Title: Self-Spatialities of Gaming Experience

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INTRODUCTION

'It's the cross dissolve that's captivating. The hot contagion of millennia fever fuses retro with futro, catapulting bodies with organs into technotopia where code dictates pleasure and satisfies desire…Identity explodes in multiple morphings and infiltrates the system at root.'
Bitch mutant manifesto, VNS Matrix, 1996

Traversing a catalyzing era of technological ubiquity, the nowadays expanding presence of computer games keeps forming a stimulating subject of interdisciplinary scientific discourse. A plethora of theoretical approaches attempt to redefine this kind of 'other' space, parallel to the exploration of human interaction and digital experience, as far as their new, opening-up dimensions are concerned. This study focuses on the inquiry of gaming environment through the observation of a player, namely the phenomena inherent in one's computer mediated experience – the perceptual phenomena of one's surrounding immaterial gamespace, either the mental phenomena occurring to oneself.

It is necessary to outline the context of this research which constitutes a cross-disciplinary view on spatiality. Thus, the player is regarded as a game inhabitant, in other words, a digitally projected human entity through an avatar and the phenomena of digital experience are discussed in terms of the corresponding self scenarios in gamespace.

Gamespace can be considered as a cyberspatial scenario – 'Ours is a world that is both everywhere and nowhere, but it is not where bodies live' was stated by John Perry Barlow in his 'Declaration of the Independence of Cyberspace'[1], commenting on the bodies left behind, the user bodies – the 'obsolete' bodies that, according to Stelarc, were incapable of passing to the 'other side' of the screen[2], to the absolute space of the gaming environment. But as Lewis Carroll's Unicorn replied to Alice on the 'other side' of the wonderland's looking glass: 'If you'll believe in me, I'll believe in you'[3]. In the same way, gamespace as cyberspace comes into being through an immense, individualistic, mental and fictitious construction which seeks its own kind of embodiment, triggering the notions of the digital self or body as an online inhabitant. Chris Gray, when talking about human-machine, cyborgian interaction,

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[1] John Perry Barlow, *A Declaration of the Independence of Cyberspace,* Switzerland,February 8, 1996, https://projects.eff.org/~barlow/Declaration-Final.html, (accessed March 5, 2011)
[2] Marquard Smith*, Stelarc: The Monograph (Electronic Culture: History, Theory, and Practice),* (The MIT Press, 2005), 160
[3] Lewis Carroll, *Alice's Adventures in Wonderland and Through the Looking-Glass* (Cosimo Classics, 2010) , 70

characteristically mentioned the concept of 'a new pseudo-biosystem'[4], an organism or entity that seeks ways of digital 'corporealization', though living and acting in an immaterial, purely noetic space. These issues of computer mediated embodiment are considered in the context of this research as spatiality concepts under discussion and are approached through the exploration of the mentality of the game player's experience.

MENTAL QUALITIES OF GAMESPACE

These mental qualities of gaming environments are of main interest in this study, thus a series of correspondent features are introduced in this context. Gamespace is explored through the spectrum of mental nature, following the original idea of the word 'space', in its most abstract – possibly mathematical – meaning. Margaret Wertheim's description of an 'ex nihilo', out of nothing, space creation is still close to the non-physical, abstract idea of this kind of space. The non-physicality of gamespace introduces a parallel existence to the material world. This coexistence has been described as a dualistic theatre of reality, the 'material realm by science and the immaterial as a different plane of the real', which according to Wertheim opens up an interlude void, offered as a space for connections and resonances between the two[5]. Another realm of spatiality is presented, a space that has got rid of all the physical constrains and verges on the notions of personal, psychological, intimate space, the one of literary or pictorial qualities, as well as data space, namely the informational landscapes visited by Gibson's 'console cowboys'[6]. But above all, gamespace is dealt as a mental space, the extension of an individual's consciousness forming ephemeral landscapes in an 'anthropic' (human-based according to Peter Anders) environment, hosting states of cognition and social-digital interaction. For that reason, Anders refers to this kind of space as resembling an aforementioned fictional construct – 'the modern counterpart of Alice's looking glass'[7].

