stereotypes in the real world — which in turn initiate other chain significations. Because the fictional race of dwarves speak with a Scottish accent, it could be assumed that they are fond of alcohol or are hot-tempered (or vice versa; because dwarves are fond of alcohol, are hot-tempered and speak with a Scottish accent, Scottish individuals may be assumed to be similar). This cultural communication may happen on personal as well as on interpersonal plane — such as a Scottish individual internalizing the mentioned representation.

## CONCLUSION

This study primarily tried to explain a curious phenomenon where although individuals created digital avatars that are unlike themselves, they would still perceive the avatars of others as entities that would produce information about genuine identities. This situation was offered as a communication problem and a communication theory, the Uncertainty Reduction Theory was offered as a possible solution. It has been suggested that nonverbal visual cues about avatars were perceived automatically without any need for cognitive effort and were being translated into social and humanely values. The visual cues of the avatars took precedence when the verbal cues contradicted them, and from time to time this may result in the overlooking of the real identity behind the avatar. It was also suggested that when meeting a digital avatar for the first time, the individuals used whatever information was available to them for uncertainty reduction. These instances proceed much like meeting a person in real life, yet the sources of information and the processing of those information would differ.

Additionally the implications of an avatar for self was also debated. If it was accepted that avatars could convey information to others, the question of what could the self may infer from self-created avatars was examined. The study implemented a previous model that combined the semiotic theories of Saussure and Lacan into video game avatars. The model suggested the formation of self as chains of significations that were stabilized. Yet the presence of others would result in the self, creating avatars that are unlike the self, and those avatars in turn create a feedback to the self that may reinitiate the configuration of the chain of signification. The whole process then creates an almost

never ending loop between the avatar(s) and the self. This loop was easily applicable on video game avatars, since these avatars already invited their users to roleplay identities that are imaginary. It has been suggested that the self does not really disappear in controlling these avatars and rather a bridging process would be initiated (in Gee's terms, a reflective identity), which matches the infinite loop of signification previously mentioned.

Both the technology and the theory behind video game avatars seem to be on the move. The technology enables more realistic avatars that could convey better nonverbal communication signs such as body and facial language, while the emergence of new control schemes allow the users to interact with avatars in ways previously unthought of. As much as these new avatars would need psychological, sociological and anthropological approaches, evaluations of them from communication perspectives should also be prioritized, since avatars seem likely stay as important interpersonal and intrapersonal communication tools in the upcoming times. //

## REFERENCES

- Babrow, A.S. (1992) "Communication and Problematic Integration: Understanding Diverging Probability and Value, Ambiguity, Ambivalence, and Impossibility", *Communication Theory*, 2(2): 95-130.
- Berger, C.R. & Calabrese R.J. (1975) "Some Explorations in Initial Interaction and Beyond: Toward A Developmental Theory of Interpersonal Communication", *Human Communication Research*, 1(2): 99-112.
- Berger, C.R. (2005) "Interpersonal Communication: Theoretical Perspectives, Future Prospects", *Journal of Communication*, pp. 415-447.
- Burgoon, J.K., Guerrero L.K. & Manusov, V. (2011) "Nonverbal signs", in Knapp, M.L. & Daly, J.A. (eds.) (2011) *The Sage Handbook of Interpersonal Communication*, New York: Sage Publications, pp. 239-282.
- Burke, M., Marlow, C. & Lento, T. (2010) "Social network activity and social well-being", *CHI '10 Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, New York: ACM, pp. 1909-1912.
- Clatterbuck, G.W. (1979) "Attributional Confidence and Uncertainty in Initial Interaction", *Human Communication Research*, 5(2): 147-157.
- Crawford, C. (1984) *The Art of Computer Game Design*, Berkeley, Calif.: Osborne/McGraw-Hill.
- Donath, J.S. (1999) "Identity and deception in the virtual community", in Smith, M.A. & Kollock, P. (eds.) (1999) *Communities in Cyberspace*, London: Routledge, pp. 29-59.
- Ducheneaut, N., Wen, M., Yee, N. & Wadley, G. (2009) "Body and mind: a study of avatar personalization in three virtual worlds", *CHI'09 Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, New York: ACM, pp. 1151-1160.
- Fantone, L. (2003, April) "Final Fantasies Virtual Women's Bodies", *Women's Studies*, 4(1): 51-72.
- Flanagin, J. (2014, 16 September) *How to Fake Your Next Vacation*, New York Times, retrieved from [http://op-talk.blogs.nytimes.com/2014/09/16/how-to-fake-your-next-vacation/?\\_r=0](http://op-talk.blogs.nytimes.com/2014/09/16/how-to-fake-your-next-vacation/?_r=0), date accessed 22/11/14.
- Gee, J.P. (2003) *What Video Games Have to Teach Us About Learning and Literacy*, New York: Palgrave Macmillan.
- Gudykunst, W.B. (1995) "Anxiety/Uncertainty Management (AUM) Theory", in Wiseman, R.L. (eds.) (1995) *Intercultural Communication Theory*, New York: SAGE Publications, pp. 8-58.

