

SOCIOLOGY OF METAVERSES: VIRTUAL WORLDS AS PUBLIC/PRIVATE SPACES AND CYBERSPACES

Pedro Andrade *

INTRODUCTION

“Metaverse” is a peculiar term meaning a virtual world, often created as a computer/Internet 3D space-time, where users can embody avatars, i.e. virtual actors, to represent themselves within a social digital life. The aim of this text is to suggest a sociological reflection on metaverses, considering these virtual worlds as new social scenes where public/private spaces and cyberspaces converge and diverge. Public/private territories are frequently edified within social networks. However, the genealogy of metaversical virtual space-time should not analyze only pre-modern and modern social networks, but also digital social networks within Web 2.0 and Web 3.0.

For such a purpose, Social and Human Sciences and even Aesthetics may provide some of the most pertinent hermeneutics on public spaces and metaverses. In this perspective, a transdisciplinary strategy is presented here, including:

- (a) a philosophical heuristics of metaverse, Topophilosophy;
- (b) Alfred Schutz’s sociological phenomenology;
- (c) Jurgen Habermas’ theories on public space and communicative action;
- (d) a literary analysis conducted with experimental novels.

Within this hybrid epistemological perspective, merging philosophy, science, new media and arts, this essay tries to demonstrate that, besides scientific and philosophical dispositives, artistic and literary tools may help understanding social and virtual worlds, and particularly the dichotomy between public and private spaces.

* Universidade do Minho, Instituto de Ciências Sociais, Centro de Estudos de Comunicação e Sociedade.

For example, GeoNeoLogical Novel is an experimental literary style founded on the dynamics of metaverse, in a singular way. In fact, GeoNeoLogical Novel uses four physical and social dimensions inside real and virtual public/private worlds, that is, the three classical spatial dimensions, unfolding in classic time and cyber-time temporalities. In this “cybrid” world, as we will see, the GeoNeoLogical Novel constructs a new meta-genre, more than an author’s novel or a reader’s novel, also a characters’ novel.

A second illustration is the Web 3 novel, a fiction developed within Web 3.0, or Semantic Web. Web 3.0 connects people across digital social networks, adding the explanation about the existing relations between the contents and meanings shared by users, through social semantic sites and networks.

1. CONTEMPORARY SOCIETY AS A CYBRID

We live in a hybrid society, an intercultural society where different and often opposite identities and conceptions of alterity may merge, in unprecedented ways, in public and private spaces and cyberspaces.

Many authors tried to describe and interpret this contemporary reality. Mikhail Bakhtin (1981) notices that, in our culture, the very emergence of meaning derives, among other constraints, from the hybrid nature of language (*polyglossia*). Stuart Hall (1996) circumscribes a “crisis of identity” in our intercultural world, indicating the decline of classical distinctive identities and the rise of new forms of identification. Nestor Canclini (2002) underlines that hybridization may be the transition from multiculturalism to interculturalism, where different identities are shared and exchanged in order to avoid cultural wars.

Such hybrid society surpasses the classical sociocultural dichotomies that shaped modernity. In a seminal book, Marcel Cornis-Pope (2001) criticizes such modern reductionist attempts by cultural and literary approaches of the postwar period after 1945. For example, socio-cultural dualisms of race, gender, class, and narratological oppositions such as Realism/Formalism, imitation/invention, may be surpassed by an alternative history of creative interchange among these polarities.

In this direction, Artur Matuck states that “[t]he decoding of this hybrid reality needs an open and improved perception which can only be achieved through a reformulation of the fundamental structures that

inform human being, culture, history, the planet, identities, scientific creation and language itself” (2009, 293).

In turn, Peter Anders defines “cybrids” as combinations of physical and symbolic or electronic digital images; or as a hybrid between mediated entities and physical ones; or a merge between the physical and the electronic. He develops this idea, relating it with the very construction and reconstruction of social public and private spaces through architecture and design:

The cybrid hypothesis works on a number of different levels, all of which I would argue are part of architecture. There is space that is inhabited, there is space that is perceived, and there are the objects and the people that inhabit it. So the people that we see here engaged in discussion are passing information between each other, they are also negotiating a physical entity in front of them, and then, on top of that, there are observers on the outside who have their own systems of notation. Viewing this world through their headsets and not being only able to see what is going on here, they can see the consequences of decisions at a smaller level happening at the larger physical one outside. Outside it doesn't exist per se. Outside it's experienced perhaps through a set of devices or displays that let you experience the larger configuration of the project in full scale, but without physical consequence. (Anders 2001)

Thus, cybrid entities are at the core of virtual worlds or metaverses, worlds that are eminently social, as they allow new social interactions and activities that, sometimes, do not have a physical correspondent, even if both worlds are intimately connected.

