
The Role Of Massively Multiplayer Online Role-Playing Games In Extramural Second Language Learning: A Literature Review

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Abstract

In recent years, digital game-based language learning has gained a considerable amount of recognition from researchers and educators alike. Emerging as one of the most popular digital game genres, massively multiplayer online role-playing games (MMORPGs) have been at the forefront of online gaming communities and their popularity has expanded to the pedagogical field of second language learning. While the relationship between online gaming and language acquisition is amply documented in various studies, these have mainly been in controlled and formal contexts (gaming sessions observed by a teacher/researcher in a classroom setting). Therefore, this literature review particularly focuses on the lesser-studied aspect of digital gaming; namely in extramural settings of digital engagement. Journal articles published within the last six years have been perused and five have been chosen as part of this overview, which does not aim at discussing the implementation of digital games into curricula but rather at drawing attention to common threads within the articles and to certain niches for improvement. The review shows that the sociocultural and collaborative nature of the gaming experience is an important factor in extramural L2 learning and that it should be studied exclusively.

Keywords: *Digital game-based language learning, MMORPG, digital games, language learning*

1. INTRODUCTION

In a predominantly digital age, technological advancements have inevitably influenced almost all facades of life and the way we perceive it. The shift towards a globally online world has drawn the attention of educators, who have, over the years, deemed it necessary to be in tune with the Zeitgeist. The field of second language acquisition is especially witnessing an increasing interest in the potential of online games, namely network-based role-playing games as language learning environments (Achterbosch, Pierce and Simmons, 2008; Cornillie, Thorne and Desmet, 2012; Peterson, 2012; Strachan, Kongmee and Pickard, 2016; Sylvén and Sundqvist, 2012;). Although there have been a limited number of studies so far, massively multiplayer online role-playing games (MMORPGs hereafter) show promise in offering opportunities for language learners.

The main aim of this literature review is, first and foremost, to inquire what role(s) MMORPGs can play in supporting second language learning in extramural contexts by identifying and examining some of the recent studies conducted on the relationship between engaging in MMORPGs and second language development as well as discussing similar and differing themes found in key sources. To this end, this literature review firstly presents brief explanations of nomenclature related to digital games and progresses to introduce the major sources that will be used in this article. The contents of these sources will be summarised in the next part with a particular focus on determining and discussing the common points. The review will then move on to discuss whether there are certain competing views or niches for improvement among the chosen sources. Finally, the research question will be revisited and attempted to be answered.

2. TERMINOLOGY AND HISTORICAL BACKGROUND

Before explaining what MMORPGs are and what features they display, it would be beneficial to look at language learning through digital games retrospectively. The concept of technological innovations assisting language development dates back to the 1960s and late 1970s when the advent of personal computers (PCs) allowed wider audiences to experience and interact with this new medium. Since then, computer assisted language learning (CALL) has undergone several transformative phases that reflect the course of new technologies and paradigm shifts (Bax, 2003; Warschauer, 2000; Warschauer and Healey, 1998). Although there were a limited number of digital technologies and the Internet was still in its infancy in the early 1990s, the pedagogical potential of digital games was envisioned by Philip Hubbard, who argued that language learning based on digital games could not only be a reality but also a permanent fixture of curricula (Hubbard, 1991). Over the past few decades, the Internet, social media, 3D video games, mobile devices, networked game worlds and gaming communities have grown so exponentially and extensively that digital game-based language learning (DGBLL hereafter) has emerged as a “serious” entity for study amidst a fair amount of scepticism and reluctance from researchers (Chik, 2011; Neville, 2009; Selwyn, 2011). DGBLL is still a relatively new field and can be considered to be in a state of evolution where it necessitates an underlying theoretical framework.

