GETTING THE FOREST FOR THE TREES: SITUATION TRANSCENDING IN MASSIVELY MULTIPLAYER ONLINE GAMES

MICHAEL BISCHOFF

University of Hawai'i at Mānoa

The traditional language classroom has always been, in my mind, a kind of laboratory for language learners; in other words, I view it as a safe and controlled environment to practice something that is learnable. In the classroom, language is boiled down into learnable units which may differ depending upon the teaching method: grammar or vocabulary drilled and memorized by rote in the case of grammar-translation, or functions and topics in more communicative methods. Most of the time, productive classroom use of language is limited in context and scope, and limited to the small community of learners within. Materials and linguistic artifacts such as essays, posters, or course newspapers either stay inside the classroom walls, or are disseminated only to the immediate outside community. In the end, both teachers and students hope that language learning and use inside a safe and controlled classroom environment will transfer into myriad unpredictable contexts and situations outside.

Over the past three decades, computers and technology have also played a part in the language classroom. Unfortunately, all too often the computer merely replicates activities that can just as easily be done with paper and pen (Ballance, 2012). While linguistic input might be audio-visually more sophisticated and realistic in language learning software, learners in all likelihood engage with the material in a similar manner as they would in a traditional language classroom. Despite the ability for computers to create much more sophisticated linguistic or cultural artifacts, those materials can only reach a limited audience.

So, it seems that computer-assisted language learning (CALL) has seen its great potential wasted. However, with the growth of Web 2.0 technologies and tools such as wikis, blogs, social media, smartphones, YouTube, Google Drive, and video game genres such as massively multiplayer online games (MMOGs), it seems that CALL is undergoing a revolution of sorts, one which is at last beginning to link together disparate language learning communities around the world. Traditional CALL software is designed specifically from the ground up for language

learning, whereas Web 2.0 tools generally allow for users to purpose them however they wish. Not only can individual language learners seek out their own materials and cohorts, but they can also actively and collaboratively contribute to the production of text and multimedia online. Web 2.0 tools thus help learners use proper lexical items, accurate syntax, or appropriate rhetoric (Sykes, Oskoz, & Thorne, 2008).

Video games are an extremely relevant area of study within CALL, as they have grown over the past four decades to become not only an extremely popular form of entertainment, but also tools for learning. A report published in 2013 from the Entertainment Software Association, showed that consumer spending on video games in the United States totaled \$20.77 billion in 2012. The report further found that fifty-eight percent of Americans are gamers. Whether they are played on a console, PC, or mobile device, video games are often connected to the Internet to allow play and interaction with anyone in the world.

In particular, MMOGs are an especially compelling tool for language learning and use. MMOGs are a genre of video games that offer persistent virtual worlds where thousands of players may connect at any given time. As such, the game world continues to live and breathe even after players log out. MMOGs have players assume the role of avatars, which are graphical representations of players within the virtual world. Avatars may be manipulated by players to perform myriad actions: moving around the game world, chatting with other players, and performing interactions such talking or fighting. These can be done with other players and with non-player characters (NPCs), which are computer-controlled. Modern MMOGs offer rich and extremely detailed 3D multimodal universes for players to move about, so language learners have opportunities for highly contextualized and purposeful use of target language with others.

These dimensions of MMOGs offer key opportunities for learning. This study attempts to answer questions regarding social gameplay in MMOGs and the implications for language learning. Previous studies in MMOGs have focused on differing constructs. Zheng, Young, Brewer, and Wagner (2009) examined middle school students in China and their attitudes toward learning English and discovered a development of positive attitudes toward English language learning; English learning was more fun and interesting in *Quest Atlantis* than in the classroom. Suh, Kim, and Kim (2010) utilized a Korean MMOG called *Nori School* and found that elementary school-aged children in Korea had higher achievement scores in MMOG-based instruction. Another construct that has been researched is what learners do and how much agency

they have when interacting in virtual environments. Peterson (2010) took L1 Japanese learners of English into the world of *Allods Online* and found that while the learners were able to take the lead in target language interactions with native speakers, those without prior MMOG experience or lesser levels of language proficiency had trouble in contributing to interactions.

