

Social Nature of Time and Space in Online Games: Designing Fantastic Social Worlds

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Abstract

This paper is concerned with the dimensions of time and space of multi player online games along with the perspectives of both sociology and game design. We will analyse the time and space in these game worlds with regard to the illustrations from The World of Warcraft which came on the scene in 2004 and presently has 11 million players all over the world. We are examining both what players see on user interface and what is going on behind in computer space, comparing the time and space of the game with other games of the same genre and analysing social aspects of these game worlds. Our motivation in challenging such a problematic is that online games emerge as a social phenomenon that affects millions of people's lives and constitute their own social environments for their online players.

Keywords:

MMORPGs, Virtual Worlds, Time and space distanciation, Complexity theory, World of Warcraft, Digital divide, Net generation, CMC.

Introduction

The phenomenon of online games has come into consideration for several disciplines with the extensive growth of MMORPGs (Massively Multiplayer Online Role-Playing Games) and the increase in the number of players joining these virtual worlds. Despite the digital divide, there are crucial alterations in human experience of time and space with the creation of new social worlds by ICTs at least for who has access to them. This research is based on our observations in game (mainly Warcraft) and the social environments on the net related to the game such as forums and guild sites and it is also based on our interviews with the game players.

Who are MMORPG players?

Although the player profile may change according to games, one can get pretty accurate information after decent participant observation. It is quite possible to see players in large scale of ages. The general misconception of regarding computer games as children's and teenagers' spare time activity is shaken when you see players from 10 years old to people who are in their 30s and 40s playing together. Online game players are individuals who have access to ICTs and who are from different cultures, living in different parts of the world. It should be considered here that ICTs are not available or equally available for the whole world population. For some countries there are handicaps like: *poverty, poor telecommunication infrastructures, and state*

copyright, which intensify the digital gap.¹ Digital divide is put on the agenda by international organisations like The United Nations and OECD. This problem is not related only to having access to an online game world but is also related to inequality among players due to quality of hardware/software and the internet connection.

The internet eliminates some existing boundaries but creates new ones. You have access to far away parts of the world with the internet but you can only communicate with people who have computer and access to the internet. For example, to join the Warcraft world you also have to buy the game and pay your fees. These are barriers to enter this virtual world. These are a kind of visa and passport. Another barrier is language. For example, Warcraft realms include English, German, French, Spanish and Russian. However, Turkish, Italian or Greek are not included in the list.

A Warcraft player has a variety of identity choices in the game. Whoever you are in actual space and time, you are a Night Elf, Orc, Gnome, Troll or whatever race you choose as your *toon* (Image of your game character: avatar) in the game, casting your spells to heal friendly targets or cursing, damaging, controlling your enemies....etc. and doing your job according to your class. A teenager can give orders in a guild as guild leader, class leader or as raid leader to the players who are older than him/her. Although most of the guild application forms include the age question as they prefer to play with mature players, age is of minor importance compared to playing talents, raid experience, attitudes towards the community and *gear*. (In World of Warcraft, players, like most MMORPGs, have one tangible objective: the improvement of their onscreen avatar. This is accomplished by acquirement of 'gear'; armour that improves the "stats" of a player, and thus their survivability and by improving their "level" which increases their stats and thus survivability, allows access to better gear, and generally allows the player to see more of the game content/world).

Net generation

Developments in the computer technology have been accelerated during the period following the invention of the transistor and integrated circuit in electronics that made possible the production of smaller, faster, cheaper handy computers more accessible by larger number of users than before. The 1980s are the years when computer use grew immensely widespread. During late 70s and early 80s, some computer models such as Sinclair, Commodore 64, Amstrad, and Atari...etc, have become famous as personal game computers. Children, who are in their middle ages today, have got acquainted with the computer technology and the computer game worlds. Computer games have become popular and prevalent spare time activities of youth.

