

*Chapter*

# **VIRTUAL BODIES SPEAKING REAL LANGUAGES: THE USE OF THE VIRTUAL WORLD IN THE FOREIGN LANGUAGE CLASSROOM**

*Angela Giovanangeli\**

A lecturer in French studies and a member of the School of International Studies,  
the University of Technology, Sydney, Australia

## **ABSTRACT**

In this chapter, I report on the findings of a study that investigated French and Japanese language learners in a three dimensional virtual world (Second Life). Observation of student participation in text chat and analysis of the student survey responses indicated that the 59 intermediate level participants were able to undertake a variety of tasks through target language interaction. Moreover, the findings in this chapter suggest that virtual worlds support traditional teaching pedagogies and redefine the way the human body negotiates meaning and space in the language classroom.

## **INTRODUCTION**

The human body is the means by which a person is able to learn a foreign language—one observes, mimics, and performs. Theorists in teaching pedagogy agree that the human mind works best when it can build and run simulations of experiences its owner has had (Barab, Hay, Barnett, & Squire, 2001; Gee, 2004, p. 4; Lave & Wenger, 1991; Miller & Gildea, 1987).

The body, however, also inhibits this learning process. Students of a foreign language stutter to find new words, misunderstand meaning, and pronounce sounds incorrectly.

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\* Angela Giovanangeli's publications include articles and chapters in the area of second language acquisition and French language policies, and on European and French cultural identities, particularly with regard to European interregional cooperation.

Research conducted by Horwitz on language learning goes so far as to refer to student “foreign language anxiety” associated with understanding and speaking the foreign language (1995, p. 575).

Parallel to this foreign language anxiety, the space occupied within the classroom can be far removed from the real-life context of the language studied. It is not uncommon for language teachers to present vocabulary to students on topics such as household chores, with the aid of images from a language textbook, in a classroom space filled with chairs and desks. Barab et al. (2001) argue that the “treatment of concepts as disembodied entities separate from practice and particular environments leads to circular relations in which meanings become self-referential” (p. 53). Consequently, teaching a foreign language in the classroom situation may be problematic if concepts can only be recalled when students are requested to do so, but are not used spontaneously in other situations.

What if a virtual body were used to replace a real body in the language classroom? Would some of the problems faced by students with regard to their inhibitions be alleviated or considered in different ways? Could the reality evoked by a virtual world replace the artificiality of the classroom context and the way in which the body responds to its surroundings?

Working with technology that allows for the creation of virtual worlds is to examine the role of the body and its location in space. Some language educators view virtual world technology as “one of the most important revolutions in language learning and teaching” (Dervin 2008, p. 28). Virtual spaces on Second Life (SL) are now commonplace ranging from privately run language schools such as [avatarlanguages.com](http://avatarlanguages.com) to spaces leased by secondary and tertiary educators. Since 2009, European Union funded projects such as NIFLAR (Networked Interaction in Foreign Language Acquisition and Research) have been developing virtual activities on Second Life for language learners.<sup>1</sup> Further, virtual spaces replicating cities like Paris and Rome, can provide keen language students with the chance to communicate with speakers of the target language. While virtual worlds offer new possibilities in language teaching, language educators agree that there is considerable scope for further research on the effects of virtual worlds in language education (Dervin, 2008; Henderson, Huang, Grant, & Henderson, 2009; Peterson, 2006). Furthermore, the research to date does not fully explore the implications of virtual worlds in foreign language classrooms with regard to the body and the space it occupies.

This chapter examines the use of virtual worlds in foreign language learning. It considers how the body performs in a virtual space when facing the challenges associated with second language learning. This chapter also examines whether the technological applications of the space in the virtual world enhance the delivery of instruction. More specifically, it provides empirical support on the use of Second Life in two French and one Japanese intermediate level classes in an Australian university over the period of one academic semester in 2011. It will do this through observation of text chat activities in the virtual world, analysis of a student survey, and a class quiz.

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<sup>1</sup> For more information on these projects see NIFLAR at <http://cms.hum.uu.nl/niflar>.

