Exploring Virtual Worlds: Conducting a Netnographic Research in *Second Life*

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Abstract

The development of the internet and growth of the number of users of this technology have shaped the beginning of the twenty-first century. Over the last decade, online games and social platforms have become very popular and have contributed to the emergence of new forms of communication. The augment of the number of internet users 'inhabiting' virtual worlds reinforces the need to understand the role played by these platforms within media practices, and for contemporary social interaction. It is necessary to research them, and to understand how users are appropriating these digital landscapes.

The research methodologies for the study of virtual worlds are a central aspect to take into account. Since the emergence of the first virtual communities, researchers from all over the world have been investigating these spaces from several points of view. One of the challenges they have to exceed is the methodological one. Aiming at contributing to the discussion on the need for innovative methodologies adequate for the research of contemporary 'mediascapes', this chapter focus on the use of a specific qualitative methodology – netnography, for the study of a particular virtual world – *Second Life*. The method is discussed both from a theoretical and empirical point of view.

Keywords: Internet, virtual worlds, netnography, *Second Life*.

Introduction

INTERNET development and generalized use has been very important to bring reality near fiction's technological worlds recurrent in literature and

cinema since the beginning of 20th century. The certainty of a highly technological future has been the inspiration for many artists and, in fact technological evolution is leading towards the path foreseen by literary and audiovisual works – human experience is becoming more and more mediated, remediated, [1] and premediated [2] by technology.

The development of the internet and growth of the number of users of this technology have been very important in bringing reality near to fiction's technological worlds. In the year of the 10th anniversary of the World Wide Web, 2005, a new concept rose – a concept that intends to characterize the state of the art of the internet: web 2.0 (Musser, 2007). This new expression represents not only the technical development of the network, but mainly the fact that this network has evolved quicker due to the participation of experts and users from all over the world. Web 2.0 is the result of the development of a more and more social network: "Collaboration, contribution and community are the order of the day and there is a sense in which some think that a new 'social fabric' is being constructed before our eyes" (Anderson, 2007, p. 4). In the last years several social applications have been developed. The goal of all of them is to induce interaction, collaboration and sharing among their users. Blogs, podcasts, wikis, social networking sites (*Facebook, MySpace*), content sharing networks (*YouTube, Flickr*) and massive multiplayer online social games (*Second Life, Habbo Hotel*) are among the most popular web 2.0 applications (Pascu, 2008).

Over the last decade, online games and social platforms have become very popular and have contributed to the development of the internet. Virtual worlds have attracted a vast number of users: in 2007 the number of users

1. Jay David Bolter and Richard Grusin in their book *Remediation – Understanding New Media* (2000) propose remediation as a keyword to understand new media – new media remediate their predecessors once they refashion some of their characteristics. For instance, the internet allows users to watch movies just like TV, to listen to radio like traditional radio systems and to see pictures like painting.

2. "Where remediation characterized what was "new" about new media at the end of the twentieth century as its insistent re-mediation of prior media forms and practices, premediation characterizes the mediality of the first decade of the twenty-first century as focused on the cultural desire to make sure that the future has already been pre-mediated before it turns into the present (or the past) – in large part to try to prevent the media, and hence the American public, from being caught unawares as it was on the morning of 11 September 2001" (Grusin, 2010, p. 4).

of these virtual environments was between twenty and thirty million, but it was expected that it would grow rapidly (Castronova, 2007). And it did: according to Kzero's [3] latest report the number of registered accounts in virtual worlds in the first quarter of 2012 almost reached two billion – 1,921,000,000 registered accounts. [4] Due to the growth of the number of users registered in virtual worlds, it is necessary to research them, and to understand how users are appropriating these digital landscapes. Studying these environments may be important to 'premediate' the increasing impact new media will have in the organization of social life. This chapter is focused in one particular open-ended virtual world of the sandbox type – *Second Life*. In fact, *Second Life* takes the characteristics of these digital social spaces further by offering its players the opportunity to take part not only in world's history but also in its geographical development. Within this platform users are in fact *produsers*, they are *produsing* the landscape they inhabit, their own representatives, and the in-world society.

Second Life was developed by Linden Research, Inc. commonly known as Linden Lab, and launched on 23rd June, 2003. Nevertheless, it was only by the end of 2006 and the beginning of 2007 that this platform captivated the interest of media and new media researchers – from various areas such as new technologies, media and culture studies, as well as from sociology, economy and educational studies.

