The Discursive Construction of Language Teaching and Learning in Multiuser Virtual Environments

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Dedication

To my greatest teacher and dearest companion,

Jessica Canfield,

who, *à son insu*, brought me to this work.

You have taught me more about communicating, loving, and being than I could ever learn from books and professors. You made this possible. I am indebted to you and will be forever and ever, so of what do I have to boast?

I hope one day you will read this text, make your own connections and/or resonances,

and share them with me.

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—…the source of meaning is to be found not in the figures or in their backgrounds but in the difference between the two because it is the boundary around a figure that makes it exist as a thinkable thing (Wegerif, 2006, p. 145).

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Abstract

This dissertation seeks to broaden how researchers within Computer-Assisted Language Learning (CALL) make sense of and examine psychological and power constructs at play in language courses conducted in 3D multiuser virtual environments. Eighteen students and two teachers in eight formal English as a Second Language (ESL) classes in the 3D multiuser virtual environment of *Second Life* participated in a discourse analysis study to explore the theoretical and analytic ways in which *critical discursive psychology* could function to explore how teaching and learning are performed as interactional events in a community of language teachers and learners in *Second Life* by investigating the use of interpretative repertoires, ideological dilemmas and subject positions during these interactions and considering the implications of what is noticed. Transcriptions and field notes of screen recordings from the eight classes were the primary source of data. Findings drawn from the classes pointed to how the participants' discursive practices worked to reframe orientations to pedagogical ideologies rhetorically, and how misunderstandings could be operationalized in ways divergent from their target language abilities. Broader implications of this research are then discussed, along with suggestions for teachers and researchers working within virtual environments, as well as desiderata for future research both from the findings shared and the data that was beyond the scope of this research.

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Abbreviations

3D	Three-dimensional
AVALON	*Access to Virtual and Action Learning live Online*
CALICO	*Computer-Assisted Language Instruction Consortium*
CALL	Computer-assisted language learning
CDP	Critical discursive psychology
DAM	Discursive Action Model
DP	Discursive psychology
ESL	English as a second language
IALLT	*International Association for Language Learning Technology*
IRF	Initiation-response-feedback
L2	Second language, target language
LLT	*Language Learning & Technology*
MMORPG	Massively multiplayer online role-playing game
MOO	Multi-user object-oriented domain
MUD	Multi-user dimension
MUVE	Multi-user virtual environment
SL	*Second Life*
SLA	Second language acquisition
TESOL	*Teachers of English to Speakers of Other Languages, Inc.*

Chapter One: Introduction

The amount of contact time necessary for adult learners to achieve even limited communication with a native speaker far exceeds the language requirement at most universities even as learning a language has become critical in our increasingly interdependent world. While current research in second language acquisition does at times stress the social aspect of language acquisition (Atkinson, 2002; Gee, Allen and Clinton, 2001), this has proven difficult to achieve in current instructional paradigms given the power asymmetries that exist in the classroom setting. At the same time, foreign language instruction has benefited from advances in technology by (a) promoting easy access to other cultures, (b) increasing exposure to naturalistic discourse, and (c) reshaping formal instruction through the Internet (Levy, 1997) and various iterations of computer-mediated communication (Warschauer, 1997), including virtual worlds (Milton, 2012). However, empirical studies carried out within research approaches in Computer-Assisted Language Learning (CALL), which stresses the effectiveness of technology on language acquisition) have resulted in findings similar to Clark's (1983) media effects studies. These studies find that technology does not significantly influence learning under any condition. While researchers may occasionally acknowledge variability in their data that resists categorization into their cognitive research models, those models constrain researchers from investigating how this variance manifests itself in interaction, confining their research to frameworks of language learners as deficient communicators with learning defined as approaching the target of idealized native speech (Firth and Wagner, 1997).

As pedagogy strains to keep pace with the tectonic shifts in emerging technology, researchers seek alternative approaches to study pedagogical technology to determine the nature of the relationship between the two. This is a study of a language learning community in a 3D

multi-user virtual environment known as *Second Life*. It examined eight classes in this virtual space using an alternative empirical approach known as critical discursive psychology, which emphasizes the local discursive practices of study participants in their environment and the "argumentative texture" that makes such interactions possible (Laclau, 1993, p. 341). As this approach calls attention to phenomena that resist analysis in traditional CALL research, critical discursive psychology strives to respect the variability and complexity of contexts in natural discourse (Edwards & Potter, 1993).

Multi-user virtual environments such as *Second Life* are playing a progressively more significant role in education in general (Warburton, 2009), and language learning in particular: to use *Second Life* as an example, Cooke-Plagwitz determined the early number of universities or academic institutions involved in *Second Life* to be over 200 (2008). This number more than tripled to over 700 educational institutions from all over the world in the space of three years (Linden Research, 2011) and continues to grow. Of the educational activities taking place in *Second Life*, language learning is by far the most common (Kaplan-Rakowski, 2010). Many traditional language programs as well as private language schools are now using multi-user virtual environments to support language learning. This account of the growing popularity of multi-user virtual environments for language educators is a result of the breakthrough in technology affordances over the last decade: the evolution and increasing ubiquity of Internet access, sharper and faster video and audio technologies, and capable mobile devices have all made 3D multi-user virtual environments more pragmatic and functional (Warburton, 2009). A multitude of activities unlikely to occur in a traditional classroom setting are possible in *Second Life*, including multiple modes of communication such as text chat, instant messaging, voice chat and notecards, many of which can be stored for future reference. The constructed, interactive

and immersive nature of *Second Life* fosters an environment for verbal, paralinguistic, and nonverbal communication and contributes to social interaction on not only verbal and aural levels, but a kinesthetic level: the ability to act on objects and be acted upon by objects and other avatars in the virtual space opens the possibility for learning by doing in a way that CALL has not seen before (Hew & Cheung, 2010). *Second Life* has been seen as "an excellent potential resource for supplementing foreign language classes" (Hislope, 2008, p. 56).

Of course, the CALL discipline has seen this excitement for new technology paradigms before, only to see efficiency studies comparing these new technologies with classroom instruction that show no clear advantage or disadvantage of the technology, possibly due to the challenge of controlling contextual and individual factors that affect learning (e.g., Burston, 2003). This exclusion of context and variability in cognitive and efficiency studies constitutes a void in CALL studies that requires research methodologies to investigate these contextual factors, which may prove a significant part of the instructional and learning processes (Jamieson, Chapelle & Preiss, 2005). As users of multi-user virtual environments design innovative educational environments and acquire a critical mass of participants, a contextual awareness of fully immersive spaces such as *Second Life* (that is, understanding the manner in which these spaces mediate everyday interaction) becomes increasingly important. As Thorne (2003) points out, both synchronous and asynchronous forms of online communication are profoundly influenced by the characteristics of these tools that mediate everyday communicative practice. In other words, research has shown that students "have extensive Internet experience that catalyzes specific forms (and expectations) of communication. In turn, the resulting communicative dynamics are consequential for both the processes and products of language learning" (p. 38).

Perhaps we have arrived at that point predicted by Garrett (1998, p. 9) where "the tail of technology starts wagging the dog of conventional language pedagogy." Of course, this dialog in second-language acquisition (SLA) studies (the discipline from which CALL springs) between technology and pedagogy seems very similar to the media debate in instructional technology between Robert Kozma and Richard Clark. Kozma (1994) contended that media itself can influence learning under certain conditions. On the other hand, Clark (1994) argued that it is always the method, rather than the media that influences learning. I align myself closely with Thorne and Kozma in my view that multi-user virtual environments as Internet communication tools are not neutral media, but that these environments influence the ways teachers and students engage in them, with consequential outcomes for both the processes and products of these engagements.

Statement of the Problem

Extant research into language teaching practices in Second Life has argued that educators simply re-inscribe traditional classroom pedagogy in virtual environments (e.g., Zheng & Newgarden, 2012). Given that a large majority of the CALL community sees effectiveness research as appropriate because it fits in with their social understanding that technology should only be leveraged to carry out activities that are successful with existing pedagogical paradigms (Colpaert, 2006), it should not surprise anyone that the preponderance of CALL research seeks to prove that any given technology can fit into those existing paradigms (Garrett, 2009). The hegemony of effectiveness research "implies that current pedagogical practice represents everything we need to know about instructed second language acquisition (SLA) so that we need only 'computerize' what we already do," (Garrett, 2009, p. 720) rather than perceiving those pedagogical practices as socially constructed, questioning the role of power as pedagogies are

deployed in these virtual environments, and "setting out to demonstrate convincingly that students learn differently" within these virtual environments (Garrett 1998, p. 8) to foster the conceptualization of new pedagogical frameworks.

In responding to Garrett's (1998) call for convincing performative research, I recognize that of the plethora of existing CALL research methodologies and effectiveness studies, none will sufficiently highlight the points that Garrett would want to raise, namely, how the participants in virtual language learning environments perform learning and teaching in ways that problematize traditional CALL research, established pedagogy, and the power dynamics of the traditional classroom. I especially resonate with the idea that 3D multiuser virtual environments (MUVEs) such as *Second Life* challenge all researchers to question the usefulness and relevance of traditional methodological tools of analysis as one confronts the assumptions made about research and evaluating the validity of those assumptions in MUVEs (Boellstorff & Thomas, 2010).

Purpose of the Study

The purpose of the study is to investigate how language students and teachers in the 3D multiuser virtual environment (MUVE) of *Second Life* construct concepts of teaching and learning in the virtual classroom through discourse. As stated above, the study examined 8 *Second Life* language classes using critical discursive psychology (CDP), an empirical approach that focuses on these pedagogical moments as socially constructed, emerging from interaction between teachers and students within a specific context. I do this with the supposition that the study will answer the "how" of Garrett's (1998) call to demonstrate convincingly that students learn differently from current CALL pedagogical perspectives. In other words, I believe that localized discourses around teaching and learning (with their pedagogical and power

implications) will become more apparent, paving the way for the conceptualization of different pedagogical and research frameworks for MUVE language learning, as well as strategies to address power asymmetries particular to virtual language learning and research.

Research Question

The following research question will guide this study, subject to change due to ongoing reflection during this project:

- How do participants perform "teaching" and "learning" during language courses conducted in the multiuser virtual environment of *Second Life*?

Significance of the Study

First, through analyzing formal classes in *Second Life* using CDP, I will contribute an interpretation of the performance of language teaching and learning in a virtual environment as this study investigates how these concepts are actually worked up in discourse. Firth and Wagner (1997) have suggested that holistic approaches (of which CDP would be considered one of several) problematize the distinction between social and individual/cognitive approaches, attend to both the process and product of language learning, are more attuned to emic and interactional orientations to research, and are critically sensitive towards the theoretical nature of fundamental concepts in the discipline of language learning. I submit that this study will add another alternative voice on how to conceptualize and frame language pedagogy in virtual environments, and attach another understanding of how looking at virtual language pedagogy as socially constructed might contribute to the development of new pedagogical frameworks for virtual environments that can also address power asymmetries particular to the virtual language classroom.

Second, while recognizing the importance of early work on classroom interaction focused on uncovering patterns of discourse through coding teacher utterances (e.g., Sinclair & Coulthard, 1975), such work has been critiqued for theorizing from the descriptive labeling of verbal exchanges in disconnected, impersonal ways indicative of their etic stance towards classroom research; a stance that fails to fully comprehend language use in the classroom (Box, 2012). This study's focus on the conversational practices of language teachers and learners will provide a divergent view on how people manage, contest, and make relevant the concept of language learning and power asymmetries in a virtual environment.

Third, while recognizing that discourses manifest power relations between institutions, teachers, and students in a language learning community, the traditional critical categories of gender, ethnicity, and class oriented to in CALL's *critical theory of technology* (Feenberg, 1991; Warschauer, 1998) are problematized as MUVEs have the power to eliminate or further complicate (in the case of trans/humanism) these critical issues. This study's focus on the power asymmetry between language teachers and learners will demonstrate how both groups negotiate language learning and power around different axes in a virtual environment.

Finally, this study will make valuable contributions to CALL research methodology, as conversational analysis methodologies are developing (Hellermann, 2008; Markee, 2011; Markee & Seo, 2009; Seedhouse, Walsh & Jenks, 2010), discursive psychology approaches are nascent (de los Arcos, Coleman, & Hampel, 2009; Hampel & de los Arcos, 2013; Kalaja, 2003; Kramsch, 2003), and CDP approaches are lacking. This project has the potential to offer new theoretical and analytical insights to CALL researchers investigating MUVEs in particular, and other virtual worlds and computer-mediated communication in general.

Theoretical or Conceptual Framework

In order to achieve the purpose of this proposed study, I will apply a form of critical discursive psychology (CDP; Billig, Condor, Edwards, Gane, Middleton, & Radley, 1988; Edley, 2001; Edley & Wetherell, 1997, 1999; Taylor, 2012; Wetherell, 1998; Wetherell & Edley, 1999, 2009) to analyze the discourse in virtual classes. CDP is an analytic outgrowth of discursive psychology (DP) (Potter & Wetherell, 1987) that synthesizes the techniques of conversational analysis (Sacks, 1992) with elements of post-structural analysis (Foucault, 1971; Laclau & Mouffe, 2001) using specific concepts and tools such as *interpretative repertoires*, *ideological dilemmas* and *subject positions*. CDP is similar to DP in that it focuses on situated discourse, looks at the formation and negotiation of interactional and intersubjective events, and is concerned with participant methods and the logic of accountability. CDP differs from DP in that it also seeks to put these events and methods in a genealogical context, to comprehend patterns of background normative constructions and their forms of expression, and to consider the consequences of such constructions. While I admit to being seduced at times by later incarnations of DP that promote forms of "direct empiricism" missing in other research traditions (Potter 2010b, p. 695) (distinguished by close analysis of the action orientation of talk) (Edwards & Potter 1992, 1993, 2005), I recognize that there is always a "broader cloth" of social fabric from which interactions take their threads (Wetherell, 1998, p. 403), and the discourse of language instruction involves institutional discourse where a long and storied genealogy of power asymmetry is in play (Edwards 1997b). Wetherell (1998) characterizes the analytic questions in CDP as orienting to the description and evaluation of events, and then looking into the construction of multiple versions of events and the related construction of troubled (or dilemmatic) and untroubled (or normative) identities and talk. Wetherell believed that it is useful

when viewing the variability in accounts and formulations to ask, "Why this formulation at this point?" (1998, p. 395).

In approaching the data, I assume that life experience brings each student and teacher comes to their courses with highly personalized ideologies of the tenets and practices of teaching and learning and of the media they use to participate in those processes. By looking at the way that participants approach the inevitable inconsistencies and contradictions in those highly individualized understandings, one is able to understand how these are developed rhetorically in discourse to persuade others and to ultimately construct versions of the world (Potter & Wetherell, 1987). As individual accounts are often at odds with each other, the task of analysis is to ask why formulations are manifested when they are.

Limitations of the Study

There are a few features of this project that limit the claims I will make regarding my findings. The first is the technology itself (the instruments I used for data capture) and the second is a possible lack of generalizability.

Although the browsers that provide access to *Second Life* include audio and graphical channels, the quality of transmission on those channels might be a factor which would affect the resulting discourse, but which would also prove an interesting site for exploration. How participants negotiate instances of limited bandwidth and simulation lag (interruptions and delays of sound and images in *Second Life*) in a foreign language may prove to be a topic of investigation. Additionally, not all modes of communication will be available to the researcher. Private text and audio chats, much like private conversations in the physical realm, will not be accessible beyond how they may be made relevant or attended/oriented to in public.

I also recognize that, while my findings might be transferable to other settings and to other participants, I neither expect nor aspire to generalize my findings. I aim rather to situate this study within a broader dialogue about how CALL researchers understand MUVEs and their implications for academic inquiry. As a discourse analyst, I view generalizability itself as a discursive construct that draws on understandings produced by the researcher rather than discovered through research (Edwards,1997a; Potter, 1996). In other words, I assume that all researchers "traffic" in versions of the world grounded in their personal epistemologies and ontologies (Edwards, 1997a, p. 45). As such, methodological rigor is attended to in this project by considering my "positionality" (or the version[s] of the world I construct) and the analytic tradition in which I situate this study (Edley & Wetherell, 1997; Fawcett, 2008), which will be discussed below.

Delimitations

The delimitations described below constitute the scope of this study and establish its parameters and limits.

First, while not disparaging the body of effectiveness studies occurring within the CALL field of research (Felix, 2005) (realizing that funding for new technologies and new approaches is not likely to be forthcoming without some well-founded promise of their success), it is not relevant to this project to consider whether or not the pedagogical interventions I observe were effective or successful.

Second, I will collect data from the classes of only two teachers, with eighteen students, within only one teaching organization, and only within the 3D MUVE of *Second Life*. In doing so, I recognize that participants will organize specific forms and expectations of interaction in *Second Life* that may or may not exist in other MUVEs or virtual worlds. I also recognize that

within this study's methodological approach the sample size is "strongly influenced by pragmatic considerations" (Willig, 2008, p. 98) in response to participant wishes which I detail later. I also acknowledge that these types of considerations might be more appropriately located under limitations with other researchers in similar paradigms. While having a more longitudinal study may have brought issues I noticed into sharper focus and even introduced new issues, I acknowledge the impossibility in all research of capturing everything, both within the courses I did observe and those I chose not to observe. Data collection is always partial and positional. While I will never fully capture how learning and teaching is performed in Englishville, I contend that the value of this project is ultimately built upon the analytic questions asked by the researcher, which are also always partial and positional.

Third, I will not collect interview data. While interview data has gained a central position in qualitative research, I consider data to be naturalistic when they are neither elicited by nor affected by any action of the researcher. Potter (2002) suggests that an appropriate test to determine whether data are naturalistic or not is the dead researcher test. For example, interviews would not take place without a researcher, but classes, discussions, tutoring sessions, and other types of interactions would happen whether the researcher were present or not. This approach to data avoids the nature of self-reporting to provide normative descriptions as interviews typically do (Potter & Hepburn, 2005). This type of data also provides a high degree of ecological validity (Van Lier, 2004) as it captures the everyday discourse of participants in a radically emic way.

Definitions

In this section, I define central terms and ideas that are to be used in this study that I believe require stipulation or unpacking to make the motives and assumptions of the study clearer.

CALL: Computer-assisted language learning (CALL). While the use of computers for language learning and research dates back to mainframes serving behaviorism-based initiatives like the Grammar-Translation and Audiolingual methods (Beatty, 2003; Burton, Moore, & Magliano, 1996), the term computer-assisted language learning or CALL was coined in the early 1980s at a convention of teachers of English to students of other languages (TESOL) by a group of enthusiasts who saw a need for applied linguists involved in SLA to "recognize the ways in which technology affects their work" (Chapelle 2005, p. 743). The designation eventually received the imprimatur of second-language acquisition and other mainstream language learning journals and became the basis for a body of journals devoted to CALL such as ReCALL, the CALICO Journal, LLT, the IALLT Journal, and Computer Assisted Language Learning (Chappelle 2005). This moniker has recently become a source of tension in the CALL community by some who work with technology and language learning but find the notion of the "computer" in CALL increasingly irrelevant or obsolete (for a non-exhaustive list of derivative approaches, see Beatty 2003, pp. 9-10). Rose (2000, p. 8) has characterized this type of struggle as an attempt for "various factions to privilege their meanings and interpretations above those of others." Lagenhove and Bertolink (1999) offer the alternative lens of "a specific social action in which actors are actively engaged in socially constructing a technology," each actor holding a stake in the outcome (p. 126). While I believe in the value of resisting the orthodoxy of CALL nomenclature, and affirm that it is an issue in the CALL community, I choose not to take up the

matter here. As a practical measure, I will use CALL to signify theories and approaches to the study of second language learning via various technologies, despite my reservations about the acronym.