## LANGUAGE PEDAGOGIES AND THEORIES OF EMBODIMENT

Over the past few decades, there have been rapid developments in approaches to the teaching of language. Whereas the traditional view of language teaching involved the teaching of grammar in order to access literature and culture, today there is a strong emphasis on teaching language for communicative purposes with theorists in second language acquisition such as Krashen distinguishing between language learning and language acquisition. For Krashen, language acquisition plays a far more central role than learning in second language performance. Acquisition refers to a subconscious process that is identical to the process used in first language acquisition while learning is conscious learning (Krashen, 1989, p. 8). Krashen argues that “language acquisition, first or second, occurs only when comprehension of real messages occurs and communication takes place” (1983, p. 1).

The importance of meaningful communication is also echoed in constructivist and cognitive pedagogy. Constructivism proposes that “learners construct their own reality, or at least interpret it based on their perceptions of experience, so an individual’s knowledge is a function of one’s prior experiences.” For constructivists, learning is the result of the exchange of information and social interaction is a source of meaningful learning (Duffy & Jonassen, 1992). As for cognitive theory, this focuses on the processes involved in assimilating and encoding information (Jonassen, 1994, p. 34). What these theories share is the idea that communication is possible when the learner understands concepts and is then able to pass on information in a comprehensible way.

In order for meaningful communication to take place and for language acquisition to be successful, Krashen suggests that “the best methods are therefore those that supply ‘comprehensible input’ in low anxiety situations, containing messages that students really want to hear” (1983, p. 7).

The relation between anxiety and performance in foreign language classes is also identified in the work of other language theorists. Horwitz, Horwitz, and Cope (1986) talk about “performance anxiety” in foreign language learning and describe this with regard to communication apprehension, test anxiety, and a fear of negative evaluation (p. 127). Horwitz’s (1995, p. 575) study emphasises that much of the anxiety is associated with understanding and speaking the foreign language, an especial concern as foreign language curricula move increasingly toward communicative teaching approaches. Further, Horwitz et al. suggests that the performance anxiety felt in foreign language learning is unlike that of other academic subjects due to the “disparity between the ‘true’ self as known to the language learner and the more limited self as can be presented at any given moment in the foreign language ... Probably no other field of study implicates self-concept and self-expression to the degree that language study does” (Horwitz et al., 1986, 128).

The concept of self, or how students perceive themselves when learning a language, ties in with theories on embodiment. Work by Heyes defines the body as the medium through which humans engage the world and are recognized by others as subjects, and as such embodiment is central to our human existence (2007, p. 17). Heyes argues that specific situations can become an “affective disturbance” or a type of anxiety for a person when “the gaze of the Other in particular, can bring the subject to acute awareness of the body” (2007, p. 24). The foreign language classroom may be a space in which some students are made to feel that their body’s performance is judged through the gaze of other students and the teacher,

particularly when faced with the dual relationship of the “real self” that is able to communicate efficiently in the first language and the “language learning self” that has to meet the challenges of learning and speaking a second language.

Virtual worlds may therefore offer a space in which to explore how the body performs and learns language by way of a shared social construction of reality through communication and language.

## **INTEGRATING SECOND LIFE INTO THE LANGUAGE AND CULTURE SUBJECTS AT UTS**

This case study focuses on 59 undergraduate students in the French and Japanese intermediate Language and Culture subjects offered in the International Studies Program at the University of Technology, Sydney (UTS).<sup>2</sup> Three classes took part in this study: French A consisted of 23 students (17 female and 6 male); French B was made up of 14 students (13 female and 1 male) and Japanese consisted of 22 students (21 female and 1 male). Time constraints prevented the Japanese teacher from working with more than one Japanese class during this project. In French A, one student was aged over 50 with the rest aged between 20 and 25, in French B, one student was aged over 50 while the rest of the class was aged between 20 and 25 and in Japanese all the students were aged between 20 and 25 years. In both French classes all students had English as a first language while 60% of the Japanese class had English as a first language. Each class participated in two-two hour sessions of Second Life activities over one semester during tutorial hours to complement traditional weekly lessons based on a textbook and other materials. For the French classes, the sessions were alternated during the semester so that French A and French B were not working on the same virtual activities at the same time. This was decided for the purpose of the quiz outlined below in which a control and an experimental class were set up. A virtual representation of a two-storey furnished house was built in Second Life to simulate private space. In front of this building, four smaller single level rooms were built for activities covering themes such as retail and administration (Figure 2.1).