However, there seems to be a dearth in the literature concerning how resources in MMOGs can be appropriated by language learners and the implications appropriation of resources has on their learning both in and outside of the virtual environment. Some work examining MMOGs in terms of their multimodal resources and affordances (Rama, Black, Van Es, & Warschauer, 2012; Zheng, Newgarden, & Young, 2012) has found that the design of these game environments can promote communicative activities and provide opportunities for learning that cannot be easily replicated in a classroom. In a separate study, Zheng (2012) argues that MMOGs can "provide learners with social, historical, and cultural materials to augment action and interaction across space and time" (p. 557). This study differs in that it seeks to examine vocabulary learning in these environments and to answer how language learners appropriate resources in *World of Warcraft (WOW)*.

THEORETICAL BACKGROUNDS OF STUDY

Many past research studies both in and out of game-based environments have used traditional second language acquisition (SLA) theories based on computational assumptions of learners processing a fixed code of input and output (Krashen, 1985). Taking this SLA perspective, previous experimental work by deHaan (2005) and deHaan, Reed, and Kuwada (2010) used video games to examine specific constructs such as vocabulary learning, but these studies isolated the learners from a more natural gameplay environment. deHaan and colleagues found that those who played a video game retained less vocabulary than those who watched. However, I believe that their studies missed the forest for the trees, as it were. The participants could have learned more if they had played with a friend, or interacted in some way in a wider community of practice (Squire, 2008; Ranali & Ritzko, 2013) where players could discuss their favorite characters, levels, or myriad of other topics. Instead of thinking of the best linguistic "inputs" to provide for ESL writers, attention should focus on linguistic and social environments that are

rich in affordances for the learners to pick up on (Thorne, 2008; Peterson, 2010; Rama et al., 2012; Zheng et al., 2012).

By contrast to the SLA perspective, this study relies upon a theory of language learning that is ecological in its assumptions. Ecological linguistics is an outgrowth of the ecological phsychology theory of direct perception laid out by Gibson (1979). Key to this theory is the term affordance, which Gibson defined as "what it offers the animal, what it provides or furnishes, either for good or ill" (p. 127). To illustrate using an everyday example, imagine a standard laptop keyboard. Technologically literate people will perceive the keyboard as an input affordance for the computer upon seeing the keys printed with letters and numbers, and act accordingly by typing funny messages to their friends on Facebook. However, a pet cat will perceive a laptop keyboard as something entirely different. The cat clearly cannot read letters or numbers on the keys, but its sense of touch is certainly stimulated because laptop keyboards tend to be very warm. To its owner's dismay, the cat acts by leaping onto and lying down on the keyboard. Perhaps the cat sensed it as an ideal napping affordance. Extended to language learning, affordances in terms of ecological perspectives are further defined by van Lier (2004) as things that are available to learners to do something with. They are a potential for action by the learner; perception, action, and interpretation are all involved in a cyclical relationship with the environment learners find themselves in (van Lier, 2004).

Through ecological theory, we can look at language learning not in terms of discrete units and objects such as grammatical rules or vocabulary. Rather, the learning that is taking place is in the area of *first-order languaging*, which Thibault (2011) defines as "the focus on the dynamics of real-time behavioral events that are co-constructed by co-acting agents rather than the more usual view that persons 'use' a determinate language system or code" (pp. 2-3). Thus, instead of *learning about* language in terms of *second-order* (Thibault, 2011) constructs such as words or phrases, taking an ecological perspective allows us to see how learners engage in *learning to be* as they apprentice and enculturate in real social contexts in-situ (Brown, 2005). This learning to be can be thought of as being equivalent to first-order languaging (Thibault, 2011). In the situation of here-and-now first-order languaging, learners are also engaging with more than their immediate environment. First-order languaging includes not only the interlocutors and socio-cultural artifacts within a situation, but also third parties (Linell, 2009)

who are not present, or other imagined socio-cultural situations and environments across timescales of past, present, and future.

Zheng (2012) produced a useful model detailing this concept, shown below in Figure 1, with the action-perception cycle of the environment working around the languaging behavior within the circle. In particular, this model allows for us to view language learning as potentially situation-transcending. Learners do not merely learn lexico-grammar that the teacher provides in the classroom in the situated "here," but can move beyond, making use of resources in the environment and in their own experiences in a situation-transcending "not-here." Dufva (2013) further argues that our entire conception of learning needs to be rethought as well, that "learning occurs in collaboration and [is] mediated by other people and/or different tools and artefacts of the social world" (p. 2) and is in reality a process through which learners *appropriate* resources across time and space, and social situations and contexts.

