THE SOCIAL CONTEXT OF ONLINE GAMING: AN ANALYSIS ON THE SOCIAL RELATIONS AMONG "WARCRAFT" PLAYERS

Online Oyun Oynamanın Sosyal Bağlamı: "Warcraft" Oyuncuları Arasındaki Sosyal İlişkiler Üzerine Bir İnceleme

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ISSN: 1300-5642

Abstract

This paper is concerned with the social aspects of "game worlds" and attempts to analyse the social relationships in a game by researching the illustration of World of Warcraft. This work aimed to obtain an understanding of how a Multi Player Online Game -World of Warcraft- could occupy within the players' social lives. This study based on a research that seeks to discover social context of a game experience through investigating certain variables such as level of involvement in the game, the links between Ingame and real life, belonging to a game community.

Keywords: MMORPGs, Virtual Worlds, World of Warcraft, Virtual communities. Game worlds

Özet

"Oyun dünyaları"nın sosyal yönlerini ele alan bu makalede World of Warcraft örneğinin araştırılması suretiyle bir oyun içindeki sosyal ilişkiler incelenmeye çalışılmaktadır. Bu çalışma çok kullanıcılı online bir oyunun -World of Warcraft- oyuncuların yaşamlarında nasıl bir yer tuttuğuna dair fikir edinmeyi amaçlamaktadır. Araştırma, oyuna dâhil olma, gerçek vasamla oyundaki yaşam arasındaki bağlantılar ve bir topluluğa ait olma gibi belirli değişkenlerin incelenmesi yoluyla oyun deneyiminin sosyal bağlamını ortaya çıkarmaya çalışan bir alan çalışmasına dayanmaktadır.

Anahtar Kelimeler: MMORPGs. Sanal Dünvalar. World of Warcraft. Sanal Topluluklar, Oyun dünyaları

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Çok Kullanıcılı Online Oyunlar, MMOG (Multi Player Online Games) bir oyun jenerasyonunun genel adıdır.

Introduction

When the general public hears the word "virtual world", one of the most common reactions one can get (after confusion) is "is it something to do with games?" Creating the virtual world of a MMORPG² is not only about making a game. It is also about creating a community. It is about creating a space where like-minded people can come and share an experience with each other. Social games are not spaces designed for communication/interaction, they are designed for gaming. However, players inevitably interact and construct social relations through these shared experiences.

Now, these experiences can vary greatly. The most common view of those virtual worlds is the vastly popular World of Warcraft (by Blizzard). This is a game played by approximately 11 million players. And on the other end of the scale, you have virtual worlds like Second Life³. Second Life is more of a virtual world than Azeroth in World of Warcraft and this is primarily due to the way its designers have created the space in which its community resides. Game designers' create a space where people can express themselves in (within limits) any way they wish. Thus you have spaces that are very limited but no less social and others that are almost limitless but no more social.

A common assumption is that designers simply invent anything they 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 even considered, a designer has made dozens of choices regarding its makeup. In an age of image overload, one tends to forget that spaces can be created in prose which novelists do all the time. However people tend to read less and less, and prefer the visual rather than the textual. While it may not seem like a big decision, deciding whether a virtual space is text-based or visual has significant impact on every other decision that is made regarding the creation of the world. However, there are even differences in the way visual virtual worlds are constructed, within the same genre even.

Today, multi player games are not considered only the productions for a gaming experience. There are many researches which analyse them in terms of social interactions and communications. Social aspects of those MMO gaming are examined in the perspectives of different disciplines and scrutinised, interpreted in various ways. For one who is interested in understanding the social characteristics of MMO games, there are plenty of resources, mostly based on a field research in one of those games: a work that investigates Star Wars Galaxies (SWG) to discover how social interactions in a multiplayer online is affected by the game design and (Ducheneaut, Moore, 2004) Or a ethnographic study on EverQuest aims to analyse in the light of sociological

² Abbreviation of Massively Multi Player Online Role Playing Games

³ Second Life is the name of an online game and a virtual world developed by Linden Lab.

phenomenology, interplay between the everyday lives of online gamers and their activities in a game (Chee, Vieta, Smith (2006).