This platform is located in cyberspace and is available through the internet. In order to enter it one must create a profile and download the *Second Life* viewer. After logging in users may interact with each other creating a social network of contacts and services. Apart from socialization this space offers different possibilities for individual and group activities such as exploring the territory, attending concerts and theater shows, going to the cinema, creating and trading products (considered virtual property), and taking advantage of several services: banks, communication and marketing agencies, stores and even embassies, universities and religious spaces. The access to this virtual dimension is free; however there are paid activities and functionalities like

3. Kzero is a consulting company specializing in virtual worlds, virtual goods, augmented reality and social gaming. Amongst Kzero's outputs are reports regarding the growth of virtual worlds. The main results of these reports are published on the company's website and blog – www.kzero.co.uk, and www.kzero.co.uk.

4. Report results available at www.kzero.co.uk, last visited September 2012.

owning land. Regarding the goal, in this game there is neither an ending line to cross nor knights or aliens to defeat, players just have to live and to explore available resources. Some players use this space as an alternative dimension of their social lives, while others use it as an entertainment platform. *Second Life* was not the first online social game to appear, but it is seen as one of the most important since it has a high number of users – more than 31 million registered users. [5] One of *Second Life*'s main components is produsedcontent: within this digital environment residents are active contributors to in-world development, and only one per cent of the content available was created by Linden Lab (Ondrejka, 2006, p. 163). Players are not only contributing to space construction – buildings, green spaces and general surroundings, but also to its social development – institutions and groups that contribute to in-world's economy, culture, identity, and hierarchical organization. Besides this, there are four more characteristics that make this multiuser virtual environment interesting as an object of study: all the avatars existent in-world are playing characters controlled by human beings in real time; intellectual property is recognized – meaning that avatars own everything they create; it has its own micro-currency – the Linden Dollar, that may be exchanged for 'real value currencies' through Linden Lab's exchange platform – LindeX; and all the players have access to simple building tools and to the Linden Scripting Language, which are the 'ingredients' to create objects (animated or not) within this virtual world.

The augment of the number of internet users 'inhabiting' virtual worlds reinforces the need to understand the role played by these platforms within users' media practices, and for contemporary social interaction. The research methodologies for the study of virtual worlds are a central aspect within this research area. Since the emergence of the first virtual communities, researchers from all over the world have been investigating these digital three-dimension social spaces from several points of view. One of the challenges they have to exceed is the methodological one. Aiming at contributing to the discussion on the need for innovative methodologies adequate for the research of contemporary 'mediascapes', this chapter focus on the use of a specific qualitative methodology – netnography, for the study of *Second Life*. The first part intends to contextualize the role of virtual worlds within the contem-

5. According to Kzero – www.kzero.co.uk, last visited September 2012.

porary new media landscape. This contextualization is followed by a review of different research methods employed in the study of virtual worlds as social spaces. The detailed analysis of the use of netnography is explored in the third part. Here, this method is discussed both from a theoretical and empirical point of view.

Virtual Worlds within the Scope of Web 2.0

The concept web 2.0 was first proposed by Tim O'Reilly [6] who set the distinction between the first stage of the commercial internet – web 1.0, and the social web emerging from the transformation of the World Wide Web into a platform. The concept was rapidly adopted, and it began to be used as a buzzword. Nevertheless, the web 2.0 phenomenon cannot be fully understood unless one sees it as something that is in permanent adjustment: "Web 2.0 is a set of social, economic, and technology trends that collectively form the basis for the next generation of the Internet – a more mature, distinct medium characterized by user participation, openness, and network effects" (Musser, 2007, p. 10). In a first approach to web 2.0 O'Reilly pointed out the seven principles that characterize this new understanding of the internet: web as platform, harnessing collective intelligence, data is the next 'Intel Inside', [7] end of the software release cycle, lightweight programming models, software above the level of a single device, and rich user experiences. In 2007 these principles were updated and it was proposed that they should not only be understood as principles, but above all as patterns because "the impact of Web 2.0 is now accelerating as the network grows and becomes more ingrained into the daily lives of individuals and organizations" (Musser, 2007, p. 10). The core patterns considered essential to achieve success in what concerns web 2.0 then are: (1) harnessing collective intelligence – participation should be encouraged; (2) data is the next 'Intel Inside' – in order to become meaningful to users platforms should rely on databases difficult to recreate; (3) innovation in assembly – practices of remix should be welcome and fostered; (4) rich

6. Tim O'Reilly, 'What is Web 2.0: Design Patterns and Business Models for the Next Generation of Software' (2005). Retrieved, July 2009, from http://oreilly.com.

7. In other words, users will trust in more extensive and precise databases as they trust that computers with the reference "Intel inside" have a trustworthy processor.

user experiences – users should be able to interact with the published content; (5) software above the level of a single device – the software should be developed for the different internet connected devices available; (6) perpetual beta – software in permanent updating; (7) leveraging the long tail – taking advantage of niche markets through online networks; and (8) lightweight models and cost-effective scalability.