Among the virtually endless array of digital games that are commercially available, possibly the one most accordant with second language learning in terms of collaborative activity, learner participation and knowledge construction would have to be MMORPGs, which comprise a unique category of commercial off-the-shelf (COTS hereafter) games (Van Eck, 2009) – games which are not explicitly designed with language learning or teaching objectives (Cornillie, Thorne and Desmet, 2012). Text-based MUDs (multi-user dungeons) and MOOs (multi-user domains object-orientated) are generally accepted as the ancestors of MMORPGs, which include three-dimensional, theme-based virtual realms where players from all around the world can interact with one another through customisable, user-controlled agents commonly known as avatars (Peterson, 2011). MMORPGs are distinctive in that they incorporate a narrative structure as the game adheres to a specific plot and a consistent game flow – avatars continue to “exist” in the virtual world even though players log out of the game (Achterbosch, Pierce and Simmons, 2008; Friedman, Hartshorne and VanFossen, 2008).

The main aim in MMORPGs is to develop players’ characters within the game hierarchy by accepting and accomplishing specific tasks called quests, which, upon successful completion, add status or various skills to the player (Peterson, 2012). These quests become more difficult as the game progresses and need to be carried out in organized groups of players, namely guilds (Chen, 2015). Such in-game groupings allow inexperienced players or newcomers to communicate with more adept players by means of chat rooms or web forums, thus resulting in collaborative problem-solving activities and information sharing.

Of the multitude of MMORPGs currently available, Blizzard Entertainment’s 2004 release *World of Warcraft* (*WoW* hereafter) deserves to be mentioned as one of the most popular and commercially successful examples of the genre, with more than one hundred million accounts having been created over the existence of the game (Polygon, 2014). In the virtual realm of *WoW*, it is possible to observe the typical features of MMORPGs: players controlling different classes and races of avatars in a fantasy setting to complete quests either on their own or in guilds, continuous sharing of information and expertise in chat channels and related forums, cooperative gameplay and social interaction based on problem-solving skills.

3. CURRENT RESEARCH ON MMORPGS FOR SECOND LANGUAGE LEARNING

In this section, several recent studies of digital games (MMORPGs) and second language learning are summarised chronologically, taking into account their underpinning theoretical and analytical methods. It should be noted that although there has been an increasing interest in the pedagogical benefits (especially concerning second language development) of digital games, it is still relatively uncharted territory and the potential of COTS digital games needs to be supported by the frameworks of second language acquisition.

Rama, Black, Van Es and Warschauer's (2012) qualitative study investigates the activities of two college-age Spanish learners in the Spanish version of the online game *WoW* over a period of seven weeks. The researchers aim to illustrate the ways in which the two learners benefit from the unique possibilities the combination of the game itself, its culture and the learners' skills present in terms of language learning (Rama et al., 2012). The study is essentially based on sociocultural theory and van Lier's (2000) concept of affordance is also adopted as a point of reference in the analysis, which initially focuses on language patterns in the participants' chat logs as well as themes in journal entries and interviews. Among the key affordances emerging from the study are the safe learning environment created by *WoW*, communicative competence highlighted in gameplay, and the promotion of collaborative activity between experts and beginners. The study does, however, acknowledge certain limitations that accompany the aforementioned affordances, especially emphasising the fact that there is a need for a "more structured approach" (Rama et al., 2012, p. 337) and that a preliminary tutorial about the mechanics of the game might prove beneficial both for players/learners and instructors.

Grounded on gaming as an extramural practice for the development of English as a second language, Sylvén and Sundqvist's (2012) study observes eighty-six young Swedish learners aged 11-12 asked to engage in seven different out-of-school activities, with digital games emerging as the most popular one. Given that the number of empirical studies investigating the relationship between the gaming tendencies of young learners and second language development is limited, Sylvén and Sundqvist put forward two research questions as their premise: one inquiring whether there is a positive correlation between the L2 proficiency of learners and their involvement in extramural English habits, and the other examining if a gender distinction exists in either of the previously mentioned areas. For this study, a questionnaire, a diary, and three proficiency tests are used as data sources, the results of which suggest a positive correlation between playing digital games and L2 proficiency. The researchers assume that digital games which contain a wide range of target language items and stimulating elements can enhance L2 proficiency (Sylvén and Sundqvist, 2012). Even though the findings of the study seem to corroborate such an assumption, variables, such as language aptitude, learning style or socioeconomic conditions are not taken into account; therefore, the need to explore these factors and to conduct longitudinal research for more substantial results is concluded.