There are various researches about World of Warcraft too: one of which examines collaborative play in the game for understanding social organisation of the game (Nardi, Harris, 2006). Or a study that addresses sociolinguistic aspects of computer mediated communication in Warcraft (Rusaw, 2011). Due to the current abundance in the research field concerning MMORPGs there is not enough room here in this paper to mention all the valuable studies that have been done so far. In this research we scrutinize the social aspects of the World of Warcraft in the perspectives of sociology and game design. We have done participant observations and semi-structured in-depth interviews for attaining information about the social context of the game

About the Game

The game history splits by the expansions into periods. World of Warcraft first released on November 23rd, 2004 by Blizzard Entertainment. 3 expansions have been released so far, the first one Burning Crusade on January 16th, 2007, the second one Wrath of the Lich King on November 13th, 2008 and the third expansion Cataclysm on December 7th, 2010

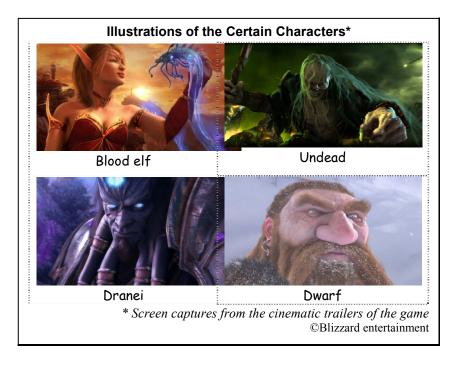
The players control their onscreen avatars. Intelligent creatures belonging to two major opposite factions and various races live in The Warcraft universe. Players chose: Horde or Alliance before creating a character. Different races speak different languages, come from different homelands and have different racial traits. Orc, Undead, Blood Elf, Troll, Tauren and Goblin are Horde races. Human, Dwarf, Dranei, Night elf, Gnome and Worgen are Alliance races. Paladin, Priest, Druid, Mage, Warlock, Warrior, Rogue, Death Knight and Hunter are the classes for both factions.

There are 2 different challenges for a player: PvP- Player versus Player and PvE-Player versus Environment. Questing is the primary conveyer of the narrative and levelling mechanic. A Quest is a task (that gives gold, experience, reputation or a reward at the end) for the players. Players have to deliver their quest after their task is done. Some times the task is only delivering objects; those quests are called FedEx quests. Raiding is grouping in more than 6 to 40 players for PvE to fight against hard mobs called a "Boss" in high level dungeons or for PvP to fight against enemy players together.

A Warcraft player endeavours to improve his/her onscreen avatar. This is accomplished by the acquirement of "gear"-better armour to improve 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. Better gear gives a player higher social status in game world. And guilds are the game

clans; association of player characters for purposes such as helping each other and creating a medium for collective activities and chats.

A "town" is composed of buildings that serve a purpose to the player. You have an Inn, where a player can log out for the night and accumulate his/her bonus experience points, and also receive the mail from the post box found outside. You have the Blacksmith, where players can fix their armour. You have the various vendors, where players can buy certain goods. And you have the main "keep", which acts as a hub for the distribution of various quests to the player. Non Player Characters (NPC) just exist in the game narrative and function for the game mechanism without any rational basis. For example: there is not a clue about where all the "NPC's" live, why all the NPC's work 24 hours a day, 7 days a week. The non-player characters do not seem to have any life to them at all, merely being vehicles for game mechanics - the NPC standing there with "Food Vendor" over his head, is not a person. This becomes even more prominent with regards to hostile NPC's (or "mobs", which comes from the term given to them by Richard Bartle, creator of the MMORPG genre, which stands for "mobile". This is because they, well, are mobile). The mobs that occupy the space in Warcraft exist for one purpose only, to be killed by a player. That is their sole existence. They wander around in circles, waiting to be killed, then respawn and repeat this cycle ad infinitum.