Children of this time including the 90s, the group following Generation X, has been called as the Net-generation who feels more comfortable with computers than their parents do.² Tapscott considers “*Net as the antithesis of TV and the N-Generation as the antithesis of the TV generation in many ways.*”³ Game worlds were different from TV as Turkle⁴ pointed out, and they created something you do instead of creating passive watchers. Playing a game is not only about sitting in front of a screen and watching but it is also about being part of it. That was a shift in our time and space experience towards a virtual presence.

Different time and space experiences: Imaginary worlds

Time and space are not only the matters of geography or physics but are also socially constructed notions. Durkheim points out that time and space are of the essential notions that have been called by philosophers as the categories of understanding since Aristotle and we seem unable to think of objects that are not in time or space. Moreover, the notion of time is almost unthinkable without references that we create like years, months, weeks, days and hours. We have created references for space as well, there is no north or south, no right or left, no below or above in the universe but space is conceived by these categories which are created through collective experience rather than the individual one.⁵ Durkheim is not the only sociologist who dealt with time and space. Urry provides a short history of the notions of time and space in sociological thought in his work: ‘The sociology of Space and Place’ and claims that space (place) should be central to sociology⁶

Although time and space experiences and conceptions are related to one’s social environment and change according to cultures, people have similar boundaries of geography and physics in real life (for example, you can only move forward to the future if you wait enough, but you cannot go back in time). Elimination of these boundaries is possible in the “dream space” that exists in artworks (novels, stories, pictures, movies, etc.), or in the imaginations and dreams of the individual.

Playing online games is different from reading a novel, watching a movie or dreaming. When you enter this kind of game world, you cannot take your physical body with you. Nevertheless, you experience a disembodied entrance to a different world. Your feelings, thoughts and reactions regarding other people are indeed real in the sense that you are aware of the existence of your addressee on the other side of the line.

Reality Discourse: “It is more real than real world!”

The dichotomy of real and virtual, like in the other social worlds of cyberspace, leads to a conception that the imaginary and nonphysical worlds of online games are not real. This idea is supported by the disembodiment of the cyberspace. It is also very common among online game players to use the

term “real” with the abbreviation IRL (in real life) for subjects related to their offline life. Nevertheless, the players, who meet, interact and build social relationships and bonds in these games, have used expressions emphasizing the reality of their experience in game. A Warcraft player states: *“This is a fantasy world, there is nowhere like Azeroth in the universe but what we share socially in this world is real”*

One of the Warcraft players has also pointed to the reality of his experience, reporting that his heart was beating like a racing horse while fighting against an important boss in a high level raid. Either speaking of human computer interaction or of human-human interaction through computer mediated communication (CMC), impossibility for the body to enter computer space or disembodiment of cyberspace does not make the body independent from social or non social worlds created by ICTs. Although the body cannot infiltrate into this world, it is affected by what is going on there (heart beatings). The interviews with Warcraft players indicate that the anger during an argument with another player, shared pleasure of a success, the social and emotional reactions towards the attitudes of loyalty/betrayal, benevolence/selfishness, conformity/contravention...etc, and the time and space of the game are experienced in high level reality. Jakobsson describes experiential reality of a game:

“It’s just a game. In a VW sticks and stones can’t break my bones, but this does not mean that I not would take notice of an angry mob trying to stone me or beat me up with their sticks. My mind and my emotions are present and virtual actions can work as the cause to effects on my mental state that are as real as anything you can experience in the physical world.”⁷

There are experiences of losing the boundary between real world and cyberspace. An Age of Wonders player has stated that after playing the game for a long time when she went out, she has perceived for a second the soldiers on guard duty in front of General Staff Chief Office as the soldiers in the game. Another player who is playing Warcraft has told that “how much gold” came out of his mouth while he was intending to ask the price of a box of chocolates. Online game worlds like Warcraft are imaginary worlds but they are beyond the imagination.