Deviating slightly from previous studies by adopting a mixed-method approach (both quantitative and qualitative), Wu, Richard and Shaw's (2014) study examines MMORPGs as supplementary tools in assisting and developing English proficiency. To this end, nineteen adult volunteers from Taiwan and the United States are surveyed using Ryan and Deci's (2000) self-determination theory (SDT) – a framework on the psychological factors related to motivation – and Yee's (2006) components of motivation. The researchers primarily aim at investigating which aspect(s) of motivation the participants of the study view as promoting communicative competence and subsequently identify the sense of being in contact with other gamers or *relatedness* as the most prevalent component of motivation according to the SDT framework. Overall, the exploratory study recognises certain shortcomings it possesses –

ranging from the computers used to the disproportion of sexes in the study. Nevertheless, it bears some encouraging findings that point in the direction of the potential of MMORPGs being implemented in the “traditional” classroom as engaging and effective channels for second language learning provided that they are “properly scaffolded” (Wu, Richards and Saw, 2014, p. 80).

A more recent but rather small-scale study conducted by Strachan, Kongmee and Pickard (2016) explores the role(s) MMORPGs can play in second language learning processes and the player/learners’ involvement with the target language during gameplay. A combination of ethnography and action research is employed as research methodology to study two Thai first year university students with disparate English levels and gaming experiences. A pre-test and post-test are administered during the case study to test vocabulary, grammar and listening skills. In addition, each participant is assigned various game-related tasks and data are collected in three phases: introducing basic game instructions, choosing suitable MMORPGs to play, and experiencing the game to transfer the information gained from earlier sessions. Both students select and engage in three different games matching their preferences while their tutor is also present in the gameplay as observer and helper. The results from the study show that MMORPGs can present opportunities for language learners not only to further their language skills but also to build up their linguistic competence in a relatively safe environment.

Scholz and Schulze’s (2017) study is rather different from the other studies presented in this literature review in that German serves as the target language in the research. Furthermore, it calls for an approach that explores actual gameplay experiences instead of the self-reflection of the learners about the games; therefore, the researchers base their research methodology on complex adaptive systems (Larsen-Freeman and Cameron, 2008) and retrodictive qualitative modelling (Dörnyei, 2014) with the intention of gaining insight into how extramural digital gaming activities can foster L2 development. The study examines fourteen graduate and undergraduate students at a Canadian university over a period of four months as they are asked to engage in the German version of *WoW* for at least ten hours in their spare time. The research question posed for the analysis focuses on how the trajectories of language learners correspond to their trajectories of second language development. The researchers, after analysis of gathered data, claim that language gains from gaming experiences can be transferred and used successfully in other contexts, especially when these non-gaming situations are closely related to the in-game contents. It is also stated that second language development will be observed irrespective of the course of gameplay the learner takes (Scholz and Schulze, 2017).

4. COMMONALITIES IN KEY SOURCES

The aforementioned studies are an indication that MMORPGs have gained considerable attention from language researchers and that certain games display qualities which align with what second language acquisition theories deem essential for L2 learning. This section will aim at presenting and discussing some of the common threads that are salient in the preceding key sources.

MMORPGs are virtual worlds in which players interact with one another around a joint interest, share expertise and collaborate in problem-solving activities. Therefore, as is mentioned in Rama et al.’s (2012) study, these digital games have strong ties with sociocultural theory and Vygotsky’s (1978) Zone of Proximal Development concept, where, put very briefly, the former views learning as a socially mediated activity and the latter emphasises the importance of novice-expert interplay in knowledge construction. In line with this thought, Sylvén and Sundqvist (2012) also correlate their research with the same theory

and concept, stating that MMORPGs, such as *WoW*, require their players to collaborate using in-game chats and web forums to accomplish tasks.