The World of Warcraft does have social repercussions, in terms of real space and time. The most prominent of these factors is the fact that World of Warcraft compresses real world geography to a microcosm.

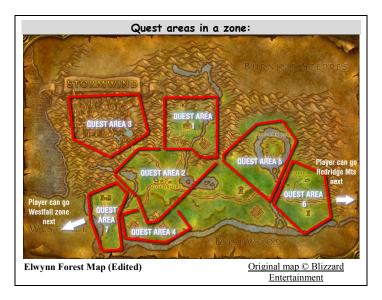
The World: Geography of the Game

The World of Warcraft is made up of planets like Azeroth and Outland (Draenor), planets exist in "The Great Dark" which is similar to outer space in the real physical universe. The Warcraft universe is quite unsteady and has changed through the expansions. For example Northend is added in the WOTLK expansion. At the beginning Azeroth was made up of 2 continents, Kalimdor and Eastern Kingdoms. Yet this has changed through the game history and today there are several continents, subcontinents and islands such as Quel'Thalas (part of Lordaeron) Teldrassil (island) Pandaria (island) South Seas (including many islands) Ominous island, Elemental Plane, Deepholm (subcontinents of elemental plane), Emerald Dream etc.

These continents and lands are split into various "zones" which contain progressively harder challenges for the player. A zone may represent a country, town, city, dungeon, whatever the designer designates. It is an area of space where certain events transpire. For example, in a Forest zone, one can encounter enemy creatures to combat, or human players to combat. There may be a town, a village which the player can visit (populated with friendly computer-controlled mobs for the player to interact with). A city zone may contain various shops for the player to purchase items from, sleep in an inn, etc.

Players who are on the quests in the same zone are more likely to make a group because although the experience points gained is reduced compared to individual work, it is easier to complete some tasks within a group. Therefore questing or farming gold or experience points in the same zone carry potentials for building new friendships.

Because online worlds consist of players connecting to a server, the use of zones allows the server to handle all these players (the "load"). If not the players will have connection problems which lead to a very unpleasant play experience for the player and possibly a financial disaster for the company producing the game. It is incredibly important for the designer of the world to take this into consideration not just aesthetic issues or the technical ones, but also the points related to sociability and collectivity, at all times.



Community⁴

The space of World of Warcraft is created within a digital game realm, actually goes beyond the limits of the game world. Thus there are web based environments such as forums and fan sites, where the community can discuss events related to the game. For example, guild web sites, where members can post pictures of themselves, talk about the game, their accomplishments, as well as their ups and downs, are the communities created within the game culture. Blizzard also has an official forum for their world, where players can make suggestions or point out things that don't work well in the world, and Blizzard can respond.

This is a very interesting point. In a way, the players are contributing to the creation of the world, by working with the makers. Thus a digital construct becomes real. It crosses the border of being a virtual world and in a sense becomes a real world [though this is a philosophical debate beyond the scope of this paper].

Online social games can allow us to cross the borders between virtual and real. Rheingold, whom the term virtual community is generally ascribed to, can help us to understand the reality in the virtual. In his famous book "Virtual Community Rheingold states:

⁴ Those can not be considered only as virtual communities. They cross the borders between virtual and real. This will be explained further while discussing the research findings related to the variables like playing with in real life (IRL) friends or meeting online game friends in real life etc.

"People in virtual communities use words on screens to exchange pleasantries and argue, engage in intellectual discourse, conduct commerce, exchange knowledge, share emotional support, make plans, brainstorm, gossip, feud, fall in love, find friends and lose them, play games, flirt, create a little high art and a lot if idle talk. People in virtual communities do just about everything people do in real life, but we leave our bodies behind. You can't kiss anybody and nobody can punch you in the nose, but a lot can happen within those boundaries. To the millions who have been drawn into it, the richness and vitality of computer-linked cultures is attractive, even addictive."