The focus of student interaction was synchronous (text chat) and asynchronous (through digital objects such as note cards and video screens). The design of the activities was influenced by studies on task-based learning, particularly by findings which suggest that activities involving communication can facilitate second language development (Krashen, 1983; Pica, Kanagy, & Falodun, 1993). Furthermore, these activities were influenced by research on tasks encouraging students to reflect on language form while still being orientated to meaning making because these are seen as particularly useful for learning strategic processes as well as grammatical aspects of language (Swain, 2000, p. 100). Students undertook various tasks related to specific themes (problem solving and direction giving,

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<sup>2</sup> Communicative learning is the basis of the UTS Language and Culture subjects. This approach stresses the development of communication skills in a meaningful context (such as activities one might endeavour in the target language) using authentic materials (such as newspapers and film clips) and is embedded within blended learning experiences. Blended learning incorporates independent learning and classroom instruction to provide students with literacy skills in the target language and to equip them with the skills for self-directed learning. In the context of this case study and to achieve subject objectives, a virtual environment was built in Second Life to accommodate student interactions.

opinion exchange on household chores, leisure activities, and films) while consolidating grammatical concepts that were part of the semester's curriculum (hypothetical, imperative, direct and indirect speech, conditional). Understanding how to use Japanese text script was a particular focus for the Japanese class. At the beginning of each class using Second Life, activities and an avatar were distributed to each student. Students were requested to not reveal their real identities during the virtual session. In the French classes, students worked on activities individually and in pairs, with the teacher interrupting only when it was time to move on to a new section. The teacher of the Japanese class chose to take part in a group discussion as a facilitator. Initial activities were kept simple so that students could familiarize themselves with the technology and to reduce the risk of technical difficulties during the session. In one Japanese activity, designed to encourage the use of vocabulary referring to movement and to colour, students in the virtual space were given instructions in Japanese through group chat. The students were requested to show their understanding by responding virtually using the body of their avatars. The teacher for example asked all avatars dressed in red to perform a short dance, or students in blue to run around the room.



Figure 2.1.

In another activity, students were asked to listen to short video clips accessed through screens in the virtual world. One clip for example was on a Japanese anime. Students were then instructed to exchange opinions on the anime prompted by questions from the teacher. As students became more familiar with the functions in Second Life, activities incorporated more variety in the way sessions were conducted. In one particular French activity on direct and indirect speech, students were given instructions to move around the different rooms of the virtual house identifying note cards placed on household objects such as dirty plates, with the instruction “Please wash the dishes.” Each student had distinct instructions. Students were then requested to work with a partner through Instant Messaging (IM) to explain what they

were requested to do, using indirect speech. The activity then progressed to a text conversation between students and their partners about the chores they liked and disliked doing in real life. Students were then instructed to decide which chores they would do with their partners if they lived together in the house, with the activity leading to the use of the hypothetical form.

## **DATA COLLECTION AND ANALYSIS**

Observation of student IM text chat interaction was used to identify key aspects of learning acquisition that entailed communication strategies to manage target language interaction. One Japanese and one French teacher took part in these observations, each having 15 years experience in language teaching. Evidence of language development was supported by the work of theorists such as Krashen who argue that language acquisition takes place when communication between learners is successful (Krashen, 1983, p. 29). Pica's (1994) work also suggests that language learning may be achieved through negotiation of meaning, whereby comprehensibility is achieved as interlocutors repeat and rephrase meaning.

Observation of student IM text chat encompassed identification of transactional strategies to transfer information relevant to the tasks (clarification/definition) and interactional strategies relevant to establishing and maintaining social relationships (Peterson, 2006, p. 87). The student text chat interaction was examined for evidence of:

- the nature of student participation in virtual language activities;
- negotiation of meaning in the target language; and
- continuity of communication.