MULTI-USER VIRTUAL ENVIRONMENT: While the acronym MUVE refers to a multi-user virtual environment, it often gets conflated with terms like *virtual worlds* and *online games*, as well as the text-based multiuser dimensions of the previous two decades. While I will consistently be using MUVE as the term to describe *Second Life*, I do on occasion use virtual world as a term because multi-user virtual environments as fully immersive spaces are in every right virtual worlds. However, as environments which are more easily woven into the physical world such as Facebook, LinkedIn, and blogging are also increasingly referred to as virtual worlds, I will limit my use of the term as these latter do not fall into the scope of this study. Similarly, online virtual worlds that are game-specific and have pre-determined goals and narratives, such as World of Warcraft and other massively-multiplayer online role-playing games (or MMORPGs), do not fall into the scope of this study. Finally, while this project will in its review of extant literature look back to the text-based multi-user virtual environments of the last two decades known as multiuser dimensions (or MUDs), this project will look exclusively at *Second Life,* one of several modern multi-user virtual environments with 3D graphics that represent persistent virtual environments.

SECOND LIFE: The most prominent MUVE for both entertainment and educational purposes, developed by Linden Lab in 2003. Accessed through one of several free browsers (called *viewers*), users are able to interact with the environment and with each other through the body of their avatar. Avatars can explore the world (known as the "metaverse" or "grid"), meet other residents, socialize, participate in individual and group activities, and create and trade

virtual property, services, and currency (the *Linden dollar*) with one another (See Figure 1). *Second Life* currently comprises over 1.5 billion square meters of virtual space. Hundreds of universities around the world own and use *Second Life* real estate (purchased in units known as "islands," which are equivalent to 64,000 square meters). Many universities have produced *simulacra* of their physical-world campuses and use these virtual campus settings for residential activity and distance education purposes.

Avatars have the ability to do much of what is done in the physical world, but can do unconventional things such as fly and teleport to various locations within the virtual world (Appel, 2006). Far from being the intelligent tutor or cognitive agent of traditional CALL, multi-user virtual environments "one-up all other forms of interactive media by allowing participants to take complete control of cultural forms of production" (Book, 2004, p. 5). Participants do not just inhabit the space, they create the space, as well as their self-(re)presentation through the body of their avatar. In other words, every aspect of *Second Life* is performative, even to the encouragement of imaginary positions (Wetherell & Edley, 1999), a sort of "rhetorical avatar" deployed in conversations to achieve particular ends (Terry & Braun, 2012, p. 11). Through discursive construction amongst avatars, many features of the physical world have been (re)presented in *Second Life*, such as unique language, political structures, economy, and social rituals (Steinkueler, 2004). The avatars that co-locate a given space could be managed by people from anywhere in the world, who are only known through what is constructed in the virtual environment with others, as avatars do not necessarily have any essential properties in common with their alter egos.

Figure 1. Screenshot of a classroom in *Second Life*.

Positionality Statement

Throughout this research, I seek to make explicit to myself and others the biases I bring to this project. I experience the world from particular positions of embodiment, location, and sociality. As such, I too have lived ideologies that shape my understanding of the world and influence how I choose to represent participants, data, and findings. As a result, I feel it important to share with the reader how I came to research virtual worlds and why I desire to examine learning and teaching in *Second Life*.

With undergraduate degrees in French and history, an M.A. in Medieval French Studies, and a significant amount of PhD work in medieval studies, I came to this project as a French instructor who once aspired to be a medievalist but stumbled quite accidentally into computer-assisted language learning and from there to directing language technology centers. In my positions as director of various language resource centers, I have waded in and out of formal French instruction but have worked closely with language instructors to incorporate technology into their courses. As I continued in this line of work, my frustration with the seeming lack of understanding between researchers and instructors in regards to pedagogy, learning, and the place of technology in both, combined with my regrets for terminating my degree pursuits after reaching candidacy, fueled my desire to (re)enter a research program.

My line of work directing a large language resource center also affords me the chance to interact with students as they do coursework and explore their digital world in the center. I had occasion several years ago to sit and watch a student "play" with *Second Life*, and could tell by the way she was lost in this world and using language with great motivation that this type of technology held promise for learning. Indeed, I believe that these virtual environments are the nascent platforms for future iterations of the Internet (Pettey, 2007). I see in them the potential

to unite the value of education and the powerful, motivating attraction that gaming and "serious play" has on the rising millennial and post-millennial generations: a new iteration of Horace's axiom that one must simultaneously delight and instruct. The lure of virtual worlds such as Linden Lab's *Second Life* and Blizzard Entertainment's *World of Warcraft* for language-learning communities lies in my opinion on three axes. First, they have a critical mass of people: tens of thousands of people are online at any given time. Next, they have an affinity to real life in that interactions involve people working in collaboration that co-construct and make sense of an environment. Finally, these worlds resonate in a significant way for language learners. As participant avatars are deployed into conversation, and invested by their alter egos with an imagined sense of the self applicable for the particular conversational context of learning or teaching English, MUVEs may well afford a deeper and more profound exploration of not only what is possible in performing learning and teaching through the body of the avatar, but what is possible in describing the self and interrogating power asymmetries through the performance of imaginary positions (Wetherell & Edley, 1999).

I see the formal classroom as a reflection of the ideologies that inform it. These ideologies may be praxiological (informed by research and pedagogical frameworks) or "lived" (informed by experience, anecdote, and folklore). In both, the expectations surrounding best practices for learning and instruction are simply social constructs, not universal laws. I presume that ideas surrounding instruction and learning at any level and in any environment emerge from both an individual and institutional perspective and thus reflect power relations between researchers, teachers, and students as they seek to expand their ability to interact and create their world. As such, I enter this project assuming that teaching and learning, like any other

phenomena, is not objectively knowable, but is rather known to the extent that it is made relevant through interaction in a given context.

Just as I resonate with Garcia, Standlee and Bechkoff's (2009) call for understanding the differing contexts of physical and virtual worlds as different communicative modes of one life-world as opposed to bifurcating those life-worlds, I also believe that there is a danger of falling into the trap of "reifying knowledge and separating it from the activity of people knowing in particular situations" (Wells, 1999, p. 75). Knowledge stands out from and is defined against an implicit background of activity that cannot be discarded. For me, a research approach that specifically looks at how available interpretative repertoires are taken up to create knowledge in any space and between positivists and relativists alike is very compelling.

Organization of the Study

In this chapter, I introduced this study, outlining its purpose, the research questions, and the significance of the study. I further described my orientation to critical discursive psychology as a discourse analytic approach. Finally, I discussed the limitations and delimitations of the study, the relevant definitions and terms, and my position vis-à-vis the study.

In Chapter Two, I present a literature review and analysis of selected empirical studies at the nexus of learning theories, CALL, virtual worlds, and DP, as well as a review of the literature around critical issues of power between student and teacher in computer-mediated language classrooms. I then focus on the historical construction of CALL as a discipline to discuss the assumptions underlying CALL research that shape the present-day discourses surrounding language communities and technology. I do this in order to demonstrate the need for a CDP approach to the examination of the performance of language learning in virtual environments as justification for departing from existing methodologies. Chapter Two also includes a description

of discursive psychology projects in SLA and CALL, one part of the theoretical construct that frames this study's methodological approach.

In Chapter Three, I focus on this study's methodological framework, delineating the underlying epistemic and ontological assumptions of critical discursive psychology. This is followed by a description of the site of data collection and the participants. I follow this by describing my methods of data collection and data analysis. Finally, the procedures for warranting claims is discussed.

Chapter Four begins with a thick description of aspects of the field sites of Englishville courses that will assist in providing a contextual background for the analysis that follows in the chapter. Next, noted patterns across the participants' discursive practices in performing teaching and learning and negotiating power during language courses conducted in *Second Life* are presented, highlighting the ways in which interactions worked to frame teaching and learning behaviors and to reproduce/transgress normative language classroom communication patterns and power asymmetries. In them, technology is performed as a negotiable quality, pointing to a need to approach technology practices in language courses using more interactionally-based methodologies.

Finally, in Chapter Five, I situate my findings in the existing literature discussed in Chapter Two and discuss the findings in light of my research question. I then discuss the broader implications of this research by presenting several implications of the research for students and teachers working within virtual environments. I also share some specific research implications, indicating the ways in which this study's findings might inform how researchers approach the examination of language learning communities in virtual worlds. Ultimately, I offer suggestions for future research both from the findings I shared and the data that was beyond the scope of the

research. In this final chapter, I also add my conclusions and suggest the importance of carrying on an interrogation of the hegemonic discourses about language teaching and learning.

Chapter Two: Review of the Literature

The purpose of this study is to examine how language teaching and learning and the power negotiations inherent in these activities are performed, made relevant, and constructed within pedagogical interventions between teachers and students in *Second Life*. While viewing education as located within the practices of the environment in which interaction takes place, I also acknowledge that education is situated within a broader social landscape of lived ideologies about learning and teaching in a given culture-of-use. As such, within this literature review, I attend both to research specific to this project's goals, and to the key historical texts displaying the varied positions of language teaching and learning.

Overview of the Chapter

This chapter is separated into three sections. Section One reviews how the concept of learning has been conceptualized by cognitive and social research in second-language acquisition and computer-assisted language learning, followed by empirical studies of multi-user virtual environments (MUVEs) and power asymmetries in the L2 classroom situated within CALL and SLA. Section Two provides an overview of the construction of computer-assisted language learning (CALL) and second-language acquisition (SLA) as disciplines. In the course of considering literature in SLA and CALL theory, I point to the nascent moments of CALL as a discipline as well as others that defined the ways in which CALL has been predominately conceptualized and researched. I do this to not only establish CDP as a counter mandate to Long's (1993) call for theory culling within the CALL/SLA disciplines (which will be discussed below), but to justify using CDP in lieu of other qualitative approaches that have gained acceptance in CALL. Finally, Section Three describes the overarching theoretical framework, critical discursive psychology (Edwards, 1997a; Edwards & Potter, 1993; Potter, 1996,

Wetherell, 1998), how discursive psychology in general, and critical discursive psychology (CDP) in particular have been taken up by CALL and SLA researchers, and the ways in which CDP is particularly suited to investigating performative constructions of teaching and learning in the virtual classroom and the power asymmetries that are particular to virtual language learning. Before delving into the empirical studies in CALL and SLA on MUVEs and power asymmetries in the L2 classroom, I first describe the search methods used for the literature review.

Search Methods

From 2010 to 2015, I performed a series of literature searches that permitted me to (1) review the foundational and polemical writings that highlight the diverse arguments made concerning CALL in general and virtual worlds in language education in particular, as well as the corresponding institutionalized pedagogical practices; (2) identify the relatively few empirical studies that focused on multi-user virtual environments; (3) locate opinion papers, conceptual papers, literature reviews and empirical studies explicating discursive psychology and critical discursive psychology and situating it within the SLA and CALL disciplines; and (4) systematically delimit my research focus.

As evidenced by Hinkel's two-tome, 2,260-page overview of L2 research (2005, 2011), swarms of studies in SLA and CALL have been generated in the last forty years, offering divergent and at times conflicting perspectives on the nature of learning a language using computer-mediated communication. It became apparent early on that delimiting the research focus would be imperative. The question became how to trace a meaningful, retrospective path through the disciplinary morass. The search for relevant literature was completed in three stages. First, I searched the following databases: (a) Academic Search Premier, (b) Education Full Text, (c) ERIC, (d) JSTOR, (e) Linguistics and Language Behavior Abstracts, (f) MLA International

Bibliography, (g) PsycARTICLES, (h) PsychINFO, and (i) SAGE Journals. In addition, as the principal CALL journals are not well-represented in databases of the social sciences, humanities, or even linguistics, I made a point to also search the Google Scholar and Mendeley databases, as they typically tend to crawl (or receive information from) the CALL journals in question (specifically the *CALICO Journal*, *Computer-Assisted Language Learning*, *Language Learning and Technology*, and *ReCALL*). I also made it a point to search Academia.edu, a site that scholars use to post works in progress or galleys of articles that are in press. In the searches, I used various combinations of the following keywords: "classroom discourse," "computer-assisted language learning," "computer mediated communication," "conversation analysis," "critical discursive psychology," "discourse analysis," "discursive psychology," "ethnomethodology," "input response feedback," "language learning," "multiuser virtual environments," "post structural discourse analysis," "power," "power asymmetry," "second-language acquisition," "*Second Life,*" "*Second Life* in education," "top-down," and "virtual worlds."

Initially, as I hoped to gain a sense of the flavor of foundational research and polemics within the discipline, and since the literature on second-language acquisition, critical classroom discourse analysis, computer-assisted language learning, and virtual worlds spans at the most several decades, I chose not to delimit my search by year. As the SLA and CALL fields of research are dominated by cognitive approaches to language learning, it was easier as I progressed in the search to identify researchers who were engaged in naturalistic and qualitative approaches, and specifically in discursive approaches to research. In the second stage, I used a "snowball" method in which I searched the reference lists of the articles and texts identified during the first stage. Finally, I searched through the archives of the SLanguages Annual

Symposium of Language Learning in Virtual Worlds (http://avalon-project.ning.com/page/about-slanguages), which is about to conclude its eighth year and is currently hosted by The AVALON Project (Access to Virtual and Action Learning live ONline), a project funded by the European Commission as a part of the Education and Culture DG Lifelong Learning Programme.

For the purposes of this project, I only incorporated results specifically related to my study. Altogether, as of August 25, 2015, I located a total of seven related dissertations, eighteen seminal texts, thirty-five more broadly related texts, and over one hundred articles. I elected to include/review only those that: (1) assisted me in presenting a history of the culturally contingent nature of language learning and language learning technology research; (2) attended to the application of discourse and conversation analytical research (including discursive psychology) within the fields of CALL and SLA; and (3) provided empirical insights into the evolution of critical and virtual world research in CALL and SLA. By so doing, my objective was to move towards a post-cognitive stance, contrasting my research agenda with the many bodies of CALL research situated within cognitive and social models.

Section One: Review and Analysis of Selected Empirical Studies

In this first section, I review some of the empirical studies in SLA and CALL research surrounding learning theory in general and conceptualizations of language learning in multi-user virtual environments such as *Second Life*, as well as critical considerations of classroom power asymmetries in CALL research. Of significance is the conundrum shown where researchers recognize complexity in the actions of their participants that resist their description as mental content, yet find themselves constrained both in theory and practice from investigating how this variance manifests itself as social action, confined to the traditional etic frameworks under which they operate. First, I discuss the nascent research in CALL of 3D multi-user virtual

environments, which is interesting in that the studies iterate a theme of the power of *Second Life* for informal learning despite much of the research being done within some type of a formal context, and reported as time and context-free findings that do not take this formal context into account. This stands in contrast to my study, which will look at formal classes in *Second Life* and how students and teachers in *Second Life* "do" learning and teaching, but will take care to account for the context of the virtual space. Then, I review studies that draw upon how CALL has conceptualized power asymmetries both in the classroom and in language technology. Finally, I explore the small body of CALL and SLA-related research situated within the tradition of discursive psychology in order to describe the ways in which this study will contribute to the broader academic dialogue, noting where I believe my project is similar to and different from extant research.

Theories of learning and their discontents.

I now look at the ways in which conceptions of learning vary across SLA research agendas, because languages as disciplines of study have the position of being "both the object of pedagogical attention, and the medium through which learning is accomplished" (Hall & Walsh, 2002, p. 187). As stated earlier, the work of Sinclair and Coulthard (1975) was seminal in uncovering patterns of discourse through analysis of teacher utterances in a pair of English lessons, but has since been criticized for theorizing about everything from how discourse rules are learned to the development of rubrics to assess teaching styles and teacher effectiveness from what amounts to a categorical labeling of verbal exchanges in disconnected, impersonal ways. This stance failed to fully comprehend language use in the classroom (Box, 2012). Yet, subsequent normative research into classroom discourse (See Hall, 1997 for a review), while avowing that teachers and students collaboratively construct the expectations for what counts as

learning in their courses, do little more than reinvent the notion that both content and processes of student learning are exclusively tied to instructional practices. Put another way, while normative research has found that "it is through the moment-by-moment unfolding of talk that …teaching plans actually unfold" (Box, 2012, p. 1), these paradigms affirm the recurring hypothesis that teacher decisions in the classroom, along with lesson plans, are the sole salient factors that facilitate or hinder student learning (Walsh, 2006), ignoring completely or marginalizing the interactive and situational dimensions of teacher discourse, which should be considered just as relevant if not more so.

Any cognitive theory of SLA will try to explain the psychological mechanisms that underlie learning and the means by which competence develops (Harrington 2002). For example, one of the newer cognitive models that is gaining popularity is Processability Theory (Pienemann 1998, 2005), which argues that a learner can produce and comprehend only those linguistic forms of the target language that the "language processor" can handle, therefore understanding the architecture of this processor and the way in which it handles a new language is critical as it enables researchers to predict language learning across languages. Of course Pienemann, like many before him, offered up a model that is now being "confirmed" in languages from Creole (Plag, 2008) to Italian and Japanese (Di Biase & Kawaguchi, 2002), and "extended" with tangential theories such as the Lexical Mapping Theory (Pienemann, Di Biase & Kawaguchi, 2005). Other researchers attempt to define the point at which some discrete part of language has been "learned" (Scarcella, Krashen, & Long, 1979). For example, early after the founding of SLA, Hakuta (1974) defined acquisition as the consistent (over 90 percent of obligatory contexts) native-like use of a construct over time. While many researchers in this

tradition may admit that the cognitive perspective is one of several views of learning, they insist that cognition is a necessary component in any theory of SLA.

In situated social approaches to language learning, use and learning are inseparable, afforded by topics and tasks and related to specific people with localized identities, with whom new ways of interacting occur as interaction unfolds (Firth & Wagner 2007: p. 812). Doehler (2010) believes that language learning is best understood as "a conversational process that observably occurs in the intersubjective space between participants, not just in the mind/brain of individuals" (p. 107). Factors such as motivation, and learning strategies are seen as responses to social practices and can be examined to the extent that they are observably enacted. Markee and Seo (2009) introduced learning talk analysis, which relies heavily on ethnomethodology and conversation analysis, as an empirical paradigm to investigate learning dynamics at the commonplace zones of interactional transfer (ZITs) between conversational and pedagogical modes of talk and how these zones are fraught with errors as the discursive rules necessarily change between institutional and mundane talk. As related earlier, Kasper (1997) initially saw situated social approaches to language learning as antithetical, asserting that a "noncognitivist discipline that has learning as its central research object is a contradiction in terms" (p. 310). In a later article (2009), she opens the door to admit there were some tenets of conversation analysis that may bridge the gap. In discussing Sacks' treatment of language learning in children (1995, Part VII, Lecture 12), Kasper identifies in Sacks' lecture that, in a sense, "culture is equipped with its own intrinsic learning mechanism," which was likely learnable and, more importantly, empirically accessible (Kasper, 2009, p. 30).