Markham and Baym (2009) consider that the internet is involved in the four major transformations of our era: media convergence, mediated identities, redefinition of social boundaries, and the transcendence of geographical boundaries. The internet users are the central figures in the reconfiguration of the web. Due to the importance of their role as users of the online technologies, as well as enthusiastic consumers of digital content in different formats – text, audio, video, or image, a new concept is needed to name these 'enhanced' users. Axel Bruns (2008) proposes *produsage* "as a means of connecting such developments in the cultural, social, commercial, intellectual, economic, and societal realms" (p. 5). *Produsage* is emerging as the opposite to the industrial model of production which sees producers, distributors, and consumers as distinct entities with well-defined roles. The technological development along with the diversification of the consumer research techniques contributed to the adjustment of this model in order to include consumer feedback. The aim was to enable producers to respond exactly to consumers' needs and desires. Another development of this model was proposed by Alvin Toffler who acknowledged the existence of a new type of consumer, the *prosumer*. In order to set the difference between what Toffler call *presumption* and what he defines as *produsage*, Bruns explains:

> what prosumption appears to envision is not a shifting of the balance between producers and consumers, but merely the development of even more advanced consumption skills by consumers [...] [p]rosumption, if understood in this way, therefore describes merely the perfection of the feedback loop from consumer to producer; it sketches a capitalist paradise [...] where production and distribution remain driven very much by corporate interests. (Bruns, 2008, p. 11-12)

Produsage is taking shape around the affordances of web 2.0: its potential to encourage the formation of networks of communication and content pro-

duction, decentralization, and openness. The models of *produsage* tend to be probabilistic, not hierarchic, modular, and based on sharing practices. The figure of the *produser* is a hybrid one. He may assume the role of producer of content, or just be user of what others produce. More important than trying to define under which circumstances he is being a user or a producer, one should understand these 'interactive audiences' as being able to assume both roles depending on their will. The model of *produsage* is the base of several platforms relying on users' capacity to collaborate and participate in the formation of complex digital networks.

Social games, like *Second Life*, are one of the characteristic applications of the web 2.0. They are a sub-genre of the massive multiplayer online games. These games have revolutionized not only the video games industry but the entertainment industry in general. The first online multiplayer games were remarkable, they allowed players from all over the world to get together, and play in a shared digital space. The virtualization of social space had a notorious impact on the entertainment industry and the number of networked players had grown rapidly. The first virtual multiplayer games had similar characteristics to the 'traditional' computer games of that time (end of 1990's). The great innovation was the possibility of playing not only with game characters but also with players from any part of the world. The virtual worlds made available through these games were mainly developed by video game creators, from the action spaces to the script. In some cases the players were able create their own characters and even to contribute to the plot's development. However, the goal of these games was similar to the majority of games – to win, to be the most powerful, and eventually the most feared.

The distinctiveness of massive multiplayer online social games within the scope of the massive multiplayer online games is their aim: to live. The challenge is not to be the first to achieve the end and to win the game, but to live an experience through an avatar, [8] a character created to live in this alternative space. This kind of game may take place in varied settings and offer diffe-

8. The etymology of avatar proceeds from Sanskrit avatārah meaning the descending of a divinity from paradise to Earth. According to Boellstorff (2008) avatar means the incarnation of a Hindu deity (particularly Vishnu), nevertheless "while 'avatar' [...] historically referred to incarnation – a movement from virtual to actual – with respect to online worlds it connotes the opposite movement from actual to virtual, a decarnation or invirtualization" (Boellstorff 2008, p. 128).

rent possibilities, but there is a common element – they recreate new worlds, new social spaces, second lives. Immersive social games were inspired by the cyberpunk artistic movement and its literary reference work *Neuromancer* by William Gibson (1984). These platforms are called virtual worlds, settings where humans represented by avatars interact in tridimensional digital spaces.

The will to develop alternative social spaces is becoming more and more evident with the emergence of online digital games that allow users from all over the world to interact in a highly mediated (and remediated) fictional environment. Throughout the last years many concepts were proposed to define and characterize the emerging computer-generated virtual worlds. Some of them are: synthetic world (Castronova, 2005), persistent world (Kushner, 2003), artificial world (Çapin, Pandzic, Magnenat-Thalmann, & Thalmann, 1999; Schroeder, 2002), digital world (Helmreich, 1998), mirror world (Gelernter, 1991), possible world (Ryan, 1991; Schroeder, 1996), virtual environment (Blascovich, 2002; Schroeder, 2006) and metaverse (Stephenson, 1993). The common element in the majority of these expressions is 'world', a "dangerously naturalistic metaphor" implying "an entity that has come into being without human agency and that is self-contained" (Boellstorff, 2008, p. 18). In the case of virtual worlds human agency may indeed be a certainty; nevertheless calling these digital complex environments worlds makes them more palpable and more 'real'. Following Ralph Schroeder's proposal (1996, 2006, 2008), within the scope of this chapter, virtual worlds are intended as computer-generated landscapes where users are compelled to interact with each other, but also with the environment, developing a sense of being there. The conceptualization of digital environments like *Second Life* as virtual worlds adds some elements to the equation. The 'real' world is compounded of land (territory), and inhabited by people that get organized through social structures. Virtual worlds also; only the materiality of these worlds is different, the virtual world is made of pixels, it only exists in a digital format, and it is accessed through technological devices. Nevertheless, I would like to contend that despite being highly mediated the experiences lived within these environments still are sensorial ones.