There are social channels in the game like General, Trade, Defence, Guild channels and “whisper” for private communications. Although Blizzard added a voice chat feature to the game, communications in game are still mostly text based. Voice based communication is generally preferred for the big raids and players still prefer to use some game-chat programs and servers such as Ventrilo or TeamSpeak instead of the voice chat option of the Warcraft, since players are more likely to have lag in voice chat.

While the social space of Warcraft is created in the game world, it actually transcends this space. You have forums, fan sites, guild web sites where members can post pictures of themselves, talk about the game, as well as their ups and downs, even talk about things unrelated to the space they share. MMORPGs connect a great number of individuals living in different parts the world within a game and on the internet, thus providing a dynamic and complex communication occasion.

Complexity of the MMORPGs

Complex systems are characterized by large numbers of components, *large numbers of interactions* among components and *self-organization* that occurs at some stages, *adaptation* to their environments over time, *dynamic structure*, nonlinearity, interactions and *feedbacks* among elements which produce higher-level *emergent phenomena*.⁸ All these characteristics of complex systems can be seen both in computer space and social space of the MMORPGs. There are large numbers of players and large numbers of interactions among them. The social organizations in the game world represent self-organization and positive feedbacks. The communication medium itself, in which these games exist, represents the characteristics of dynamic complex systems.

“The Internet can be understood as a system that is far from equilibrium at several levels. The “energy” that is perpetually being dissipated through the system includes not only the constant movement of electrons through circuits; it can also be understood as the information that perpetually flows through the Net.”⁹

One can see the signs of deterministic chaos in the social organizations of the game. While great effort may not result in aggregation to set two raid groups of 80 (2x40) players, a huge PvP raid over 100 men can be started unpredictably by a weak whisper. On the other hand, the complexity in computer space, in which every player exists as bytes and bits and where every movement occurs as information, can cause technical problems. Large number of interactions among large number of components will result in heavy information traffic in computer space. Since online worlds consist of players connecting to a server, the use of zones allows the server to handle all these players (the “load”) in a much more efficient fashion. If it can not handle all these players in an efficient manner, the players could find themselves disconnecting from the world, experiencing lag in the world, or not being able to connect to the world at all. All these lead to an unpleasant play experience for the player.

Time and space distancing

Giddens exposes how time and space relation has changed in modern societies: it is impossible to define any social event without thinking of time

and space altogether. “No one could tell the time of day without reference to other socio spatial markers: “when” was almost universally connected with “where”¹⁰ However, this relation has changed with the uniformity in the social organization of the time that has become possible first with the invention of mechanical clock. For pre-modern cultures social life was mostly dominated by ‘presence.’ “The advent of modernity increasingly tears space away from place by fostering relations between “absent” others, locationally distant from any given face-to-face interaction.”¹¹ Modernity produced mechanisms for the disembedding of social systems which means “lifting out’ of social relations from local contexts and their restructuring across indefinite spans of time-space”¹² and it accelerates the ‘time and space distancing’. This analysis of time and space is quite significant for the worlds provided by ICTs that enable interactions with those who are physically absent.

The law of proximity of Gestalt theory states; spatially closer elements are perceived as a group.¹³ This perception reflects the reality for social relations based on direct interaction. Social proximity and spatial proximity are interrelated. Whoever is closer spatially is more expected to be socially close. Today one can be socially closer to a spatially distant person than his/her neighbour who is closer in time and space. However, in a game world like Warcraft social proximity still depends on proximity in the time and space of the game. Being in a same realm, same guild or even questing (the primary conveyor of the narrative and levelling mechanic) in same area of the game world generally prepares the required conditions for social relationships.