Summary and analysis.

While the progression from cognitive to situated social approaches to SLA is a promising movement, research still ignores that formal instruction is both a medium for the transmission of ideas and a subject that people have ideas *about*. Research also largely ignores that students and teachers come into a formal instructional context with disparate lived ideologies of what learning looks like, ideologies which resist the research models of learning (Billig et. al., 1988). Not only is the approach and experiences of every teacher idiosyncratic, but every student has a unique experience of formal education and thus idiosyncratic ideas of what "good" learning and teaching look like, ideas that become dilemmatic when placed alongside the lived ideologies of other students and teachers who each come from distinct backgrounds and have incongruent ideas about instruction and learning. In addition, educational issues are easily perceived as social issues of power "such as those of individual freedom of action versus authoritative constraint, and the conservatism of sticking to traditional ways and wisdom versus the encouragement of change, variability and the potential for new understandings" (Billig et. al., 1988, p. 45). This is why my proposed study focuses on the conversational practices of language learners, along with their teachers and tutors. This focus will provide a divergent view that looks at the language learning process and these conflicting ideologies as they unfold while being sensitive to the broader social cloth from which these ideologies may spring.

As learning is a central topic of inquiry, learning will need to be defined in order to establish when it has occurred. Edwards has argued that even for cognition to figure in any kind of research or assessment, its processes had to be "operationalized in some way, brought into public view via testing, interview, experiment, or observation" (1997b, p. 33). The formal classroom input-response-feedback model is one example of teachers eliciting observable data

which can then be evaluated, repaired, and re-elicited until the teacher is satisfied that the student has learned the concept. This learning also goes on in informal settings such as repair requests, where one interlocutor, through paralanguage such as hesitation or false starts or through circumlocution, demonstrates difficulty constructing an account. Another interlocutor will offer a repair which can be evaluated, recast and repeated in context by the first interlocutor to demonstrate learning. These *interpretative repertoires*, or building blocks speakers use for constructing versions of actions, are constructed out of a range of terms used in a specific stylistic and grammatical fashion. For the purposes of this study, I echo Firth and Wagner's (1997) argument that the successful deployment of "communicative resources" is indicative of language learning (p. 296). Thus, learning will be defined as demonstrating the ability to use a new or recycled repertoire appropriately in the course of an interaction (likely through IRF exchanges or repair sequences). Unlike cognitive linguists who separate performance from competence and learning from acquisition (as will be detailed later) through concepts such as transfer, this study will take the correct use of a new interpretative repertoire at face value and not strive to speculate on what is empirically inaccessible, specifically any mechanisms that may (or may not) underlie learning.

Multiuser virtual environments and CALL/SLA.

Most of the early literature on language learning in multi-user virtual environments involved speculation that was largely anecdotal or theoretical in nature (Stevens, 2006; Sykes, Ozkoz & Thorne, 2008), although Toyoda and Harrison (2002) took five advanced learners of Japanese as a second language into a learning project in *Active Worlds* to interact with native speakers. These dyads chatted via text for 1 hour per session over 10 sessions. The resulting data was analyzed for grammatical schema patterns, a hallmark of cognitive SLA research

(Varonis & Gass, 1985). The researchers claimed that students showed quantitative evidence of managing their interaction and working cooperatively. They also found that language aspects that are crucial for communication, but often neglected in formal instruction, came to light in these opportunities to chat with native speakers. In a similar study, Peterson (2005) looked at non-native speaker interaction in *Active World*s. Fifteen intermediate Japanese learners of English from Tokyo engaged in three task types such as jigsaw, decision making, and opinion exchange. While the researcher claimed to use conversation analysis (p. 33), he actually used speech turns to conduct a content analysis of communication events and strategies that have been identified in the CMC literature as facilitating interaction, rather than constructing a detailed transcription, find recurring patterns of interaction without access to exogenous theory, and developing a model to explain the patterns. In addition, Peterson identifies the discursive media used by the avatars: beyond the main mode of synchronous text-based chat, 15 of 24 students also made use of nonverbal features such as waving to attract the attention of potential task partners and displaying emotional responses such as joy on their avatars.

These studies treated schemas as mentally encoded templates that guide talk. My study moves beyond research that presents language as following from a standardized routine (which is not how instructors operate) to investigate how these formulations are worked up to accomplish action within the interactions being described.

While Peterson (2005) did reinvent in some ways the research into the text-based multiuser virtual environments (*Active Worlds,* an early prototype of a 3D multiuser virtual environment, relied heavily on emoticons and text chat, and had no audio at the time of Peterson's research), his study is different in its use of content analysis and linguistic discourse analysis to determine how the environment was being used and not simply how effective it was.

Peterson's research is much more relevant to researchers and practitioners who may not be very familiar with the basic affordances of multi-user virtual environments and have yet to establish any best practices for their pedagogical or empirical use, as technology generally begins simply as a replacement for something done in class before it can be considered and used as a transformative pedagogical tool (Hughes, 2012). Despite Peterson's research, the desire to draw comparisons between the efficacy of classroom interaction and the efficacy of similar interventions in *Second Life* persisted in subsequent research (as we will see below), failing to account for affordances and resources in *Second Life* that do not exist or exist differently in traditional classrooms. Research into language acquisition in *Second Life* centers around three topics, including affirmations that *Second Life* has positive effects on affective states, that *Second Life* positively affects interaction and engagement, and that *Second Life* allows for activities difficult to perform in the classroom environment.

Second Life and affective states.

A large number of studies purport that *Second Life* has positive effects on learner affect, attitudes, and motivation, all considered causal links to improved learning in cognitive research (Wehner, Gump & Downey, 2011). Sadler and Nurmukhamedov (2008) analyzed data from ten undergraduate students of English as a second language and twenty-three master's degree students in an English teaching program in a semester-long project using *Second Life* in an ESL course. Based on results from pre-intervention and post-intervention questionnaires, participant journals and interviews, and task observations (task outcomes and process videos), Sadler and Nurmukhamedov concluded that task-based learning activities in the virtual environment were effective in maintaining motivation and that the learners generally achieved task completion in *Second Life* that included substantial interaction in the target language. Wehner, Gump and

Downey's (2011) quantitative study focused on whether the use of *Second Life* affects the motivation of students in an undergraduate Spanish course. Comparisons between a traditional classroom and a classroom within *Second Life* are made using an adaptation of Gardner's (1985) Attitude/Motivation Test Battery (ATB), which was developed to ''assess the major affective components shown to be involved in second language learning'' (p. 5). The researchers concluded that virtual worlds could be a valuable resource to increase the motivation to learn a foreign language, even though only one of the 15 questions from the ATB that ask about attitudes towards Spanish culture and courses gave a statistically significant difference between the *Second Life* classroom and the traditional classroom. This is another example of how effectiveness studies (and especially those using preconceived lists of affect) may not be the most adept tool to demonstrate how learning is performed in virtual environments.

Wang and Shao (2012) went as far as to treat *Second Life* as a space where students could interact with native speakers as an ancillary tool to the formal learning environment, as the learning curve and technical requirements "made SL-based language learning conceptually applicable but difficult to conduct" (p. 15). They looked at the reflection papers, group work, and final work of 39 ESL learners' perceptions of *Second Life*. These learners indicated that the game-like feel and look of *Second Life* was motivating and maintained their attention. This vein of study where *Second Life* is seen as ancillary to formal instruction is continued with Balcikanli (2012), who records the experiences of seven American learners studying Turkish in the USA and eight Turkish learners studying English in Turkey, and then interviews them using a protocol established by Dörnyei (2003). One of the themes reported by students was feeling as if they had a chance to practice the language in a non-threatening way despite technical challenges. Balcikanli argues that this lowering of the affective filter, combined with an environment where

"students seem to learn in a more constructive way" (2012, p. 132), is conducive to learning. Ho, Rappa and Chee (2009) were among the first to examine a particular formal pedagogical design for *Second Life*. In their study, they deployed and recorded the effect their pedagogical design had on forty-five 17- to 18-year-old students of English in Singapore using control groups, interviews and pre-test / post-test essays on topics related to the *Second Life* activities. There was frequent mention among students that the environment provided an almost deliberate motivation for thinking through the tasks. Henderson, Huang, Grant and Henderson (2012) report on a two-year quantitative study of 81 students that sought to establish a link between two Chinese lessons in *Second Life* and self-efficacy beliefs, which they argue is a strong indicator of motivation and ultimately of learning. While the descriptive results of their pre-, post- and delayed post-tests of seventeen Likert-scale questions suggest a significant impact, the reasons for the impact and for unexpected variations between students are listed as desiderata for additional study.

Questions of affect reflect a desire to recognize the way these virtual worlds move us. Unfortunately, the assumptions about affect made in these articles encourages an improper engagement with psychology that separates affect from discourse, marginalizing the activity of sense making and how power might work through affect (Wetherell, 2012) even though their data could support the centrality of affect and the performative aspects of learning in sense making.

Second Life and interaction.

Researchers have also argued that *Second Life* can positively affect interaction and communication among learners. For example, Deutschmann, Panichi, and Molka-Danielsen (2009) described an action research project in two oral proficiency courses held entirely in

Second Life using an ecological approach to learning (Van Lier, 2004), where teaching is primarily about providing access to and promoting engagement in meaningful social activity. Using linguistic discourse analysis to analyze the recordings of four 90-minute sessions against a five-stage model of interactivity and learning (Salmon, 2004), they concluded that authenticity (or having an ideal native speaker as a model) and collaboration had a direct impact on learner participation and learning, and that technical and social introductions within *Second Life* are critical to success.

Jauregi, Canto, de Graaff, Koenraad and Moonen (2011) developed a set of design principles for interaction tasks aimed to foster social interaction, intercultural awareness, and use of specific affordances of *Second Life*. These included authentic language, the elicitation of cognitive processes to promote contextually appropriate language use, the creation of a semantic space that would favor the production of specific linguistic forms, and tasks with clearly defined communicative deliverables and a specified procedure. They then tested these principles in a case study in which two students of Spanish and two pre-service teachers carried out four interaction tasks followed by a questionnaire about the experience. It was reported that the spontaneous talk generated increased student and teacher perceptions of the space as it contrasted with what was regarded as the predictability and lack of authenticity of formal classroom interactions. They also noted that while the teachers, not being native speakers, may have had reason to have a higher affective filter, their status as teachers made them acutely aware that their status might be threatening for the Spanish students, and they use affective strategies on the students to create a safe, supportive atmosphere for them.

Liou (2011) collected questionnaire focus interview data from 25 college students learning English in *Second Life* through task design to argue that sound pedagogy with

appropriate tasks is necessary for *Second Life* to support language learning objectives or sense-making in student learning.

Beyond the implication that student to student speech is somehow not naturalistic or authentic due to their status as learners, the empirical data produced by these research designs was neither spontaneous nor naturalistic, as the researchers designed their studies to predispose communication toward the kind of speech they wished to see as data.

Second Life and the fallibility of the classroom.

Some researchers see in *Second Life* a remedy for the weaknesses of a formal classroom setting, yet are drawn into the trap of comparing the effectiveness of one against the other. Hislope (2008) conducted a study where she administered a 34-question open-ended survey about attitudes toward *Second Life* to fifteen third-semester Spanish students. Her goal was to inform design of tasks within *Second Life* and to propose an empirical study to investigate the impact of *Second Life* on second language learning. Thirteen of fifteen students reported their belief that *Second Life* could help them learn Spanish, specifically with regards to conversation and cultural experiences that could not easily be provided in a traditional classroom. While Hislope considers her study to have value for practitioners, she regards the study as a non-empirical elicitation of anecdotal information from a small sample of students. Among her suggestions for future research was to study a larger group with empirical controls such as a pre-test and post-test to determine any gains in learning, and a control group in the traditional classroom setting to compare learning between environments.

Xu, Park and Baek (2011) divided 64 Korean undergraduate students in an ESL program into two groups to investigate writing for digital storytelling. One group created their digital stories in *Second Life*, the other group offline using Windows Movie Maker. The groups were

then compared for writing self-efficacy and flow using pre- and post-testing. It was reported that the group using *Second Life* were more effective digital storytellers than the offline group, but offered no explanation as to why this might be.

Summary and analysis.

Within each of the studies in the sections above, the researchers drew upon various cognitive theories from SLA to describe how a particular cognitive construct (for example, affect, motivation, or negotiation of meaning) within the context of *Second Life* was demonstrated, with the ultimate goal of establishing a causal link between the construct and achievement or "learning" in the target language. Put simply, either data was found to confirm a researcher's hypothesis, or not. While some of these studies part from and are at times even critical of mainstream cognitive research, none call into question the validity of the basic cognitive framework. The result is a variation of the black box conundrum where researchers acknowledge complexity and variance in the language learning interactions taking place in *Second Life* that is at times at odds with their cognitive research paradigms, yet find themselves compelled both in theory and practice to ignore how this variance manifests itself in interaction, as they are confined to the traditional etic frameworks under which they operate. As Latour (1999) puts it, "the more science and technology succeed, the more opaque and obscure they become" (p. 304).

Social action in a virtual world parallels what is highlighted in a project such as the one I propose. Not only are traditional experimental methods insufficient in these complex environments (Winn, 2002), it is difficult (if not impossible) to get beyond the virtual environments to make any kind of judgment about what lies beyond; one must rely on what avatars are doing with the different types of resources that they have available within the virtual

environment. Perhaps because of this distinction, Garcia, Standlee and Bechkoff (2009) acknowledged that many argue that there is a difference between virtual worlds and the "real" world. They countered this argument by contending that "there is one social world which contains both traditional and technologically advanced modes of communication and sites of social activity" (p. 54), and that understanding virtual environments was necessary to understand life in society. Thus, looking at locally-managed interactions in virtual environments can inform us about larger social realities. Looking at these locally-managed interactions can also serve to inform an idiosyncratic approach to task design both on the level of *Second Life* and on the level of personal learning environments for students.

Critical classroom discourse.

I now turn to look at the ways in which language learning communities in MUVEs share a critical concern of any community of language learners, where far too often learners' "beliefs about what is important, their reasoning and their experience are not part of the assumed context of the teacher's communication" (Young, 1992, p. 59).

The social turn in SLA research fostered a turn toward critical perspectives as they promote better understanding of how societal power relations are made manifest through language use in a language learning community (van Dijk 1997: 22–3). A basic premise of these critical perspectives is that language is not neutral: it is constructive, or in other words, language builds the life-worlds in which we live, and provides a window by which to observe how people relate to each other and share or use power within those relations. The body of work is understandably large, and covers everything from (to name but two examples) pedagogical positions (Benesch, 2001) to access to opportunities to use the target language (Norton, 2000), and how these become complex issues when social interactions come into play.

CALL specifically orients to critical perspectives in the name of *critical theory of technology* which sees technology as a locus of struggle between divergent social forces (Feenberg, 1991). Warschauer (1998) suggests that a critical theory of technology could answer questions about what new literacies emerging technologies require, how these new literacies intersect with issues of ethnicity, class, and gender, and how the context of learning communities affect emerging literacies.

There are two problems with limiting critical perspectives to issues of ethnicity, class, and gender (as would appear to be the case in CALL) when applied to virtual worlds. Standard critical issues such as gender, ethnicity and class are not transparent and can even become deceptive as "issues of race, class, gender and so on" are, ostensibly, "eliminated" (Gronstedt, 2008; p. 1). On a basic level, users can experiment with, explore and dissimulate the class, race and gender embodied by their avatar. For example, about 20 percent of the female avatars in Second Life have male alter egos (Gronstedt, 2008; p. 2), and "many African Americans have white avatars to avoid the racial prejudice which exists" in society in general, and *Second Life* in particular (Russell, 2009; p. 87). On a more revolutionary level, there are nonhuman avatars who feel a connection to or wish to be a particular animal, real or fantastic. The drive toward the post/human blurs the ontological categories of ethnicity, class, and gender which critical theories of CALL have traditionally invoked.

The second problem lies in the conundrum that to do rigorous critical research using traditional critical theory may also raise ethical considerations or render void any attempt at ecological validity in order to access a user's race, class, or gender. In the United States, studies with human subjects require adherence to ethical guidelines and require formal approval from an institutional review board. As avatars are by default anonymous in *Second Life*, strict

confidentiality about the avatar name in records tends to be a satisfactory safeguard against inappropriately revealing identities or confidential information. As some users put enormous resources into maintaining online personas that involve exploration or dissimulation, the bar to maintain ethical standards in the disclosure of that information would be very high (Yee, Ducheneaut, Yao & Nelson, 2011). The method of retrieving this information would either be through self-reporting (which it not entirely trustworthy) or through a research methodology like connective ethnography. Connective ethnography raises issues of maintaining a radically emic or naturalistic setting on one hand and (in the case of this study) feasibility on the other, as participants are from all over the world.

Summary and analysis.

If the critical lens were to be widened to assume any agenda that requires a deconstruction of power asymmetries, then the lens could include the analytic mindset discussed peripherally by Firth and Wagner (1997) that positions the non-native speaker (or language learner) as a deficient communicator with an underdeveloped L2 competence, struggling to attain the "target" competence of an idealized native speaker, embodied in proxy by the teacher. A critical research approach to how institutions of language learning reproduce particular constructions that come to govern our subjective experience would attend to the dynamics of language learning in place of, or at least in concert with, the assessment of language acquisition. Kumaravadivelu (1999) proposed a critical approach to language classroom discourse analysis based on poststructuralist perspectives of discourse using critical ethnography as the research tool to unravel the “hidden meanings and underlying connections” (p. 476) in ESL classroom discourse as they disempowered learners as non-native, deficient communicators, or empowered them by assuring their voices were heard and respected. The main caveat about

Kumaravadivelu's approach is the assumption that the critical elements are hidden and underlie discourse. As Edwards (1997b) cautions, teaching and learning are public. "Even the apparently private, internal features of it, such as childrens [sic] thinking and learning, or teachers [sic] aims and philosophies of educational practice, are features that have to be realized and defined interactionally" (p. 33). As such, all classroom activities can be examined as illustrative of "some larger social pattern" or "power asymmetry" (p. 33). CDP is equipped to address this gap in Kumaravadivelu's approach as it works by analyzing interaction and then taking the threads which run through the data set and connecting it, as warp and woof, with the broader cloth of social discourse in order to address the issue of how institutions reproduce particular power asymmetries between teacher and learner, how those are resisted in MUVEs, and what the effects are.