According to the existence, or not, of a predetermined narrative, virtual worlds may be structured along two main types, the first invite players to take part in a predetermined narrative, while the second are sandbox games. In games having a predetermined narrative players are invited to choose an avatar

that will represent them in the virtual environment. Usually there is a set of avatar types representing the different characters of the fictional world; [9] each type having their own skills. These game-worlds may be developed under different themes, but fantasy scenarios where players have to fulfill different quests and defeat monsters seem to be among the favorites. [10] While logged into these virtual environments players play the chosen role interacting with other players and with non-player characters. On the other hand, the second type has no conducting narrative; these worlds 'just' offer settings for virtual interaction. They are sandbox games: "authoring environments within which players can define their own goals and write their own stories" (Jenkins, 2007, p. 59). This type of virtual worlds offers players a digital space where they can build their own narratives and set the goals for being in-world. These narratives are built through the interaction with other avatars and with the setting. The majority of multiuser virtual environments are open-ended; the game does not have a determined finish line, the world exists while users inhabit it and/or until the company owner turns the servers off.

Researching virtual worlds as social spaces

The internet has played a major role in transforming the world into the global village foreseen by Marshall McLuhan (1994 [1964]). The development of this communication and information technology is allowing users from all over the world to become immersed in a virtual reality accessible through an internet-connected computer. Virtual worlds play a major role as online three-dimensional spaces for social interaction once they allow users to get immersed in an alternative reality, which has been considered as having a remarkable research potential (Bainbridge, 2007), and as being *petri dishes* for social and human sciences (Castronova, 2005).

The first multiplayer environments appeared in the 1970's, but as soon as the internet was made available for personal computers the number of these platforms rapidly increased. Nowadays there are more than 50 three-

9. In the majority of games despite having to choose a standard initial appearance, once logged in the avatar is customizable.

10. *World of Warcraft* is the most popular game-based virtual world with over 12 million subscribers worldwide (www.businesswire.com).

dimensional virtual environments; which are usually called massively multiplayer online games despite the existence of several types of these games. Among the most popular are the massively multiplayer online role-playing games, like *World of Warcraft* or *EverQuest*; the massive multiplayer online first-person shooters, like *PlanetSide* or *MAG*; the massive multiplayer online real-time strategy games, like *Age of Empires Online* or *Battleforge*; the massive multiplayer online sports games, *FIFA Online 2* or *Need for Speed – World*; or the massive multiplayer social games like *Second Life*. Not all these games should be classified as virtual worlds, since not all of them are persistent, nor allow players to freely explore the digital environment. The number of internet users that use this medium to play digital games is increasing. [11] Persistent worlds are sought by an increasing number of people, and I would like to suggest that this growth reinforces the need to understand the role played by virtual worlds in contemporary social interaction.

Several data collecting methods have been used in internet research, both quantitative and qualitative. Among the quantitative surveys are the most used method. There are two major methodologies for collecting data through surveys in a virtual world: the avatar managed by the researcher invites random or specific avatars to participate in the research and then apply the survey; the other hypothesis is to apply the survey through bots. [12] Amongst the qualitative ones ethnography has been the most used. Due to its social character, the internet has allowed the emergence of virtual cultures and the ethnographic method "can therefore be used to develop an enriched sense of the meanings of the technology and the cultures which enable it and are enabled by it" (Hine, 2000, p. 8). Among the ethnographic methods, virtual ethnography and netnography are the most used.

One of the aspects more frequently explored by virtual worlds' researchers is their potential to generate complex social spaces. Some of these researchers are Edward Castronova, T.L. Taylor and Ralph Schroeder. Castronova's seminal work *Synthetic Worlds: The Business and Culture of Online Games* (2005) was the first comprehensive research work focused on business in online persistent environments and its implications to the strengthening of a synthetic

11. See, for instance, the 2012 report of the Entertainment Software Association, available at www.theesa.com (last visited September, 2012).