Rheingold,1993⁵

What makes a virtual community different from a real one is about the presence of the community members in a nonphysical space.

Virtual Presence

Presence is a major concept for/within any given interactional context. Once we think of the concept of presence considering virtual communications, we come to the point where the fundamental question related to cyberspace stands: Is the presence still indispensable for social interactions?

For sure presence is still an important element for a social interaction. However now we talk about a new type of presence, which can be termed as "virtual presence". There are various views with regard to the definition of the concept. Although they differ from each other in many terms, all seem to agree that presence is in a sense something about "being there". Although it could be illusive in some cases presence could be defined with regard to the perception:

⁵ This is cited from the electronic version in which page numbers are not available.

"Presence arises when there is successful substitution of real sensory data by virtually generated sensory data. The substitution is "successful" to the extent that the participant- in a virtual or mixed reality forms- percepts from the sense data and responds to and acts upon these as if they were real. This response is at many levels, ranging from unconscious physiological processes such as brain activation states, heart activity, breathing, skin response, through unconscious automatic behaviours and reflexes, through deliberate volitional behaviour, through to the highest level cognitive behaviour - including a 'feeling of being there'."

(Slater et al 2009: 194,-195)

Virtual presence has its own interactional context although it occurs in not a simply physical, but a disembodied environment. During the interviews some of the players reported certain psychosomatic symptoms such as increase in the heart beatings or increase or decrease in the body temperature. For instance, they could feel their hands were cold or their body temperature was up dependent on the excitement or anger they had during the play experience. These experiences illustrate how a player who participates in a disembodied virtual space could be bodily affected and could percept the "being there".

The view defining presence in respect of perceptions do not exclude the concept of "being there" though it refers the "sense of being there" rather than physical presence. Slater and et al employ the term 'reported presence' referring to subjective reporting of individuals about what they felt during the experience. Their approach essentially involves interaction, the ability to interact with the environment and the potential for a response as if the virtual sensory data were real (*Slater et al 2009:195*).

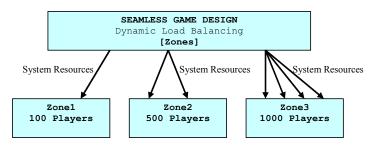
Most of the game worlds also have visual sensory data which creates more immersion in the players compared to the completely text based computer mediated communication spaces. Taylor states:

"Presence is one of the most elusive and evocative aspects of virtual systems – and yet it forms the very foundation on which immersion is built. It goes to the heart of what feels "real" and creates the quality of experience that signals to us "I am here". Users do not simply roam through the space as "mind", but find themselves grounded in the practice of the body, and thus in the world."

(Taylor, 2002:42)

According to Taylor unlike the text based environments, graphical worlds at least initially allow seeing images as an indication of presence of the players. In fact whether a virtual environment is created as a text based or graphical world is not the only determinant that affects construction of the presence but there are also various factors determining how the virtual presence is grounded.

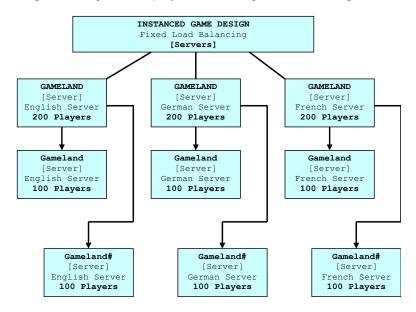
Virtual presence is affected greatly by the game design. The presence availability will change according to creation of the game space. It will be different in a game which has a seamless space design or in a game which has an instanced space design. In a *seamless world* (Bartle, 2001:101), there is no overt loading data that the player experiences. They travel from one zone to another just like in real life. It is seamless. All the players are in the same world (server), Seamless space design uses "dynamic load balancing"⁶.