In order to examine the link between language learning and body perception, an anonymous student survey was administered and examined with regard to the above three areas. Surveys were distributed to the students at the end of the second session using Second Life. Survey responses from the three classes were combined and 59 survey responses were collected. One question in the survey asked students what language learning tasks they preferred to do in class in order of preference. Three questions related to student experience of virtual environments in their private lives and in education. A further three questions asked students how they found the virtual activities with regard to the specific tasks completed during each session. Seven questions explored whether students felt that virtual activities allowed them to communicate more efficiently than real-life classroom activities and whether students felt anxious in real-life and virtual role-playing activities. One question asked whether students would like to see the use of voice chat included in the virtual activities.

A short quiz was distributed one week after the first session of a virtual activity session to establish whether grammar was enhanced after the virtual session. This quiz was administered to the two French intermediate classes. Time constraints prevented the administration of additional quizzes to these two classes. Given that only one Japanese class participated in this case study, a quiz was not administered to this class to compare language progress. The quiz asked students to respond to two questions that required answers in the hypothetical and one question asked students to provide directions using the imperative. Twelve students in French

A and 22 students in French B took part in the quiz. Only one class, French A, used virtual world activities to learn these specific grammatical concepts (experimental class) while the other group, French B, was taught the same language concept in that same week using traditional question/answer tasks (control class). Scores were determined in accordance with how well the participants used grammatical structures to indicate the hypothetical and the imperative for direction giving.

## OUTCOMES

The survey responses revealed that the overwhelming majority of students in the three classes had never come into contact with a virtual environment in education (99%). Most students had personal experience with chat messaging only (98%).

With regard to preferred in-class language activities, 83% of the students indicated that role-playing and speaking type drills were the activities they preferred the least in the traditional classroom context with a significant majority preferring grammar, listening, and reading exercises. When asked if they felt anxious in role-playing and speaking exercises 75% percent answered “yes,” with the word at times either capitalized, followed by an exclamation mark, or emphatically repeated two or three times. These results support Horwitz’s work on the link between language learning and anxiety (1995). For Horwitz and for language theorists like Krashen, anxiety felt by students in the classroom is a determining factor in how successful a student acquires a second language (Krashen, 1983, p. 31).

The students all agreed having valued their participation in the virtual world activities. This in part could be attributed to the fact that during each session no technical issues were encountered; teachers intentionally kept all technical risks as low as possible (no building involved, avatars created for the students ahead of class, text chat only, and activities tightly structured with precise instructions).

### Student Participation in Virtual Language Activities

During the Japanese chat session on the anime video clip, the teacher observed that students were significantly more interactive through text message than in the real-life classroom situation when asked to voice their opinion. Student answers were longer and more detailed with students volunteering their responses in complete sentences. In the traditional intermediate Japanese classroom, the teacher observed that students would wait for the teacher to choose a student to respond, with answers usually consisting of only one or two word utterances. The following extract demonstrates some of these extended responses—TadasSpiritor is the teacher facilitating the conversation, the other names used in this paper are the avatar names of students:

TadasSpiritor: じゃ、みなさんに質問します。どうして日本人はサザエさんが好きだと思いますか  
‘Now let me ask all of you, why do you think the Japanese love *sazae-san* (the title of this anime, which is also the name of the main female character)?’

- Tsukiji: かれは。。。やさし人だともうから？  
'Because he is a kind person?'
- TadasSpiritor: かれってだれですか？  
'Who is "he"?'  
(Teacher was confused because Tsukiji misunderstood the question as 'why Japanese love *sazae-san* as the main character, not the program itself', and also he/she confusion.)
- Ratonlaveurgis: アニメとほんもののサザエさん、どちらですか？  
'Which do you mean, the animation or the person?'
- TadasSpiritor: アニメの方です  
'I meant the animation.'
- Emotionelle: 彼女は優しいし、伝統的な主婦ですから？  
'Because she is nice and a typical traditional housewife?'
- TadasSpiritor: どうして日本人はこのアニメが好きなのでしょう？  
'Why do Japanese love this animation.'  
(Teacher tried again to rectify the original question's meaning.)
- Emotionelle: 日本人自分の生活の話ですから？  
'Maybe it's because the story is closely related to everyone's ordinary life.'
- Perdrix: サザエの家族と日本野の家族は同じです？  
'Maybe the *sazae*'s family is very similar to majority of Japanese families—they can relate to the situation?'
- Houlette: すごくすてきでおもしろいストーリーがあるんです。  
子供たちはこのアニメからたくさん教えられるので。  
日本の文化や習慣や行儀 (manners) など。  
'The story is charming and interesting. Children would probably learn a lot about their own culture, traditions and manners.'
- Ratonlaveurgis: やっぱサザエさんを見ると、自分の家族をりかいできる？  
'It helps to understand some family issues and to establish better family relationships?'