Section Two: The Historical Construction(s) of CALL/SLA as Justification

The purpose of this section is to provide a brief overview of the research in computer-assisted language learning (CALL) for promoting second language acquisition (SLA). It attempts to integrate CALL developments in foreign languages and ESL, as "CALL developments in foreign languages are all too often unfamiliar to teachers of ESL, and vice versa" (Garrett, 2008, p. 386). It serves as a justification of why I as a researcher feel a need to depart from established research paradigms in CALL, as I believe that none will be able to show how students learn differently in MUVEs. In addition, I believe that discursive methodologies that look at talk as social action and not as a window to some proposed narrative of cognition would provide another alternative to reconceptualize the foundation of established CALL research paradigms, established pedagogy, and the power asymmetries of the traditional classroom. While some (as will be discussed later) have argued that there must be a way to

achieve some coherence, I stand with Potter (2003) in not yet being convinced of that possibility. I believe that the departure that this project undertakes also serves to countermand the ongoing insistence that CALL needs to operate under a "coherent" scientific paradigm based on effectiveness research (Schulze & Smith, 2014).

Since the dawn of the Information Age, technology issues have slowly moved from the margins to the center of SLA theory and praxis, as second-language (L2) researchers and teachers have integrated technology into their daily practices (Chappelle, 2005). Hence, the CALL research agenda is no longer simply a focus within SLA; it is an emerging discipline that studies how technology is used for language learning, teaching, and research (Levy, 1997). Scholars have organized reviews of CALL in numerous ways. Bax (2003) and Warschauer (2004) historically traced the development of CALL. Others (Hubbard, 2009, Vol. III; Levy & Stockwell, 2006; Stockwell, 2007; Warschauer & Grimes, 2008) formed reviews based on a typology of CALL technologies. Ducate and Arnold (2006) and Hubbard (2009, Vol. II) organized their reviews by language skill, focusing on areas such as speaking, listening, reading, writing, culture, and others. An exhaustive description of the theories that contribute to CALL or SLA is an account well beyond the scope of this paper. Instead, given that the historical assumption of valid CALL research involved studies that confirmed or disproved hypotheses generated by SLA theory (Chappelle, 2003; EUROCALL, CALICO, and IALLT, 1999), I will organize this review by first positioning CALL within the framework of SLA, then offer one perspective on the genealogical development of SLA (Foucault, 1977; Shapiro, 1992), drawing on foundational assumptions and critical debates in the literature. Then, I will argue that CALL research has been slow to react to the tectonic shifts in SLA research generally, and has been unwilling to look to new media with an eye to reframing traditional research and pedagogy, an

issue that I demonstrated in Section I with the review of CALL research into multi-user virtual environments.

Before CALL.

Before the inception of SLA as a discipline, foreign language teaching and learning was guided by behaviorism in combination with a structural approach to linguistics from the 1940s to 1960s. Language was viewed as a system of semiotic associations (Saussure, 1970) which interlocked with one another (Bloomfield, 1961). For behaviorists, the linguistic system of the mother tongue (L1) is learned gradually by reaction to stimuli in the environment. Therefore, a foreign language (L2) was to be taught by presenting linguistic items systematically and repeatedly to induce appropriate linguistic behavior (Fries, 1945). This could be done through positive or negative reinforcement (Jones & Brader-Araje, 2002; Skinner, 1992). Research concentrated on overt behaviors (teacher stimulus, student response and teacher reinforcement) that could be observed and measured quantitatively (Standridge, 2002).

SLA grew out of a reaction to behaviorism driven in part by Chomsky (1956), who reframed learning as cognitive information processing involving Universal Grammar, a theory which basically posited that all human languages are constructed on the same, abstract template, with an innate, language-specific mental module called the Language Acquisition Device (LAD) which effectively pre-*programmed* children to learn a language (Chomsky, 1965, italics are mine). Chomsky separated competence from performance; he described competence as an idealized capacity that is located as a cognitive property and performance as the production of discourse, and separating them allowed researchers to discriminate between a speech error and not having the knowledge about a discrete speech act.

Initially, linguists were interested in refining and testing these abstract linguistic descriptions (or models) for L1 learners (Bellugi & Brown, 1964; Braine, 1963). Chomsky's theories were soon taken up by researchers such as Corder (1967) and Selinker (1972), whose research investigated whether and how Universal Grammar is available to learners of second languages. These studies are generally seen as the inception of SLA (Larsen-Freeman & Long 1991), although it is difficult to point to a specific time (Gass & Selinker 2008, p. 1; see Hatch, 1978, for review). As explained earlier, while performance data was considered vital in SLA research, "understanding underlying competence, not the external verbal behavior that depends on that competence" was considered the ultimate goal (Doughty & Long 2003, p. 4). It is during the "golden age" of cognitive SLA in the 1980s that CALL as it is currently understood came into being, and where (as I will explain below) it seems to languish.

(Re)Considering SLA.

In the 1990s, SLA research began to inform issues too many in number to enumerate here, which led to more acquisition models and methods stemming from either general cognitive (emergentist) frameworks (Ellis 2003), frameworks derived from Chomsky's models of cognitive linguistics (Doughty 2003), or interactionist cognitive frameworks (Long, 1985). At the same time, socially-situated models of cognition were beginning to emerge, which viewed social interaction as a context for cognition, not the other way around. From sociocultural theory (Frawley & Lantolf, 1985) to psycholinguistic research on language inspired by sociocultural theory (Tarone & Swain, 1995) to intercultural approaches (Kramsch, 1995), the SLA field experienced a rapid proliferation of ideas. So much so that some researchers began to notice, and worry.

Long (1993) offered a count and brief review of 40 to 60 extant theories of SLA. Under the guise of the social responsibility of SLA to provide transparent pedagogical solutions to teachers and the expediency to produce steady productive research under a dominant theory to succeed as a scientific discipline, Long advanced the need for theory culling within SLA in order for the field to be united around a single or a few theories. This has remained the mandate for cognitive researchers in SLA ever since.

Among others (Van Lier, 1994; Lantolf, 1996), Block (1996) rejected Long's call for theory culling. He understood what Long was attempting to do, and in what he described as the "debate about the heart and soul of SLA" he asked what "the ontological parameters of the field are to be. In simple terms, what counts as SLA or SLA-related research and what does not" (Bloch, 1996, p. 75). Of course, Block's question alludes to an acrimonious debate as to who gets to answer the ontological question. Block confronted the orthodox SLA preoccupation with individual cognition to make space for a multi-dimensional view that adds social psychological concerns to the dominant cognitive paradigms.

The Firth and Wagner polemic.

The watershed moment for this building tension in the SLA field was the polemic launched by *The Modern Language Journal* (MLJ) in 1997, where a still-controversial paper by Firth and Wagner (1997) appeared with several response articles (Hall, 1997; Kasper, 1997; Liddicoat, 1997; Long, 1997; Poulisse, 1997; Rampton, 1997). This debate spilled over into the Spring 1998 issue of the MLJ (Firth & Wagner, 1998; Gass, 1998), followed by an issue dealing with a reconceptualization of SLA's disciplinary borders to include, among other things, conversational analysis (Markee & Kasper, 2004), and was the focus of a reflective issue of the MLJ in 2007 that considered perspectives on the reconceptualization of SLA (Lafford, 2007;

Swain & Deters, 2007, Tarone, 2007), the "cognitive / social" debate (Firth & Wagner 2007; Gass, Lee & Roots, 2007; Larsen-Freeman, 2007), emergent post-polemic research directions (Block, 2007; Mori, 2007), implications for the classroom (Freeman, 2007; Lantolf & Johnson, 2007), and affirmations of the "social turn" in SLA (Canagarajah, 2007; Kramsch & Whiteside, 2007). The polemic continues to be the fulcrum of disciplinary engagement about the direction of the discipline.

Firth and Wagner stressed that SLA research was dominated by a focus on individual cognitive issues, with discursive and social approaches to language learning considered "beyond the purview of SLA" (1997, p. 287). They posited that this focus gave priority to quantitative research, to experimental settings over naturalistic ones, to etic concerns and categories over emic ones, and at best marginalized (if not ignored) the social, discursive, and contextual dimensions of language (p. 288). Using principles of conversation analysis and ethnomethodology as an approach to examining the data of a conversation between a native speaker and a nonnative speaker, Firth and Wagner were able to argue that research on the successful deployment of "communicative resources" as indicative of language learning (p. 296) should be one thing of several to be added to SLA's research agenda in order to "attend to, explicate, and explore, in more equal measures and, where possible, in integrated ways," emic aspects of language learning (p. 286).

It is, however, hard to discern where Firth and Wagner might have seen ways to integrate cognitive dimensions within their project given their critique of the cognitive agenda as quantitative, experimental, and privileging universal, underlying processes, an agenda which they characterized as defective in that it bracketed variability in emic accounts that could prove insightful (Firth & Wagner, 1996, p. 285). Traditional SLA scholars received their critique as a

call to a new, “anti-cognitive” SLA (Kasper, 1997, p. 310). Larsen-Freeman (2007) recalled many SLA researchers perceiving it “like a no-quarter assault” upon cognitivism. For those researchers, “Firth and Wagner were making a bid for the supremacy of an entirely different approach to SLA” (p. 776).

The ensuing interactions within the SLA literature divided roughly along the same lines as the positions taken by the response articles contained in the 1997 MLJ. Larsen-Freeman, in the issue of MLJ devoted to reviewing the Firth-Wagner polemic (2007) meticulously outlined the differing orientations. Of course, traditional cognitivists (Gass, 1998; Gregg, Long, Jordan & Beretta, 1997; Kasper, 1997; Long, 1997; Poulisse, 1997) who supported a unified theory of SLA to establish SLA as a successful social science, continued to exhibit what Lantolf described as “relativeaphobia” (1996, p. 731). Kasper (1997) saw the social/discursive turn as an array of analytic tools that might bridge the gap between discourse analysis and cognitive understandings of communicative competence, but was “comfortable with an essentially cognitivist definition of SLA”, asserting that a “noncognitivist discipline that has learning as its central research object is a contradiction in terms” (p. 310). Thorne (2000) remarked that relativism was an undeniably human quality expressed in language, society, and thought, but argued for the existence of “multiple theoretical traditions” to develop “more accurate heuristics” of SLA processes (p. 221). Similarly, Larsen-Freeman (2007) and Lantolf (1996) called for a synthesis of theoretical traditions, with Larsen-Freeman (2007) using the metaphor of multiple theoretical traditions providing a larger lens with which to examine issues (p. 782) and Lantolf using the metaphor of letting “all the flowers bloom, not just a chosen few” (p. 739).

Potter (2003) has highlighted the risks involved with the desire for conceptual synthesis. He noted that a prominent feature of discourse analysis in general “has been engagement at a

theoretical, methodological and conceptual level" (Potter, 2003, p. 784) with mainstream cognitive research. To treat a project like that of Firth and Wagner (to paraphrase Lantolf's expression) as *just another flower in the flowerbed* "risks stifling or evading debate with other approaches" (p. 784). One also cannot, as Kasper (1997) has suggested, pick up discursive analytical tools as a method alone, because certain discursive analytical tools work with an approach "embedded in a web of theoretical and metatheoretical assumptions" (Potter, 2003, p. 785). The decision to use a research approach "is not like selecting one dessert from an array of different and equally tasty ones" (Potter, 2003, p. 785). In the case of this project, conceptualizing talk as a social practice rather than the use of language as an abstract system represents a profound shift in focus away from cognitive models of research. Using this focus with methods, approaches, or theoretical stances that assume a dissimilar view of discourse is "a recipe for incoherence" (Potter, 2003, p. 785).

Post- Firth and Wagner.

Understanding Potter's (2003) problematization of conceptual synthesis explained above puts Atkinson's (2011b) lament about SLA research in the wake of the Firth and Wagner polemic into perspective. Atkinson observed that the alternative approaches to SLA research now known in the discipline as the Social Turn (Block, 2003), while a crucial contribution to what Atkinson describes as a now "conceptually richer field", have largely led "independent and even isolated existences" (Atkinson, 2011b, p. xi). Many of the approaches Atkinson highlights in his tome, while not rejecting a role for cognition outright, express disenchantment with its limitations.

Sociocultural approaches to SLA focus on operationalizing the development of the ability of a learner to use the new language to mediate their "mental and communicative activity"

(Lantolf, 2011). In so doing, the researcher cannot ignore the situated contexts in which they learn or the power asymmetries that exist (Bourdieu, 1991).

Complexity theory approaches to SLA see language as an emergent, bottom-up process resulting from complex interaction of multiple people in multiple speech communities as opposed to a static, top-down composition of grammar and rules frequent in cognitive paradigms (Larsen-Freeman, 2011). As the system must adapt to fit continually-changing circumstances in these interactions, researchers look at how learners interact locally and adapt frequently-occurring patterns to suit their communicative needs (Macqueen, 2009).

Identity approaches to SLA orient to any interaction in a target language as an undertaking in identity construction and negotiation. Researchers endeavor to understand how power asymmetries in society affect a learner's access to a target language community, and how learners who are marginalized from one identity position can appropriate more powerful identities with respect to the target language community, thereby enhancing language learning (Norton & McKinney, 2011).

Language socialization approaches to SLA investigate how the processes of linguistic and cultural development are intertwined, and how these mechanisms vary according to the cultural context. A branch of linguistic anthropology, it favors longitudinal research designs and ethnographic or discourse analytic methods (Duff & Talmy, 2011).

Sociocognitive approaches to SLA claim that mind, body, and world operate in an integrated way, and as such, cognition, as it has been historically conceived and operationalized, is a fiction. Researchers see learning as a continuous process not limited to unusual locations like the classroom (Atkinson, 2011a). Researchers also conceptualize cognition as projecting out

into the world through the creation of tools that provide affordances (Gibson, 1979) that support cognition and learning.

In short, conversation-analytic approaches to SLA (CA-SLA) are a reaction to earlier discourse analytic studies (i.e. Sinclair & Coulthard, 1975), which try to portray classroom interaction by heavily relying on teacher-initiated Initiation-Response-Feedback sequences. Researchers may attempt to understand the context-sensitive nature of classroom interaction by analyzing (for example) how participants accomplish learning tasks collectively (Hellermann & Pekarek-Doehler, 2010), or how learners move out of IRF patterns and establish conversational structures that create symmetrical speaking powers for participants (Waring, 2009).

Of course, a branch of study in SLA evolved out of CA-SLA to deal specifically with post-cognitive research approaches using discursive psychology in addition to ethnomethodology and conversation analysis, in no small part due to Markee (Markee, 2011; Markee & Seo, 2009), who introduced learning talk analysis as an empirical paradigm. Markee and Seo (2009) created learning talk analysis in an attempt to engage the various theoretical positions of a post-polemic SLA discipline in a dialog intended to bridge what increasingly seemed like a schism between etic and emic approaches to research. In the Atkinson volume, Kasper and Wagner called on their SLA colleagues to insist on "theoretical coherence, methodological accountability, and relevance" (2011, pp. 137-138) when considering CA-SLA. Of course, Kasper earlier (2008) characterized DP as so theoretically sophisticated that research resulted in little more than under-analysis and commonsense insight (p. 73). However, in 2009, Kasper softened this view by admitting that a dialogic view of interaction combined with what she calls a "procedural infrastructure of interaction" was inseparable for all interaction, "language learning included" (p. 15). Markee (2011), drawing on conversation analysis to treat topic avoidance (when a learner

demonstrates that they do not possess the discursive resources they need to communicate their message) as a locally contingent practice that is collaboratively co-constructed by participants during the course of institutional talk, refers for the first time to the discursive turn as "post-cognitive" (p. 604).

The first in SLA to take up DP were Kalaja (2003) and Kramsch (2003), who were both interested in using DP to explore beliefs about SLA as a response to the repertory grids used by Munby (1983). Kalaja (2003) relied on the Discursive Action Model to spell out the starting points of a discursive approach, and looked at the variability of expectations of success by students. Kramsch (2003) delineated two approaches to investigating spaces of belief: by analyzing explicit metaphors about learning a foreign language, and by metaphoric analysis of student essays about their experiences of learning a foreign language. There have been no studies in SLA from a CDP perspective, meaning that no studies exist that use DP and then attempt to comprehend and consider the implications of background discursive and interpretative patterns, or the things that "go without saying because they come without saying" (Bourdieu, 1997, p. 167). Given the steady growth of what might be described as an emic counter-culture in SLA, such a study is likely not far off.

CALL and its (emic) discontents.

While there has been a social turn in SLA as seen above, an assessment of recent CALL literature reviews suggests that CALL has been very slow to react to the Firth and Wagner polemic. Debski (2003) noted that while the popularity of qualitative and discursive research has grown since the 1980's, CALL researchers as a whole "often interfere with the setting conditions, rely on quantification, and take a non-participant position with respect to the setting" (p. 181), divulging CALL's etic proclivities. Felix (2005) and Hubbard (2005) observed that

qualitative measures in CALL studies in the early 2000s (most of which were mixed-methods studies) consisted largely of etic if not positivist activities such as structured interviews, questionnaires and think-aloud protocols. Egbert, Huff, Mcneil, Preuss, and Sellen (2009) drew attention to the lack of integration of teacher voice in research of CALL in the classroom.

One by-product of this sluggish reaction is the unwitting reinvention of research with new technologies but in ignorance of earlier studies based on outmoded technology (Garrett, 2008). A good case in point is the evolution of research from earlier text-based multiuser virtual environments such as multi-user domains (MUDs) and multi-user object-oriented domains(MOOs) to more recent research into three-dimensional multiuser virtual environments such as *Second Life* which come well after the polemic. Dominant themes in MUD/MOO research tend to be cognitive, including comparisons of interactional data between native speakers and non-native speakers to existing research on similar face-to-face interactions (Schwienhorst, 2002; 2004), support of the hypothesis that the textual interactions in a MUD/MOO transfer to a learner's capacity to improve verbal interaction (Chun, 2008; Schwienhorst, 1998) and data that supported the SLA concepts of autonomous learning (Beauvois, 1992; Lafford & Lafford, 1997) and a lowering of the affective filter (Beauvois, 1992; Von Der Emde, Schneider, & Kötter, 2001).

These cognitive themes surrounding CALL research on text-based MUVEs that predate post- Firth and Wagner scholarship see themselves replicated in research projects on three-dimensional multiuser virtual environments, disregarding developments in SLA. For example, in Balcikanli's (2012) structured interview of seven American learners studying Turkish in the USA and eight Turkish learners of English who studied English in Turkey to uncover their experiences in *Second Life* using grounded theory (Glaser & Strauss, 1967; Strauss & Corbin, 1990) as a

lens, he reports similar findings on interactions between native speakers and non-native speakers, and also finds *Second Life* to be an excellent tool for lowering the affective filter, but makes no reference to earlier work that made the same findings in textual-based multiuser virtual environments. Kuriscak and Luke (2009) describe data from the text chat logs and surveys of 107 intermediate-level Spanish students that seem to indicate that learners who interacted mainly with native speakers (as opposed to non-native speaking class peers) in *Second Life* had more positive attitudes toward computers, language learning, *Second Life*, and the corrective feedback they received in *Second Life.* However, their study fails to account for the things that distinguish 3D multiuser virtual environments from their text-based counterparts, mainly, the verbal and gestural communication that occurs in the 3D environments. Zheng, Li, and Zhao (2008), in an ethnographic observation of Chinese language learning, use participant mapping and interview data to assess engagement within *Second Life* and the potential benefit to learners through negotiation of learning. Their findings were congruent with, but fundamentally did not significantly extend, findings on text-based multiuser virtual environments.