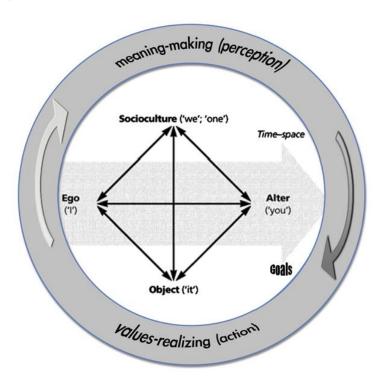


Figure 1. Zheng's (2012, p. 546) Eco-dialogical Model of Interaction.

New Literacies and "Reading" World of Warcraft

MMOGs are rich in linguistic text, and communication with other players is a central part of the gameplay experience, so it could be argued that playing MMOGs might help language learners in improving their traditional literacy skills of reading and writing. However, in playing MMOGs, students and language learners can not only become better language learners, but they can also develop *new literacy* skills that are of critical importance in the present digital age. According to Gee (2003), modern media allows for meaning to be conveyed through an interspersing of words, images, and use of space. Being able to read such multimodal texts defines new literacies. Knobel and Lankshear (2007) discussed these literacies in terms of how they are different in terms of technology and in terms of ethos. The technology, of course, refers to the multimodal (text, sound, image, and animation) delivery systems of computers, games, CDs, the Internet, and so forth. By ethos, they mean that new literacies are less author-centric and expert-dominated than traditional literacies. New literacies are defined as being participatory, collaborative, and distributed in nature (Knobel & Lankshear, 2007). Video games in particular have come under focus as fertile sites for learning and an expanded notion of what it means to be literate in the 21st century (Gee, 2003). MMOGs as video games are especially characterized by the ethos of new literacies. They are rich with resources that must be properly "read" by players in order to succeed and flourish in the virtual world.

As one of the most widely-played MMOGs in the world, *World of Warcraft (WOW)* has served as a research site in numerous studies. Like many other MMOGs, *WOW* is replete with resources for learning. An important affordance in *WOW* is questing. Quests, specific tasks given to players by the game environment, afford different negotiations for action (Zheng et al., 2009) depending upon the requirements to complete the quest and provide structure in what is otherwise a very open and free world. Quests may be undertaken collaboratively with other players, thus creating a need to coordinate and communicate (Zheng et al., 2012) and pay extra attention to the other resources in the game environment. The requirements for completing any given quest are varied, so players may be required to talk to a non-player character (NPC) that is not controlled by a human player, slay a certain number of monsters, or seek out and find a rare item. Successfully completing a quest provides players with a reward in the form of experience points that help develop their avatars. Quest completion may also award players with in-game money, items such as healing potions, or new equipment. In all cases, quests give players tangible and identifiable goals to work toward, making their avatars more powerful as well as moving forward the plot of the game.

Other resources in *WOW* work in concert with quests. Players may manipulate their avatars in various ways, such making their avatar perform a number of pre-animated actions such as dancing. More purposeful avatar actions include attacking, healing, or taking treasure from slain enemies. Quest and game logs serve to explain to players what they must do to successfully complete a quest, as well as situate the quest within the larger lore and storyline of the game world. In addition, *WOW*'s chat and system logs are tied together to present very meaningful and important information to players. The chat log is used to receive information from NPCs as ingame dialogue, but the log also functions to allow players to communicate with one another through a variety of transmission modes such as "saying" (visible to all players within a short radius), "shouting" (visible to all players over a very wide radius), or "telling" (private communication between two players). Players are free to take as much time as they need to construct messages, and in particularly tense or high-action situations, errors in spelling or syntax are tolerated, which is of particular advantage to language learners trying to express communicative competence in-game (Rama et al., 2012).

The surrounding 3D graphic environment itself is yet another rich resource. WOW offers players lush forests, sprawling cities, small hamlets, vast deserts, inhospitable wastelands, gentle and serene coastlines, and other locales to explore. Also, the way in which players and NPCs appear and disappear from the 3D environment itself is a potential resource. When monsters or players are killed, their corpses remain in the game environment for a short time (to be either looted or revived) until they disappear from the landscape. New monsters especially seem to suddenly materialize out of thin air, a concept popularly known by players as "popping."

Returning to my theoretical underpinnings and its connection to *WOW*, ecological linguistics is focused on relationships rather than objects, and van Lier (2004) discusses these relationships as both being between language and the physical and social environments, as well as the relationships between the learner and the learning context. Human beings do not learn and do not exist solely 'in here' but 'out there' in the activities of everyday life (Lantolf & Thorne, 2006). In MMOG environments like *WOW*, a number of resources and socio-cultural artifacts are available to a player or language learner, among the most important of which are other players with which to interact. This use of resources and artifacts by players extends the situation-transcending (Linell, 2009) potential of games such as these and make the learning that takes place within relevant without.