Instanced worlds are created by the use of *instancing*, using a system known as Fixed Load Balancing (Bartle, 2001) An instance is a copy of

If one zone has 1000 players in it, and one has 100 players in it, the server dedicates more resources to the one that has 1000 players in it. A seamless world creates a greater sense of immersion as there is no artificial barrier to disconnect players from the virtual world like a loading screen. However there are limitations to this, otherwise all virtual worlds would use this system. One limitation is that the aesthetics cannot be to straining on the systems resources. This is why you find games like World of Warcraft adopting a stylised, cartoon-like aesthetic. Blizzards graphics engine is optimised to use low-polygon count models, giant texture tiles, and simple lightning, to render their game world.

something, in this case the game world, we can call it "Gameland". In an instanced game design all the players do not log into the same game world⁷.



Players in different Gamelands can communicate through chat channels, but they will not be able to see each others.

These different game designs are not only factors influential on the presence. For example a feature known as "target of the target" has significant effects in context of presence. "Target of the target" feature allows players to know who is looking at him/her. Players also use emotes which are visual animations of laugh, cry, kiss, hug etc. just like body language to express their feelings. Emotes and the target of the target feature enables a kind of presence because they refer to "being there". You can come across a player near the Auction House, in a city square or in an inn. You see other players who are in the same place running, standing, sitting around you. This virtual presence works just as being in the same place in real life (Ege, Koullapis, 2009: 114)

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⁷ The server is told that each instance of the game world can hold for example 100 players. Thus, the first 100 players log into "Gameland". For the next 100 players server creates a copy or instance of "Gameland" we can call it as "Gameland #1" So we will have the first 100 players playing in "Gameland", and the second 100 players playing in "Gameland#1".

Target of the target* Splycer Shurdillynion Shur

In Dalaran City I am looking at Splycer and he is looking at Tirelle

*A photo (Screen Shot) taken during the participant observation

©Blizzard Entertainment

The connection between game design and the social context within it will be clarified further when we look into how some changes that have been done in the game mechanics affected the social relations in the game.

Before patch 3.3.0 players used to announce that they are willing to join a group for a group quest or a dungeon. They used to do that by typing LFG⁸ in the general channel and then specifying what type of collective activity they wish to be part of. Blizzard has introduced the Dungeon Finder feature with the patch and it has changed the nature and spirit of collaborative relations. Players do not have to find, anymore, a full group of players within the same realm. This has 2 inevitable results: first guilds and social relations in a same server are weakened, second the relations among the players from different servers strengthened.

After patch 3.3.5, Warcraft players who use the Real ID feature have access to their friends across the realms and across the factions. They can

Sosyoloji Dergisi Sayı: 25 Yıl: 2011

⁸ Abbreviation of Looking for Group

communicate to the players who are in their Real ID friend list even when they are playing a character in a different realm or in the opposite faction. This has important results in terms of social relationships: it enables players to be able to see old server mates so provides an environment for continuous relations after leaving a realm if they still wish to keep old friendships.

Field Research

Having experiences in game worlds and being part of the computer game culture motivated us to do this research to contribute to the game studies from the perspectives of our own disciplines. We have conducted an ethnographical research to investigate various aspects of World of Warcraft.

This article includes a study of social context in World of Warcraft: the study which is only a part of this broader research that is based upon our 2 years participant observation and in depth interviews in between 2008-2010. The technique employed for the selection of the interviewees was "convenience sampling" Therefore the research sample of the in depth interviews consist of the players who accepted to participate to the research during our participant observation.

Interviews with Warcraft players

Due to the nature of the Internet, it is very possible for players in the UK to quest with players in France, South Africa, Israel and Australia (assuming they have the computer, the game and an internet connection, among other things). Geographically there are no limits to where the population of Warcraft is based. However, the game can also be viewed as an "exclusive" world, as some kind of "club". Because there is a monthly subscription rate (currently £8.99 in the UK), this can be seen as a sort of "membership fee", and as such, certain members of society may not be able to enter the World of Warcraft. This "fee" becomes a lot higher when you consider you need the equipment to run the game, the game itself, and be able to pay for your monthly Internet subscription.