This kind of abstract, immaterial, parallel space is described in the film 'Tron', followed by the Tron video game, commenting on the player's everlasting desire to enter the gameworld, with the whole of his/her existence – like the human desire to conquer cyberspace and experience the other side of the restrictive hardware. A non-physical space is introduced, which stimulates disorientation, reality and virtuality amalgamation and constitutes one of the initial representations of cyberspace – a complex though consensual hallucination.

Gamespace materiality is therefore considered on an intellectual basis. This means that the long discussed Cartesian factor 'res cogitans' versus 'res extensa'[8] describes the substantiality of this space, presenting it as a mind-produced and digitally projected piece of creation, corresponding to its previously described mental nature. One might see this kind of space 'as a kind of electronic res cogitans, a new space for the playing out of some of those immaterial aspects of humanityman that have been denied a home in the purely physicalist world picture' says Wertheim[9],

[4] Chris Hables Gray, *Cyborg citizen: Politics in the Posthuman Age* (Routledge, 2002), 48

[5] Margaret Wertheim, *The Pearly Gates of Cyberspace: A History of Space from Dante to the Intern*et (W. W. Norton and Co., 1999), 227

6 William Gibson, Neuromancer (Ace Trade, 2000)

[7] Peter Anders, 'Anthropic Cyberspace-Defining Electronic Space from First Principles', *Leonardo*, vol.34, no.5, (Ninth New York Digital Salon, 2001),1

[8] John Beckmann describes that 'Descartes divided reality into two halves: the *res extensa* – the extended realm of matter in motion – and the *res cogitans* – the realm of thoughts, feelings and emotions.' John Beckmann, *The virtual dimension: architecture, representation, and crash culture* (Princeton Architectural Press, 1998), 50

[9] Op.cit., Margaret Wertheim, 230

drawing the focus on the rather intriguing, personal dint of experience – the first person perspective. This mind stimulating qualities can be found in MUD games (Multi-User Dungeon/Dimension/Domain) where the whole world is basically made out of text. The interest lies in the verbal representation of space, people and actions which structure an imagination-stimulated virtual game world.

The aforementioned subjective, abstract, psychological and parallax characteristics constitute components of the mental composition of the perceived image of gamespace and the selves within. For that reason, they form basic concepts of the attempted theoretical approximation of digitality – the state of placing oneself in the middle of a digital culture – stimulating respective aspects of spatial and semiotic issues.

CONCEPTUAL ANALOGIES

Keeping mentality into consideration, the aforesaid aspect of the nature of gamespace, this study attempts to develop a series of analogies in order to approach the corresponding experience. These analogies are of conceptual nature, and consist of juxtapositions of experiential phenomena that either occur as 'altered states' of mental conditions – disrupted mental states – or occur to the game inhabitant during a digital experience. This forms an attempt to create stimulating metaphors and configure fruitful correspondences of human, noetic phenomena in a non-psychiatric context. Additionally, this offers a potential for a discussion about the exploration of spatial issues of immaterial nature, deriving from the state of mind of the individual, as well as the concatenation of his/her evoked experiences.

Prior to the further development of the conceptual analogies, a closer specification of the correspondence process is required. The process includes three components – psychiatric/mental phenomena according to DSM-IV-TR (Diagnostic and Statistical Manual of Mental Disorders)[10], juxtapositions with self scenarios in gaming environments, and spatiality issues applied as a theoretical filter on those two. The research presents these mental phenomena organized in two categories, the dissociative and the associative analogies.

These juxtapositions either describe the person's perception concerning his/her identity and self-awareness or refer to the perceptual encounters with the characteristics of digital space. This does not constitute a strictly outlined distinction, since the two categories often diffuse and mingle with each other - self and space are strongly interrelated and the connections between them contribute to the formation of experience. In computer games the self is often affecting dynamically the inhabited space. This can be stimulated by the player's preferences or even his/her actions during gameplay. This characteristic reminds of the 'dynamic game balancing' concept used in games in order to automatically adjust the game environment according to the player. This kind of process introduces a sense of fluidity of game structure, opening up a multiplicity of personalized possibilities to be experienced. The game 'Flow' is an example of these dynamic real-time adjustments caused by the player, and reinforces the idea of the fluctuating relationship between self and space in the literal sense as well, by representing a microorganism which evolves in an aquatic environment.