Thus, returning to my study, my goal is to show real vocabulary learning in *WOW*. Others have looked into language learning in MMOGs other than *WOW* by examining vocabulary acquisition (Rankin, Gold, & Gooch, 2006), achievement (Suh et al., 2010), and attitudes (Zheng et al., 2009), but studies focused specifically on *WOW* (Bryant, 2006; Rama et al., 2012; Thorne, 2008; Zheng et al., 2012) have not probed vocabulary learning. In addition, I want to echo the sentiments that the collaborative play environment of MMOGs offer meaningful contexts for language use and practice (Thorne, 2008) in real time, as opposed to the decontextualized language laboratory of the traditional classroom.

METHOD

Participants

I conducted this research as an in-depth case study, so I recruited a single participant. The participant will hereafter be referred to by the pseudonym Conan. At the time I collected my data, Conan, a Japanese national and L1 speaker of Japanese, was an undergraduate student enrolled at a university in the United States. He had been studying English for the past nine years and had achieved a very high level of proficiency in his L2 English, and as such was taking content courses in English at the university. I gave him a pre-study questionnaire, which can be found in the Appendix. The questionnaire revealed that he identified himself as someone who likes to play video games, and that he has played English language video games to help assist him in his learning of English. Finally, Conan indicated that he had never played an English-language MMOG prior to the study.

While I had hoped to record Conan's gameplay from his avatar's point of view, doing so unfortunately proved to be a difficult logistical and technical challenge that I could not overcome. Therefore, in order to be able to record and collect data for the study, I also joined in the game play as a participant observer. My avatar's name was Mediziner. As a participant observer, I was able to offer advice and assistance regarding the ontology of the game world to Conan as we played together. I was also able to help explain any unfamiliar vocabulary he encountered, and I joined him in completing tasks and quests in the game.

Materials

This study was primarily conducted within the game environment of *World of Warcraft* (*WOW*). As of the time of writing this paper, *WOW* was the most popular MMOG in the world (Activision Blizzard, 2014), with 7.8 million subscribers logging in to the game from around the world. Developed and maintained by Blizzard Entertainment, *WOW* is a typical exemplar of the MMOG genre. It is a commercial game that requires not only a purchase of the game software, but also a monthly subscription fee in order to continue play. Given the short-term nature of this study I was able to utilize a free trial version of the game. There are limitations to using free trials however, which I will address later.



Figure 2. The Interface of WOW

WOW is set in the virtual world of Azeroth, a land torn between the forces of the Alliance and the Horde. One of the very first acts of the game is avatar creation, which requires players to choose which side to play for; following this they decide which race to play as. As an example, Human players are allocated to the Alliance, while Orc players join the Horde. Players then

assign themselves a combat class such as Warrior or Mage (i.e., front line attacker or back line support) which not only defines the type of role they fulfill in battle, but can also affect the kinds of role-playing players engage in. Players' avatars are then placed in the starting city for their chosen race, and the entire world is open for them to explore from that point forward. This rich tapestry of detail is designed to immerse the players within the world and provide a basis and structure for all actions they will take, be it completing quests, delving into the complex economic system of the game world, or simply slaying monsters for fun and profit. This is exactly the explicit structure that Thorne (2008) argued MMOGs exhibit.

Finally, as a means of facilitating installation and setup of *WOW*, Skype was used for instant message (IM) communication with Conan prior to gameplay. Skype also came in handy as backup communication when some unexpected technical problems with *WOW* required me to logout of the game for a while.

Data and Procedures

The main data for this study was collected directly from in-game interactions and text IMs through Skype. By using TechSmith's Camtasia screen recording software on my own personal computer, I was able to capture everything happening within the game's interface from my point of view in real time. I ended up recording nearly two hours of video data. In order to ease the transcription process, I had also intended to use an add-on program in WOW that would log and timestamp everything appearing in the text chat box. Unfortunately, due to a technical error the logs were not automatically generated as anticipated and I had to transcribe the text chat data manually. Of the multimodal resources available to WOW players for communication, the primary mode of interaction in the game is its text chat box, located at the bottom left of the screenshot depicted in Figure 2. The text chat box allows players to send and receive messages to and from other players. In addition, they can learn critical information about what is happening in the game world, such as how much damage they have dealt to a monster or whether or not they were successful in crafting an item. When playing together, Conan and I primarily communicated through the /whisper command, a private chat channel that nobody else was privy to.