2. SOCIAL SCIENCES ON PUBLIC/PRIVATE SPHERES WITHIN VIRTUAL WORLDS

A previous question in this debate is the following: how can Social and Human Sciences discuss “publicity” (in the sense of Habermas) and “privacy” subjacent to virtual worlds or “metaverses”, in the age of Web 2.0/3.0, or in other future regimes of communication and information?

As we know, Web 2.0 is an Internet age, popularized mainly by blogs and social networks, in which 3 major trends are manifested in terms of production and reception of information by socio-cultural agents:

A. Nowadays, more and more software is not just installed in the hard disk of a personal computer, like the desktop version of Word and Excel. They are being gradually accessed and used online, not just by computer professionals, but by common users, for exchanging information. For this reason, this sort of instruments is widely named "Social software". It is true that this process already happened even before Internet was born (e.g. through electronic bulletin boards), and in the first age of Internet across the last decade of the 20th century (through Internet forums, *etc.*). However, such common practices by users are much more frequent and central in Web 2.0, for instance by means of social digital networks, like Facebook and Twitter. As Steve Jobs used to say as early as the 1980s: computers are not just personal, but mainly interpersonal computers. In other words, within Web 2.0 and as a general trend, the means of production of information (and not only the means of their reception) are becoming more intrinsically public. This constitutes a major social-economic drift inside Internet.

B. From an empowering, political and activist perspective, Web 2.0 users often share and discuss information among themselves both more frequently and profoundly, within virtual communities developed inside digital social networks, and in terms of "digital solidarity and sociability" (Andrade 2001). In other words, more intensely than in the first digital communities, digital social networks are working as mediating entities. In doing so, they contribute to reinforce the articulation between the public and the private, e.g. constructing a semi-public opinion, also according to Habermas' conceptualization of public space. A semi-public opinion has some traits of a public opinion, like the dissemination of political options in a democratic public space, hybridized with private space characteristics, such as the relative secretiveness of private communication.

C. Considering now a cultural and discursive point of view, common users are more actively involved in the production of content. Indeed, at Web 2.0 they do not often just read information, but also write content, in a deeper way than they did in the first Internet period. For instance, a user may write comments in a blog or at Facebook. That has more chance to be read and shared by a large community of readers-writers than in the last years of the 20th century (Marichal 2012). In this way, public opinion can be developed in a more profound reciprocal way. Many social, political and cultural movements that use extensively digital social networks testify to such a trend.

Some of these forms of virtual communities and digital social networks make more and more use of social interaction environments structured in three dimensions. As we mentioned earlier, such digital worlds are named “metaverses”, a concept forged by Nead Stephenson, within the science fiction novel *Snow Crash*, in 1992. A metaverse (meta + universe), which means something beyond our everyday universe, is basically a virtual world in 3D, but using a metaphor of the real world. Thus, physical and digital social spaces are never apart.

Some reflections and practical applications illustrate this position. For example, Luís Petry (2009, 148) reflects on a “topophilosophy”, that is, a genre of thought weaving the ontology of virtual worlds and metaverses. Topophilosophy departs from physical experiences of virtual environments in real time, which are articulated, reflexively, with genetic epistemology and constructivism. In particular, metaverse interfaces reuse, in an original way, the concepts of “mind”, “body”, “design” and “cognition”.

To achieve this, the author retakes (a) hermeneutic phenomenology; (b) and also its connection with Lacanian psychoanalysis as operated by Michel de Certeau; (c) or the application of Peirce’s semiotics to metaverses conducted by Lucia Santaella. Petry applies these reflections and the concept of “topophilosophy” to the development of concrete environments in 3-D, aiming ultimately to understand their profound meanings. Quantic Opera *AlletSator*, produced in partnership with Pedro Barbosa, is an example of this perspective:

Topophilosophy reflects on the three-dimensional digital and its possibilities of meaning, its foundations and its expressive manifestations. In topophilosophical research, building and living are thought departing from hermeneutic phenomenology. That is, all construction of three-dimensional hypermedia environments are considered as constructions conveying meaning. (Petry and Barbosa 2009, 50)