In the universe of bits, game worlds create their own perceptions of time and space both spatially and socially. Game realms have conceptions related to time and space like landforms, day and night circles, seasons, climate, aging, and travel in time, etc. The text-based multiplayer games (MUDs) have evolved into more graphical multiplayer games. A graphical game world provides embodiment to some degree. In text based environments emoticons work as a body language such as :) for smile, :(for sorry :x for kiss. In the graphical world of Warcraft you can use emotes which are visual animations of laugh, cry, hug, kiss, love... etc. as body language. This visual and virtual embodiment enables a kind of presence availability as it is about *being there*; you can come in contact with a player at one of the places (e.g. Auction House, a city square or an inn...) in the game world. You see the images (toons) that represent other players who are in the same place and the “target of the target” option lets you know who is looking at you. This virtual presence availability works just as being in a same place in the offline world. All these indicate how being in the same world is socially important for the time and space design of a multi player

online game. Creating multi player online game worlds is also creating a social world.

Creating a game world:

A common assumption one can make is that as a designer, you simply invent anything you need out of thin air. This is not the case. Before the shape of any virtual space is created, or even the aesthetics of one is considered, a designer has made dozens of choices regarding its makeup. Creating a game world is all about making choices. A game world can be anything your imagination can conjure up. As such the possibilities can be overwhelming. Who is going to control this world? What can the players do in this world? What kind of community do you wish to appeal to with this world? Is it a large or a small world? Is the world open plan (for example like World of Warcraft)? Is it “zoned/instanced” (for example like Age of Conan or Everquest)? Is it narrative driven? Is it abstract? Is it a graphical world or a text-based space?

Designer would want players to explore the space he/she created. Game environments should give the feeling of a living world. Creatures; the Mobile elements of the environment (Mob) and Non Player Characters (NPC), should be designed not only with a mob model, a simple pathing algorithm, and a respawn timer but also with spirited features. Furthermore, there is a paradox for the designer arising from different playing attitudes of “hardcore players” and “casual players”. Designers have to keep both groups occupied and encourage casual players to feel progression whilst implementing the new content after a while in order to keep hardcore players in game.

In an age of image overload, one tends to forget that spaces can be created in prose. Deciding whether a virtual space is text-based or visual has significant impact on every other decision that is made regarding the creations of the world. Players would prefer more realistic time and space for better gaming experience. Aarseth remarks the non-real world aspects of the Azeroth in World of Warcraft such as “*cartoonism, lack of depth and ease for traversal*” and lack of personalization compared to Everquest II where players can play on facial details and furnish their own apartments etc.¹⁴. These differences are based on the time and space design of the game.

Time and space design

There are two principle ways in which a designer constructs space in a virtual world. One is to create the space as seamless world. Here, the player, within the designers’ constraints, can explore the world in whatever way they see fit. The player also shares the game world with all the other players in the game world. Game worlds can be seen to be split into categories called “zones” (A zone is an area of space where certain events transpire. For example, in a forest zone, one can encounter enemy creatures or enemy

players to combat. There may be a town, a village or a city zone containing various shops for the player to purchase items from, sleep in an inn, etc.) However, all the players are in the same world (server), rather than in different “instances” of the game world. There is no overt loading of world data that the player experiences. They travel from one zone to another just like in real life people travel from one part of London to another. A player can go from one end of the world to the other, without the need for any loading. The loading of data in a seamless world, is handled behind the scenes, using a technique called “dynamic load balancing”. (The server dedicates more resources to the zone where more players are).

“Dynamic load balancing:

- 1. Has seamless terrain (you can see the horizon)*
- 2. Has boundaries that are not physical (monsters chasing you don't get stuck at zone edges)*
- 3. Balances the load better*

It's an example of where technology imposes constraints. For fixed load balancing, zones can be created with greater individuality. The physical barriers between them allow for radical change...For a seamless world, sudden changes have to make more sense or they will seem out of place.”¹⁵

A seamless world creates a greater sense of immersion in the player. They can jump on their horse and ride from one forest into mountains, across rivers, into cities, in a seamless fashion. However, this is a slight illusion. The game mechanics keep the player confined to various zones or quest areas:



Elwynn Forest Map (Edited)

Original map © Blizzard Entertainment

Since players will not have a chance of survival if an enemy is of a significantly higher level compared to the player, they are confined to the

zones around their level, to do “quests” and kill monsters until their level outgrows the challenges of their current zone.