Another mode of interaction is the visual depiction of the game world, with the screenshot in Figure 2 showing a typical scene from *WOW*. Players are able to manipulate the camera to look

around in all directions, and have a choice as to whether to view their avatar from a third-person perspective or zoom in until they see the world from their avatar's first-person view. They may also interact with other players by typing emotive commands. For example, when I typed /dance while selecting Conan's avatar, my own avatar begin a dance animation, with the text chat log saying "You dance with Conan." Due to the fact that I could not record Conan's screen, it was critical as a participant observer that I tried to remain in close visual proximity with him.

After collecting the data, I loaded the video files I recorded into Transana, a multimodal transcription tool. I then went over the screen-recorded videos carefully, transcribing our interactions. Following the multimodal transcription principles laid out by Baldy and Thibault (2006), my transcript included not only the various linguistic turns taken between Conan and myself, but details such as the actions our avatars took, or the orientation of our avatars toward one another and other artifacts in the game environment. During the process of transcription, I noted interesting interactions and language use for later qualitative analysis. After producing a lengthy transcript covering nearly two hours of gameplay, I examined the transcript as a whole using multimodal discourse analysis (Baldy & Thibault, 2006) in the hopes of finding Conan making use of and appropriating *WOW*'s resources. Key to multimodal discourse analysis is the concept of timescales, or the temporal sequencing of human interactivity, which can range from microseconds to years. As defined by Lemke (2000), multiple timescales may function simultaneously. Over the wider timescale of an entire gameplay session, one single resource or affordance may be relevant and contributing to interaction and learning, while other concurrent affordances may only be relevant over much shorter timescales.

FINDINGS AND DISCUSSION

In this section, I will first outline the overall trajectory of my gameplay session with Conan, and then zoom in and take a much closer look at three specific instances of how *WOW* contributed to Conan's language development.

Summary of Gameplay

After successfully using *Skype* to direct Conan on how to install the *WOW* software client and create his avatar, we both logged into the game. Our avatars appeared in front of a church set

within a forest in Northshire, which is a common starting ground for new players of the game. We first had to add one another as friends in-game to be able to communicate privately with one another, and upon doing so I proceeded to explain and demonstrate the basics of the game to Conan such as how to move his avatar around.

Our next task was to accept and complete some basic early quests. This involved showing Conan how to speak with and accept quests from NPCs (non-player characters), how to battle enemies and retrieve items from their corpses after defeating them (looting), how to wear and add new pieces of equipment to his avatar, and how to tell player characters apart from NPCs.

The next basic quest involved needing to locate and kill eight enemy NPC Blackrock Spies in a forest. We both had difficulty finding them, but in the process we explored more of the game world outside of Northshire. Both of our avatars were defeated by higher level enemies, which forced us to revive as spirits in a cemetery, then find our corpses to reanimate as our avatars. Moving along, we found our way to a great castle city known as Stormwind City, which clearly was the wrong place for us to be looking. Retracing our steps back to Northshire, we eventually found the orcs in the forest just outside the chapel where we had begun our play and proceeded to slay them to finish the quest.

After another quest that involved teaching Conan how to learn new combat abilities for his avatar to use in battle, we then moved to another quest that required us to slay orcs once more. This time the quest description was much clearer, telling us to cross a river to the east. As we moved east we could see the forest was burning, so the game environment in this case made it obvious that this is where the nefarious orcs were to be found.

Our final quest involved finding and defeating a single enemy NPC, which other players in the game world were also trying to do. Other players were able to engage and defeat the enemy before we could, necessitating us to wait for the NPC to "repop" and become available for us to try again to claim. Unfortunately, many attempts at trying to engage this NPC resulted in failure. It was at this point that Conan and I decided that we had played for long enough and ended our gameplay session.

Appropriation of Resources: Forest

The first excerpt picks up after Conan and I were given a quest to locate and kill eight enemy NPC Blackrock Spies. There was a bit of confusion as to where these enemies were located.