In dialogue with topophilosophy or with other hermeneutics of metaverses, it is possible to move towards the perspective of Social Sciences application to virtual worlds. In our case, since 2003 we have related philosophers and sociologists to the interpretation of urban cultures and to the arts at “Sociology of Art” classes, within the context of various Undergraduate or Master Courses at the Faculty of Fine Arts, University of Lisbon. Such an analysis was simultaneously articulated with virtual worlds, in “Digital Libraries and e-Learning” and “Art and

New Technologies” classes, and at the Master of Arts Education in the same Faculty. Within such a hermeneutics, we have gradually moved from verbal concepts to visual concepts by systematically linking ideas and images. And we translated both verbal and visual concepts to digital concepts, in other words, terms and notions, more appropriate to reading and writing the realities of virtual worlds.

Among other authors, we associated Simmel to the reading of Paula Rego (a celebrated Portuguese artist) art works and their public and private universes; we also applied Edmund Husserl (the founder of phenomenology) and Alfred Schutz (who adapted Phenomenology to Sociology) to the works of René Magritte. For example, Husserl notices this: in the process of man’s relationship with the world, the subject inside a *lebenswelt* (the everyday public world) uses perception and consciousness as a means to reach knowledge inside a more private world. In this demand, the otherness may be the world outside the subject, or other subjects (Bouckaert 2003).

Applying phenomenology to Second Life, which appears to be the most popular metaverse, we can notice the following: in this context, nowadays we experience everyday public lives that are parallel or concurrent with the “real daily life”. In fact, avatars (social agents who represent us), communicate with one another in an everyday life world or virtual *lebenswelt*, which is a public space-time distinct but superimposed to the physical *lebenswelt* inherent to the daily lives of its users. In such virtual life worlds, sensorial capturing of the public and private worlds by a user may suffer dramatic changes. This is the case of flyby view, that is, an aerial perspective or “vision of God”, developed during the flying movement of the avatar.

From this or other discursive devices activated within metaverses, the resulting awareness of the real and virtual public/private world, also changes. Therefore, the knowledge acquired within journeys inside metaverse can be more singular than a mere temporary virtual immersion experience. In other words, the continuous and daily frequentation of Second Life and other metaverses, engenders modes of publicity and privacy knowledge (be it common knowledge, scientific or artistic knowledge, etc.) never before envisioned.

But how visible these processes are, in a more sociological perspective? Alfred Schutz adapted phenomenology to social interpretation in terms of a “sociological phenomenology”. The concept “finite provinces

of meaning” reflects the phenomenon of contextualization of what is understandable, in the course of our societal relations. That is, a common citizen understands what he/she experiences in his/her daily routines, often within the limits of his/her *lebenswelt* or social life world. Even a neighbor in our quarter cannot understand most of what we say or do, for the simple reason that he/she travelled through different daily experiences and knowledge.

In other words, what is private is always situated by the public, but not always the enlarged public that constitutes the public sphere as a space controlled by the State and by a dominant ideology, constituted in the end of 18th century, according to Habermas (1991). The immediate interaction context among social actors in co-presence often mediates not just them, but also intermediates global society with common citizens. By developing a theory of communicative action, Habermas (1985) tries to articulate, on one hand, the macro level of public space as a territory of expression of democratic public opinion and, on the other hand, the communicative processes that occur at a micro social and more private level.

Let us apply the notion of “finite provinces of meaning” and Habermas’ concepts to the analysis of virtual worlds or metaverses. Within them, “avatars” or virtual actors constitute themselves as social agents of a new type, always as a mediation of the real subject that underlies it, as previously stated. Indeed, inside metaverses, each group of avatars (and respective users) has its own experience (a specific finite province of meaning, knowledge and modes of communicative action), not necessarily coinciding with those communicative practices and knowledge experienced by virtual characters who travelled across other routes of daily immersion in the metaverse. Hence, metaverses do not present a single daily life and modes of communication, but many, each one of them corresponding to a single actor/avatar, or to a group of players in just a moment of his/her (or their) digital biography. In other words, there is not only one virtual *lebenswelt* (or world of digital experiences). That is, there isn’t just *one* “Second Life”, because in the metaverse, there is not just *one* second way. Therefore, “Second Life” metaverse should be named “Multiple Life”, even if we consider a single real person and his/her virtual character as parts of his/her (or their) metaversic career.