- Jin, S.A. & Park, N. (2009) "Parasocial Interaction with My Avatar: Effects of Interdependent Self-Construal and the Mediating Role of Self-Presence in an Avatar-Based Console Game, Wii", *CyberPsychology & Behavior*, 12(6): 723-727.
- Kafai, Y.B., Melissa S.C. & Deborah A.F. "Blacks Deserve Bodies Too!: Design and Discussion About Diversity and Race in a Tween Virtual World", *Games and Culture*, 5(1): 43-63.
- Klages, M. (27 May 2014) "Jacques Lacan", retrieved from <http://www.webpages.uidaho.edu/~sflores/KlagesLacan.html>, date accessed 22/11/14.
- Kross, E., Verduyn, P., Demiralp, E., Park, J., Lee, D.S., Lin, N., Shablack, H., Jonides, J. & Ybarra, O. (2013) "Facebook Use Predicts Declines in Subjective Well-Being in Young Adults", *PLoS ONE*, 8(8), retrieved from <http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0069841>, date accessed 22/11/14.
- Lacan, J. (1986) "The agency of the letter in the unconscious of reason since Freud", in Adams, H. & Searle, L. (eds) (1986) *Critical Theory Since 1965*, Tallahassee: Florida State University Press, pp. 738-756.
- Lacan, J. (1992) *The Seminar of Jacques Lacan: Book VII – The Ethics of Psychoanalysis, 1959-1960*, New York: W.W. Norton & Company, Inc.
- Lakin, J.L. (2006) "Automatic cognitive processes and nonverbal communication", in Manusov, V. & Patterson, M.L. (eds.) (2006) *The Sage Handbook of Nonverbal Communication*, New York: SAGE Publications, pp. 59-77.
- Lim, S. & Reeves, B. (2009) "Being in the Game: Effects of Avatar Choice and Point of View on Psychophysiological Responses During Play", *Media Psychology*, 21(4): 348-370.
- Manago, A.M., Graham, M.B., Greenfield, P.M. & Salimkhan, G. (2008) "Self-presentation and Gender on Myspace", *Journal of Applied Developmental Psychology*, 29: 446-458.
- Messinger, P.R., Ge, X., Stroulia, E., Lyons, K., Smirnov, K. & Bone, M. (2008) "On the Relationship between My Avatar and Myself", *Journal of Virtual Worlds Research*, 1(2), retrieved from <https://journals.tdl.org/jvwr/index.php/jvwr/article/viewArticle/352>, date accessed 22/11/14.
- Morningstar, C. & Farmer, F.R. (1991) "The lessons of Lucasfilm's Habitat", in Benedikt, M. (eds.) *Cyberspace: First Steps*, Cambridge: MIT Press, pp. 273-301.
- Nakamura, L. (2002) *Cybertypes: Race, Ethnicity, and Identity on the Internet*, New York: Routledge.
- Nakamura, L. (2009) "Don't Hate the Player, Hate the Game: The Racialization of Labor in World of Warcraft", *Critical Studies in Media Communication*, 26(2): 128-144.
- Nardi, B. (2010) *My Life as a Night Elf Priest: An Anthropological Account of World of Warcraft*, Michigan: University of Michigan Press.
- Nardi, B. & Harris, J. (2010) "Strangers and friends: collaborative play in world of Warcraft", in Hunsinger, J., Klastrup, L. & Allen, M.M. (eds.) *International Handbook of Internet Research*, Houten: Springer, pp. 395-410.
- Nass, C. & Moon, Y. (2000) "Machines and Mindlessness: Social Responses to Computers", *Journal of Social Issues*, 56(1): 81-103.
- Newbigin, L. (1978) "Christ and the Cultures", *Scottish Journal of Theology*, 31(01): 1-22.
- Newon, L. (2011) "Multimodal creativity and identities of expertise in the digital ecology of a world of Warcraft Guild", in Thurlow, C. & Mroczek, K. (eds) *Digital Discourse Language in New Media*, New York: Oxford University Press, pp. 131-153.