The other technique used to create virtual worlds, is through the use of a instancing. An instance is a copy of something, in this case the game world; let us call it “Gameland”. The server holds all the data of the game world (graphics, music, objects, etc). However, all the players do not log into the same game world. The server is told that each instance of the game world can hold 100 players. Thus, the first 100 players log on and go into “Gameland”. Then 100 more players log on but not into “Gameland”, instead, the server creates a copy (or instance) of “Gameland” (lets call it “Gameland #1”) and players log into that. They may be able to communicate through chat channels, but a player in Gameland will not see a player in Gameland#1. This system has been employed by several mainstream MMORPGS, most notably, Everquest II, more recently Age of Conan. One feature that separates these two from World of Warcraft is that their visual quality is vastly more photorealistic. They also allow the player to climb objects such as trees and mountains.

There are two ways time can be represented in a virtual world. One is through the use of an artificial representation of time; the other is to use real-time (though this is slightly misleading in relation to the space of the world). Everquest II uses its own, internal clock to represent time. A day in Norrath can pass in a matter of hours, and thus a player experiences several days in the space of one real day. Age of Conan also employs this system.

Real-time in virtual worlds is exactly that: a minute in Azeroth (in World of Warcraft) is a minute in your world. When it is 9:00 pm in London, it is 10:00 pm in Azeroth (allowing for the +1hr time difference since the Blizzard server is based in France). This lends itself to a more realistic representation of time, without any significant drawbacks. A game world is an imaginative time and space design, yet paradoxically it should be realistic at the same time.

“Designers, and the code they construct, go a long way toward making a virtual world real. They fill it with objects and spaces, properties and behaviors. Sometimes they create imaginative scenes only found in science fiction or fantasy. Other times they help mirror the offline world by creating more straightforward representations of our everyday environments.”¹⁶

The time and design of a MMORPG should use the potential of imagination to tear down the boundaries of physical world and also should use the references of the real world to improve the sense of reality.

Conclusion

It is obvious that the time and space design of a multi-player online game is crucial for the social relationships in game. A space design that separates players into instances or a time design that fails to take the real time differences into account, make it difficult to share the same time and space; thus are not socially preferable. For these game players, unity of the social world of the game is as important as the quality and realistic aspects of the visual materials.

Interviews with Warcraft players revealed that they demand from game producers and designers: freedom (more choices) more private property (having your own castle house or shop) wardrobe (a space for making collection of gear sets which are not in use anymore but obtained from hard work in the past), encouragement of teamwork, (keeping raid drops over items that are crafted or sold), less lag and so on. However their emphasis on reality of this experience and the social aspects of the game is remarkable. A Warcraft player says: "*If you prefer to play alone, what is the reason for playing a multi player online game?*" This idea represents that the game world is not only considered as a gaming space but also as a social space by the players.

The reality discourse on the game world is intensively based on the friendships and social bonds built up within social environments of the game. Although it is accepted that this world is a fictive, imaginative, fantasy world, emotional and social experiences are perceived as real and factual by players. MMORPGs enable the player to participate to the story, play a role while having fun, and socialize at the same time. These games, unlike TV, provide both the chance to build up social relationships and the possibility of participation the story on the screen.

The increase in the number of MMORPG players is possibly related to the rise in the number of people who have closer relation with ICTs. Net generation is getting older. The children of late 70s and early 80s are in their middle ages today. This generation has grown up with computer games. They want to participate to the story. Internet is not only an ICT to surf on the web, to get information or to communicate, but it is also a tool for entertainment and multi player online games seem to be candidates to become one of the main elements of the future entertainment.

Notes

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