12. Bot, short form of robot. Automatic avatars that may be programmed to invite avatars to participate in a given research through answering a survey.

world culture. By synthetic world Castronova intends the persistent virtual environments that remain the same whether one is online or offline. T.L. Taylor had also researched online virtual environments. In *Play Between Worlds: Exploring Online Game Culture* (2006) Taylor examines life beyond what Castronova designates by 'cyberian frontier' (Castronova, 2001), and presents online multiplayer games has rich social spaces, having *EverQuest* as object of study. And Ralph Schroeder's latest work – *Being There Together: Social Interaction in Shared Virtual Environments* (2011) explores interaction within virtual environments, analyzing avatars' behavior in different circumstances. In the last years it was witnessed not only a growth on virtual worlds' research, but also on researches focused on *Second Life*.

Broad studies on *Second Life* society and culture as the ones conducted by Tom Boellstorff (2008) and Phylis Johnson (2010) explore the cultural and social dimensions within this virtual world. In *Coming of Age in Second Life: An Anthropologist Explores the Virtually Human* Boellstorff analyzes cultural practices' taking form within *Second Life*. His ethnographic research was conducted from 2004 to 2007, and reflects the socio-cultural development of this platform, from almost the beginning of its commercial era. This study was the first within the field of anthropology to examine this virtual environment. Using traditional anthropology research methodologies Boellstorff was able to dissect emerging social structures within *Second Life* like individual and collective identities, space, time, money, race, gender, and conflict and antisocial behavior. Phylis Johnson study, on the other hand, has a different scope; it examines the development of *Second Life*'s society and the role played by in-world media in that process. Throughout this book Johnson looks at the role media play in reporting and reflecting the social, economic and political issues in-world, concluding that media development in *Second Life* may reflect 'real life' media's future. The main characteristic of the in-world media is the prevalence of *produsedcontent*. Residents are not only media consumers, they may also be *produsers*.

There are also micro-analysis on *Second Life* social environment that help to better understand the impact that this virtual space may have in the way people interact. Among those studies there are those employing predominately quantitative approaches, and others qualitative ones. Among the quantitative are the work developed by Doron Friedman, Anthony Steed and Mel Slater, presented in 'Spatial Social Behavior in *Second Life*' (2007), a paper descri-

bing the results of a software bots-oriented experience conducted in-world, and which indicates that *Second Life*'s users display distinct spatial behavior when interacting with each other; 'The Evolution of Social Behavior over Time in *Second Life*' (2009), by Helen Harris, Jeremy N. Baleinson, Alexia Nielsen, and Nick Yee – following J. Blascovich (2002) model of how virtual human representations may influence users' behavior within virtual environments, this study presents the results of a six-week qualitative and quantitative controlled research on engaging social roles in *Second Life*, concluding that despite the diversity people tend to replicate realist behaviors when immersed within this virtual world; and 'Effects of Third Person Perspective on Affective Appraisal and Engagement: Findings From *Second Life*' (2010), by Ellen L. Schuurink and Alexander Toet – a study on the influence of first and third-person perspectives on the affective appraisal and user engagement within *Second Life*. Examples of qualitative researches may be analyzed through the work developed by Shaowen Bardzell and William Odom, 'The Experience of Embodied Space in Virtual Worlds: An Ethnography of a *Second Life* Community' (2008), a research focusing on the mutually constituted relations among avatars, space and artifacts in a Gorean community; 'From Text to Gesture Online: A Microethnographic Analysis of Nonverbal Communication in the *Second Life* Virtual Environment' (2008), by Smiljana Antonijevic – a study of the use of nonverbal communication in-world, focusing on the analysis of proxemic and kinesic cues of nonverbal communication; 'Excavating *Second Life*: Cyber-Archaeologies, Heritage and Virtual Communities' (2009), by Rodney Harrison – offering a conceptualization of 'cyber-archaeology' as a tool to study the virtual material culture of *Second Life*; and 'These Great Urbanist Games: New Babylon and *Second Life*' (2009), by Thomas M. Malaby, who settles a parallelism between Constant Nieuwenhuys' New Babylon project and the development of *Second Life* in order to understand the different notions of play associated with both these projects.

Conducting a netnographic research in *Second Life*

Quantitative and qualitative methodologies have been applied to the study of virtual environments. Despite the importance of both methods, after the review of the main studies developed within these online settings, it was con-

sidered that a qualitative approach would allow a greater knowledge of the research object. Following Robert V. Kozinets' (2010) proposal, the research conducted within *Second Life* was based on netnographic research methods.

According to Hine (2000) there are two ways of understanding the internet: as a site where culture is formed and reformed, and as a cultural artifact. The majority of the first ethnographic studies conducted online focused on internet culture, neglecting its role as a cultural artifact. Due to its complexity, in order to better understand the role of the internet the ideal is to combine the two approaches. Virtual ethnography is proposed by Hine (2000) as the best methodology to achieve it, once it is "an approach to the Internet which embraces the complexity offered by this form of mediated interaction" (Hine, 2000, p. 63).