More concretely, and according to Schutz, social agents can communicate with one another through interactions between individuals (e.g. a conversation) and from the corresponding mutual interpretation. This

process is supported by “typifications”, that is, public categories created and operated within the practices of everyday life, presenting common and socially shared meanings. In other words, such public meanings are “collective common sense” understood by the members of a particular social fabric. In the case of Second Life, we can think of virtual public typifications that are characteristic of this space, virtual society or culture, and are understood in the articulation of their various and more circumscribed *lebenwelts* or life worlds, each enclosing a separate “finite province of meaning”.

If we retake as well Habermas (1985), communication experienced within *lebenwelt* or everyday public and private worlds is ruled by social norms within a given society or culture, and through power relationships. The agent privacy and even the possibility or the moment of speaking in a public space is conditioned by the ethics of a collective community, the unlimited communication community, who defines the very public meanings of communicative action, within all social spheres.

Thus, metaverses contain very pronounced social traits, which can be studied by Social and Human Sciences. After all, in Second Life, users do not develop only power games and economic activities such as firms openings, that is, accessible and open strategies for creating and marketing firms (Mahar 2009). Users also promote cultural and artistic events, for instance virtual photos of other agents within this context (Andrade 2007). In this essay, I questioned the socio-symbolic nature and the status of photographic images and of the “photographic” within Web 2.0 and particularly in the virtual world of Second Life (or SL). To answer this core question, the text is structured in two parts:

1) Firstly, it criticizes some ideas included in the photography’s, Web 2.0’s and SL’s semantic and sociological areas. In particular, we are witnessing nowadays the emergence of a new paradigm in the art of photography that I name “virtual photographic”. “Photographic” is a concept forged by Rosalind Krauss (1992), meaning this: rather than refer to the photography itself, it speaks of what the photo hints at the social fabric. Virtual photographic is the set of social references inferred from photos taken by users within virtual spaces today, like SL. Other processes discussed in that text, parallel to virtual photographic and that partly explain it, are the return of the author and the emergence of the planetary author, the “Pessoa” effect (which is a sort of “public virtual personality”), the Second Body, etc.

2) Secondly, a content and discourse analysis is undertaken on one of the most popular manuals teaching how to use Second Life. Such an analysis seeks to apply some of the concepts outlined above.

In another text, anthropologist Tom Boellstorff (2008) made an empirical study of the life that occurs in Second Life. Choosing to incarnate avatar Tom Bukowski, he observed, for two years, a set of practices carried out there. For this purpose, he used anthropological methods and techniques similar to those used by social scientists within the real “first life”. His aim was to analyze the public and private behaviors and attitudes relating to gender, race, conflict, interaction between subjects and even the notions of time and space constructed inside the metaverse. The author demonstrates that our identity and society suffer profound changes in virtual worlds.

In short, metaverses explain that, somehow, man has always been virtual, as virtual worlds are derived from the human capacity for constantly create culture.

3. THE RELEVANCE OF METAVERSE

The centrality of virtual worlds to understand the contemporary world, and in particular public and private spheres, seems to be witnessed by the initiative of Orange Montagne, who produced a “Manifesto of the Metaverse”. The author stresses that, in the last years, countless people have travelled in voluntary immersion across virtual 3D visual environments. These contexts are shared, i.e., in this space we see others, but we are also seen. A few decades ago, such virtual environments were reduced to mere science fiction. We may say, taking Montaigne, that even private immersion seems to be, in some conditions, a public immersion.

The precedent attitude leads to sound social consequences. The author, resuming the tone of Engels, notes the following: nowadays, some people insert themselves inside virtual worlds by identifying with the proletariat. Others assume themselves as a social class vanguard, consciously creating new realities. Thus, metaverses are not always “innocent” and lacking social criticism, as some observers or analysts may think.

In addition, a hybrid approach between two scholars discussing the metaverse, the philosopher Peter Ludlow and journalist Mark Wallace (2009) undertake a demystification of what, at first glance, Second Life seems to emit or omit. Referring to the history of multi-user environments and to their own experience of the metaverse, the authors show that, in this public space within cyberspace, there are also conflicts and power games, censorship and new social rules. This is a true parallel and often transgressive reality, where sex and crime are not uncommon. In short, the authors emphasize the dual nature, idyllic and dark, subjacent to such digital second life.