(A-1)

- 1. (0:00:52.6) Mediziner: did you make any progress on that quest?
- 2. (0:01:00.7) Conan: im still looking for spies
- 3. (0:01:16.8) Conan: quest description said they are hiding in the forrest so

Excerpt A-1 is situated within Elwynn Forest, located just outside the village of Northshire, where we began our gameplay. Clearly, it's a natural place to be looking for the spies, as Conan mentions in line three. This line also indicates that he has utilized one of the in-game resources, the quest log. He misspells the word 'forest' here, but I either did not notice or overlooked it. I told Conan before we began playing that we would be simply playing the game and that I would not be actively correcting his spelling or grammar or any other errors. Furthermore, it was clear from context what he meant. Also, with the forest being the primary environment of our play, further opportunities to use and see the word used would come later. We continued running around the forest in vain for a few more minutes.

(A-2)

- 1. (0:06:57.6) Mediziner: oh i think i got it
- 2. (0:07:04.3) Mediziner: we need to go to the forest to the NW

Next, in excerpt A-2, after consulting the quest description again, I mentioned that I thought the spies were hiding within the same forest, but in the northwestern portion. Here, I used the correct spelling of the word. The word 'forest' did not come up again for some time however, as we consumed ourselves with trying to locate the enemies we needed to vanquish. In the process we got quite lost wandering through our virtual forest, and eventually found our way to a large walled city. The environmental resources clearly told us that we were on the wrong track. Eventually, after returning to the forests, Conan and I located the target enemies in another part of the forest far away from where we were looking, and we were able to complete the quest. After finishing another quest in Northshire, the next transcript begins with Conan describing what he must do for the next quest.

(A-3)

1. (0:45:23.4) Conan: K now I have to go see Seargeant Wilem behind Northshire Abbey in Elqynn Forest

2. (0:45:37.4) Mediziner: me too

3. (0:45:53.2) Conan: I thought the word forrest need two rs

4. (0:46:08.5) Mediziner: just one!

5. (0:46:26.5) Conan: im learning! lol

6. (0:46:32.1) Mediziner: awesome :D

The next mention of the word 'forest' shows up here in excerpt A-3, line 1. Conan uses the dictionary spelling of the word when repeating information he had read in his quest log. Line 3 displays Conan coming to the realization that the word is not spelled with two Rs, and in line 5 he very explicitly states that he is learning.



Figure 3. Conan in the Forest

Conan mentioned reading the quest description, which is a rich linguistic resource the game provides. It typically provides a reason and motivation (loot) for players to complete the quest. I provided the correct spelling of forest but without calling upon Conan's attention to it. He does eventually pick up on the spelling after finishing the quest. He once again demonstrates having read the quest description but then uses the correct spelling. It is also noteworthy that the action up to this point has been situated in a virtual forest. The word being learned (or relearned) is not an abstract thing or concept, but a very real context in which we are interacting. Through a combination of our shared coaction and Conan's perception and appropriation of the quest log and 3D environmental resources, he was able to come to the correct spelling of the word all on his own.

Situation Transcending: Loot

Many times Conan asked for the meaning of new words he either didn't know or wasn't sure of how they were being used in the context of *WOW* gameplay. He indicated this many times by simply asking what a word meant. Excerpt B offers one example of this.

(B)

- 1. (0:29:26.0) Conan loots enemy NPC Blackrock Spy.
- 2. (0:31:16.4) Conan: whats the difference between
- 3. (0:31:19.6) Mediziner defeats enemy NPC Blackrock Spy
- 4. (0:31:22.0) *Mediziner loots 1 copper*
- 5. (0:31:26.0) Conan: verb loot and find?
- 6. (0:31:42.9) Mediziner: good question
- 7. (0:31:43.6) Conan: is it like to gain something? i havent seen this verb before
- 8. (0:32:00.9) Mediziner: yeah, there's lots of vocabular in this game that may be new
- 9. (0:32:12.4) Mediziner: loot is kinda like to find something valuable
- 10. (0:32:30.4) Conan: I learned new vocabulary today:)
- 11. (0:32:37.7) Conan: is it used only in WOW?
- 12. (0:32:45.2) Mediziner: it's used a lot in other games
- 13. (0:32:58.7) Mediziner: but you can use it like
- 14. (0:33:08.3) Mediziner: say during a riot
- 15. (0:33:17.3) Mediziner: people break into a shop and steal all the stuff inside

16. (0:33:24.5) Conan: aaaa!