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[10] American Psychiatric Association, *Diagnostic and Statistical Manual of Mental Disorders DSM-IV-TR Fourth Edition* (American Psychiatric Publishing, Inc., 2000)

This kind of interrelation can be also regarded as a compositional feature. In the example of 'Rez', the game inhabitant affects the composites of the surrounding virtual environment and this kind of real-time synthesis has been often characterized as a metaphor for synesthetic experience. Rez's soundscape ephemeral constructions are placed coincidently in the gamespace, formulating a continuously transitional experience.

A DIAGNOSTIC APPROACH

The sole categorization referred in the context of this study, defines the content of each respective mental phenomenon, and usually derives from the symptom characteristics and how they relate to the person and his/her surrounding space. The following references introduce mental phenomena and their spatiality consequences classified according to two basic concepts – dissociation and association. However, some qualities might be occasionally met in-between the various phenomena, on different levels, or be observed from differentiated points of view.

An important, theoretical tool for the composition of the following analogies is the consideration of the characteristics of symptomatology. More specifically, observations of symptom-like phenomena are used and they are adopted as embodiment mechanisms. Symptoms serve as the means to introduce qualities of physicality, spatiality and phenomenology to the exploration of the respective digital body and self. Symptoms according to Altan Löker, are considered as 'thoughts, emotions, somatic processes, altered perception, altered states of consciousness, and personality traits' and they 'either carry messages addressed to the consciousness of the patient and/or to other persons around him/her, or try to do their job directly through their mental and behavioral components.'[11] They act as theoretical apparatuses that perform processes of 'corporealization' onto the disembodied mind and they function constructively, as far as the invention of abstract gamespace is concerned. In this way, they are indicative of produced space, 'encoding awareness and reporting' as W. Pennebaker[12] refers, and they constitute referents of various corporeal or not phenomena – in this case, of the digital or mental phenomena. They are regarded as a form of manifestation of something usually unnoticed or unforeseen taking place in the body or mind of the individual and they contribute to the person's intimate mental constructions, concerning the sense of self, body or space.

Symptoms are related to pathological conditions and diagnostic processes. According to David Locker 'diagnosis is dealt as the outcome of the explanatory process'[13] – a process made out of the symptom indicators. Psychopathological conditions are examined as correspondent to the psychological aspects of gamespace described. However, it is important to underline that the notion of pathology is placed on a differentiated base than the one prevalently established. The concept of pathology is getting rid of the morbid or erring qualities and is mutated into the notion of the 'pathos' of an element which rather refers to the phenomena taking place on the

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[11] Altan Löker, *Cognitive-Behavioral Cybernetics of Symptoms, Dreams, Lateralization: Theory, Interpretation, Therapy* (Trafford Publishing, 2006), 109

[12] James W. Pennebaker, *The psychology of physical symptoms* (Springer, 1982), 3

[13] David Locker, *Symptoms and illness: the cognitive organization of disorder* (Tavistock Publications Ltd, New York, 1981), 77

digital body or self – passivity rather than suffering. Pathos[14] means the state of feeling or what befalls one, but its etymology also means passion. 'Passion' and 'passivity' both manifest aspects of experience and they also relate to Galen's classification of pathos as one of the basic descriptions of disease, along with mishap, symptom and epigenesis.[15]

Considering Mark D. Pesce's pathogenic ontology in states of holosthesia[16] – cyberspace is regarded as a kind of holesthetic space – one can rethink his 'vivogenics'[17] neologism of mythological and communicational characteristics as a structural composite of the ecosystem of digital space and its inhabitants. However, contrary to Pesce's descriptions, this study draws a distance from a venturesome, menacing theoretical reflection on cyberspace and places it under the scope of an observational, experimental approach which appears more appropriate in the context of a spatially triggered study.

In the context of computer games, a kind of reinstatement of the diagnostic process is attempted, in the hope of leading towards new ways of apprehending digitality. H.Tristram Engelshardt, Jr. sees diagnosis as a process of 'an inseparable mixture of descriptions, explanations, predictions, and evaluations'[18]. The ventured demystified diagnosis of this research consists an aspiration of disclosing aspects of an 'other', rather than disordered (pathological or sick), mental continuum of the digitally projected humanity.