After all, what practices and behaviors are possible, probable, or exchangeable in virtual worlds? Stefan Sonvilla-Weiss (2008) shows that, after an epoch where almost everything was discovered, the metaverse allows to extend even further the boundaries of what is known, conducting to some sort of infinity. In this new medium and through its interface, discussions about people's problems on learning and participation are different from but complementary to real life. In fact, within the metaverse a new "DataCulture" is emerging, pointing to new avenues beyond the dichotomies "individual/community", "private/public", "visibility/invisibility", "autonomy/control", etc. In this context, unprecedented social, artistic and scientific commitments, are now possible.

4. LITERATURE AS A SOCIAL HERMENEUTIC DISPOSITIVE

4.1. *GeoNeoLogic Novel*

Besides Social Sciences, literature is an artistic device that witnesses and clarifies social and cultural realities, sometimes in a surprising way. Thus, it can constitute a reliable method (a) to reflect on society in general, that is, on macro social structures such as culture, communication, information; or (b) to testify particular micro practices and characterize significant socio-cultural agents. We will present below a new type of novel, named GeoNeoLogic Novel, which, in addition to its artistic purposes, also aims to serve as a sociological hermeneutic device. More specifically, this is a singular kind of digital method of understanding the "real" social worlds, as well as the virtual worlds or metaverses. For more details, please see Figure 1 and Andrade 2011a, 2011b (site *Public Communication of Art*) and 2011c (site *Experimental Books*).

Such a “novel novel” was first presented at the event *Acta Media 7º – Simpósio Internacional de Artemídia e Linguagens Digitais*, that took place at São Paulo, Brazil, from August 7 to 14, 2009, and later at *CIANTEC’09 – II Congresso Internacional de Arte, Novas Tecnologias e Comunicação*, which took place from October 12 to 14, 2009, at the University of Aveiro, Portugal.

Indeed, inside GeoNeoLogic Novel, we can find not just an Einstein’s universe, but a sort of Einsteinian metaverse structured in four dimensions, i.e. the classical three-dimensional Euclidean space (represented by the axes x, y, and z in Descartes Analytic Geometry), articulated with time, which is the 4th dimension of social and virtual lives, that Einstein articulated with space in new ways.

When GeoNeoLogic Novel is activated by a user in the Internet, it unblocks, in cyberspace, 2 modes of temporality, among others: (a) the real-time social life of the characters photographed (see Image 1) and (b) cybertime. In a broad level, cybertime may be defined as the set of temporalities invested by communities of users when they cross cyberspace or, in particular, digital networks. In other words, a user or users are always acting in the course (time) of their paths (the social spaces of cyberspace). For example, the typical synchronous time of a chat is naturally (and socially) distinct from an asynchronous time inherent to the “post/comment” two-step process, used within blogs in the blogosphere.

Hence, we can understand the current Internet as hybridization between:

(a) on one hand, cyberspace, in its 3 dimensions, which are never switched off from their investment in real and social spatialities, in terms of public and private spaces (at the private domestic space of the house, at the public professional territory of the work place, at the semi-private play area of a cyber cafe, etc.).

(b) on the other hand, cybertime, which cannot be thought without the real times of its activation and reference or without the virtual and real spaces associated with it. In fact, these cannot be understood without the real-virtual temporalities underlying it (for instance the interpersonal private time of writing an e-mail, the semi-public time of writing and sending a post or a comment in a blog, the public time spent when visiting a web page, etc.).

The results of such real and virtual space-times' intersections are social configurations whose traits and effects still seem largely unpredictable. Anyhow, some emergent clues may already elucidate on how society works in some of its private/public articulations. Through a GeoNeoLogical Novel, common structures and individual practices can be actualized within their spatial and temporal contexts by common people acting as novel characters. Let us now see how this can be done.

PLOT AND INTERFACE

In terms of content and plot, this experimental novel revolves around a traumatic event: the author's death. The seminal or first author was murdered by an ordinary citizen in a normal street using a regular gun (in Image 1, see the picture in the corner below on the left, or the sixth photography within the novel plot scenes, in the center). During the novel course, through dialogue and action, characters try to figure out who will take the place of the disappeared seminal author.

This substitute could be the reader, as Roland Barthes would put it. But it seems more viable that anyone, in real or in virtual life, could replace the author. In this perspective, any social or cultural actor or agent may emerge as a potential candidate to embody a character integrated in the narrative, as we will see briefly.

As for the structure of the interface, GeoNovel is organized in the form of *deixis*, i.e. a concept borrowed from Greek philosophy that illustrate the process of articulation between time, space and the subject or subjects that move across that space-time continuum. In other words, this novel considers the public and private space-times regarding the action produced by novel's subjects, not just the classical or recent characters invented by a seminal or first author, but moreover the very authors, the readers and the social actors that are implied both in authors and readers.