Another common thread that can be observed among the studies is the transferability of in-game skills and knowledge to other contexts. Despite scepticism from Thorne, Black and Sykes (2009), studies have shown that player/learners can put their gaming-related skills into practice in non-gaming settings (Scholz and Schulze, 2017; Strachan, Kongmee and Pickard, 2016; Sylvén and Sundqvist, 2012). Nevertheless, considering the specific nature and narrow range of lexicon present in MMORPGs as well as the informality of in-game chats, the language transfer to real-life situations can be said to be quite limited.

Undoubtedly, playing MMORPGs is a very popular form of recreational activity not only among teenagers but also among adults (Gee, 2007). Therefore, this volitional pastime is likely to be linked with a high level of motivation, which is a very essential component of second language learning (Dörnyei, 2001). In the studies of Sylvén and Sundqvist (2012), Wu, Richards and Saw (2014), and Strachan, Kongmee and Pickard (2016), the concept of motivation is addressed as an important aspect of gaming in that L2 learners display a “willingness to communicate” during gameplay, experiencing low levels of anxiety and gaining confidence in using the target language (Reinders and Wattana, 2014). However, the effects of being willing to communicate on second language acquisition still need to be further investigated.

5. NICHES FOR IMPROVEMENT

Although the implementation of computers in language learning is a well-established field, learning through digital games, especially MMORPGs, is relatively new and un(der)explored ground. Recent studies regarding the use of these games for second language learning are encouraging; however, they are mostly exploratory and heavily based on individual accounts.

One evident shortcoming among the studies in this literature review is the fact that there have not been many large-scale or longitudinal research projects investigating the relationship between engaging in MMORPGs and second language development. Thus, it has not been possible to reach a generalisation on the subject, and due to obvious restraints, such as limited play time or an uncustomary gaming setting (a classroom or a computer laboratory), the authenticity of the gaming experience itself seems highly questionable. Studies conducted extramurally (Rama et al., 2012; Scholz and Schulze, 2017; Sylvén and Sundqvist, 2012) have partially addressed the problem, allowing player/learners to play MMORPGs at their own discretion. That said, the observation of participants by researchers in this case is virtually impossible and the reliability of self-reporting can be disputable, rendering further investigation on how language learners can benefit from MMORPGs in extramural settings necessary.

Given the pace of evolution in COTS digital games, MMORPGs are becoming increasingly elaborate and challenging, which, at times, makes gaming an overwhelming experience even for experienced players. Although the studies in this literature review have included novice players and non-gamers as part of the research, Sylvén and Sundqvist, and Scholz and Schulze do not comment on whether the participants struggled with the game mechanics. In light of such accounts as being “confused by the game system” (Strachan, Kongmee and Pickard, 2016, p.104) or needing “more time getting accustomed to the play mechanics first” (Wu, Richards and Saw, 2014, p.76), it is apparent that there is a need for player/learner training to support and guide novice gamers in their gaming/learning experiences, thus enabling higher participation.

It should be noted that, with the exception of Sylvén and Sundqvist’s study, none of the studies is aimed at young learners and it would be interesting to observe the effects of

MMORPGs on the interactions of young learners in a large-scale study. In addition, the majority of studies utilise only one MMORPG as part of their investigation (participants in the study of Strachan, Kongmee and Pickard are allowed to experience three different games); thus, another promising area of analysis would be the comparison of different MMORPGs and their impact on learner target language output.

6. CONCLUSION

This literature review set out to inquire what role(s), if any, MMORPGs can have in extramural second language learning and, to this end, five key sources as a research baseline were designated. Though the selected studies have different methodologies and perspectives, they all bear certain parallelisms that provide insight into this review.

In recent years it has become more and more evident that successful language learning is no longer restricted by the confines of the classroom mostly due to the ubiquity of digital technologies. It should come as no surprise that the discontent with the existing and rigid formal education models and with prescriptive teaching methods has coincided with the growing popularity of the Internet, social networking and digital games among young people. These “digital natives” have found refuge in out-of-school digital domains where they can engage in social and collaborative activities, and become active agents of their own learning experiences.