17. (0:33:25.1) Mediziner: we would say thye're looting

18. (0:33:30.6) Conan: I see

19. (0:33:41.7) Conan: so its kinda like robbing+finding

This excerpt begins with both players killing enemy NPCs to fulfill a quest objective. After defeating an enemy, it is possible to check its corpse for items, what the game terms 'looting'. Conan is seen to be looting a felled enemy in line 1. Whenever the items are taken from a corpse, the text log indicates that players 'loot' something. In the case of line 3, it's one copper piece. Conan is seeing the same thing appear on his screen, because he asks in lines 2 and 4 what loot means. I explained in lines 8 and 9, with Conan confirming his understanding in line 10. In line 11 he then checked to see if this use of the word is limited to the game world. I elaborated on the meaning of the word and linked it to a real world context in lines 13 through 15. Conan appeared to really grasp this extension of the word's meaning in lines 16, 18, and 19.



Figure 4. The Yellow Box Shows Conan Looting; the Green Shows Where the Word "Loot" Appears

This example shows how the virtual world can link resources of in-game linguistic resources, actions within the game, and text chat with other learners or teachers to help situate words in a wider social context. In this case, looting is something that the learner is still able to directly experience. Of course, looting is not something I would want to encourage Conan to take part in in the real world, but looting in the context of the game is an action that does not have negative social consequences. So, as a teacher, my role is to contextualize the meaning of the word and the action in the wider outside world, and to prompt further critical questioning and discussion of the situations in which looting may or may not be acceptable practice. Through gameplay, Conan was able to *learn to be* a looter rather than having to *learn about* looting in a decontextualized fashion. Returning to Figure 1 above showing Zheng's (2012) eco-dialogic model, my contribution to his looting practice allowed both of us to engage with a sociocultural "we" to transcend the immediate situation, as Conan and I both imagined a real social situation in which real looting takes place.

Learning-to-be: Repop

Excerpt C below displays another example of vocabulary learning by Conan, this time of a word that is very specific terminology to *WOW* and MMOGs in general.

(C)

1. (1:12:27.8) Mediziner: haha, someone else killed it

2. (1:12:39.7) Conan: ahaha

3. (1:12:40.5) Mediziner: we'd have to wait for it to repop

4. (1:12:47.0) Conan: repop?

5. (1:12:54.5) Mediziner: reappear

6. (1:13:07.9) Conan: naruhodoo!

7. (1:13:22.8) Mediziner: pop kinda describes how they just pop out of thin air

8. (1:13:26.3) Mediziner: which you just saw

9. (1:13:32.2) Conan: heee!

Here, we are trying to fulfill a quest objective of slaying a single enemy NPC. Other players in the game world are working on the same quest, and thus we are all waiting for the enemy NPC to repop so that we can complete the quest. The enemy does indeed repop, but neither Conan nor

I were fast enough to target it and we are made to wait a while longer for the next repop. I pointed this out to Conan in line 3, which led to an immediate questioning in line 4 by Conan. In line 5, I recasted the word by providing a synonym, which Conan confirmed his understanding of in line 6. In this case, *naruhodoo* is a Japanese word which roughly translates as "I see." I gave further explanation of the word in lines 7 and 8, and Conan again displayed that he understood in line 9 by using the Japanese *heee!*, which in this context I would translate as "Woooow!".



Figure 5. Waiting for the Enemy NPC to "Repop"

Learning of the word "repop" here might not have happened at all without that very thing occurring in front of us. As a teacher, I could have explained the concept of repop to Conan before undertaking the quest, but that would have required a lengthy explanation. In the context of this research paper, I suspect that while I might have provided a sufficient definition of the concept, repop likely still does not make much sense to non-MMOG players who are reading. However, in *WOW* there is simply no need to do so. Conan and I ventured to the location where the enemy would be repopping, and through direct experience Conan was able to pick up the meaning. I gave a word for the phenomenon we witnessed, and after a very brief explanation

where I linked the word to what we had just seen in lines 7 and 8, the meaning of repop was instantly clear to Conan. Returning to Brown's (2005) concept of *learning about* and *learning to be*, this excerpt shows how the environment of *WOW* provided Conan, through direct perception and action, a kind of learning that he could see and do at the same time.

CONCLUSION, IMPLICATIONS, AND LIMITATIONS

What I witnessed Conan engage in was real language learning in an MMOG environment, utilizing the resources of WOW to come to a better understanding of meaning and form than would have otherwise been possible in a textbook or classroom. While two of the examples in my analysis show Conan learning words that are more specific to the game environment, this study should not be viewed as one that is focused on whether MMOGs are ideal environments for vocabulary learning. The real implication of this study is what MMOGs have to offer in terms of transcending the immediate situation of gameplay, and how the learner's *learning to be* allows them to language in a myriad of contexts and situations.