Section Three: Discursive Psychology and SLA

While there are no studies in SLA or CALL that use critical discursive psychology as a lens, there is at least one discursive psychology study within SLA, one study in CALL, and quite a bit of theoretical positioning of discursive psychology by those in the conversation analysis tradition that has begun to emerge in second-language acquisition studies (CA-SLA), in no small part due to Markee (Markee, 2011; Markee & Seo, 2009). Kasper and Wagner (2011) characterize discursive psychology's entrance into second-language acquisition studies as cautious, but admit that "most likely we will soon see more uptake in second-language acquisition studies" (p. 137). For Kasper (the reformed cognitivist) as CA-SLA begins to

welcome in discursive psychology researchers and diversifies its research program, she calls on her colleagues to focus on "theoretical coherence, methodological accountability, and relevance for social intervention" (2011, pp. 137-138). This call seems to speak to issues of academic rigor, validity and practical salience that will have different (perhaps antithetical) but certainly not less valid significance in discursive psychology research than in cognitive and normative research. This seems to be a fruitful area of exploration as research projects are taken up in second-language acquisition studies, to engage the CA-SLA community more critically on these topics with an eye to demonstrating the strengths of discursive psychology.

The first in second-language acquisition studies to take up discursive psychology was Kalaja (2003), who was interested in using discursive psychology to explore beliefs about second-language acquisition. Kalaja called for a reconceptualization of research into student beliefs about second-language acquisition, which had largely relied on replications or adaptations of the Beliefs about Language Learning Inventory (BALLI), which she criticized for being hypothetico-deductive in that respondents were asked to consider tasks in mostly hypothetical situations and choose from a set of response alternatives formulated by the researcher.

After synopsizing the Discursive Action Model to spell out the starting points of a discursive approach, she describes a project where a dozen students who were about to take an English exam which they had to pass in order to graduate high school and continue college studies were asked to keep a tape-recorded diary of their thoughts, feelings and experiences concerning the test before and after each subtest and after receiving official test results. They were also invited to return to hold a discussion in pairs or groups of three and share their experiences. They were provided with a list of topics about the exam and their knowledge of English with specific prompt questions which they could consider commenting on if desired.

The data was transcribed and all instances of expectations of success were extracted from the diary entries and discussions. Kalaja demonstrates that the wide variation in expectation talk (coming from even the same student on occasion) becomes less puzzling once placed within interpretive repertoires, where students were observed to modify their talk around test expectations based upon the rhetorical position that they were trying to assume (diligence, skill, chance, or social status). This, of course, resists the notion that these are stable psychological constructs and compels a reconceptualization of how these beliefs are researched.

There is one CALL study of note that employs discursive psychology. De los Arcos, Coleman and Hampel (2009) explore affect as a discursive construct in the context of a synchronous audio-conferencing tool being used to give students the opportunity to practice oral skills remotely with a tutor. This was accomplished by interviewing seven volunteers about their experiences, a collection tool that the researchers were sensitive enough to mention is likely burdened with their concerns and placed participants in the position of providing normative descriptions of their emotions. As their results point to the importance of judging that one's behavior as a language learner coincides with what is believed to be expected of a language learner to indicate the absence of anxiety, their study would have been much more valuable had recording of the actual audio-graphic sessions been captured.

Similarly, there is one article of note that uses discursive psychology to investigate *Second Lif*e. Phillips (2008) uses a combination of three social constructionist approaches to discourse analysis (critical discourse analysis, discursive psychology, and the discourse theory of Laclau and Mouffe) to begin an initial exploration of how people's rhetorical positioning in meetings that are a part of a collaborative research project in *Second Life* creates particular discursive patterns that can then be used to determine the values ascribed to *Second Life*. Her

partial mapping produces patterns in terms of usefulness, reflection, transgression and others, with the assumption that these constructions somehow delimit the production of knowledge about virtual worlds, and the delimitations can then be explored critically in terms of marginalization and/or exclusion.

Summary and Analysis

Each of the studies above share some aspect of my study, but also lack some aspect of it as well. While Kalaja limits her analysis to the Discursive Action Model, meaning actions actually performed by a person on specific occasions of talk or writing, my definition of discourse includes both verbal and non-verbal elements. As an example of this combination, Laclau and Mouffe (1987) offer the discursive activity of building a brick wall, which includes verbal elements ("pass me that brick") and nonverbal elements (placing brick on top of brick). Both acquire their significance in relation to each other and the constructed, stabilized system of relations we recognize as "building a brick wall", where the identity of objects (such as bricks) and social agents (such as bricklayers) also become defined in relation to each other.

While De los Arcos, Coleman and Hampel (2009) look at affect through the lens of DP, they do so in the context of research interviews, a hallmark of emic qualitative research which ostensibly allows the participant to frame the answer in their own terms, and provides a more accurate depiction of the individual's "mental map" (Fetterman, 2010). Potter and Hepburn reconceptualize the interview as analytically tractable only when treated as an interactional event where one is analyzing things such as orientation to social science agendas, footing, and appropriate stake and interest in the interview process (Potter & Hepburn, 2007). Given some of the etic features that are bound up with emic features in the interview, it is a difficult place to achieve the traditional desired activity, which is the excavation of participants' views (Potter & Hepburn, 2005). The appeal of naturalistic data (for

example, the video recordings of conversations and classes of this study) as more "powerful and analytically tractable" came from this dissatisfaction with what Potter and Hepburn might describe as "less emic" — but certainly not "more etic" (Potter & Hepburn, 2007, p. 279) — materials such as the interview.

While Phillips (2008) shares this study's concern with issues of power and ideology in *Second Life*, she seems to operate from a position that the typical top-down Marxist notion of ideology is the only way to conceptualize ideology. Marx and Engels (2005) conceived ideology as a form of false-consciousness that blinds people to their own position and as such hides the true nature of the power relations that pervade society. However, the idea of false consciousness cannot exist without the binarity of true consciousness, and as such is an untenable position for those who align themselves with social constructionism. A more relativist position (Billig et. al., 1988) that distinguishes Marxist or top-down ideologies from lived ideologies (commonsense understandings of beliefs and practices within a given culture or context) allows the researcher to look at the way that people approach inconsistencies and contradictions in these commonsense understandings to ascertain how they are developed rhetorically to persuade others in interaction.

Chapter Summary

In this chapter, I first reviewed how the concept of learning has been conceptualized by cognitive and social research in second-language acquisition and computer-assisted language learning, followed by the empirical studies in computer-assisted language learning that examined multi-user virtual environments from a cognitive perspective. Next, I reviewed how traditional critical studies are not effective in virtual worlds, and suggestions for more effective critical studies. I then made a case for departing from these research traditions by (re)constructing the history of computer-assisted language learning and second-language acquisition as disciplines,

describing many of the seminal writings and watershed moments that contributed to the ways in which computer-assisted language learning has been conceptualized and researched. Finally, I discussed how discursive psychology has been taken up in second-language acquisition and computer-assisted language learning research, and briefly outlined how my study will extend this body of research. In the next chapter, I discuss this study's methodological framework.

Chapter Three: Methods and Procedures

The purpose of this study was to explore how language students and teachers in multi-user virtual environments perform learning and pedagogy. The three-dimensional virtual world setting of Englishville provided a suitable forum for examining how aspects of language learning are made relevant, managed, and mediated in a virtual space. I employed a critical discursive psychology (CDP) analytical approach in order to attend to how discourse both constructs the social realm and is part of the social realm of virtual spaces (Edwards, 1997a; Potter & Wetherell, 1987). Before I lay out the positions, orientations, and methods that framed this study, I first provide an outline to the chapter.

Chapter Overview

In this chapter, I first restate the research question as well as detail the epistemological and ontological underpinnings of the research approach. I follow this by describing the site of data collection and the participants. I then describe the data collection and analytic processes, endeavoring to illustrate as transparently as possible how I drew upon the traditions of discursive psychology and the critical work informed by Laclau and Mouffe (2001) to make sense of the data. In addition, through my description of how I warranted claims, I will discuss how I sought to maintain academic rigor. I then position myself within the study. Finally, I will speak to the ethical considerations that were particularly relevant to this study. The description that follows is not of a static process, but of a process that evolved over the course of the study.

Research Question

With the disclaimer that I was committed to being open to what was found and observed in the data as outlined by Sacks (1992), and acknowledge that the research question below was

subject to shifts and mutations of focus as the project progressed (Rapley, 2007), I opened this study with a focus on the following research question:

- How do participants perform "teaching" and "learning" during language courses conducted in the multiuser virtual environment of *Second Life*?

Rationale

This study engaged with particular features of the Discursive Action Model (DAM, Edwards & Potter, 1992), an approach concerned with developing fine-grained, emic accounts of naturally occurring language learning behavior. Like other qualitative approaches, the DAM allows researchers to take into consideration the interpretive resources for making sense of everyday life that all competent members of society have at their disposal (Garfinkel, 1967). However, it moves beyond the question of whether cognitive and/or affective constructs, structures and processes underlie language learning behavior. Instead, this post-cognitive methodological approach (Friesen, 2009) offers a theoretical and analytical lens by which to consider how people routinely co-construct the grammar of interaction as an emergent phenomenon, manage cognitive and affective topics during talk, and formulate patterns of speech in and through talk.

I chose this methodological approach for several reasons. First, my interest in CDP's discursive psychological side — the study of the way in which social action is achieved in talk — closely aligns with the DAM's purpose to link different features of participant discourse together to create process-oriented accounts of affect, language, and language learning that are treated as observable, socially distributed interactional practices (Edwards & Potter, 1992). Second, as I presuppose that learning and teaching are situationally constructed through talk but are also informed by the lived ideologies of the students and teachers observed, I desired to

select a methodological approach that would allow me to examine how the participants accomplish, manage, and contest language learning and pedagogy within the broader discourse of the virtual world and language education. Since the DAM in concert with the critical elements of CDP (interpretative repertoires, ideological dilemmas, and positioning) focus on exploring what people do with their talk, as well as how versions of the world are constructed and maintained, this methodological approach fits with how I orient to the notion of constructing reality and comprehending communities of learning. Therefore, I aligned the research questions and data analysis process of this project with the assumptions of this particular critical discursive approach.

Finally, in my role as researcher, there are particular epistemic and ontological beliefs that act to frame how I believe the world is best interpreted. I sought to maintain balance between my own epistemic and ontological beliefs concerning human interaction, and those belonging to my research methodology. When determining whether to employ a constructionist approach, I critically considered whether its theoretical and philosophical assumptions aligned with my own. As my assumptions regarding knowledge construction and the nature of reality resonate with the philosophical underpinnings of critical discursive psychology, it seemed a harmonious choice for me to make.

Theoretical Framework

As I aim to situate this study within a broader academic conversation within the CALL and SLA disciplines, I will now elaborate on the primary theoretical and analytical framework, critical discursive psychology.

An overview of CDP.

Before providing a narrative of what critical discursive psychology is, a brief overview of the main postulates of historical influences is in order. As Billig (2009) observed, any discussion of discursive psychology will inevitably simplify the complexities of the approach, as the term "discursive psychology" itself "conveys the idea of a defined theoretical position and a united intellectual movement" when in reality various positions of discursive psychology exist (p. 2).

Critical discursive psychology comes out of a tradition of discursive psychology and conversation analysis, which considers both the person and their world as constituted through discourse and societal practices. (For an overview of the definitions of and relationships between these three approaches and cognitive approaches like SLA, refer to Table 1.)
As such, CDP (like DP) rejects the notion that psychological topics (such as learning) represent an internal, set and persistent phenomenon, or that reality is somehow available for discovery or description prior to and independent of our construction of practices (Billig, 1997). CDP is relativist in that experience and truth claims can only be understood in relation to local discourse. This rejection, however, does not constitute a denial of an objective reality, which would be an equally essentialist move (Edwards, Ashmore & Potter, 1995; Potter, 1998; Potter, 2003). Rather, the rejection shifts the focus of study to how our reality is constituted and particularized in local discursive practices, as well as the resources people draw on to give objects or people significance, determine what kinds of things (or people) they are and the kinds of identities that people can take up in relation to them (Edwards, 1997a; Potter, 1998). To give a brief example, someone with the title of teacher is accorded a certain significance in relation to a student, and modifies both what activities can be taken up by the teacher and what activities can be taken up

Table 1

Definitions and Relationships of the Four Approaches

Approach	Focus of Analysis	Treatment of Critical Methodologies	Role of Researcher
Cognitive Approaches to Second Language Acquisition (SLA)	Focus is on experimental settings and discourse to the detriment of naturalistic real-life encounters. Priority is on explanations in terms of underlying cognitive processes over descriptions.	Quantitative explanations of individual cognition according to critical class (analysis limited to race/class/gender in extant critical CALL).	To discover the (cognitive) reality *behind* the discourse, in order to discover what *really* happened.
Conversation Analysis (CA)	Focus is on people's own sense-making practices revealed in everyday discourse using a technical micro-analysis of talk.	Any and all critical analysis must be rooted within the interactional data. Focus on a micro-analysis of talk-in-interaction to the exclusion of the broader social and institutional practices that are not picked up in interaction.	Use the principled method of microanalysis to reach some form of interpretative closure grounded in the participant interactions.
Discursive Psychology (DP)	Psychological language is constructed, attended to, and organized for action and interaction in everyday discourse. CA used to analyze the psychological language. DP is agnostic as to mental processes, as they are empirically inaccessible.	Generally unproblematic, but if critical stance is realist in nature, research becomes a trope for passing off preconceptions as a product of investigation.	Work with the discourse to explore patterns in and across the statements, identifying social consequences of different representations; take account of the role of the researcher through reflexivity.

Table 1. Continued.

Approach	Focus of Analysis	Treatment of Critical Methodologies	Role of Researcher
Critical Discursive Psychology (CDP)	Inherits not only DP's analytical focus, but also takes up everyday discourse and its relationship to abstract discourse, as culture and common-sense knowledge of participants and researchers are unacknowledged and unexplicated resources in DP.	CDP employs a synthesis between micro-analysis of talk and genealogy of discourse, broader social practices to develop a critical commentary on the social and cultural significance of analyzed patterning. Treatment of all power asymmetries.	Explore interpretative repertoires, patterns in the discourse using the discursive action model (DAM). Reintroduce patterns and repertoires back into larger discursive fabric to explore and critically comment on ideological dilemmas and subject positions that resonate in the local discourse. Take account of the role of the researcher through reflexivity.

by a student in relation to the teacher. DP without the critical dimension would not consider power to be a key variable unless it was overtly oriented to in talk.

Interaction in the general DP framework is not seen as an outcome of some internal driving construct, but is the principal topic of interest. Because of this, focus on interaction is taken very seriously by DP researchers, to the point of insisting that any and all analysis must be rooted within the interactional data. Wetherell (1998) has been critical of the tendency of researchers in conversation analysis and discursive psychology to focus on a technical micro-analysis of talk-in-interaction to the exclusion of the broader social and institutional practices and structures that can shape and even define discursive practices. She invoked Laclau and Mouffe (1987) to extend the idea of discourse to include all objects and actions situated within the system in which signification is produced. As Laclau (1993, p. 341) explains, society can be conceptualized as "a vast argumentative texture through which people construct their reality". Wetherell makes it clear that for Laclau and Mouffe "it makes no sense to distinguish between the discursive and the extra-discursive or talk and the world" as meaning making is unending and boundless, "configured in ever-changing patterns of relations" (Wetherell, 1998, p. 393). The focus of research in critical discursive psychology continues to be on the action orientation of interaction while maintaining awareness of the cultural and historical genealogy which surrounds the interaction, since, as Wood and Kroger (2000) point out, it is counterproductive to parse interaction into its various components, but to "view the whole as a semiotic system; that is, we should think of discourse in the broadest sense" (p. 63).

This notion of discourse resonates strongly with my own epistemic and ontological assumptions. I agree with Wetherell that poststructuralists tend to excel in abstractions, and rarely have to show "how their perspective might apply to what is happening right now, on the

ground, in this very conversation" (1998, p. 395). However, a stance that reads post-structuralism in terms of DP and conversation analysis (and vice versa) may prove to be "the most productive basis for discourse work in social psychology" and is certainly "in line with earlier attempts to weave a range of influences into a viable approach to discourse analysis for social psychological projects and topics" (Wetherell, 1998, p. 388). Critical discursive psychology underscores both the constructive nature of talk highlighted in discursive psychology and the pervasive, defining, and genealogical nature of discourse (Shapiro, 1992). The analytic concepts that critical discursive psychology brings to research topics are interpretative repertoires, ideological dilemmas and subject positions, which will be discussed below.

Historical influences.

The epistemic position of critical discursive psychology is profoundly shaped by traditions in discursive psychology and sociology, specifically in the fields of ethnomethodology and conversation analysis. Conversation analysis emerged during the 1960s in the work of Harvey Sacks and colleagues Emanuel Schegloff and Gail Jefferson. It consists of "the application of ethnomethodological principles to the empirical study of talk" (Edwards, 1997a, p. 84). Ethnomethodology, developed by Harold Garfinkel in the 1960's, reconceptualized the problem of social order "as a practical problem of social action, as a members' activity, as methodic and therefore analyzable" (Ten Have, 2007, p. 6). Research involves an intense immersion into the details of members' localized practices, understood as displayed in their local discursive interaction. In short, ethnomethodology asks "how" questions rather than "why" questions, as the limits of empirical knowledge are seen as procedural rather than explanatory. As such, one part of critical discursive psychology analysis will study interactions for the work they do, for the ways in which descriptions are constructed to be normative, and for how

knowledge and accountability are invoked, oriented to, and contested in interaction (Potter 2010b). Central to discursive psychology epistemology is Wittgenstein's observation that "language is itself the vehicle for thought" (Wittgenstein, 1953, p. 329). As such, discursive psychology considers what is knowable to the researcher to be contingent upon the discursive moves of participants. This can be studied by a close examination of participants' everyday discourse in naturalistic environments (Potter & Hepburn, 2007). Wittgenstein's idiom of "language game" (that language use occurs in a rule-like fashion in specific social contexts) has had significant influence in discursive psychology. The idiom accounts for a world *constructed* by conventions of language use in localized situations as it simultaneously accounts for *constructive* participants who create and stabilize versions of the world that are then reiterated in discourse. (Potter & Hepburn, 2007, p. 277).

Ontological and epistemological assumptions.

When discussing critical discursive psychology, I resonate with and consequently draw upon the literature of discursive constructionism coming from Derek Edwards (1997a), Jonathan Potter (1996; 2006a), and others who take a stance inspired by conversation analysis (Korobov, 2010; Potter & Hepburn, 2008; Speer, 2001). As such, critical discursive psychology could best be described as agnostic on the nature of reality (Kasper & Wagner, 2011; Korobov, 2010). Since DP considers both the person and their world as constituted through discourse and societal practices, both DP and CDP on the whole reject the notion that identity is an internal, set and persistent phenomenon, or that reality is somehow available for discovery or description prior to and independent of our construction of practices (Willig, 2001). Wetherell (2003) and Wetherell and Edley (1999), however, leave room in analyses to "examine the person as yet a further site where meaning gets organized," (p. 114).