1. Time: if we look at the image above, of the GeoNeoLogical Novel, we note that the date and time of photos taken to the characters (people of the real world, etc.), by the seminal author or by other social actors working as co-authors, are registered at the top left. In fact, any urban resident or citizen may send, in a periodical basis, his/her own authored photos about his/her real life. They are then integrated into the virtual

environment of the novel. He/she may as well read this ever-changing novel and make comments.



Image 1. The death of the seminal author

2. Space: just below the narrative's temporal or diachronic data, it is indicated the spatial or synchronic data referring to the recording location of these characters in the real world, through the name of their location. When a GeoNeoLogical Novel scene is enabled on a computer connected to the Internet, the map on the right takes virtually the user to the corresponding spatial location, at the global, national or local level, in the latter case by showing the exact place on a city street. This confluence of real and virtual (digitally narrated) space-times, retakes, applies and actualizes the concept of "chronotope", forged by Mikhail Bakhtin, within our contemporary urban public spaces.

3. Subjects: as mentioned above, within GeoNeoLogical Novel, characters can also be common social actors, both known, recognized or unknown people, without excluding the author himself, or even animals and objects.

For example, the author of GeoNeoLogical Novel suggests the following:

– I think we must remake no longer an author's genealogy, as Michel Foucault would say, but a kind of author's Geo-Neology. [...] In this case, "Geo"

means seeking the author all over the places and routes of social life on the planet, to discover where he appears, disappears and reappears, sometimes transformed into hybrid or cybrids forms. "Neologia" here means that if the author died, in whole or in part, we need to know which new alternative names or authorship neologisms emerge today.

A CHARACTER'S NOVEL

In other words, each common citizen can simultaneously be an author (lay writer, etc.), reader and actor. In fact, as socio-cultural agents, we "read" the public, semi-public and private urban and virtual inscriptions made by other city inhabitants, and we also 'write' endless stories and histories in our daily interactions with others. The GeoNeoLogical Novel only makes this real process in a more explicit way, a process that sometimes appears so implicit in our routines that often becomes almost invisible in our daily public and private lives.



Figure 2. Fernando Pessoa graffiti, a common social actor's heteronym

Thus, in some way, every common citizen may become a hybrid and cybrid somewhere between a social author and a literary actor.

In short, this is a novel that considers not just fictional persons, as it happens even in the case where novels depict a real story. In the GeoNeo-

oNovel, actual people are not just readers, authors or co-authors; they are as well social actors that are included in the plot as both real and virtual social actors. And this is done through the dispositives that were partially shown in the text, like the interface, which has both real and virtual components.

If this is true, human agency can be reinforced precisely when new media seem to erase people actions and become inhuman or anti-human.



Image 3. Novel's characters revolt against the author

In particular, such a process constitutes a quest for new social roles and literary characters, which are searched among the common agents involved both in their daily lives and in geo-narrative public/private lives. This demand may involve old and new types of fictional characters, sometimes hybridized among them, who may appear inside Geo-NeoLogical Novel scenes. For instance, heroes, anti-heroes, antagonists of the protagonists, common heroes, adjuvants of the common heroes, alter-heroes, adjuvants of alter-heroes, author-readers, author-social actors, readers-social actors, etc.

Fernando Pessoa himself (see Image 2, left, below) talking from a wall as he speaks through the voice of a graffiti character, says: “- [...] beyond my heteronyms as an author, I now have multiple heteronyms as a common social actor, like any other person or any character in a story, novel or romance.” Pessoa refers, in the context of the GeoNeo-Logical Novel, to the heteronyms that emerge from the various pres-

entations and representations of his person in various graffiti or in other incarnations of this author across the public or private spaces of the city. Therefore, the GeoNeoLogical Novel is not so much an Author's Novel, nor just a Reader's Novel, but essentially a Character's Novel. In this regard, an evil clown, on another graffiti (see Image 3), announces and pronounces: “– In short, the characters revolted against the author...”

In so doing, we may witness the weaving of a social and cultural network of characters not so much in search of an author, like in Pirandello's play, but characters that appear to have survived the author's death.

4.2. WEB 3 NOVEL

A second example of literary hermeneutics on society is Web 3 novel (see Figure 4). This is an Internet modality of the GeoNeoLogical Novel, which uses new dispositives of literary fruition associated with Web 3.0 which may be used as well as modes of interpretation of society and culture.