DISSOCIATIVE SPACE

The first symptomatic categorization of this research is based in the phenomenon of dissociation[19] and the multiplicity of its manifestations in human behavior and perception. Dissociation refers to the act of separating, breaking, disuniting or decomposing, or in other words, the act of removing from association (etymology: dis+association / from dis- "apart" + sociare "to join").

Gamespace inhabitation encourages the invention of a plethora of identities and creates a series of dislocated selves, which are given birth by the same person. The multiplicity of player characteristics, as well as the extensive game applications that strongly relate to personality construction and role playing, trigger alternative ways of experimenting with a fragmented sense of self, while contributing at the same time to the contemporary formation of identity in a digital environment. Massively Multiplayer Online Role-Playing Games (MMORPGs) represent a basic aspect of this identity construction in virtual worlds. Correspondingly, these games are

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[14] Coming from Gk. pathos "suffering, feeling, emotion," lit. "what befalls one," related to paskhein "to suffer," and penthos "grief, sorrow". Online Etymology Dictionary, *'Etymology of the word 'pathos''*, *http://www.etymonline.com/index.php?term=pathos,* (accessed March 18, 2011)

[15] 'Πάθος, πάθημα, σύμπτωμα και επιγέννημα'. Galen, Ian Johnston, *Galen on diseases and symptoms* (Cambridge University Press, 2006), 21

[16] 'The word holosthesia 'has its roots in the Greek *holos* (whole) and *aisthesia* (to feel or perceive), and describes any medium which produces the perception of an event through several (or all) sensory modalities in a self-consistent manner.' Mark D. Pesce, 'Final Amputation: Pathogenic Ontology in Cyberspace', *Third International Conference on Cyberspace* (University of Texas, 1993), http://hyperreal.org/~mpesce/fa.html, (accessed March 3, 2011)

[17] The term vivogenic is described by Pesce as a 'neologism, born from a need to define an opposite to pathology 'which 'has come to encompass an approach, an assemblage, which frames cyberspace in terms of mythological content and communicative bilaterality.' Op.cit., Mark D. Pesce

[18] William E. Stempsey, *Disease and Diagnosis: Value Dependent Realism* (Springer, 2000), 163

[19] 'Dissociation: 1. the act of separating or state of being separated, 2.segregation of a group of mental processes from the rest of a person's usually integrated functions of consciousness, memory, perception, and sensory or motor behavior'. The Free Dictionary by Farlex, *'definition of the word 'dissociation''*, http://medical-dictionary.thefreedictionary.com/, (accessed March 11, 2011)

characteristic for the concepts of 'hero' inventions as well as for social interaction. The parallel self or alter ego creation may refer as well to the concept of the 'Second life' platform, which cannot be considered ultimately as a game, however, there is a plethora of game qualities inherent in this environment. Second life or even social networks could be regarded as games in the sense of the identity invention or acting out, since the subject is entering a role playing condition.

When mentioning dissociation, one is initially referring to the clinical dissociative identity disorder, formerly, or widely known as multiple personality disorder – however, dissociation is considered on the basis of a mental state, the expression of which involves alterations, disruptions and sometimes even mutations and breakdowns of the individual's structures concerning memory, perception, identity and consciousness. These phenomena of disarranged identity management, result in discontinuity issues, and refer to the concept of splitting, bringing a rupture or causing deviation. They might also introduce other aspects of deflection, divergence or even departure – all placed as theoretical concepts of a spatial approach concerning gamespace.

The experienced self discards its rigid centrality and composition and is relocated in a multiplicity of differentiated ways. The new de-centered and fluid entity appears as if leaking and according to Wertheim, 'It becomes almost like a fluid, leaking out around us all the time and joining each of us into a vast ocean, or web, of relationships with other leaky selves.'[20] This act of disclosure or escape sketches the protean landscape of an open 'self space', or in other words Wertheim's 'ocean of leaking selves' into which the game inhabitant flows. Wertheim's open self space reminds of open world games, also known as sandboxes, in which the player can freely wander and interact creatively. The games 'Grand Theft Auto' or 'Mafia' are characteristic examples of this absence of uniqueness and linearity of gameplay.