The "foregrounding of the epistemic position of both the researcher and what is researched" (Potter & Hepburn, 2008) is perhaps the most distinctive characteristic of a discursive psychology approach. Potter (2010a) argued that it was "shorthand for the very project of discursive psychology" (p. 658). Critical discursive psychology can be described as anti-foundational because researchers do not assume the existence of a foundation on which to base truth or knowledge claims. It is informed by work in the sociology of scientific knowledge, which is also methodologically relativist in that it systematically avoids starting with one party's version of events, actors or structures as true or given (Ashmore, 1989). Therefore "both the analytic and explanatory focus is moved from considering cognitive processes and entities to discursive practices and the resources they draw on" (Potter, 1998, p. 235).

Potter and Hepburn (2005; 2007) furnish one example of how this epistemological stance is *radically* emic (Potter, 2003). One hallmark of emic qualitative research is the interview, where researchers ask open-ended questions about some phenomenon from the participant (emic) perspective. This ostensibly allows participants to frame the answer in their own terms, which provides a more accurate depiction of an individual's "mental map" (Fetterman, 2010). Potter and Hepburn reconceptualize the interview as analytically tractable only when treated as an interactional event where one is analyzing things such as orientation to social science agendas, footing, and appropriate stake and interest in the interview process (Potter & Hepburn, 2007). Given some of the etic features that are bound up with emic features in the interview practices, it is a difficult place to achieve the traditional desired activity, which is the excavation of participants' views (Potter & Hepburn, 2005). The appeal of naturalistic data (for example, audio and video recordings of conversations in everyday or institutional settings) as more "powerful and analytically tractable" came from the dissatisfaction with what Potter and

Hepburn might describe as “less emic” — but certainly not “more etic” (Potter & Hepburn, 2007, p. 279) — materials.

Research approach.

In this section, I outline the “more synthetic approach” (Wetherell 1998, p. 388) I use to weave a viable approach to discourse analysis for a social psychological projects such as this one. I first provide a description of the Discursive Action Model used to create systematic connections between different features of participants' discourse and highlighting how these features work in participants' social practices (Potter, Edwards & Wetherell, 1993). I then describe the critical analytic concepts I use to link analysis from the Discursive Action Model to the “broader cloth” (Wetherell, 1998, p. 403) of cultural practices and references that are subject to critical analysis, these concepts being *interpretative repertoires*, *ideological dilemmas* and *subject positions*. As the steps in this approach are well-established analytical traditions in their own right, I will inevitably present an abbreviated description. Each of these will be illustrated through the following excerpt from an ESL idioms course observed in Englishville that we will see again in Chapter 4. You will notice that Gail Jefferson’s (2004) transcription system has been used, as it will throughout this study. It allows the researcher to mark features of talk and interaction that have been found to be relevant across the body of work in conversation analysis. (Please refer to Appendix A for a list of transcription conventions to assist in understanding the Jeffersonian transcriptions in this study.) In Excerpt One, Izzy, one of the two instructors whose classes are being studied, finishes up her struggle to answer a question posed by Miles, one of her students, to explain the idiom *nitty gritty*.

Excerpt One

1 Izzy: That's the best way >I can explain nitty gritty↑<. So if you: ar::e, u::m (2.0)

it's ↑almost ↓similar to getting down to ↓brass tacks, remember when we did brass tacks?

Rory: Mmm, no.

Miles: [U::m, no:: I huh h huh.]

Izzy: [Yes you do, yes you do.] Because I ↑showed you, I ↑showed you uHHHHHH huh huh huh hah. I think that was the first one we ↑did, >↓actually<, so maybe you forgot. Um, it was brass tacks, that means [getting down] to the basics. Nitty gritty.

Akilah: [((types //www.urbandictionary.com/define.php?term=nitty+gritty))]

Izzy: _Thank you_ Akil, Ak, Akilah, we try not to use the dictionary here. No cheating. [chhhhhhh] hah ↑hah]

Rory: [huh huh]

Izzy: Nuh ↑chea↓ti::ng. If you ↑↑cheat, ↓tsnot ↑a good ↑thi::ng!

Discursive Action Model.

The Discursive Action Model framework methodically links the varying features of discourse with each other in an attempt to show how discourse is organized more profoundly and with much more granularity than had previously been assumed. As seen in Table 2 below, the model is divided into 9 principles grouped loosely into three themes.

The first theme in this model focuses on action. Applied to learning and pedagogy, this means that the focus shifts from causal cognitive explanations to evidence actually performed by a person on specific occasions of talk. In Excerpt One, rather than looking at this section of teaching intervention from a behavioral or cognitive perspective, Izzy and Akilah's roles can be treated as a social practices and their interaction becomes, operationally, a sequential and

Table 2

The Discursive Action Model (Potter, Edwards and Wetherell, 1993, p. 389).

Theme	Principle
Action	1. The research focus is on action rather than cognition or behavior.
	2. As action is predominantly, and most clearly, performed through discourse, traditional psychological concepts (memory, attribution, categorization, etc.) are reconceptualized in discursive terms.
	3. Actions done in discourse are overwhelmingly situated in broader activity sequences of various kinds.
Fact and Interest	4. In the case of many actions, there is a dilemma of stake or interest, which is often managed by doing attribution via factual reports and descriptions.
	5. Reports and descriptions are therefore constituted/displayed as factual by a variety of discursive devices.
	6. Factual versions are rhetorically organized to undermine alternatives.
Accountability	7. Factual versions attend to agency and accountability in the reported events.
	8. Factual versions attend to agency and accountability in the current speaker's actions, including those done in the reporting.
	9. Concerns 7 and 8 are often related, such that 7 is deployed for 8, and 8 is deployed for 7.

dialogic account of the norming of classroom talk surrounding the definition of an idiom by Izzy openly scolding Akilah for breaking a class rule. Next the model focuses on fact and interest. As there are several ways to account for performing a classroom task and for attributing success or failure for the performance, participants construct a version of events that minimizes their stake in the version and makes their version sound factual. Izzy attempts to achieve a factual definition of the idiom *nitty gritty* by a lengthy description with examples from personal experience that precedes Excerpt One, followed by providing a synonymous idiom (brass tacks) in Line 2 of Excerpt One. Akilah on the other hand provides a link to the term *nitty gritty* as defined in an online dictionary in Line 9. In the face of these two competing versions of definitions, Izzy rhetorically organizes Akilah's account as an attempt at cheating in Lines 11-12, but does so with hearable laughter that is routine in troubles-telling (when someone is challenging another discursively), where Jefferson (1984) notes that laughter may display the teller's position to be able to minimize their stake in the troubles-telling (like the challenge is no big deal) and is "troubles-resistive" or deployed with laughter to prevent an escalation of the challenge (p. 367). It also serves to problematize the troubles-recipient's position should they not laugh, which would be a dispreferred response (the preferred response being laughter from Akilah).

Finally, the model focuses on accountability, or in the context of this study, who or what is held responsible for instructional or learning outcomes. In other words, talk can work towards "claiming credit for, or distance from, the reported events" (Potter, Edwards, and Wetherell, 1993, p. 25). By sanctioning Akilah's attempt to define as cheating, Izzy distances herself and her course from Akilah's lexical contribution and contrasts it with her role as "legitimate informant" (Edwards 1997b, p. 39).

Put another way by Schegloff (1996), three elements that should be present in any analytic account is "a formulation of what action or actions are being accomplished," "a grounding of this formulation in the 'reality' of the participants," and "an explication of how a particular practice, i.e. an utterance or conduct, can yield a particular, recognizable action" (pp. 172-173).

Interpretative repertoires.

Wetherell (1998) suggested that after analyzing local discourse using the Discursive Action Model, which is always a partial piece, that one also look to the broader forms of intelligibility that make a particular conversation possible. She identifies three specific analytic concepts: the notion of *interpretative repertoires*, *ideological dilemmas*, and *positioning*.

Interpretative repertoires are resources at a person's disposal with regard to a particular theme or topic. In Excerpt One, Akilah provided a link in Line 9 to a lexical definition to facilitate the work Izzy and Miles were engaged in to produce a workable definition of the term *nitty gritty*. In this instance, the link to a dictionary definition emphasized one way of establishing a legitimate form of knowledge in a classroom setting. Izzy's response of "nuh ↑chea↓ti::ng." (Line 13) troubles the authority that Akilah sought to establish by claiming it to be a violation of class procedure. Each of these discursive building blocks imply divergent repertoires and ideologies. This identification would be followed by reading the entire data set repeatedly to see how similarly-coded data are rhetorically developed with a goal to formulate possible functions for the rhetorical constructions associated with particular repertoires.

Interpretative repertoires are used by researchers to link the details of participants' descriptive practices to the broader ideological formations in which those discourses are situated. In the case of our excerpt, the formations have the ideological formation of establishing authority, be it definitional in the case of Akilah or procedural in the case of Izzy. The idea of

interpretative repertoires serves to help specify and analyze interpretative resources, or related sets of terms organized around central metaphors. They are genealogical in nature (there is a history attached to the concepts) and comprise a significant part of lived ideologies and institutional talk. Their ability to call upon the broader cloth of social discourse while being flexible enough to be deployed and reworked locally is what distinguishes the concept of interpretative repertoires from the almost structuralist notion of the genealogy of discourse (Potter, 1996). The term first appears in the work of Gilbert and Mulkay (1984), who were interested in the way scientists use one interpretative repertoire in their formal writing and another in their informal talk to lay people. Edley (2001) suggests that they can be understood as resources that can be taken up and deployed in everyday interaction "which are part and parcel of any community's common sense, providing a basis for shared social understanding" (p. 198). They are the building blocks of talk-in-action from which to draw to interact with others. Wetherell and Potter (1988), explain that repertoires are the building blocks for constructing versions of events and actions and are constructed out of a limited range of context-specific terms "derived from one or more key metaphors and the presence of a repertoire will often be signaled by certain tropes or figures of speech" (p. 173).

Ideological dilemmas.

Billig et. al. (1988), in a post-Marxist move similar to Laclau and Mouffe (2001), clarified how the intellectual or top-down notion of ideology typical of Marxist thought was not the only way that ideology could be conceptualized. *Ideological dilemmas* explain how discourses can be contradictory and problematic. In formulating the idea of ideological dilemmas the authors drew a distinction between the intellectual concept of ideologies and "lived" ideologies, or common-sense awareness of beliefs and practices within a particular

culture. As "lived" ideologies are by definition not as coherent or integrated as intellectual ideologies are, they introduce inconsistency and even contradiction. This means not only that ideologies are a resource of "the condensed wisdom of a given culture or society" (Edley, 2001, p. 203), but that due to this tense or "dilemmatic" structure inherent in them, one can look at how they are developed rhetorically to persuade others by examining the way that people approach the inconsistencies and how power asymmetries may play a part. This allows one to look at interaction at the localized level while being sensitive to the genealogical development of the lived ideologies. In Excerpt One, the well-developed practice of compensation strategies was showcased in the competing skills of Izzy's inference or guessing with Akilah's method of using reference materials such as dictionaries. The ideologies behind these contrasting skills are dilemmatic even in academe (Knight, 1994; Singhal, 2001), and this dilemma was negotiated locally in Izzy's Englishville course. This instance of institutional talk required both local analysis and analysis of the "broader cloth" of the politics of compensation strategies in the classroom to understand that Izzy and Akilah are informed by competing ideologies to which Izzy responded in a way that can be conceptualized critically as taking advantage of an asymmetry of power to achieve a desired institutional outcome.

As demonstrated in Excerpt One, in terms of the analytical process, the ideological dilemma of competing compensation skills is the particular "theme" upon which this negotiation of power is then displayed in this particular idioms class and perhaps other classes as well.

Subject positions.

Finally, *subject positions* are ideas that embody ways of seeing the self within an interaction. Walkerdine (1990) argues that people do not enter interaction as a pre-figured subject, but that the subjectivity is (re)constituted as interaction unfolds. Who we are and how

we perceive others at any given moment is dependent on the terms of discourse available. Put simply, subject positions are the spaces in which people locate themselves and others within a conversation (Edley 2001). In terms of analysis, Edley (2001) suggested that remaining mindful of "who is implied by a particular discourse or interpretative repertoire" is a helpful device when doing subject position analysis. Wetherell (1999) stresses the importance considering in detail the many positionings of participants in relation to formulations of the nature of events in their interactions and the way in which these positions are established and how they remain untroubled (normalized or unchallenged) or are made troubled (are challenged or rejected). In Excerpt One, Izzy's position as teacher allows her to position Akilah's attempt to use electronic reference materials as cheating (and trouble Akilah's position as a "good student") without this assertion being troubled or challenged, even though this position is not settled or untroubled pedagogy.

In whole, this project seeks to report on the performances that produce the "virtual" reality of the language learners and teachers observed, but seeks to place these in broader ideological and social contexts in order to interrogate the consequences of certain patterns of discourse. This project does not presume to be the only voice or view on what it reports, nor does it reject out of hand that collaboration of some sort might be possible. If alternative views are to be incorporated, the study of interaction as described in this paper is foundational, and any pedagogical/procedural rules coming forth out of such an enterprise would have to incorporate findings such as those in this study into their formal representations (Markee & Seo, 2009).

Study Design

The following paragraphs describe this study's research design, explicating the methods used. I first briefly describe the pilot study that I conducted in the proposal development stage of

the dissertation process, and how the study results impacted my understanding of the dissertation context and data. I then describe gaining access to the field site and inviting teachers and students to participate, and how I strove to maintain confidentiality. I then provide information about *Second Life* and the participants, and explain the data collection and analysis process. I conclude by discussing how I grounded the claims of my research.

DPDF pilot study.

In the summer of 2008 I came into contact with a European private company that taught English and Spanish in *Second Life* to an international audience of paying students. I developed a working relationship with this company over the course of two years when I was also considering a project for my doctoral research. I had always wanted to examine the naturalistic discourse of students and teachers of a target language. As I was working with this virtual site already, I began to consider other platforms in which and the conditions under which the data I was envisioning might be available. With my added interest in talk that occurs within the institutionalized setting of a formal classroom, I also considered other settings that could provide discourse between participants within a more formal context. In 2010 I was fortunate to receive a Dissertation Proposal Development Fellowship from the Social Science Research Council (SSRC). I was able to work with a cohort of 11 other doctoral students from around the country around the concept of virtual worlds. I also received funding to conduct a pilot study from the SSRC. Having found no other field site that was as suitable to me, I approached the directors of the company (Saul and Hank) about the possibility of conducting research with them for the proposal and dissertation. The project was warmly welcomed by both directors and many of the teachers, four of whom I was able to recruit for participation in the pilot study along with their students.

While my initial questions centered around how the phenomenon of virtual worlds informed and transformed language learning and use, I saw an amazing amount of interpenetrability between the virtual and physical worlds that I felt deserved further scrutiny. Also, while I was attracted to identity approaches in SLA that understood language learning in the context of forming a new identity, I began to see that these language communities, through the act of doing language learning, were shaping individual and group identities that resisted traditional notions of culture. It was not target culture acquisition or even interculture, it was a cultural repertoire unique to both; each particular individual and class as well as to the technology embedded in their everyday class interactions. I wanted to learn more about how the performances of teaching and learning in these emerging technologies affected these notions. Finally, I was aware of interminable power asymmetries that I had assumed would fall away or at least be mitigated with the nature of *Second Life*, even in a more formal course within the environment, a persistence that I wanted to look at more closely.

Gaining access to Englishville.

After a very productive pilot project, I reached out again to Hank in the Fall of 2013 about the details of conducting my dissertation research. He replied that the company had undergone restructuring and would not likely be amenable to further research, but that a large number of the teachers with whom I had worked had broken off to form a new site known as Englishville, and put me into contact with Millie, the director of Englishville with whom I was acquainted as I observed her courses during the dissertation development research project.

I shared my research interests with Millie; she shared her hopes for her community of colleagues and learners of English, and her plans to expand further into Spanish instruction. When I spoke about the possibility of conducting my dissertation research at her site, Mille

responded as follows: “We would be glad to work with you. I look forward to seeing you again. Let me know when you want to begin and what you will need.” During the months that followed, Millie and I occasionally communicated via email, writing to each other about virtual conferences where I would present about my research orientation and where Englishville would present about their community, giving me an opportunity to network with the teachers and become more aware about their approaches to fostering learning. I learned that Englishville was formed by a corps of ESL and ESL/Spanish teachers previously employed by the European private company with whom I conducted the pilot study. Englishville offered flexible, on-demand and open-ended group courses in conversation, reading, culture, speaking, and writing skills to business professionals, university students, and others from over eighty countries around the world, with a large number of individuals from Europe, Saudi Arabia, Russia, Kazakhstan, China, Turkey and Mexico.

Approximately two months prior to collecting data for this research study, I met again virtually with Millie and several other Englishville teachers with whom I had networked in the context of an Englishville instructor meeting. Early in the meeting, I more specifically detailed this study and the scholarship informing it and outlined the nature of the data I was most interested in exploring and what participation in the project would entail. Over the course of the next month, I engaged in several email exchanges in which I shared my dissertation proposal and a more succinct overview of my research goals, and spoke with several teachers about courses where they felt they might receive unanimous support from students willing to participate in such a study once I received approval from the Institutional Review Board. As it turns out, Millie was not teaching regularly as she was busy running the administrative aspects of the site, and teachers whom I had observed previously were eager to let their colleagues have a turn at being observed.

I did, however, have two instructors (Ellie and Izzy) who had expressed interest if there were a limit to how long I would be observing. They were eager to not have the observations go for longer than a month. I expressed my desire to accommodate their wishes and told them that I thought 4 weeks of sessions (their classes met once per week) was fine. Ellie then mentioned that there was a 2-week period in May where classes were suspended for the vacation period that the bulk of their students would take. I asked them if we could extend my stay for an extra 2 weeks to insure a full monthly slate of sessions, a proposal to which they agreed.

Participants.

Upon receiving Institutional Review Board approval (see current approval letter in Appendix B), I formally approached and recruited the participation of Ellie and Izzy, both of whom I was acquainted with from my work with the European firm but who did not participate in the pilot study. Both are native English speakers with either a Master of Arts in Teaching degree in English as a second language or a certificate in teaching English to speakers of other languages (CELTA), one with over 30 years of teaching experience. Both were founding teachers in Englishville and they had worked together at Englishville for a little over a year, though they worked together for various lengths in their previous virtual ESL work.

With the assistance of both instructors, I invited the participation of 4 English classes which met on a weekly basis. Students were approached by their instructor at the beginning of various courses about 2 weeks before data collection was to begin and were introduced to me and to the research project. As it had been some years since my pilot study, there was no overlap of students between my pilot study and this study. After speaking with Ellie's and Izzy's students in their classes for approximately fifteen minutes, 2 of the four classes unanimously agreed to participate. Two students did not respond to my instant messages before their classes were

scheduled and the two classes that these two students were in did not participate in the study. Thus a total of 2 classes were part of the study, for a total of 8 sessions.