The image shows a screenshot of a website titled "Web 3 novel". The page layout includes a header with the title and a search bar. The main content is divided into several sections:

- 1. What web 3.0 novel is**: This section includes a list of "Social semantic axes" such as author, book, knowledge, literature, logic, meaning, message, novel, reader, relationship, scene, semantics, site, social, text, web, writing, and "Social ontology of a novel".
- 2. Social semantic axes: what is that?**: This section lists "Web 3.0 novel components and feelings" including GeoNeoLogic Novel, IT, "What is a social semantic site?", Web 3.0 novel, Interface, Plot, Authors and actors' heteronomy, Hybrid Characters, and GeoNeoLogism.
- 3. Modes of Reading**: This section lists "Historical reading and meta-information", "Interactive Reading", and "Social and".
- ABSTRACT**: A section titled "WHAT WEB 3.0 NOVEL IS" that states "This page introduces in its Web 3.0 novel mode."
- B. Definition of the main of Web 3.0 novel**: A section that defines the novel as a "Literary theorist and critic, Gerard Genette names PARATEXTS those texts that, somehow, introduce, prepare or complement the reading of the main text of a work, literary".
- WORD CLOUD**: A central word cloud with terms like "book", "e-book", "relation", "web", "novel", "social", "site", "context", "critique", "information", "interaction", "modality", "net", "page", "reader", "reading", "relation", "version", "web", "novel", "window", "writing".

Image 4. Web 3 novel, a second literary dispositive for the interpretation of society

We saw earlier that, from the beginning of the 3rd millennium, Web 2.0 is connecting people mainly through digital social networks, more intensely than what happened in the 1st Internet age during the last decade of 20th century. More recently, the so-called Web 3.0, also named Semantic Web, connects as well people across digital social networks, but their users may explain, more profoundly than what is possible to do at Web 2.0, the meaning of contents they are sharing, and their particular relationships. This is done mainly through social semantic sites and networks (Andrade 2011d).

Some of these dispositives used by the Web 3.0 novel, within social semantic sites, are Interactive Literature Windows, several paratexts like word clouds, social semantic indexes or meta-semantic indexes, etc. In order to see such dispositives in action, and to learn more about their definition and details, see site *Web 3 Novel* (Andrade 2011e).

CONCLUSION

Metaverses, like any other societal process, can be interpreted by Social Sciences (Sociology, Anthropology, etc.) and by Humanities (Literary Theory, etc.), or by other reflections or languages on society, e.g. Philosophy, Journalism, etc. But it is mainly through hybrid knowledge (sociological hermeneutics combined with literary analysis and common citizen knowledge, etc.) and by cybrid knowledges (classical sociology blended with virtual sociology) that we can ultimately understand the complexity of our multiple public and private daily lives, society and culture. Indeed, this mixed knowledge articulates specialized knowledge with non-specialized knowledge, or founds and merges experience and knowledge forged both within real *lebenswelten* and inside virtual *lebenswelten*.

Accordingly, the GeoNeoLogical Novel proposes one of these phenomenological, social and narrative hermeneutics that aims to experience and interpret the Web 2.0/Web 3.0 environment and its public and private social contexts in different manners and modes. That is, we are witnessing today a complex but fascinating game between emergent social and virtual space-times, produced and reproduced in the confluence and fusion not only between social spaces and virtual spaces, but also between social space-times and the four incommensurable dimensions of public/private cyberspace in dialogue with public/private cybertime.

