Virtual reality and online role-playing games among the students of Subotica Tech

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Abstract — The paper presents a research on how students at Subotica Tech use shared virtual environments (SVE). It gives some information about students' interaction, collaboration in online environments known as Massively Multi-User Online Role-Playing Games. The article gives a description and evaluation of the research results.

I. INTRODUCTION
The paper is a research paper on social interaction in Shared Virtual Environments (SVE). It presents information about interaction, collaboration in online environments known as Massively Multi-User Online Role-Playing Games. The students referred to in the title are students of informatics at Subotica Tech – College of Applied Science. The research was conducted in the academic year 2012/2013.

A. What is MMORPG?
The Massively Multiplayer Online Role-Playing Game can be defined as a synthetic universe with content and artificial intelligence. It evolved from the so-called MUD (Multiuser Dungeon) which is a text-based multiplayer real-time virtual world. The first MUD - an adventure game in a persistent world that allowed multiple users to log on at the same time - was created in 1979 by Roy Trubshaw and Richard Bartle [1].

The main characteristics of MMORPG are the following [2]:

- Common space. The synthetic universe, world where the action takes place. It is related to the game’s story. For example, it can be a fantasy world with elves, dragons or a real world with humans or world placed in to the future with new races new technologies, etc.
- GUI. The game’s world is presented with 3D graphics. The player controls an avatar, which is their graphical representation in the game. Controlling the avatar and interacting with the environment is done with the help of the mouse and keyboard.
- Directness. Social interaction within game and between players can be described as direct or immediate. In many games there are quests which require a group of players. It is very often that the group will be build up with people who have previously never seen or talked to each other.
- Interactivity. Depending on the type of the game, the player can do many things: traveling, mining, researching, fighting with mobs (PvE – player vs. environment) or with real players (PvP-player vs. players).

- Permanency. The synthetic world has rules, structure etc. which are not changing, so the player can plan ahead how to best develop his/her avatar or how to progress in the game.
- Socialization and communication. The game affects the players through communication and interaction, for example, when they help alliance players or fight with the players from the opponent fraction. Communication between users is available through typed chat and with animated gestures.

II. MOTIVATION
The Internet has changed the way how people use computers. The “machine” is not here only for some calculation task, but many have started to used it for exploring different aspect of themselves. As Turkle formulated in her book [3] “computers are causing us to reevaluate our identities in the age of the Internet. We are using life on the screen to engage in new ways of thinking about evolution, relationships, politics, sex, and the self.”

Using the global computer network, talking, exchanging ideas and feelings with millions of other people worldwide grants the user opportunity that we can improve ourselves, we can try to be someone else, someone what we cannot be in real life (RL). As Turkle articulated, shared virtual environments reveal the fluid and decentralized nature of identities. But in a whole set of opportunities there is a rule which is followed by most users: “You can’t escape yourself. You are who you pretend to be”.

The data from other projects, for example [4; 5] surveys show that the majority of users behave and interact with others in virtual environments almost the same way as how they behave and interact with others in the material world.

Next figure which presents data from Daedalus project [6] confirms that (Fig. 1).
The statement that “playing video game is a waste of time” is slowly becoming false, because it can be considered from many different aspects. From the player’s point of view generally it could mean an ultimate hobby, an opportunity to “unplug the brain” from the problems of real life but also an opportunity to discover some hidden characteristics or abilities which could help to improve their own personality.

Another point of view is based on the previous conclusion that the player’s real identity and the identities used in the game are close to each other. It also becomes interesting for those researchers who previously saw MMORPG as “only a game”. The main question “why do people play MMO’s?” leads to countless other questions.

Analyzing how players play the game, how often or how many hours per day is another vital aspect for those who study the field of game addiction. Knowing where the game stops to be game and starts becoming obsession is crucial in preventing someone ruining their life. Building the players’ profiles based on their gaming style could help discover anomalies in a given player’s behavior which can also manifest themselves in the real world. For example, behavioral sciences could establish a connection between video games-related behavior and real-life aggression.

A further captivating point of examination is whether there are some other forms of social interactions or identities which evolved by “living” in the shared virtual environment.

But it could also be an interesting question to investigate what will happen when someone who built their avatar many hours per day for an number of years is just left without Internet? What happens when their favorite game and their idealized second “I” suddenly goes away? What happens when, after many year’s of playing, the player realizes that their life was not advancing precisely because of their excessive playing habits? What happens when the gamer, again after many years of playing and with bitter taste in their mouth, realizes that it would have been better to spend their time going out, talking to people, getting homework done, communicating with the family? Will this cause a real-life break down in the gamer or possibly, according to the motto “what does not kill you just makes you stronger,” actually leads to a strengthening of character?