Dissociation is the creation of a distance, the construction of a space between, or simply the breakage of association as Vernon Reed describes referring to the interrelation – isolation either unification – of the individual's psychic elements[21]. This contrasts the notion of the construction of the unitary self through the fragments – the multiplicity of roles acted out. Thus, this constitutes a critical point since integration of all the dissociative components plays an important role in understanding, accepting and unifying the alternate personalities through experimentation. It eventually leads to the formation of one's own congruous idea of self awareness. This phenomenon inheres in some game scenarios such as 'Heavy Rain', where the player is represented by a series of differentiated identities in gamespace, consequently by different points of view. In this game the player unravels the game plot which describes a mystery of serial murders, by role-playing four characters, while at the same time redefining the end of the story.

One of the most common symptoms of dissociative phenomena is derealization, in which the created distance exists between the person and reality. The subjective reality perception is questioned and aspects of virtuality connections are introduced. Digital mimicking of dream-like qualities affects game users in a conscious or unconscious level, reflecting personal constructions, insights and meanings during their gameplay experience. Voluntary distance creation from reality is met in computer games, especially in cases of games based on strong emotional

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[20] Op.cit., Margaret Wertheim , 249
[21] Vernon Reed, 'Adaptive Dissociation in Cyberspace', *Evolving the Bioapparatus*, http://www.vernonreed.com/dissociation.html, (accessed March 13, 2011)

qualities, such as survival horror games. This creates a reality instantiated space and complements to the need for placing of oneself to an altered, diverted, digitally enhanced perspective or state of consciousness – in this sense, gamespace offers a kind of an 'other' state of mind.

When the distance created rather relates to the person's actions, the phenomenon of depersonalization is introduced. This kind of self-detachment still keeps reality characteristics and is also induced as a dreamy state of mind, however, it focuses on the invention of an out-of-the-body point of view – consciousness is placed somewhere else, other than the space where the actions are performed. The individual turns into an observational point and the actions are performed in a distant, dissociated space. 'It is precisely within the epistemology of this total corporeal amputation that the notion of cyberspace as virtual reality takes shape, lending itself to infinite imagination and culminating into a matter for the mind and the mind alone. Cyberidentities are thus conceived as a matter of momentary performances, reality as an illusive metaphor, subjectivity as a mere possibility and body as a vital impediment to the metaphysical infinity of virtuality'[22]. Ajana Btihaj describes the recurrent, ephemeral nature of the multiple self-performances while returning to the immateriality of digital space. It appears that one can talk about a form of digitally mediated self-inflicted amputator, posing questions on corporeal and psychological embodiment. This amputational space carries qualities of an otherworldly, but deliberately created personal environment that can potentially form a reverse reflection to analog space on the mental level.

Momentarily self performances include notions of temporality and respectively perceived space. Parallel to other dissociative symptoms, there are cases of game users experiencing a distortion or loss of their subjective time. This could resemble to phenomena of dissociative amnesia - and more specifically psychogenic amnesia - since it is taking place in a mentally induced space. However, this time-perception disruption rather introduces the idea of 'body amnesia' that was described by Michael Heim[23] when talking about virtual environments, online games and generally cases of strong consciousness immersion. More specifically, when describing the idea of the AWS (Alternate World Syndrome) he also refers to derealization-like symptoms stimulating a schism 'between the virtual and the physical reality, the cyber-body and the biological body'. As a result, he introduces the concept of 'body amnesia', the interest of which lies in the perceptual interstice created amidst the two conditions.

Disruptions of temporal judgment appear to affect the sense of personal time flow, forgetting temporarily the corporeal part of the self. This kind of amnesia can be regarded as an inertial phenomenon. A whole new space full of inertial qualities is constructed and therefore is offered for inhabitation and interaction. As Benedikt said 'a whole new space…that lies between the two worlds…as another venue for consciousness'[24]. The inhabitation of a threshold is therefore a basic characteristic of digital experience, and this can be approached through two differentiated points of view - gamespace as an inertial mechanism while entering, leaving the biological body behind as humans move towards an immaterial digital environment and gamespace as a space of departure while 'logging out' towards the real world, carrying out, acting out or transferring the digitally invented senses of self, time and

[22] Ajana Btihaj, 'Disembodiment and Cyberspace: A Phenomenological Approach', *Electronic Journal of Sociology* (2005) , http://www.sociology.org/content/2005/tier1/ajana.html, (accessed March 9, 2011)
[23] Michael Heim, *The metaphysics of virtual reality* (Oxford university press, 1993), 175
[24] Michael Benedikt, *Cyberspace First Steps* (The MIT Press,1991), 124

reality. For that reason, a reality mechanism, and consequently, a time-threshold mechanism inheres in digital experience and is manifested in both directions.