Money is not the only commodity that needs to be invested, which influences the social makeup of the populace of Warcraft. A small survey is conducted to collect information about sociality in the game. 92 interviews have been done with the players from different EU servers.

Demographics

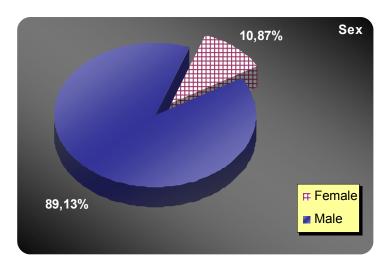
One of the differences about Warcraft that separates it from most other games is the demographics of the players. In Warcraft society you have children as young as 10 years old to people who are in their 40s and 50s playing together in this world. This assumption is supported by our survey data. The youngest participant is 14 and the oldest one is 59 years old (see Table 1).

It should be expressed that because our sample is not statistically representative, it might not display true likeness with the research universe. For example although this is a 13 plus game, it is still possible to see children under the age of 13 playing the game illegally, by hiding their age.

Age**	
Mean:	22,87
Std. Deviation	8,23
Oldest	59
Youngest	14
11 participants refus	ed to answer the age question.
	has been taken as a continuous sverted to a categorical variable.

For most MMORPGs gaming is generally assumed to be a masculine activity. There is a broad opinion that girls generally do not fancy the games with warlike challenges. Nevertheless 11 percent of the participants were female in our survey (see Graph 1). Besides, girls tend to conceal their sex and gender-switching is prevalent among female players as it is among the female users in most other virtual spaces. This attitude could be derived from the idea that females are more likely to be victims of the online abuses.

research purposes.



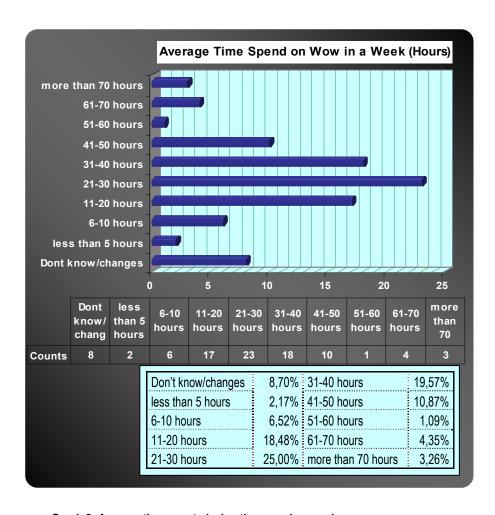
Graph 1: Demographics of the participants: Sex

Level of involvement in the game

The time spent for a game can show how much a player involves in the game. Participants are asked to estimate the average time they spend for WOW in a week. The average time spend for the game in a day is calculated from their total seven days average estimation. About 74 percent of those players spend between 10-50 hours for the game in a week (see Graph 2). Results have shown that more than half of the participants (55%) are spending 20-50 hours of average time in a week which indicates most are spending between 3-7 hours in a day for Warcraft (see Table 2).

There are many differences in the gaming behavior of the players between those that are called casual players and those that are called hardcore players. Hardcore players spend more time on and play the game more regularly in a businesslike manner.

The participants mostly have represented the characteristics of hardcore players. This finding indicates more than the frequency of playing a game because a multi player online game is not only about computers and games it also has sociological context. These players are spending a good deal of time with game friends in the significant part of a day. This also indicates that players put the virtual companionship over real life company. The data here only displays the time spent in the game. However we have to noticed that multi player online gaming is not just about the time spent within the game since players also spend good deal of time on forums and guild websites searching for guides and tips.