These extended responses could be linked to the students' use of a virtual body during the language activities. In the student survey, one of the questions asked students how they felt about having a virtual body in the language learning context. Ninety per cent of the students found that replacing the real body with a virtual body helped in carrying out some language activities. The fact that students were not aware of the real identity of their partners was a significant aspect of the virtual world activities. The students related that: "the anonymity takes you out of the discomfort and awareness that you feel when communicating in another language," "the anonymity makes it a little less stressful," "it's anonymous and interactive which gives you the opportunity to attempt things that you wouldn't do in the classroom,"



“the anonymity makes it safer if for example, you make a mistake or take a long time to answer.” The teacher’s observation regarding the extended responses, combined with the students’ answers on how they valued their experience in the virtual world, suggest that there could be a link between the way students performed in class and the students’ perceived sense of confidence in the virtual world context. This ties in with early studies which argue that the “internet environment creates among the students a certain sense of freedom which allows them to say things they would probably not say in face-to-face interaction.” (Lantolf, 2000, p. 11).

These responses also highlight body awareness in foreign language learning and stress the anonymity offered by the virtual body. In the virtual, students noted that they no longer felt a sense of anxiety, with some students speaking of the “physical comfort and ease” they felt in their virtual body when communicating because of the freedom anonymity gave them. Furthermore, one student noted that in the real class context, particularly in the larger class “there is one question per thirty students in class, many levels of ability and only a few answers.” Consequently, the virtual world allowed this student to communicate more efficiently in the larger class context where students with stronger speaking skills tend to dominate discussions. Moreover, for a male student in a class made up predominantly of female students, gender was an issue in how he participated in class discussions. Through the anonymity of the virtual world, this student felt he could participate more openly amongst his female peers and therefore had more to say.

Interestingly, when students were asked in the survey if they would like to incorporate voice chat in some of the Second Life activities, whilst 35% were happy to do so, the majority indicated that voice chat would take away anonymity, the very aspect the students felt was beneficial in the virtual world activities. The use of the voice seems to bring back the issue of body awareness—one is aware of presence through the voice and the mistakes it makes.

## Negotiation of Meaning

Negotiation of meaning was an aspect observed in a number of the French language tasks which involved pair work. In a French language activity, students were asked to elaborate on instructions using indirect speech with their partner. The following is an example of how meaning is negotiated:

- Granddede: *qu’est ce qu’il a dit, ta pere dans le balcon?*  
 ‘What did your father tell you to do on the balcony?’
- Emotionelle: *Il m’a dit de ramasser toutes ces tasses du balcon*  
 ‘He told me to pick up ((ramasser)) the cups on the balcony.’
- Emotionelle: *qu’est-ce que ramasser?*  
 ‘What does *ramasser* mean?’
- Granddede: *Peut etre comme ranger, laver ...?*  
 ‘Maybe put away, wash ...?’
- Granddede: *faire les ménages ...*  
 ‘Clean up...’

This excerpt indicates that where meaning was not understood, the student was able to share knowledge with a peer and self-direct learning without the help of the teacher. In the traditional classroom, the French teacher noted that students would ask the teacher for a translation of words not understood in activities. In Second Life, the teacher was less “visible” and this absence suggests that students turned to each other more readily for answers. Swain’s (2000) research highlights the significance of negotiation when she notes that:

collaborative dialogue is problem-solving and, hence, knowledge building dialogue. When a collaborative effort is being made by participants in an activity, their speaking (or writing) mediates this effort. (...) Through saying and reflecting on what was said, new knowledge is constructed. (p. 113)