Inertia is considered as a spatial metaphor in the context of this study, and raises issues of resistant, direction-shifted and perpetually fluctuating space. Game players are inhabitants of this inertial space, which acts as a reality, self or time threshold. Visiting this kind of interstitial space one can talk about the space in-between. Digital space is thought of as a liminal space and as Colin Turnbull suggests: 'the liminal state is an 'other' condition of being that is coexistent with the state of being of which we are normally conscious (the material state of being susceptible to rational awareness and sensory perception)'[25] or in other words, the physicality borders and corporeal embodiment of 'real' -analog- life. Gamespace is considered as liminal space commenting on the threshold between two states - analog and computer mediated. 'The Void' game describes the concept of liminality by placing the player in an environment where the state of existence is obscure. The interest lies in the in-between space of the scenario, a landscape that represents a kind of afterlife space. It appears between two planes of existence - between death and absolute death. For that reason, the actions performed there determine whether the protagonist will return to life or proceed to permanent death.

Another issue that addresses inertial resistance is the observation of errors, limitations and recurrent cases of time lags or freezings. Juxtaposed to a kind of paralytic experience, there are some occasions of decomposing gaming delusions, which usually include disruptions of interactivity, discontinuity of communicative structures and other kinds of fallible, unexpected phenomena such as system errors and what John Suler calls cyberspatial 'black holes'[26]. Such cases demystify the illusion of digital interactivity and the game user experiences feelings of frustration, surprise or disorientation when encountering a temporary communication breakdown which brings him back in the bipolar man-machine relationship.

In other cases, this technological deficiency can formulate an interesting characteristic of the game. At this point, one could refer to the hybrid games that engage both the real city and a computerized environment, in order to interact in both the physical and virtual context. Games like 'Can you see me now'[27], which are played simultaneously by players online and members of the Blast Theory team, could have interesting outputs through tricky or even unorthodox use of satellite capturing and handheld computer technology and their deficiencies, differences or desynchronizations from the physical world.

ASSOCIATIVE SPACE

The aforementioned dissociative related symptomatic phenomena of gaming experienced are strong referents of fragmentation and decomposition processes. Contrariwise, the following conceptual analogies relate to the phenomenon of association which means the stimulation of connection, or the invention of a 'synapse'. Association acts as a process of raising mental constructions in the in-between space while the game user is trying to compose a whole made of the

[25] Toni Sant, , 'Liminality and Altered States of Mind in Cyberspace' , *Journal for theory and practice of luminal phenomena* no.1(2001), http://limen.mi2.hr/limen1-2001/toni_sant.html, (accessed March 7, 2011)

[26] John Suler, 1996, 'The psychology of cyberspace', http://users.rider.edu/~suler/psycyber/psycyber.html, (accessed March 3, 2011)

[27] Blast Theory official Web Site, 'Can you see me now?', http://www.blasttheory.co.uk/bt/work_cysmn.html, (accessed March 18, 2011)

representational pieces at hand. The user creates parts of this intentionally left empty space and the invented output contributes to the whole synthesis of the game. User generated content in computer games offers the potential for some kind of self-construction within the game, as if extending the relative gamespace by the individual's mental creations or parameter alterations. In 'LittleBigPlanet' one can observe this composition through accessing a 'pod' and altering the character or the corresponding personal space. The extended options for customization refer to the afore mentioned spatiality openness made out of fragments and links between them.

Openness in gamespaces can be juxtaposed to issues of disorientation as a delirium-like state of mind. In games like 'Journey' this kind of open space is expressed through an immense awe for the surroundings. The player is travelling in a wide unknown desert world, and getting lost in such a gamespace appears poetic and sometimes deeply emotional.