MMORPGs are immersive environments that not only offer entertaining and challenging fantasy worlds but also, more importantly, allow language learners to be creative and critical participants in knowledge sharing and problem-solving activities. As player/learners are represented by avatars in the games, the identities of individuals become anonymous, enabling learners to take risks in a relatively safe environment where the affective filter is lowered.

The studies discussed in this literature review show that MMORPGs present challenging tasks which require collaborative action (Rama et al., 2012) and that they provide opportunities for incidental second language learning in naturalistic settings (Sylvén and Sundqvist, 2012). In addition, the motivation component is predominant in playing MMORPGs (Wu, Richard and Shaw, 2014) as learners gain confidence in using their second language skills, which are transferable to the real world (Scholz and Schulze, 2017; Strachan, Kongmee and Pickard, 2016).

In light of the preceding findings, it is quite clear that playing MMORPGs in out-of-school contexts can stimulate and support second language development in a number of ways; however, just as it is biased and unfounded to disparage MMORPGs as merely superficial playthings, so is it to expect them to be instruments of L2 learning simply because they contain target language items. These games should not be perceived as a panacea for dysfunctional education systems or a revolutionary idea to be directly implemented in the classroom; rather, they ought to be examined more systematically to better understand the affordances they present and how they can be utilised as part of a curriculum that strives to bridge instructed classroom learning and extramural contexts.

- Researchers who plan to conduct Educational Technologies in biology education may benefit from the findings of the present study and make use of the dimensions examined in the present study.
- Conducting this study in an international scale and using multiple databases like “Web of Science” may yield further significant results by providing research sample diversity.
- With content analyses conducted on extensive sampling, various variables (country, language, article, thesis, etc.) can be compared.

- The results of the present study demonstrate that qualitative and mixed methods were least popular ones. Therefore, more qualitative research designs could be used to collect more in-depth data in the related field, and the mixed method, which takes advantages of the two methods (qualitative and quantitative methods) could be applied more.

Okul Dışı İkinci Dil Öğreniminde Devasa Çok Oyunculu Çevrimiçi Rol Yapma Oyunlarının Rolü: Bir Literatür Taraması

Özet

Son yıllarda dijital oyun temelli dil öğrenimi hem araştırmacılardan hem de eğitimcilerden oldukça fazla ilgi görmüştür. En popüler dijital oyun türlerinden biri olan devasa çok oyunculu çevrimiçi rol yapma oyunları (MMORPG) genellikle çevrimiçi oyun topluluklarının ön sıralarında yer almıştır ve popüleriteleri ikinci dil öğrenimi alanına kadar uzanmıştır. Çevrimiçi oyun oynama ile dil edinimi arasındaki ilişki çeşitli çalışmalarda fazlasıyla belgelenmiş olsa da bunlar genelde kontrollü ve kurum içi ortamlarda (bir öğretmen/gözetmen tarafından izlenen oyun seanslarının yürütüldüğü derslik ortamı) gerçekleşmiştir. Bu yüzden bu literatür taraması daha az incelenen bir alan olan okul dışında dijital oyun oynamaya odaklanmıştır. Son altı yılda konuyla ilgili olarak yayımlanmış makaleler taranmış ve beşi bu yazı için seçilmiştir. Bu tarama, dijital oyunların müfredatlarda yer almasını tartışmaktan ziyade taranan makalelerdeki ortak konulara ve geliştirilmeye açık olan bazı noktalara dikkat çekmeyi amaçlamıştır. Sözkonusu tarama göstermiştir ki okul dışı ikinci dil öğreniminde dijital oyun deneyiminin sosyokültürel ve iş birliğine dayanan doğası önemli bir faktördür ve daha ayrıntılı bir şekilde incelenmelidir.

Anahtar Kelimeler: Dijital oyun temelli dil öğrenimi, mmorpg, dijital oyunlar, dil öğrenimi.

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Soner Yaşar got his bachelor's degree from Haliç University, majoring in American Culture and Literature. He has translated books from English to Turkish and worked as a subtitle translator for TV channels. He has been teaching English at various language schools and giving private lessons while continuing his postgraduate studies in English Language Teaching (Distance Learning) at the University of East London. His interest areas vary from astronomy to Zen.

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