Virtual ethnography presumes that the ethnographer is deeply engaged with cyberspace and mediated interaction, and that he is aware of the internet's main characteristics. This method is developed based in the understanding of the internet both as culture and cultural artifact. The process of developing a virtual ethnography is necessarily an adaptive one. Each researcher must adapt the method of virtual ethnography to his own research object. When describing her first virtual ethnography, Hine suggests that the ethnographer must assume that it is impossible to achieve a holistic perspective on a specific internet research object and that the ethnographic research plan must be developed according to research object intrinsic characteristics.

Due to virtual ethnography's adaptive nature, Kozinets (1998, 2002, 2006, 2010) suggests netnography as the follow-up of the first online research methodologies. [13] He argues that online research deserves its own research methods. Having Christine Hine's (2000) definition of virtual ethnography as starting point, Kozinets proposes netnography as the best methodology for online research once it is "a specialized form of ethnography adapted to the unique computer-mediated contingencies of today's social worlds" (Kozinets, 2010, p. 1). According to the study conducted by Bengry-Howell, Wiles, Nind, & Crow (2011) on innovation and social research methods, netnography is among the exemplary innovative methods developed within qualitative research. In order to be considered an exemplar case study, the methodologies

13. Kozinets considers that netnography "is more an adaptation of a method, than proposing a new method" (2012).

should facilitate the study of a new area of social life; provide an understanding of the aspects of social life that are difficult to access through traditional methods; and deal with ethical, access or response issues raised by traditional approaches. The netnographic method was described and discussed in detail by Kozinets (2010), which is considered to be of major importance for the replication of the methodology (Bengry-Howell, Wiles, Nind, & Crow, 2011): "The netnographic approach is adapted to help the researcher study not only forums, chat, and newsgroups but also blogs, audiovisual, photographic, and podcasting communities, virtual worlds, networked game players, mobile communities, and social networking sites" (Kozinets, 2010, p. 3).

The netnographic method is based on traditional participant-observation ethnographic procedures. As such it is very important to be accepted among the study community, and to conduct an ethical research. There are five essential steps to conduct a well-organized netnography: research plan, *entrée*, data collection, data analysis, and presentation and discussion of the results. The first step includes setting the goals, choosing the research object, and defining the research question. The *entrée* implies the identification of the community that will be studied, and the 'entrance' into that community. Then the researcher needs to select suitable methods for his qualitative analysis. There are three types of data one can collect: archival data (data produced by the members of the community), elicited data (resulting from the interaction between the researcher and the members of the culture under analysis), and fieldnote data (resulting from the experiences lived by the researcher). The fourth stage is data analysis; the researcher should decide which is the more appropriate technique to analyze the collected data. And the fifth, and last, step concerns the presentation and discussion of the results.

In order to contribute to a better understanding of the use of netnography as an adequate methodology for virtual worlds' research, hereafter I will present and discuss the implementation of a netnographic research within *Second Life*. The organization of the netnographic research to be conducted began with the definition of the main goal – to understand virtual worlds as new spaces for social interaction. The research object chosen was *Second Life*, and the research question that framed the fieldwork was: Is *Second Life* being appropriated by its users and transformed into an alternative social space propitious to the remediation of cultural narratives? In order to achieve the defined goal I considered that it was necessary to understand the community of residents

inhabiting this virtual world as a whole, and the first step to enter the research setting was to create an avatar. In order to analyze *Second Life*'s social context a multimodal netnographic research was conducted. The data collection methods used were detailed observational data collection, auto-netnography, informal interviews, and content analysis of interviewed users profiles. The data analysis followed an inductive approach, and the last step of this netnographic research was a doctoral dissertation presenting and discussing the global results, as well as other preliminary pieces of research discussing specific topics resulting from the fieldwork (Ferreira, 2009, 2011a, 2011b, 2011c, 2012).

The detailed observational data collection was based on participant observation of 64 locations within *Second Life*. These locations were organized in ten thematic groups: 'newbie friendly places', 'interesting places', 'communities' spaces', 'role-playing spaces', 'wonders of *Second Life*', 'spaces for learning', 'artificial life', 'spaces for spirituality', 'spaces for dating', and 'spaces for shopping'. The choice of these locations was not arbitrary; I followed the proposal presented in *Second Life's Official Guide* (Rymaszewski *et al*., 2008 [2007]). In the case of spaces that no longer existed, they were replaced by others from the same group that were part of *Second Life Hot Spots* [14] at the time of the selection process.