These environments are often spaces characterized by transcendental characteristics. As far as temporality is concerned, different time zones can be experienced and the individual is unconsciously taking part in a kind of timescape construction. This introduces ideas of an ephemeral, immaterial, sort of 'soft' architecture that consists of timeframes, timescapes and time-associated selves, all in a perpetual flux. Time and space are strongly connected, thus, games that make use of temporality features compose a differentiated gamespace synthesis and perception of the self. In games like 'TimeShift' or 'Singularity' time manipulations are a fundamental element, not only as a designed game mechanic but also a basic element of the plot. Time travelling, experiencing distant time zones or past and future events are also embedded in their scenario, parallel to concepts of escaping or returning to the present, replaying and rewinding actions. This aspect of time manipulation indicates the individual's potential to exercise control over the game through temporal related actions that disrupt the restricting singularity and linearity of time in the physical world. The multiple temporal components are stitched together in order to outline an apprehensible and coherent idea of the gamespace and the plot within it.

Paralleity and the recurring phenomenon of game multiplicity does not only refer to the instantiated, fragmented timescapes and selves but also raises issues of duplication, mixing and cloning of personalities or digital events. The temporal aspects of this repetition resemble 'déjà vu'[28] phenomena and can be perceived as a kind of gamespace echoes. One could talk about the notion of echoic space, which is constituted by repetitive, replayed or reproduced elements that relate to the player's self decisions or actions. In the game 'Braid', one of the time mechanics inherent in the game, appears in the form of the shadow of the player – a time shadow, a trace from the past – which is also partially interacting with some objects of the scene. This ability of re-living or re-activating events within gamespace resembles the ideo-verbal symptoms of 'echolalia'[29] or 'echopraxia'[30] . These symptoms appear during psychotic states and give birth to a kind of echoic architecture which might appear either at the level of gameplay or at the outset of the plot. In this context, every player can be considered as the producer of a unique series of actions or 'history' and

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[28] 'Déjà vu: the sensation or illusion that one is encountering a set of circumstances or a place that was previously experienced'. The Free Dictionary by Farlex, '*definition of the word 'Déjà vu'*', http://medical-dictionary.thefreedictionary.com/, (accessed March 11, 2011)

[29] 'Echolalia: The immediate and involuntary repetition of words or phrases just spoken by others, often a symptom of autism or some types of schizophrenia'. The Free Dictionary by Farlex, '*definition of the word 'echolalia'*', http://medical-dictionary.thefreedictionary.com/, (accessed March 11, 2011)

[30] 'Echopraxia: stereotyped imitation of the movements of others'. The Free Dictionary by Farlex, '*definition of the word 'echopraxia'*', http://medical-dictionary.thefreedictionary.com/, (accessed March 11, 2011)

consequently, trigger the games' temporal multiplicity as well as his/her own tele-presence.

Returning to spatiality, this introduces the sense of being 'there', rather than here (or parallel to being here), even if this includes a multiplicity of locations or a single, definite out-of-body point of view. Levels, orders or layers are introduced and the interest lies in the action of travelling between them or affecting the parameters that influence them. Based on multiplicity of levels, the game 'Portal' makes use of inter-spatial entrances that enable the player to move instantaneously from one place to another, in other words to teleport among different planes through the use of the Apperture Science Handheld Portal Device (ASHPD). The whole cyberspace concept was introduced as a tele-porting metaphorical action – a tele-present communication, space and state of existence - 'not a substance but a relation-array' according to Javier Echevarria[31]. He refers to tele-space as a new kind of productive social pattern, which is also met in the qualities of interactivity of online computer games.[32]

Disembodiment and loss of inscription are followed by transparency issues. Approaching such cases phenomenologically, one can realize that the sense of opacity of one's own body is affected by the individual's perception and connection of himself to the world. In the opposite cases, such as depressive disorders, the self is no longer detached from the biological body during an 'altered' state of mind, but contrary to that, is reified and corporealized in a stiff, rigid, and opaque body, which reminds of the physical body which is left behind during game interaction.[33]

Alterations of the sense of the body are also suggesting a kind of invention of another, differentiated corporeal anatomy. Hysteria's phantasmal anatomy forms an example of imaginary configuration of the idea of the body. The symptoms of hysteria, and consequently cases of somatoform disorders, include the creation of new, intimate, fictional, anatomical structures, regardless of the already known image. In the same way, like Boss explains, digital bodyhood is indicative of the way human existence is constituted in the world – namely, the digital world[34]. Thus, what the individual experiences is a process of mental construction of imaginary structures that reflect his own sense of the digital body and its gamespace inhabitation.[35]

The majority of computer games represent human bodies close to the physical anatomy. Even in cases where the avatar is not human-based, the basic body structures are applied to the protagonist or the character that is acted out by the player. This means that alterations in the anatomic structures or even in the game scenario concerning the physics, moves and generally the gameplay method can introduce altered ways of the digitally presented body perception.