Graph 2: Average time spent playing the game in a week

Table 2: Average hours spent in a day

less than 5 hours	less	0,71	
6-10 hours	between	0,86 -	1,43
11-20 hours		1,57 -	2,86
21-30 hours		3,00 -	4,29
31-40 hours		4,43 -	5,71
41-50 hours		5,86 -	7,14
51-60 hours		7,29 -	8,57
61-70 hours		8,71 -	10,00
more than 70 hours	more	10,00	

Social Relationships and the links between Ingame and real life

Majority of the players participated in our research have Warcraft friends online. 72.8% of the participants have online game friends who they feel close to, 90.2% of the participants playing with real life friends, and half of the participants have met online game friends in real life.

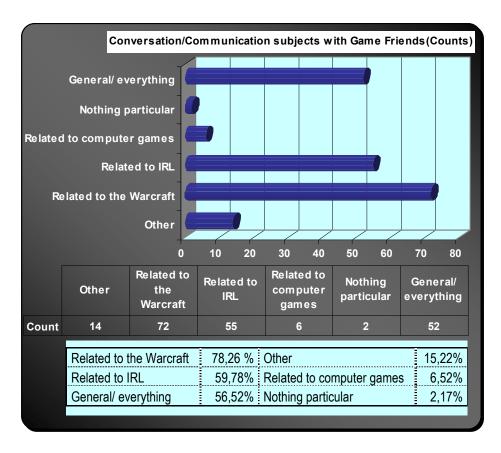
Table 3: Game friends

	Count	Percent
Warcraft Friends online:	90	97,8
Close Warcraft friends online:	67	72,8
Playing with Real life friends:	83	90,2
Meeting online game friends IRL:	46	50,0

There are social channels in the game like General, Trade, Defense, 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 (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 game using voice chat). Communication among the players is not present only in-game but there is also ongoing communication among the players on web-based platforms like game related forums or guild web sites etc.

When we look at what subjects take place in these communications, we explore that they are not merely related to the game. About 60 percent of the

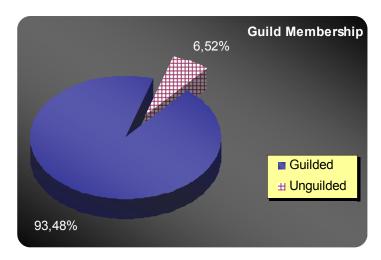
participants are sharing real life issues, and 57 percent of them talking about general subjects and everything with other players during this gaming time.



Graph 3: Conversation/Communication Subjects with Game Friends

Belonging to a game community

Guilds are in-game communities which do not only enable teamwork for gaming purposes but also provide social environment for friendships. Most of the players prefer to be in a guild not only for obtaining help from guild mates on hard game tasks, for raiding/getting easy loot and being protected against attacks from the opposite faction in PvP servers etc. but also for socializing with other players. It was clearly seen in the results that the participants generally incline to be in a guild, so that only 6,52% of the participants were without a guild.



Graph 3: Guild Membership

In the virtual worlds of MMORPGs, virtual communities carry potentials of socializing with the other players who are sharing the same interest and game culture. It appears as a kind of tribalism, the arising of groups and subgroups in a social structure. It could be seen in the guild structures of World of Warcraft. The guilds promise assistance with quests and protection from the rival faction. By doing so, they also enable the members to build social interactions. As a kind of tribalism the guilds generally involve power struggles and a "we" versus "they" mentality." (Brignall and Valey, 2007).

Social interactions might cause attachments which became so strong that players can define these relations warmer compared to their real life bonds as a player states: "After playing Warcraft for 3 years I have friends here I feel closer than my real life friends!" There was a broad theme in the discourse adopted by the participants that the gamers do socialize whilst they are playing a MMO game. There was also an obvious emphasis on the reality of and constancy in those experiences. A participant expressed how they are attached to the game: "I have been playing computer games since I was 6 years old:) And I am going to be playing when I am 60!". In parallel with this expression we had another participant who is 59 years old and also a Warcraft player. One of the interviewees remarked to the reality of the game by referring to its social context. "This is just a game. I know my avatar is just a virtual character. But we exist...I am real and my friends are... we work like hell for fighting against Allies⁹ and the dreadful bosses¹⁰"