While I did not collect demographic data from the participants, I did learn from the instructors that the average age of a learner in these courses is 26 years old, the vast majority of them being business professionals and university students from over eighty countries around the world, with a large number of individuals from Saudi Arabia, Brazil, Russia, China, Hungary and Mexico.

Typically, someone interested in becoming a member of this learning community would create an account on the company's website and then take a browser-based English proficiency test to identify their English level. They then get a *Second Life* account (this is explained below), and after orientation would teleport to their sample class pre-arranged with Englishville where they would meet with the instructor who would welcome them, teach them how to use the software and assist them in having a successful first class.

Classes are available 24 hours a day and learners can attend the classes most relevant to their needs, rather than being restricted to a class cohort or standardized curriculum. As the classes are not mandatory, class size varied widely.

Each class session ranged in size from 2-8 students with a duration of 30-73 minutes. Unlike a traditional formal classroom, Englishville was able to create anything on the virtual platform, so no time or learner effort was spent trying to set the scene. There were also several communication channels available (talk, text, and object-oriented) with both public and private access and synchronous and asynchronous modes.

Being sensitive to the risk of inappropriately revealing participant identities not only to the scholarly community and others from outside the participant community, but to the

community itself, I used a confidential system to generate all pseudonyms, including the selection of the pseudonym for the site. I never sought actual names of the participants, so the pseudonyms were linked to the avatar names of all participants. Table 3 provides the pseudonym and gender of the participants and their avatars, as well as which observed classes they attended.

The importance of context.

A fundamental theme in qualitative research is that a proper comprehension of interaction requires an acknowledgement that interaction is inextricably situated. It could be said that the central difference between qualitative and quantitative modes of inquiry is the decision to either displace participants out of their normal contexts or to gather data in naturalistic settings and to be sensitive to context in analysis. This is not to say that there are not significant differences within qualitative research in general and among researchers in conversation analysis, discursive psychology, and critical discursive psychology in particular over what being sensitive to context means.

One divergence occurs when considering whether emphasis is on local or more global contexts. Discursive psychology, for example, focuses on locally organized practices for constructing the world (Potter, 2003). In contrast, CDP researchers insist that one cannot understand what goes on in any local situation without viewing it from within not only the local context, but also the context of previous turns in the same continuing conversation, previous conversations, and ultimately, the way that such discourses are informed by societal processes.

A second divergence occurs when context is defined qualitatively. Researchers partial to conversation analysis see context as defined by participants. The researcher's task, then, is to document how people orient to the situation they are in (Sacks, Schegloff & Jefferson, 1978). For CDP, a very important rationale for research is that people will not be aware of the context in

Table 3

Participants' Pseudonyms, Gender, and Classes Attended

Pseudonym	Gender of Participant/Avatar	Class sessions attended
INSTRUCTORS		
Ellie	Female/Female	Ellie 1, Ellie 2, Ellie 3, Ellie 4.
Izzy	Female/Female	Izzy 1, Izzy 2, Izzy 3, Izzy 4.
STUDENTS		
Afton	Male/Male	Ellie 2, Ellie 3.
Ahmad	Male/Male	Ellie 1, Izzy 2, Izzy 3, Izzy 4.
Athena	Female/Female	Ellie 1, Izzy 4.
Danielle	Female/Female	Ellie 3, Izzy 1, Izzy 3, Izzy 4.
Debbie	Female/Female	Ellie 3.
Elijah	Male/Male	Izzy 3.
Emma	Female/Female	Izzy 4.
Kris	Female/Female	Ellie 3.
Kylie	Female/Female	Izzy 1.
Madison	Female/Female	Izzy 3.
Mike	Male/Male	Izzy 1, Izzy 3.
Miles	Male/Male	Izzy 2, Izzy 4.

Table 3. Continued.

Pseudonym	Gender of Participant/Avatar	Class sessions attended
Miley	Male/Male	Izzy 4.
Pipi (Name changed from Nabil early in study)	Male/Male	Ellie 1, Ellie 2, Ellie 3, Ellie 4, Izzy 1, Izzy 3, Izzy 4.
Rory	Male/Male	Izzy 2, Izzy 4.
Sharon	Female/Female	Ellie 3.
Tatiana	Female/Female	Ellie 2, Ellie 3.
Thelma	Female/Female	Ellie 4

terms where actions can be properly understood because parts of this context will be either below or beyond awareness due to unknown technical or environmental processes or background normative constructions.

It is specifically to this second aspect that I wish to orient myself. As much of the Englishville context is essentially taken for granted by participants and as such may not be oriented to during interaction, I feel it vital to provide as much context as possible. Therefore, I have chosen to use thick descriptions in my study even though DP does not usually do so, because I feel it more closely respects the CDP orientation to a granular awareness of macrostructures that may enhance understanding of the local practices.

General orientation to *Second Life* and to Englishville.

I now offer a more detailed description of *Second Life* and of Englishville, recognizing that what I describe is necessarily partial (Noblit, et al., 2004), and that much will remain untold about *Second Life* that can in some degree be read elsewhere (Boellstorff, 2008). While studies that draw to a large extent upon DP analytic traditions rarely share a detailed thick description of the culture-of-use of their participant data, I argue for the importance of presenting my findings in relation to the culture-of-use of Englishville in a very granular way. Before getting too granular, I wish in this initial thick description to emphasize those general aspects that are universal or made relevant by participants in the hopes to make their actions more transparent to those not familiar with *Second Life*, and to introduce aspects of Englishville that might facilitate a general understanding of what goes on there.

Second Life is a three-dimensional online virtual world created in 2003 by the San Francisco-based company Linden Lab. This virtual world can be accessed freely via Linden Lab's own browsers (called viewers), or through alternative third-party viewers such as

Firestorm. *Second Life* users (who must be 16 or older) create virtual representations of themselves called *avatars* and once complete, these avatars can then interact with other avatars, places within the world of *Second Life* (known as *the grid*), or objects through trading, building, and shopping. The platform features user-generated content, so much like the Internet, content availability and quality varies. But whereas the Internet is based on currencies of the physical world (like the dollar or the pound), *Second Life* has its own virtual currency, known as the Linden Dollar, which is exchangeable with physical-world currency.

The process of registering for an account begins with choosing a basic avatar from a selection of provided avatars. Next, the avatar must be named and once the *Second Life* system approves the availability of the name and additional questions are answered (email, date of birth, etc.), the viewer can be downloaded. When entering *Second Life* for the first time, an avatar starts out on Welcome Island (see Figure 2), where the user learns the basics such as learning how to walk, zoom an avatar camera, communicate, stand and sit, fly, and teleport to different places. With teleportation, a user finds out quickly that if an animation is running on an avatar and isn't stopped before teleportation, upon arrival in the new location the avatar will still be running the animation with no way to make it stop. Seasoned avatars are quick to offer an object with a stop animation script attached that is then kept in the avatar's inventory to avoid being "stuck" in the future.

While users could continue with an unmodified avatar, most customize their avatars a little before leaving Welcome Island, as an unmodified avatar signals to everyone that the user is a *n00b*, or a new/novice user.

Once off Welcome Island, avatars enter a world divided into many different simulations (called *islands*) which are owned by individual avatars who rent them from Linden Lab. Owners

Figure 2. Screenshot of Welcome Island in Second Life.

can fashion or design their islands freely, as well as grant or deny access to other avatars. Buildings and other designed objects on the islands are created by the owner and others.

Entering any *Second Life* island for the first time is similar to entering any new community: upon arrival, you must learn the customs, lingo, rules and values of the *Second Life* community you are visiting. Through observation and interaction, you learn how to act in specific situations. Learning what not to wear and what to wear, or even how to shape your avatar's body is achieved through shopping and observation of other residents who have been in the *Second Life* communities you frequent.

Students who come into contact with Englishville (either in *Second Life* or through their website) are vetted both for their English ability (many students have taken the Test of English as a Foreign Language, or TOEFL and have a score set to provide) and their technical ability in *Second Life*. Some students were quite technically adept and had been in *Second Life* for some time pursuing other passions in the environment. Others came to *Second Life* for the express purpose of studying in Englishville and were not at all familiar with a 3D virtual world, and only came to *Second Life* when they had an Englishville class to attend. Englishville offered courses to orient students to learning in their virtual environment if it was deemed necessary. The admission counselors (comprised of senior instructors with placement skills) would make suggestions and negotiate courses that they felt would assist each student in reaching their personal goals for learning English and their budget. Students could trial 2 weeks of Englishville courses for less than ten dollars, then they could buy packages with 8-16 sessions or buy 3-month to 1-year unlimited session plans. These sessions were set up by instructors so that they could meet synchronously with their students on a weekly basis in the Englishville sim (a simulacrum of a typical city with a downtown); classes being in business and entertainment

districts, residences, worksites, and even formal classrooms, which could be on the virtual ground or even located suspended in the virtual mid-air. Teachers would explain on the Englishville website what the purpose of a session was (expressing needs, learning the vocabulary of playing board games, making predictions, etc.) and the time the class was held on an embedded Google calendar, and students would sign up for individual class sessions on the website according to their availability. While students were encouraged to develop a routine of faithful attendance with teachers and times, some students would pick and choose sessions like items on a menu, others had favorite teachers and would attend all of their courses. Still others would take every course offered to them with the time they had available. Teachers and students had access to pedagogical tools you would expect to see in a traditional classroom: projectors that could stream movies or PowerPoint slides, media devices for note taking (or playing board games in-world), even ways to give various formats of homework to an avatar that could be stored in their personal *Second Life* inventory. These synchronous sessions were followed by homework that was done asynchronously and either emailed to the instructor or brought for review at the next synchronous session. Every teacher worked on the four skills (reading, writing, listening, speaking), but from differing angles. Ellie was very keen on English for specific purposes (doctor visits, grocery shopping, cab rides, etc.) that took place in virtual versions of the purpose in question. Izzy, in contrast, specialized in idiomatic expressions and cultural excursions. Other teachers approached the four skills from theatrical skits in the Englishville virtual theater, others from art appreciation in virtual museums in Englishville and elsewhere in *Second Life,* etc. All teachers assessed students but using different approaches. Ellie tended to focus on form and did both cumulative assessments and micro-assessments in the input-response feedback (IRF) mode of instruction she employed regularly. Izzy liked to assess

informally through conversation repairs and direct cultural experiences that required specific demonstrations of language skills, but she also relied upon homework assessment and formal tests. I assume that other teachers used similar methods but also had idiosyncratic aspects to their assessment approaches. Sessions (and in some instances a series of sessions) had objectives, but these were tailored to student needs as determined during intake and also in an *ad hoc* fashion by instructors. While the courses had a formal and institutional orientation, they were open ended (meaning there was no 16-week course…the course would continue as long as there were students and the teacher was available), adaptive (while there may have been a scope and sequence to the lessons, they were highly flexible to accommodate student needs and even technical conditions) and relaxed (they had virtual classrooms that had the appearance of a brick-and-mortar classroom, but they were rarely used).

Data sources and collection procedures.

Data was collected in summer 2014. Orienting to these 8 individual class sessions as interactional events, I recorded the 8 sessions via screen capture software. As Potter (2012) has made a link between audio and video quality and the subsequent ease of transcription, recordings for this project were achieved using iShowU HD, a real-time video capture software package for Macintosh that can capture HD-quality audio and video. I captured text using both a window visible on the screen and captured via iShowU HD and by copying the text generated by the window that was built into the *Second Life* browsers I used for the project.

My role during the data collection process was minimal, consisting primarily of explaining the consent and notification processes and securing consent forms from participants. As I was able to cloak myself during the classes once I notified participants of my presence to observe, the recording process was invisible. I was also able to position recording angles and

zoom to capture interactions as classes progressed and moved around from location to location. My decisions for the placement of data capture angles within these environments depended largely on available space and ability to capture the entire class and pick up both verbal and nonverbal communication. While my aim was to collect a "full" set of data, I knew my focus would end on particular subsets of my data as I began to establish nodes of relevance to my project.

Overview of data sources.

From May 1, 2014 to June 15, 2014, I collected 7.45 hours of conversational data within the context of the 8 ESL class sessions (See Table 4), as well as the conversations between the teacher and students and between students that immediately preceded and followed these sessions. I also collected thick descriptions of the locales and practices of the participants at Englishville. I spent approximately 12 hours at Englishville in the data collection period.

Class session data.

The Englishville class sessions I observed took place in much the same fashion as they do in the physical realm in terms of administravia: class location (with a link to teleport to the location) was provided once registered, attendance was taken, there was a lesson plan with activities, assessments, homework, etc., and courses were listed as lasting one hour (but technical and schedule considerations did shorten this expectation at times). While the courses I observed were ostensibly tied to ability in the language, they were essentially open to all students regardless of their communicative competence. This was not the case with all Englishville courses.

Table 4

Detail on the Data Set

Class session	Number of students	Length of observed class session
Ellie Class 1	3	57 minutes
Ellie Class 2	3	52 minutes
Ellie Class 3	7	54 minutes
Ellie Class 4	2	30 minutes
Izzy Class 1	4	73 minutes
Izzy Class 2	3	72 minutes
Izzy Class 3	6	54 minutes
Izzy Class 4	8	55 minutes

Analysis.

I preface my discussion of analysis with an acknowledgement that what was salient within my data set could not be entirely knowable *a priori*. Thus, this overview of the processes I followed was the result of an emergent and iterative process.

I focused upon what the talk-in-interaction was doing using the Discursive Action Model as explicated previously to account for the both patterns and deviations within the data (Potter & Hepburn, 2005) and the constructive work they do, spending far more time in analysis than I did in collection due to the iterative nature of the analytic process (Taylor, 2001). I principally used the theory and analytic method of critical discursive psychology as detailed earlier in this chapter. I assumed an interpretive and emergent stance to analyzing the data as is common among many qualitative approaches. As iterative readings progressed and I began to become familiar with and develop a good knowledge of the data while closely attending to language features made relevant by participants (Sacks, 1992), I began to notice themes and ideas as well as atypical encounters, constantly comparing within and between my notes as they developed to begin the process of refining and establishing relationships between themes and ideas (Rapley, 2007). In particular, as I found segments of data that resisted or contradicted emerging themes, I began to make links between these dilemmatic segments in view of the critical analysis that would occur.

More specifically, I carried out six phases of data analysis: (1) careful and repeated viewing (Ten Have, 2007); (2) transcription (Potter, 2012); (3) repeated readings/analysis (Potter, 2012); (4) selection, organization, and identification of patterns and interpretive repertoires across the data and linking these patterns/repertoires to broader forms of intelligibility (Wetherell, 1998); (5) generation of interpretations of the data; and (6) reflexively and

transparently laying out findings. In the following paragraphs, I now outline this analytic process step by step.

Within any discursive psychology framework, including critical discursive psychology, the first band of rigorous analysis consisted of viewing and re-viewing the digital recordings that comprise the dataset. For that reason, I began my analysis with viewing and re-viewing the digital recordings of the data. These initial, repeated assessments of the dataset allowed me to attend to details of the interaction that would escape a cursory investigation (Ten Have; 2007) and helped me to identify initial themes that I found remarkable or compelling based upon my research question, my position as a CALL professional, or how participants oriented to interactions. Throughout this first step, I noted and reflected upon sections that I initially found most notable, either by degree of occurrence or by the nature of participant orientation to an event (Rapley, 2007). Initial findings at this phase included orientations around the fun and/or serious nature of participants' courses, orientations around their technology, and orientation around the different registers of speech available to them.

The transcription process is an inherently interpretive and generative performance on the part of the researcher. The filtering of what counts as data — which necessarily highlights, shadows, and circumscribes the interpretive field — is dependent upon the researcher's sense of what is important (Ochs 1979), but is always grounded in the interactions of the participants. The point of transcription is to enable the researcher to see the features of talk that are often crucial for how the participants understand it. So while transcription serves as both the foundation for ensuing analysis (the production of an analytic artifact) and the secondary process by which analytic data is generated (Reynolds 2008), failure to transcribe could result in misleading representations of interaction as analysis would not be grounded in the words and

actions of the participants themselves. In the course of this second analytical step, I personally transcribed the video recordings, beginning with a cursory transcription of each recording. I then examined the recordings again, noting any paralinguistic and non-verbal features of the interactions in order to fully assess the organization of participants' interactions (Gee, 1999).

Third, I performed a close reading of all transcripts in the dataset several times, searching for patterns and conversational features (lexical choice, turn-taking organization, etc.), using these inclusive, discourse-analytic questions to inform the process: (1) What is the discourse doing? (2) How is the discourse packaged to do this? and (3) What discursive resources are present and are being picked up to perform this activity? (Potter, 2004). In other words, I did not perform close reading with a predetermined list of patterns and features, but engaged in an iterative process where I would make notes of both routine and remarkable repertoires in the data, look over the notes to identify any patterns, and use that information to refine my sense of the patterns and features. As this iterative process progressed I also positioned the data within the nine points and three themes of the discursive action model framework as well as further identifying the interpretative repertoires at play, any ideological dilemmas that arise from the interpretative repertoires, and how participants positioned themselves (subject positions) around these dilemmas. These initial readings of the transcripts not only allowed for more familiarity with the interactions, but my attempts to make sense of the data became the first notations of the transcribed dataset in preparation for an intensified study of selected material identified through this initial sense-making process (Potter & Wetherell, 1987). During these initial readings, my attempts to make sense of the data were informed both by my research question and what I noticed that the participants made relevant (Edwards, 1997a) through how they oriented to events and interactions and what they chose to pick up as topics of talk.

Fourth, this iterative process explained above produced themes and concepts which were used to select specific portions of the dataset for closer analysis. These excerpts were singled out, categorized, and labeled in preparation for a more granular analysis. I used *Atlas.ti* (a software package that allows for the systematic analysis of complex phenomena in naturalistic data) to organize the data and facilitate the analysis process. Initially, I created a repertoire of common language features within the transcripts, organizing and identifying patterns within and between the transcriptions related to specific conversational features of focus. I aligned this process with the conversational features of interest to my research question and especially those features made relevant by participants. I then began the process of formulating possible functions for the rhetorical constructions associated with particular repertoires (Sacks, 1992) by considering how conversations were being used to perform "learning" and "teaching" as interactional events. Further, I sought to identify regularity and variability across the discourse segments. Interpretation is not a straightforward activity, so it was important to comprehend both the language and interactions of participants and then to convey that in a way that readers of this study could understand, so as I began examining the data and the repertoires displayed within and across my transcriptions, I specifically looked for ideological dilemmas across the dataset, using hermeneutics to gain access to some of the more subtle dilemmas and being sensitive to "common-sense" versions of the concepts of interest (e.g., learning and teaching), especially when there appeared to be conflict. I would go back and forth between constructions in the data and possible explications in the literature of discursive psychology, conversation analysis, and ethnomethodology until I had and interpretation that was cohesive and grounded in the interactions of the participants. I also attended to the question of "who" was implied by a

particular discourse or interpretative repertoire in order to keep subject positioning at the forefront of my analyses.