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[31] Jose Juan Barba, Spiros Papadopoulos, 'Telepolis, a discussion with Javier Echevarria', *Metalocus* no.1 (1999), 13

[32] From another point of view, Mark D. Pesce, viewing it in the context of pathogenic ontology, describes telepresence as a phenomenon of 'electronically mediated schizophrenia'. The notion of the schism, the deviation or removal of the mind (referring to the etymology of the word, 'schizein' which means 'split' and 'phren' which means 'mind') results in schizophrenic perception of gamespace – self awareness is paralyzed, the ego is disorganized and the person experiences a kind of spatial diffusion. This kind of space discussed holds qualities of diffusion, liquidity and freedom of context. This point of view could place telepresence in the context of a rather dissociative than associative condition. Op.cit. Mark D. Pesce

[33] Thomas Fuchs, 'Corporealized and Disembodied Minds, A Phenomenological View of the Body in Melancholia and Schizophrenia', *Philosophy, Psychiatry, & Psychology*, vol. 12, vo. 2, (The Johns Hopkins University Press, 2005)

[34] Medard Boss, *Existential foundations of medicine and psychology* (Jason Aronson Northvale & London, 1984)

[35] This process resembles the phantom organ phenomenon, the invention of imaginary self-pieces, body parts and as a result, phantom cyberspatial elements. 'Phantom limb: the sensation, after amputation of a limb, that the absent part is still present'. The Free Dictionary by Farlex, '*definition of the phrase 'phantom limb''*, http://medical-dictionary.thefreedictionary.com/, (accessed March 11, 2011)

Some cases of somatoform alterations might include as well the surrounding environment as an extension of the avatar's body, informed by the interaction modes or tools offered by the game. In this sense, the game 'Mirror's Edge' represents the real action of free-running, which requires a connection or extension of the body towards the city surfaces in order to move. However, going further from simple representation, the sense of the digital body changes completely during gameplay of worlds like 'Spore' where in its corresponding 'cell stage' the player is acting as a single cell, as an artificial life form which evolves in its own environment acquiring complexity. It is important to note that motion capture technologies[36] have taken the perception of the digital body even further, by capturing and inserting the input of the real physical moves. This means a great potential for playful interactions with the sense of the body inside a gamespace, through the use of innumerable representation scenarios or character hypotheses.

CONCLUSIONS

The aim of the study was to bring together a series of conditions of gamespace, through the juxtaposition of experiential elements of gameplay with 'altered' mental phenomena. These interrelations were established through the use of a kind of diagnostic approach, corresponding to the observation of digital experience and the self scenarios in gameworlds.

The phenomena discussed include aspects of self, body and time construction through the spectrum of dissociation and association. Dissociative space develops around the ideas of distance creation, deflection, dislocation or relocation. The self exists in the in-between space constructed and contributes to the concept of gamespace as an altered state of mind. This invention of a differentiated, out-of-the-body point of view is also experienced through transcendental, non-congruous states or environments. Finally, associative space is rather referent to the totality formation, and outlines a process of immaterial space creation that does not conform to centrality of presence, solidity and opacity issues. The juxtaposition of the aforementioned spatial features as well as their further development aspires to constitute a theoretical schema of digital gamespace and its inhabitant.

This kind of space includes compositional aspects of immaterial spatiality that is constructed through the experimentation with the idea of symptoms as mechanisms of representation. Its structures are referred as 'self-spatialities' in the context of this research, due to their self-invoked and space-stimulating nature. All spatiality issues raised are characterized by an underlying reinvention of the established sense of self, body and context within game worlds and they can potentially form a theoretical concept concerning the architecture of gameworlds or other immaterial space.

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[36] Motion capture technology is used for example in consoles like Nitendo Wii, Xbox Kinect, or PlayStation Move.

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