WORKS CITED

- ANDERS, Peter. 2002. Towards an Architecture of Mind. *CAiiA-STAR Symposium: "Extreme Parameters. New Dimensions of Interactivity"* (11-12 July 2001), <http://www.uoc.edu/artnodes/espai/eng/art/anders0302/anders0302.html> (accessed 09.11.2012).
- ANDRADE, Pedro. 2011a. *GeoNeoLogic Novel #1: A Case of Transmediatic Literature/ First Web 3.0's Novel*. Lisbon: Caleidoscópio Publishing House.
- . 2011b. Section 4.1.6. In *Public Communication of Art [site]*, <https://sites.google.com/site/compubartenglish/home> (accessed 09.11.2012).
- . 2011c. Section 2.3. In *Experimental Books [site]*, <https://sites.google.com/site/livroexperimentaisenglish/> (accessed 09.11.2012).
- . 2011d. *Sociologia Semântico-Lógica da Web 2.0/3.0 na Sociedade da Investigação: significados e discursos quotidianos em blogs, wikis, mundos/museus virtuais e redes sociais semântico-lógicas*. Lisbon: Edições Caleidoscópio.
- . 2011e. *Web 3 Novel [site]*, <https://sites.google.com/site/web3novelenglish/> (accessed 09.11.2012).
- . 2007. O fotográfico virtual no Second Life: apontamentos para uma sociologia da Web 2.0. *Revista de Comunicação e Linguagens* 39: 189-204.
- . 2001. Sociabilidade e solidariedade digitais: estudo de caso de uma comunidade virtual. In *III Colóquio Internacional "Discursos e Práticas Alquímicas"*. Lisboa. Instituto de Investigação Científica Bento de Rocha Cabral. 29-30 de Junho de 2001. Organização José Augusto Morão et al. Lisbon: Hugin.
- BAKHTIN, Mikhail. 1981. *The Dialogic Imagination: Four Essays*. Austin: University of Texas Press.
- BOELLSTORFF, Tom. 2008. *Coming of Age in Second Life: an Anthropologist Explores the Virtually Human*. Princeton: Princeton University Press.
- BOUCKAERT, Bertrand. 2003. *L'Idée de l'autre: la question de l'idéalité et de l'altérité chez Husserl des Logische Untersuchungen aux Ideen I*. Dordrecht: Kluwer Academic Publishers.
- CANCLINI, Néstor García. 2002. *Culturas híbridas: estrategias para entrar y salir de la modernidad*. Buenos Aires: Editorial Paidós.
- CORNIS-POPE, Marcel. 2001. *Narrative Innovation and Cultural Rewriting in the Cold War Era and After*. New York: Palgrave Macmillan.
- HABERMAS, Jürgen, and Thomas McCARTHY. 1985. *The Theory of Communicative Action. Lifeworld and Systema: A Critique of Functionalism*, vol. 2. Boston: Beacon Press.

- HABERMAS, Jurgen. 1991. *The Structural Transformation of the Public Sphere: An Inquiry into a Category of Bourgeois Society*. Cambridge, MA: The MIT Press.
- HALL, Stuart, and Paul Du GAY, eds. 1996. *Questions of Cultural Identity*. London and Thousand Oaks, CA: Calif Sage.
- KRAUSS, Rosalind. 1992. *Le photographique: pour une théorie des écarts*. Macula.
- LUDLOW, Peter, and Mark WALLACE. 2009. *The Second Life Herald: The Virtual Tabloid that Witnessed the Dawn of the Metaverse*. Cambridge, MA: The MIT Press.
- MAHAR, Jay, and Sue MAHAR. 2009. *The Unofficial Guide to Building Your Business in the Second Life Virtual World: Marketing and Selling Your Product. Services. and Brand In-World*. New York: AMACOM.
- MARICHAL, José. 2012. *Facebook Democracy: The Architect of Disclosure and the Threat to Public Life*. Ashgate Publications.
- MATUCK, Artur. 2009. Tecnologias digitais e o futuro da escrita: uma perspectiva para a informação científica. In *Artemídia e Cultura Digital*. Edited by Artur Matuck and Jorge Antonio. São Paulo: MUSA, 290-301.
- MONTAGNE, Orange. 2007. *Metaverse Manifesto*. San Francisco: Studio SFO.
- TONEIS, Cristiano Natal, and Luís Carlos PETRY. 2009. The Ontological Aspects of Puzzles into Metaverses. In *SLACTIONS 2009 International Conference: Life, Imagination, and Work Using Metaverse Platforms*. Edited by Leonel Morgado, Nelson Zagalo and Ana Boa-Ventura. Vila Real: UTAD, 148-164.
- PETRY, Luís Carlos, and Pedro BARBOSA. 2006. AlletSator: aspectos fenomenológicos da produção de mundos e objetos tridimensionais na Ciberópera. In *Encontro Nacional da ANPAP – Arte limites e contaminações: anais do 15.º Encontro Nacional da ANPAP*. Salvador: Ed. Cleomar Rocha.
- SCHUTZ, Alfred et al. 1971. *The Structures of the Life-World*. Evanston: Northwestern University Press.
- SONVILLA-WEISS, Stefan. 2008. *(IN)VISIBLE: Learning to Act in the Metaverse*. Wien and New York: Springer.