This notion of reflection is supported by answers to the survey question which explores whether virtual activities allow students to communicate more efficiently than real life classroom activities. Ninety-five per cent answered “yes” with some students stating that text chat allowed more time for reflecting on meaning. Students related that: “I am able to edit a comment before sending it so I can correct myself.” the virtual world “takes the pressure off having perfect French. I felt really comfortable to make mistakes,” “you can fix and learn from mistakes.” The importance of this negotiation of meaning is reinforced by work conducted by Blake (2000) which relates that text chat in language learning encourages students to focus on form as they notice gaps in their lexical interlanguage. Furthermore, studies conducted by Pellettieri (2000) supports that computer mediated chat cultivates negotiation of meaning and allows for the “think time” in learning that plays a significant role in the development of grammatical competence. In terms of learning, theorists agree that a student who believes he or she can successfully perform an activity will differ from a student who does not. The former is likely to exert more effort, spend more time, and master the required skills earlier than the latter (Bandura & Schunk, 1981, p. 31).

## Continuity of Meaningful Communication

The language teachers observed that students in the traditional intermediate level language classroom often revert to their first language once they have completed a language task, despite efforts by the teachers to encourage the use of the target language throughout the entire language session. This characteristic is supported by the work of language researchers (AVALON, 2011) who describe the “stop start” nature of the traditional language lesson. In the virtual activities, the teachers noticed that the students did not revert back to their mother language during each two-hour session. In some cases, students who completed pair work tasks ahead of other students continued their discussion in the target language on conversations that related to their personal lives. The following example demonstrates that the students have finished their activity in French (as indicated in the first line of this excerpt) and continue their interaction in the target language to speak on a particular matter related to the private life of one of the students:

Emotionnelle: *est-ce que c'est tout que nous avons besoin de faire?*

- 
- Granddede: 'Is that all we have to do?'  
*je pense que oui*  
 'I think so.'
- Emotionnelle: *mmm je prefere ecrire que parler!*  
 'Mmm I prefer writing to speaking!'
- Granddede: *ahh moi aussi!*  
 'Oh so do I!'
- Emotionnelle: *alors, la derniere semaine, mes parents m'a dit qu'ils allaient a europe en decembre*  
 'So last week my parents told me they were going to Europe in December.'
- Emotionnelle: *sans moi!*  
 'Without me!'
- Granddede: *Ahhh non!*  
 'Oh no!'
- Granddede: *Pour quoi?!*  
 'Why?!'
- Emotionnelle: *parce qu'ils n'ont jamais ete en europe avant et ils a pensent que decembre de cette annee est une bonne temps!*  
 'Because they have never been to Europe before and they think December of this year is a good time!'
- Granddede: *Ah ouais, peut-etre ils veulent voir la france avant tu vas en 2013?*  
 'Oh yeah, maybe they want to see France before you go in 2013?'

The collaborative engagement of both these students suggests that they were able to transform the task into an opportunity for language development by way of interaction which was meaningful to them. As noted earlier, the best methods for language acquisition are those that "supply 'comprehensible input' in low anxiety situations, containing messages that students really want to hear" (Krashen, 1983, p. 7).

Furthermore, this transfer from class task to personal conversation in the target language suggests that the anonymity of the virtual space may motivate the continued use of the target language and consequently increase the amount of time students spent interacting during their activities. One student noted in the survey: "I liked that we didn't know who our partners were, it forced me to write only in French whereas in class we sometimes talk in English." This highlights the link between body and space and the consideration language teachers need to give when creating a place that will allow students to interact in a meaningful way.

## Quiz Results

The quiz was administered to the two French classes. Scores were determined in accordance with how well the participants used grammatical structures to indicate the hypothetical and the imperative in a direction-giving context. The results of the quiz indicate a difference between the two French classes. Table 2.1. summarizes the results of the quiz with regard to correct grammar use:

**Table 2.1. The results of correct grammar use in the quiz**

	<b>French A (experimental)</b>	<b>French B (control)</b>
Hypothetical	91% correct	34% correct
Imperative	75% correct	63% correct

One of the questions using the hypothetical was:

*Si le chef de votre travail vous invitait chez lui (ou elle) un dimanche midi, qu'est-ce que vous apporteriez avec vous?*

'What would you bring if your boss invited you to his/her house on Sunday afternoon?'