The economic aspect of the game is also highly important. In this case the term “economy” does not (only) refer to the profit of the game developers, but actually to the so-called “farmers” who sell virtual items for real money to those who do not want to spend time searching it in game, but the fact that many of the MMORPGs have a well working economy. Virtual items and currency have to be gained through play and these have definite value for players. Analyzing the data logged by the server we could find dependencies or define hierarchy regarding the importance of products and participants. These “virtual” economies can have an impact on the economies of the real world [7].

Buying/selling habits in the virtual world can be connected with the needs from the real world. Knowing those needs the manufacturers or the service providers can make personalized advertisements.

III. RESEARCH AND RESULTS

The aim of this research was to assess how students at Subotica Tech “live within the shared virtual environment”. It is pilot project which has a long term goal to answer some of the previous asked questions.

For the purpose of collecting data about students’ “second life” in the virtual reality, an electronic questionnaire was created and uploaded onto the web. First and second year students were asked to visit the web site https://gamer.vts.su.ac.rs, and answer the questions. The survey consists of 24 questions, which gather information on the following topics:

1. Personal-biographical data of the participating students. For example: gender, how old are they, what environment they live in, etc.,
2. how the virtual world’s avatar affects the real life user and
3. how a player plays and behaves in the game.

The survey was conducted in May 2013 – in the spring semester of the academic year 2012/2013. The site was open for 2 weeks and 126 participants filled in the survey anonymously. There were different options for giving answers. In one type of question the students could choose only one answer, but there were questions where they could choose one or more appropriate answers. The survey also contained questions where students could answer in textual form. There are cases when the student did not answer all questions from survey.

From the first group of results we can highlight that out of the 126 students 102 are male (80%) and 25 are female (20%). This piece of information mirrors the actual gender rate at the College. This data (about 5:1) matches with the gender ratio described in similar researches as can be seen in [4].

Of the 126 students 65 (51%) answered that they were playing games with virtual reality and 58 (46%) answered “No” to that question (4 students didn’t give an answer). The age distribution of the participants is also very close to the age distribution on the level of the College: 63% is between 20 and 22 years old.

By analyzing the other answers in this group of questions it can be stated that there is no dependency between those who are playing the game with VE and their gender, age or place of living.

The next three diagrams show answers to certain questions from the third group (questions 8, 9 and 23). In all diagrams the asked question is displayed as the chart’s
The previous three diagrams (Figure 2, 3 and 4) present the fact that the majority of students are addicted players. They have been playing every day for years, and are not willing to stop this.

The following section will look at some of the answers which could explain the “addiction to live” in virtual reality. The answers analyzed belong to the second group (questions 10, 11, 12, 14, 15).
The results can be formulated as follows: half of the surveyed students are playing/living in some virtual environment. A worrying sign can be the fact that around 50% of the participating students have stated that they play on a daily basis.

There are different motivations for living in the VE and playing some MMO’s. Many players can list positive effects that they experience from playing the game. Some of the students highlighted as a positive aspect of playing the possibility of building new friendship, learning foreign languages, improving communication techniques etc.

For the students the only negative aspect of the game is represented by the category “a waste of time”. But their answers show that the time that they do not spend with MMORPG is spent with other activities, such as watching TV, which, it can be argued, it also seen by many as a waste of time. What the authors were hoping for was a clear indication that if the students were not spending their time in VE, they would instead be out doing sports, reading or developing their educational skills. This, however, was not the case.

It is difficult to say where the border between addition and healthy play is. It is also worrying sign that the majority player do not want or plan to quit the game. For the most of the students the most important goal in the game is developing avatar.

There is much research yet to be done, so this project will be continued in the future. This paper analyzed only a limited number of questions from the survey. Current data indicate that the authors have found highly corresponding information compared to other similar studies. This shows that people have the same need for shared virtual environment.

Yee states that the cause of this behavior this need for virtual world is personality. He argues for example, that the outstanding efforts to have power in the game is the results of suffering in the real life from low self-esteem, or when the player craves for a greater role and their need to control the other players is a result of the fact that they cannot control their real life.

As a concluding remark the authors offer a quote from Turkle’s [3] work entitled “Life on the Screen: Identity in the Age of the Internet” which summarizes the players’ attitude on a whole:

“They enjoy the manipulated facade, without questioning where it comes from, who created it, or for what purpose. This is the attitude the manipulators of deceptive simulations (advertisers, politicians, et al) want everyone to have: don’t ask if all those wonderful images are painted on the gates of Hell; just enjoy the pretty pictures. Let everyone eat, drink and exchange sexually-charged messages on the Internet, because we will never understand what it all means, anyway.”

REFERENCES