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⁹ Abbreviation of Alliance which is one of the opposite factions

Conclusion

Computer games have their own culture and for the people who socialized within this culture, playing a computer game is a kind of essential need to be satisfied. In addition, the life in the game world is also experienced as real as the life in the offline world. It is easy for those who have never played a multi player game to understate the social context of the world. However just a small research and a short participant observation can help to explore social sides of the experiences in the multiplayer online gaming

Interviews with Warcraft players revealed that they request several revisions related to the gaming experience from the game producers and designers. It was remarkable that their demands for game revisions yet have social context in terms of cooperation and solidarity such as keeping raid drops over the items that are crafted or available to be purchased. We researched certain aspects of game play such as how much and how the time is spent in game, their motivations, friendships, conversation subjects and the connections between their real lives and what they live in game.

When we examine how the relations in the game connected to the players' real lives, we have found that players could carry their in game attachments or subjects into the real life or the real life subjects or bonds into the game world. Most of the participants have friends whom they met in the game and game friends whom they have acquainted with before in real life. Responses for the question about the conversation subjects with game friends also indicate that they do not only talk about game related issues but also on the subjects related to real life. They convey their real lives into the game world, but in return they transmit the game experiences into their real lives. Warcraft players often arrange guild meetings, national or international conferences, parties to bring the WOW players or game friends together in real life. The findings we got from the research simply reflected that the gaming experience in social games are almost always social experiences.

¹⁰ Boss is a computer controlled creature which is hard to defeat and drops items that have high value

References

- BRIGNALL, Thomas W., Van Valey, Thomas L., 2007, "An Online Community as a New Tribalism: the World of Warcraft", Proceedings of the 40th Annual Hawaii International Conference on System Sciences (HICSS'07), IEEE, IEEE Computer Society Press
- CHEE, F., Vieta, M., and Smith, R., 2006, "Online Gaming and the Interactional Self: Identity Interplay in Situated Practice", In J. P. Williams, S. Q. Hendricks & W. K. Winkler (Eds.), *Gaming as Culture: Essays on Reality, Identity, and Experience in Fantasy Games*, Jefferson, NC: McFarland Publishing, pp.154-174.
- DUCHENEAUT, N., Moore R.J., 2004 "The Social Side of Gaming: A Study of Interaction Patterns in a Massively Multiplayer Online Game", *CSCW'04*, November 6–10, Chicago, IL, USA.
- EGE, G., KOULLAPIS, N., 2009, "Social Nature of Time and Space in Online Games: Designing Fantastic Social Worlds", *The Real and the Virtual: Critical Issues in Cybercultures*, Eds: D Riha, A.Maj, Oxford-United Kingdom: Interdisciplinary Press
- NARDI, B., HARRIS J., 2004, "Strangers and Friends: Collaborative Play in World of Warcraft", *CSCW'04*, November 6–10, Chicago, IL, USA
- RHEINGOLD, Howard, 1993, *The Virtual Community: Homesteading on the Electronic Frontier*, Menlo Park, CA: Addison-Wesley
- RICHARD, Bartle, 2001, Designing Virtual Worlds, New Riders Publication
- RUSAW, E., 2011, "Language and Social Interaction in the Virtual Space of World of Warcraft", *Studies in the Linguistic Sciences: Illinois Working Papers*, p: 66-88
- SLATER, Mel, et. al V, 2009, "How We Experience Immersive Virtual Environments: The Concept of Presence and Its Measurement", *Psychology Yearbook (Anuario de Psicología)*, Faculty of Psychology, University of Barcelona vol. 40, no: 2, 193-210, Barcelona.
- TAYLOR, T.L., "Living Digitally: Embodiment in Virtual Worlds in The Social Life of Avatars: Presence and Interaction in Shared Virtual" EnvR. Schroeder (Ed.) Ironments. London: Springer-Verlag, pp: 40-62 2002