Answers to the quiz highlight that students using the virtual world activities outperformed the class using traditional activities such as question/answer drills and group discussions on form with regard to the hypothetical and imperative tenses. The control class, while demonstrating an understanding of the questions and providing a comprehensible answer, did not fully respect the grammatical conventions of the situation. The following example (sample of the French A experimental class) shows the complex structures of the hypothetical answered correctly:

*Si mon chef de travail m'invitait chez lui j'apporterais une bouteille de vin*

'If my boss invited me to his place I would bring a bottle of wine.'

This second example (French B control class) demonstrates an understanding of the question in the hypothetical but little attention is paid to grammatical form in the answer:

*S'il m'a invite chez lui, je vais apporter du vin* (incorrect use of verb tenses)

With regard to activities using the imperative and direction giving, the experimental class learned concepts related to directions and movement around the virtual house. Avatars had to negotiate space following instructions requesting them to move in various parts of the house. The control class learned these same concepts using an exercise from a textbook and talking with the teacher in the classroom.

The following example (French A experimental class) demonstrates an understanding of the imperative tense:

*Prenez la rue a côté de building 1 et continuez dans la rue.*

'Take the street near Building 1 and continue walking down the street.'

The second example (French B control class) shows an understanding of meaning but no attention to grammar:

*Bon si tu marches a droit tu voirait une rue*

'If you walk ahead you will see a street.' (+ incorrect use of tenses)

The experimental class results suggest that students succeeded in using vocabulary associated with movement and directions in a more grammatically correct way compared with

peers in the control class. Negotiating space and movement in the virtual world could possibly have allowed students in the experimental class to better acquire language through meaning and context. This corresponds with some of the student survey responses that related: "Using the virtual is very beneficial as being able to see and react to actual objects is very helpful rather than imagining." This supports earlier research arguing that spatial cognition and visualization in the virtual world are key in learning where learners make use of contextual clues in gathering knowledge of the world around them (see Osberg, 1994). Furthermore, as a result of the extended responses, students in the experimental class spent more time on activities in the target language than students in the traditional classroom. This suggests that key factors of language acquisition noted earlier (negotiation of meaning/meaningful conversation) were to some extent reinforced in the virtual activities.

## **FUTURE DIRECTIONS AND CONCLUSION**

The results in this study have led the author to propose that virtual world activities in language classes expand the ability of students to communicate with one another while removing barriers such as foreign language anxiety. This aspect of the virtual world complements language acquisition theories such as those elaborated by Krashen arguing that foreign language activities should provide students with a context and a setting in which to communicate effectively and authentically (1983, p. 66).

In this space, students relate feeling more confident and spending more time communicating in real time, suggesting that the "affective disturbance" in language learning referred to earlier with regard to body awareness may be minimized in the virtual world. The words "anonymity," "less fear of making mistakes," "attempting language structures that would not be attempted in real life," and "self correction" came up often when students reflected on their experience using Second Life.

Results gathered from the quiz in the French classes also suggest that the virtual space supports language acquisition. While further research over a longer period of time would need to be conducted in order to explore in more depth the relationship between the affordances of virtual worlds in the impact on language learning and embodiment, the grammatical improvements observed in the class using virtual activities could be attributed to some of the features enhanced by the virtual space such as the amount of time communicated in the target language, the learners' perceived sense of confidence, and the negotiation of meaning within a space that offers students simulations of the real and motivation to communicate in a meaningful way.

A compelling outcome of this project was the role of the language teacher during the virtual world activities. While the teachers' input in the design and setting up of activities was crucial to the success of each activity, once the activity was running, students worked independently in many of the tasks. The visual presence of the virtual world and the virtual presence of avatars brought together the communicative objective of each task. The teacher was often not required to intervene in many activities except to facilitate, if required, and this was usually kept to a minimum. Ene, Görtler, and McBride (2005) suggest in their work on text chats that students participate more when the teacher is less visible (p. 625). This aspect

of the visual space could also be the subject of investigation in future studies on the link between student language acquisition and notions of embodiment.

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