Seen in this light, instead of *learning about* language in terms of second-order constructs, Conan was engaged in *learning to be* in first-order languaging (Linell, 2009). I think that the MMOG environment allowed Conan to be a very agentic learner. Classrooms depend upon skilled teachers to foster agency in learners, while I believe *WOW* naturally encourages learner agency. Language and meaning surrounded him while playing *WOW*, and he made full use of its affordances and resources (including me) to actively pick up on and learn new vocabulary.

In so-called real life situations, language learners are actively engaged in a cycle of perception and action, picking up on available affordances and using them as needed to achieve skilled linguistic action and learning. However, the potential to recognize and make use of such affordances may differ depending upon the experience of the language learner. In addition, the stakes of real life are much higher. If Conan were to only call upon classroom knowledge of English or the ability to use a dictionary to find unknown words, he might very well stumble in an unpracticed or unexpected situation. In his *WOW* play, which required attuning to the environmental affordances in service of completing quests, Conan effectively problem-solved and made quite skilled linguistic actions (Zheng et al., 2012). These are skills that can be taken out of the game and applied to the real world.

Video games are already showing great promise in allowing learners to transcend the situation of "here and now." *Kerbal Space Program*, originally a sandbox game focused on building and launching rockets into space, has been utilized by introductory engineering design teachers (Ranalli & Ritzko, 2013) to better teach concepts than might be possible in a textbook or traditional classroom setting. *Civilization*, a historical simulation game, gives students chance to experiment with geography, distribution of resources, and technological development in history, rather than view history through the lens of so-called "great people" (Squire, 2008). As for language learning, deliberately designed experiences in virtual worlds with more directed gameplay with groups of language learners has made it possible for skilled language teachers to open up much wider possibilities of languaging for their students (Zheng, 2012).

Looking into avenues of future research, further inquiry of language learning in MMOGs would benefit if the following were integrated into research design: First, more participants and learners playing with one another would allow for much more varied and rich interactions. Second, researchers and instructors should focus on creating a much more scaffolded gameplay experience, while at the same time giving learners freedom to explore and discover things for themselves. Ranalli and Ritzko's (2013) work with *Kerbal Space Program*, Squire's (2008) study using *Civilization*, and Zheng's (2012) *Second Life* Chinese Island have all used skilled instruction to teach students *about* subject matter, but through gameplay they also let students *become* novices in their respective fields. Finally, gameplay sessions should be done in a variety of contexts, whether done entirely online with learners who never meet face-to-face or in a traditional computer lab where the learners are able to interact physically with one another.

Finally, I would like to address some of the limitations present in this study. These mainly come up in my research design. Since these data come from the first time I ever designed and conducted original research, factors such as lack of experience and an unclear early focus in my theoretical framework limited me. I intended for this to be more of a pilot study, so I was satisfied with having found only a single participant. Having multiple participants would have been advantageous and provided richer data via more opportunities for interaction, language use, and appropriation of different resources within *WOW*. In terms of technology, access to a fully equipped computer lab would have allowed me to record the gameplay of each of my participants, and not merely myself. Instead of only having access to only my own avatar's point of view, it would have been possible to see each participant's avatar interacting with the

environment and other avatars in much greater detail. In addition, private messages sent between participants would have then become accessible for analysis. Furthermore, one thing I noticed while transcribing was that I would often alter or erase text chat messages as I was typing them. This entirely depended upon not only the flow of conversation, but changing conditions within the game environment as well. Conan was likely doing the same, and I can only imagine what I could have captured if I had access to his screen.

Despite the limitations I just described, I believe this study to be indicative of the great potential MMOGs have to support language learners and teachers alike. I don't intend for MMOGs to completely supplant and replace the regular language classroom. However, like all new technologies in the realm of education, I think they should become a part of a diverse pedagogical toolbox.

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APPENDIX

Pre-Study Questionnaire

- 1. Is English your first language? (If yes, please skip to question 3.)
- 2. If not, for how many years have you been learning English?
- 3. What is your nationality?
- 4. Do you own a PC and/or a Macintosh?
- 5. Do you like to play video games?
- 6. Have you ever played Final Fantasy XI before? If so, briefly describe when and for how long, and if you are still playing now.
- 7. Have you ever played World of Warcraft before? If so, briefly describe when and for how long, and if you are still playing now.
- 8. Have you ever played any video game in your first or second languages to help you in learning those languages?