As the goal was to analyze *Second Life*'s social context, the research categories defined *a priori* were: [15] logged in users, place, region, owner, general place characteristics (area in square meters, access restrictions, main characteristics), traffic, number of avatars in the visited place, zones of higher avatar concentration, complexity level (low, medium or high), interaction potential, sub-locations, avatars description, and avatars interaction. The data collection applying this technique began in September 2009, and was concluded by June 2010. It was organized in two different phases. In the first one each of the selected locations were visited in mid-afternoon (the average login hour was around 4 p.m., Portuguese time); in the second one, the same places were revisited at night (the average login hour was around 9 p.m.). The observation was divided into two different phases not only to check if the real time element was significant to the number and characteristics of avatars online; but

14. A roll provided by Linden Lab where one can find the most visited places of *Second Life*.

15. The auto-netnographic experience was crucial to validate these categories.

also to verify if these locations suffered changes during the over nine months of the observational research. During the data collection the research avatar travelled almost two million square meters within *Second Life*. The average number of online users during the visits was 59.647, and an average of 7 avatars was met per destination. [16] Two hours was the average time spent in each location. [17]

The participant observation was combined with an auto-netnographic experience. Kedzior and Kozinets (2009) suggest that auto-netnography may be a valuable technique for data collection in virtual worlds, since:

> [a]uto-netnography is a more participative and autobiographical style of netnography that attends more closely to first-hand personal reflection as captured in fieldnotes. Because virtual worlds involve a 're-embodiment', a new sense of world or 'reworlding', and an ability to inhabit multiple worlds in multiple bodies or multiperspectivality, many of the most interesting aspects of the phenomena are experienced from a subjective point of view that is not easily captured through interactions or interviews with others. (Kozinets, 2010, p. 181)

The goal of using an auto-netnographic approach to complement the detailed observation of this virtual world, was to be able to include the firsthand experiences and challenges lived in-world in the analysis that was being developed. This stage of the fieldwork began in January 2009 and accompanied the investigation until the end – September 2012.

Despite the fact that I have already played different types of video games – multi- and single-player, on and offline, getting used to *Second Life* took some time. The auto-netnography began by following the recommended path for newbies: Orientation Island, Help Island, Mainland, and then the numerous islands available in-world. To manage the avatar in a natural way took some time, it is not just a question of moving forward or picking objects; there are many options for interacting with our own avatar and with the surroundings spaces and objects, and it is necessary to get used to them. Visiting several

16. Among the visited locations there were those which had over 30 visitors, and others that have no visitors at that time.

17. 4 hours and 50 minutes was the maximum period of time spent observing a single location; the minimum was half an hour.

different locations besides the ones chosen for the participant observation allowed me to better understand *Second Life*'s creative potential. In addition to the interaction with space, it is also possible to interact with the avatar by customizing it. During the auto-netnographic research different possibilities offered by this virtual world were explored: avatar personalization, shopping, camping, [18] traveling, and socializing with other avatars.

The implementation of the detailed observation and of the auto-netnography led to the conclusion that it would be necessary to use other methods in order to collect data appropriate to a better understanding of the identity dynamics occurring in-world. The complementary methods used were the informal interview and the content analysis of the interviewees' public profiles. The interviews were conducted in June 2011, using a sample of fifteen avatars. Those were selected in the top fifteen locations regarding the number of visitors by the time of the second visit during the participant observation. Each interview had an average duration of twelve minutes. The means of communication used was the built-in tool of instant messaging. The only precondition to being able to participate was the filling out of an informed consent form. [19] This form was organized as an online survey, and asked participants to declare they will to take part in the research. Additionally, it asked permission to collect, analyze and present the results. The content analysis of the profiles aimed at understanding to what extent the public profile tool is used by the residents of this virtual world, and which kind of information is preferably filled. The profile is a way of publicly presenting an avatar, since the information posted may be seen by anyone interested. There are seven sections that may be filled: 2nd Life, Web, Interests, Picks, Classified, 1st Life, and My Notes. The focus of the content analysis was the information published in 2nd Life and 1st Life sections.

The data analysis followed an inductive approach, anchored on an interpretative research paradigm: "the primary purpose of the inductive approach is to allow research findings to emerge from the frequent, dominant, or significant themes inherent in raw data, without the restraints imposed by structured methodologies" (Thomas, 2006, p. 237). The choice for this data analysis

18. A very common job in Second Life – business owners pay visiting avatars to 'populate' their commercial spaces. Avatars tend to prefer highly populated places to the emptiest ones.

19. The online version of the informed consent survey is available at: www.surveymonkey.com.

method was influenced by Kozinets suggestion that "[i]nductive data analysis is a way to manipulate the whole body of recorded information that you have collected over the course of your netnography" (Kozinets, 2010, p. 119). Combining my own experience within *Second Life* with the data collected through the detailed observation, interviews, and content analysis, allowed to better understand three main components of this type of virtual social spaces: geography, cultural identity and in-world interaction.