- Nitsche, M. (2008) *Video Game Spaces: Image, Play, and Structure in 3D Game Worlds*, Cambridge, Mass.: MIT Press.
- Pace, T. (2008) "Can An Orc Catch a Cab in Stormwind?: Cybertype Preference in the World of Warcraft Character Creation Interface", *Proceedings of CHI'08 Extended Abstracts on Human Factors in Computing Systems*, New York: ACM, pp. 2493-2502.
- Poole, S. (2000) *Trigger Happy: Videogames and the Entertainment Revolution*, New York: Arcade Pub.
- Poor, N.D. (2014, January) "Collaboration via Cooperation and Competition: Small Community Clustering in an MMO", *System Sciences (HICSS), 2014 47th Hawaii International Conference*, IEEE, pp.1695-1704.
- Ratan, R.A., Lehdonvirta, V., Kennedy, T.L., Brock, U. & Williams, D. (2012) "Razing the Virtual Glass Ceiling: Gendered Economic Disparity in Two Massive Online Games", *Proceedings of the 62nd Annual Conference of the International Communication Association*, retrieved from <http://vili.lehdonvirta.com/files/wmtr2821/Ratan-2012-gender-virtual-wealth-gap.pdf>, date accessed on 22/11/14.
- Saussure, F. de (2011) "Course in General Linguistics", in Baskin, W. (trans.) Meisel, P. & Saussy, H. (eds) (2011) *Course in General Linguistics*, New York: Columbia University Press.
- Sun, S.T., Boshnaf, Y., Hawkey, K. & Beznosov, K. (2010, September) "A Billion Keys, but Few Locks: The Crisis of Web Single Sign-on", *Proceedings of the 2010 Workshop of New Security Paradigms*, New York: ACM, pp.61-72.
- Schröder, A. (2008) "'We don't want it changed, do we?' - Gender and Sexuality in Role-Playing Games", *Eludamos: Journal for Computer Game Culture*, 2(2), retrieved from <http://www.eludamos.org/index.php/eludamos/article/view/vol2no2-7/87>, date accessed 15/03/15.
- Schultze, U. & Leahy, M.M. (2009) "The Avatar-Self Relationship: Enacting Presence in Second Life", *ICIS 2009 Proceedings*, retrieved from <http://aisel.aisnet.org/icis2009/12>, date accessed 22/11/14.
- Sengün, S. (2014) "Dijital Avatarlar İçin Semiyotik Bir Okuma ve Avatarların Dijital İletisimde Belirsizlik Azaltma Rollerini", *Dijital İletisimin Etkisi Uluslararası Akademik Konferansı Bildiri Kitabı*, İstanbul: Iskenderiye Publishing, pp. 33-44.
- Tardini, S. & Lorenzo C. (2005) "A Semiotic Approach to Online Communities: Belonging, Interest and Identity in Websites and Videogames Communities", *Proceedings of the IADIS International Conference e-Society*, retrieved from [https://ssl.lu.usi.ch/entityws/Allegati/pdf\\_pub2044.pdf](https://ssl.lu.usi.ch/entityws/Allegati/pdf_pub2044.pdf), date accessed 22/11/14.
- Taylor, T.L. (2002) "Living digitally: Embodiment in virtual worlds", in Schroeder, R. (eds.) *The Social Life of Avatars*, London: Springer, pp. 40-62.
- Taylor, T.L. (2006) *Play Between Worlds: Exploring Online Game Culture*, Cambridge, Mass: MIT Press.
- Vicdan, H. & Ulusoy, E. (2008) "Symbolic and Experiential Consumption of Body in Virtual Worlds: From (Dis)Embodiment to Symembodiment", *Journal of Virtual Worlds Research*, 1(2): 1-22.

## LUDOGRAPHY

Blizzard Entertainment (2004), World of Warcraft®

Pearl Abyss (2014), Black Desert Online®

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