Conclusions

Since the first years of the video games industry in the beginning of the 1970s until nowadays, digital games have been one of the most immersive means to 'plug in' humans to virtual reality. Spectators became 'interactive spectators' taking advantage of a remediated cultural product which tends to transport users to fantasy realms that may premediate the technological human future (Grusin, 2006). [20] The constant development of online social platforms is encouraging users to network and socialize with each other. Despite the fact that all new media have the potential to provide various mediated experiences, virtual worlds may be perceived as one of the most complex forms to interact with people from over the world, as well as to experience cyberspace. In order to contribute to a better understanding of the role performed by virtual worlds within the scope of contemporary social media, this chapter was centered in the analysis of a particular digital environment – *Second Life*.

Second Life was chosen as study object not only because it offers the possibility of living a digital life through an avatar, but mainly because this virtual world was conceived as a platform for innovation, inviting all its players to take part in its on-going development. The chosen virtual world results from the co-work of Linden Lab and the residents, and to understand its specificities as a new medium of interaction and communication I consider that it was important to fully comprehend its formal and informal structures. The

20. Video games have a double role, as other fictional narratives they combine realism and imagination. On the one hand they are influenced by the time and circumstances within which they are developed. But on the other, they are also capable of influencing future gadgets and technological features.

choice of the research methodology was also of major importance to achieve this goal.

The multimodal netnographic research allowed different dimensions of information collected in-world to be combined. On the one hand the netnographic research based on participant observation, and informal interviews as data collection methods allowed it a more structured experience of this virtual settlement. On the other hand, the auto-netnographic research permitted the collection of firsthand data enriching the understanding of the online setting. The auto-netnography is centered on individual experiences and does not require a structured and well delineated research plan. It is based on spontaneous experiences and the researchers' individual engagement with the study object. The data collected was subject to an inductive data analysis which resulted in the definition of the main categories to understand this virtual world as a new medium: geographical formal organization, spatial organization, population (avatars), cultural identity, and interaction practices. Regardless of the option for an inductive approach, it was necessary to establish the main categories that would inform data collection. These were directly related with the three essential axes to grasp this virtual environment in all its dimensions: geography, cultural identity and in-world interaction.

The choice of the research dimensions was made focusing on the particular characteristics of *Second Life* – it is a *produsedworld* where Linden Lab takes advantage of the users will to actively engage with their second lives, but also needs to face users' demands and manage their expectations in the best way possible. The analysis of these dimensions revealed that the relationships players are setting with territory, their avatars and with each other result from the remediation and representation of social space within this virtual world. Through the identification of the cultural narratives that are being developed by users during their in-world experiences, it was possible to acknowledge the role performed by these narratives within the 'politics of imagination' that are marking postmodernity. The users of this virtual world are taking the opportunity to 'appropriate' it to renegotiate the sociocultural models that frame their understanding of space, of themselves, and of the others. The development of *Second Life* as an 'enhanced' version of reality demonstrates that human beings shape, and are shaped by technology.

The netnographic research conducted in-world for the last three years allowed me a firsthand perspective of this virtual world. During this time I was

able to become a citizen of this alternative world, and to experience the digital life through my own avatar – Melissa Finley. The combination of the data collected during the different research stages – participant observation, interviews, and auto-netnography, led to the conclusion that there are three main cultural narratives emerging from the in-world experience lived by the residents of this virtual world. The first intrinsically related with geographical organization of human life – spatial narratives; the second, with the need to make sense of oneself – narratives of identity; and the third, with the fact that humans are social beings in essence – social interaction narratives. The development of these narratives was somehow expected since they integrate almost all the essential elements humans make use of to locate themselves within the complex surrounding environment. However, the way these narratives are emerging shows that, contrary to what was expected by the first internet scholars, the development of immersive online environments is not contributing to the liberation from biological and social constraints. Despite the possibility to create unique digital representatives and to co-create a digital world for them, users of virtual worlds are enriching their digital lives with social and cultural models from their first lives. Instead of being a space for overcoming the limitations of being human, virtual worlds are being inscribed with remixed versions of 'traditional' cultural narratives.

The study conducted on *Second Life* intended to understand the importance of virtual worlds for contemporary societies. New media are being rapidly appropriated by internet users from all over the world and their interactive nature appeals to the users' will to be more than content consumers. For the first time audiences may get actively engaged with the different forms of mediation available, and they are indeed taking advantage of this possibility. Within the panorama of web 2.0 virtual worlds are among the most complex platforms available, offering users the possibility to create graphic digital representatives which would allow them to live a 'second life'. The option for a qualitative approach and the use of netnography were fundamental to understand the socio-cultural dynamics behind the development of a *produsedd* virtual world like *Second Life*. Despite the importance of developing structured qualitative studies within virtual worlds, I would like also to address the importance of quantitative approaches. Demographics and statistical information focusing on the different uses of these platforms are necessary to

understand major trends occurring in-world. These studies are also essential to inform qualitative approaches.

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