Fifth, after identifying patterns and variability within the dataset, as well as attending to the broader forms of intelligibility which makes those patterns and variations possible, I formed tentative explanations about the principal conversational activities, how participants' utterances contributed to and were occasioned by those activities. As I did, I also traced through the argumentative threads displayed in participants' orientations to interrogate the content or the nature of members' methods for sense-making in more depth. I compared the tentative explanations in the dataset and placed them in a genealogical context, until I reached some final iteration of claims. As I did, I looked for representative samples to feature my claims using the rationale of picking the ones I felt best illustrated the patterns I was featuring.

Finally, I strived to transparently and reflexively detail my claims and explore the applicability of the findings.

Warranty claims and standards of quality.

It is essential to take measures that support the authenticity and trustworthiness of my findings. Warranting conveys the idea of justifying and grounding the claims of research (Wood & Kroger, 2000). As I am aware that concepts derived from this project reside in the sense that I as a researcher ascribe to the data, I sought to ground my findings in the dataset and the argumentative texture of social life from which the dataset springs (Wetherell, 1998). Since discourse as I have defined it in this project is situated and highly contextual, studying participants' everyday talk in the context of their instructional time in *Second Life* results in a high level of ecological validity. Nevertheless, this type of research also faces the inevitable criticism that analysis is open to subjective interpretation. While I have previously emphasized

the nature of critical discursive psychology, the potential for achieving validation through intensive analysis of naturalistic data, and even the misinformed assumptions that underlie claims of objectivity in traditional SLA research, I also carried out the following specific activities (aligning with the theoretical perspectives of critical discursive psychology) to warrant my claims.

I reflected on and strived to avoid what several discursive psychologists have identified as common shortcomings in discourse analysis (Antaki, Billig, Edwards, & Potter, 2003). These shortcomings include under-analysis (through summary, taking sides, over-quotation, or isolated quotation), presenting a multitude of quotations with little analysis, false survey (i.e. over-generalizing findings), or simply spotting features of talk.

Since participants in discourse must orient to what comes before or take things up as important, this orientation validates analysis of a particular phenomenon in the way that it was taken up or oriented to (Potter, 2012). As such, I left an audit trail that permits outside researchers to review the support that I lend to each of my explanations, showing how participants oriented to and worked up any given claim. In this way, I strived to approach Sacks' (1992) ideal of putting the reader of this research as far as is possible into the same position as the researcher with respect to the data set, understanding that my interpretation is situated and exists as only one of a myriad of possible explanations (Taylor, 2001).

One of the strengths of critical discursive psychology is the understanding that participants' talk will unavoidably contain shifting and multiple positions, and that the process of identifying ideological dilemmas requires the researcher to intentionally seek out alternative cases and explanations (Billig et. al., 1988), which is also vital to warranting claims (Wood &

Kroger, 2000). In seeking out deviant cases, I attended to inconsistencies and diversity within the natural talk of the participants (Potter & Wetherell, 1987).

Finally, I was mindful of Potter's and Wetherell's (1987) counsel that warranty claims can also be connected to the the extent to which a research project is able to "make sense of new kinds of discourse" and "generate novel explanations" (p. 171). Thus, as will be seen in Chapter Four, I strived to locate my work in relation to the literature review, highlighting the ways in which my claims provide a basis for new and significant understandings, as well as express desiderata for further research.

Chapter Summary

Within this chapter, I first reiterated my research question and described my rationale for using a critical discursive psychology approach. I then discussed the theoretical framework of CDP and my research approach, describing the Discursive Action Model and the critical discursive psychology tools of interpretive repertoires, ideological dilemmas, and subject positions. Next, I described the design of my study by discussing my story of gaining access to Englishville and described the participants and the field site of Second Life in some detail. I then gave an overview of the data collection and analysis process, my efforts at maintaining confidentiality, and the proposed analysis process. In addition, through my description of how I warranted claims, I discussed how I sought to maintain academic rigor. I now turn to present the analysis of the Englishville courses.

Chapter Four: Research Findings

In the process of recording, transcribing, analyzing data, and formulating interpretations, I had to make what to me were difficult commitments about where to begin and what needed to be included and excluded in my analyses and reporting. Eventually, the subjects I chose to explore point to my own commitments as a researcher and as a CALL professional, as well as those made relevant by the participants that I had not anticipated. In both cases, I endeavored to avoid inferring my assumptions into the findings by grounding those findings in the data I collected. In what follows, I ask the reader to interrogate the findings, recognizing the related and interdependent nature of knowledge production and harboring a hope to foster an accommodating world of inquiry (Bochner, 2009). While I focused on the ways in which the everyday practices of teaching and learning were constructed and managed by the teachers and students in the virtual classes I observed, I took to heart Sacks' (1992) suggestion that analysis needed to be grounded in the activities of the participants and not in response to my research question by centering analysis on participant voices, orientations, and actions.

Overview of the Chapter

In this chapter, each section re-collects (always partially) a particular aspect of this project. I begin with a thick description of salient aspects of the field sites of Englishville courses that will assist in providing a contextual scaffolding for the analysis that follows in the chapter. Next, drawing upon data from the class sessions, I present noted patterns across the participants' discursive practices, highlighting the ways in which the teachers' and students' interactions work to (re)frame teaching and learning behaviors and to reproduce/transgress normative language classroom communication patterns. These patterns are (a) negotiations around the ideological dilemma of fun and serious classrooms, (b) the conceptualization of

technology as transgressive when it is not normative, and (c) learning difficulties in zones of interactional transfer between "teacher talk" and conversation.

Before I present the noted patterns, I begin with a general orientation to what teaching looked like in Ellie's and Izzy's courses. I then investigate the struggle these teachers faced between the ideals of fun and/or serious pedagogical orientations to demonstrate that these dilemmatic concepts are negotiable qualities that are used rhetorically in constructing these courses. Next, I investigate how the institutional asymmetry of power was used by the teachers. Specifically, I look at how these teachers normalized techno-epistemological and even technological hardware behaviors to align with institutional goals, and what the consequences of this normalization were as interaction unfolded. Finally, I turn to an orientation of what mundane instances of learning looked like both in and outside of the formal class setting, then investigate the struggles students had in performing learning when dealing with shifts between conversational and pedagogical modes of interaction in their courses. For this chapter a smaller number of extracts were selected from the larger corpus of data on the rationale that they illustrated the patterns.

Constructions of Englishville

I acknowledge that the unique confluence of channels of communication in *Second Life* are profoundly affected by the individual and collective experience of Englishville participants. The way participants engaged in communication had consequences for both the activity and outcomes of language development (Thorne, 2003). I have previously argued for the importance of a granular thick description of Englishville and of the field sites. I have also already provided descriptions of *Second Life* and Englishville, in general. I will now do the same for the six field sites I visited, noting features that will assist in better understanding the class data from each site.

Ellie's holodeck.

Ellie, whose reading/conversation sessions I observed in Englishville, used one meeting place for three out of the four sessions I observed, which was a holodeck at an altitude of almost 2000 meters above the Englishville island as seen in Figure 3. The holodeck was programmed to call up realistic scenes which surrounded participants on all sides, as though one was part of a scene or a cityscape. Ellie had hundreds of scenes ranging from vistas to monuments to cityscapes and other realia that she used for both pedagogical and aesthetic purposes. The height of the holodeck prevented accidental entrance by passers by and also eliminated the distractions of Englishville for students in Ellie's courses. The furniture in the holodeck changed to harmonize with Ellie's pedagogical or aesthetic designs for the session. She adopts the form of a traditional classroom, yet her ability to change the décor and the surroundings and interactiveness of her classroom environment is an important divergence from the affordances of the traditional classroom.

Englishville helipad.

During the fourth session Ellie took a field trip to have her students use a detailed helicopter and landing pad for a lesson about directions, which is illustrated in Figure 4. The landing pad with flashing red landing lights was located in an open space of Englishville. The helicopter was fashioned to appear and sound realistic, and was also programmed to enable the novice to handle and enjoy. Because the helicopter seated four Ellie used this only when her class was three students or less.

Figure 3. Screenshot of one of Ellie's classes in her holodeck in Englishville.

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Figure 4. Screenshot of the Englishville helipad.

Izzy's gathering tent.

Izzy, whose conversation, culture, and idioms classes I observed in Englishville, has an open-air tent near the shores of the Englishville island as her principal meeting place for conversation courses (see Figure 5). The tent was 30-foot by 60-foot, with several large rugs and pillows and embedded poseballs. A *poseball* is a common kind of scripted object in *Second Life*, which could then be attached to digital objects in-world. The purpose of the poseball pillows in Izzy's tent was to play an animation on the avatar that sat on the pillows. Izzy's pillows were set to animate varying sitting poses and gestures, so that students could concentrate on speaking.

Izzy's bumper cars and rolling restarts.

Izzy and some of her friends were also owners of other simulations that were used by Izzy for culture classes during rolling restarts of the Englishville sim that occurred during her preferred time slot. Before describing these simulations, a description of *rolling restarts* is in order. All movement and sound in *Second Life* are based on software that simulates the physics of interaction. There are constant software bug fixes and improvements that Linden Lab needs to input to the servers that make up *Second Life*. These updates generally install on a weekly basis, and are known as *rolling restarts*. For Englishville, this typically occurred on Tuesdays during one of Izzy's courses. The ideal restart for Englishville would begin with the avatars in the island being given a 5-minute warning to teleport or to log out. At the end of the five minutes, the island would be restarted, with Englishville returning to full operation after about 5 minutes. My observation was that rolling restarts in Englishville were rarely ideal. Objects and avatars would frequently lose full movement and function. Problems would persist for avatars even after logging out and restarting computers. The most concerning issue was the loss of voice and/or audio, which is a great complication for an ESL enterprise. As a result, Izzy typically resorted to

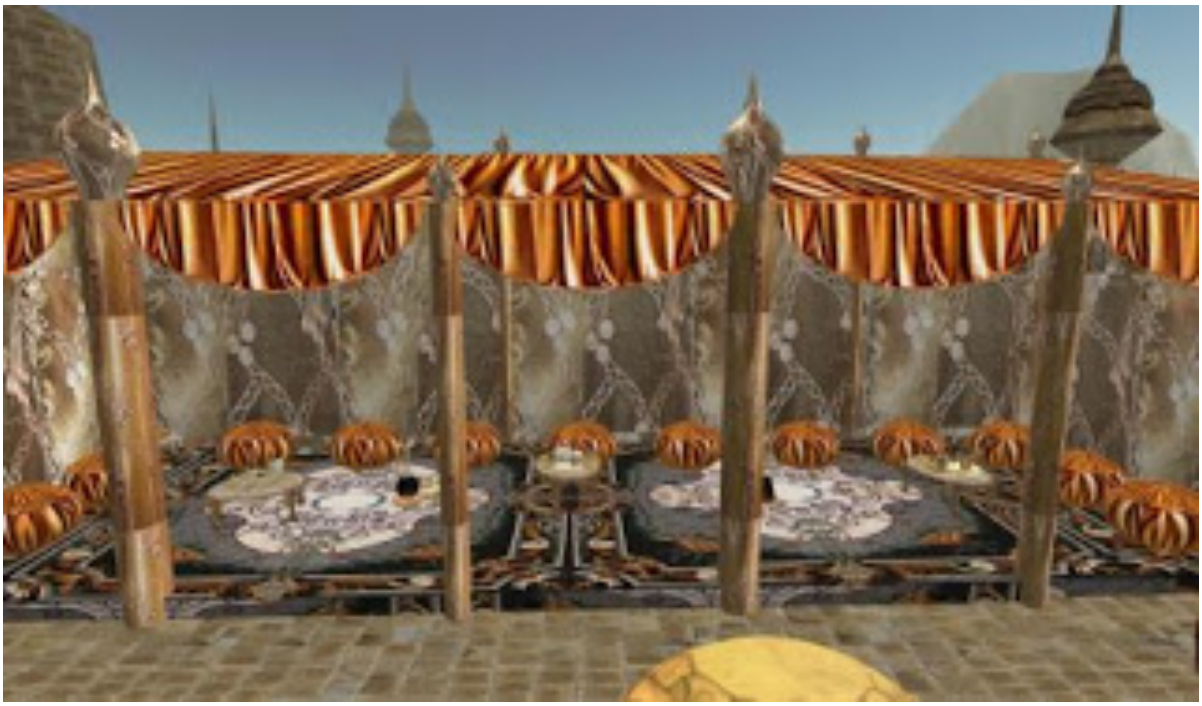

Figure 5. Screenshot of Izzy's gathering tent in Englishville.

moving classes that occurred during rolling restarts to other sites that she herself owned, or to other islands owned by friends of hers that were not subject to rolling restarts at the same time.

One of the islands Izzy visited with her students during my observations on a rolling restart day featured a bumper cars game, shown in Figure 6. Students approached the bumper car floor and touched a selection board to *rez* (create or make appear) a bumper car onto the floor. Upon sitting in the bumper car a heads-up display (HUD) would appear and show the player's score, the "health" of the bumper car as a percentage, and movement and sight shortcuts for the car. The objective of the game was to take out opponents by damaging their bumper car. If a car's damage reached 100 percent, the bumper car exploded.

Izzy's demolition derby.

Another space Izzy took her class during a rolling restart in Englishville was an island owned by friends of hers that had a demolition derby (an advertisement of which is illustrated in Figure 7 as the one used by Izzy had identifying features added). The derby included a vehicle rezzer that could create a number of different vehicles, and also a large arena with spectator bleachers where I typically placed myself during observations. The vehicles sustain damage as they collide and explode in a hail of parts, fire, and smoke that fills the arena when their health is depleted. The Demolition Derby Vehicle Rezzer uses right and left arrows to select a vehicle. When participants chose their desired vehicle, they then touched the picture of the displayed vehicle to rez that vehicle. The vehicle would instantly appear behind the rezzer, and an instructional notecard would be delivered to the avatar. The avatar would right click on the vehicle and select "Drive" within 60 seconds or else the vehicle would disappear. All vehicles were designed for a single use, and were rezzed as "temporary" objects. If an avatar exited their

Figure 6. Screenshot of some of Izzy's students at the bumper car simulation.

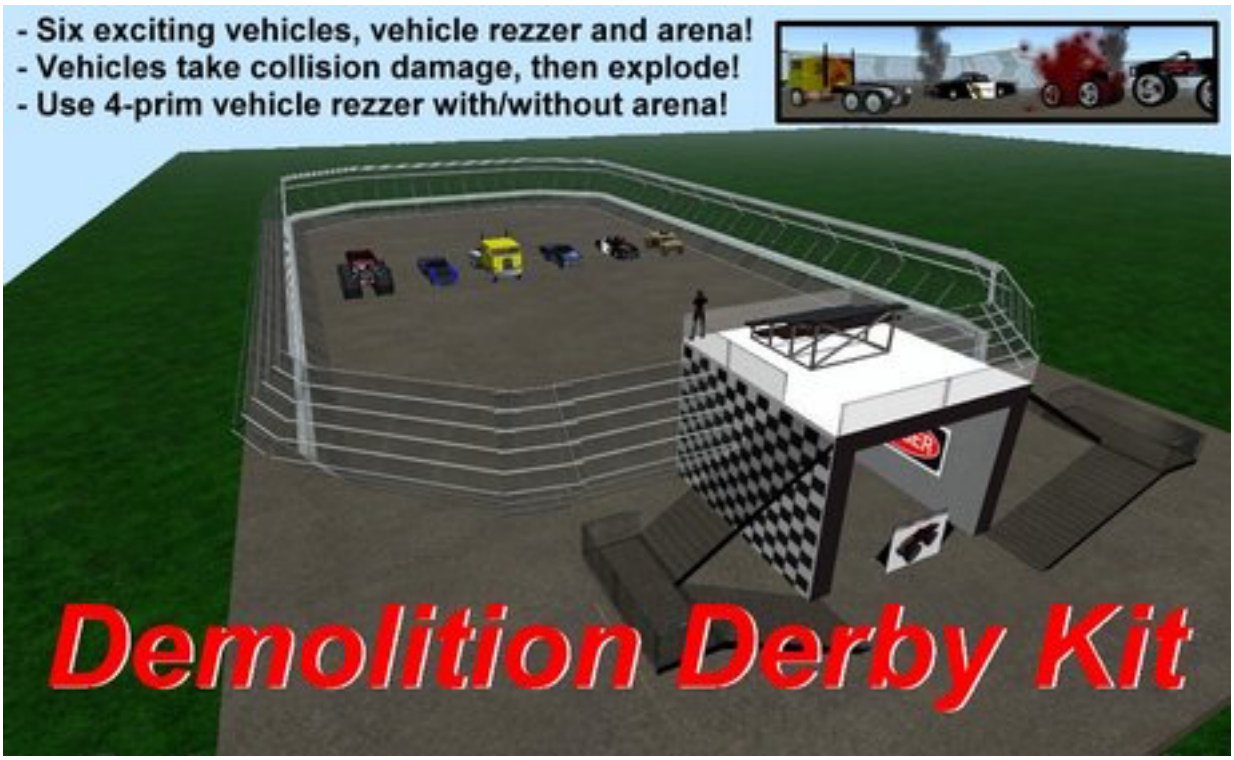

Figure 7. Screenshot of an ad for the demolition derby kit used by Izzy's class.

vehicle it would vanish immediately. To drive, an avatar would simply use the up/down and right/left arrows.

When participants chose their desired vehicle, they then touched the picture of the displayed vehicle to rez that vehicle. The vehicle would instantly appear behind the rezzer, and an instructional notecard would be delivered to the avatar. The avatar would right click on the vehicle and select “Drive” within 60 seconds or else the vehicle would disappear. All vehicles were designed for a single use, and were rezzed as "temporary" objects. If an avatar exited their vehicle it would vanish immediately. To drive, an avatar would simply use the up/down and right/left arrows.

Each vehicle's "health" value started at 1,000, which was reduced with each damaging collision. When only a third of a vehicle's health remains, smoke would billow from the engine. When a vehicle's health was completely depleted, it would explode in a ball of fire and parts, then vanish. All tires, and the front of most vehicles, were protected from taking damage, but it was possible to ram and drive over opponents.

Several types of vehicles were available, including monster trucks, NASCAR racers, semi cabs, pickup trucks, muscle cars, police patrol cars, and Humvees. Each vehicle displayed their own strengths and weaknesses, as well as differing functions that would operate when clicked.

The arena was encompassed by a fence that was specifically designed to keep vehicles inside the arena. The arena components would not cause damage to any vehicle at any time.

Englishville ice cream parlor — Izzy’s idioms course.

As Izzy’s idioms course tended to be a bit smaller, Izzy would hold these classes in the Englishville Ice Cream Parlor, a promotional facsimile of which is shown in Figure 8. It was

Figure 8. Screenshot of a model Ice Cream Parlor kit used by Izzy's idioms class.

decorated with pastel colors and contained realistic ice cream and treats for the avatars to enjoy during the class. While the counter had many animations for roleplaying all aspects of the ice cream parlor, the parlor itself was built almost fully out of glass, which made it very bright and open, along with sets of tables and chairs fully animated for conversational gestures. The Englishville name for the parlor was displayed on the building's exterior and pictures of previous courses adorned the walls. While Izzy did not choose the comfort and informality of the Gathering Tent, which for Izzy was a space where her conversation classes occurred, she also did not choose to have her students sit around a conference table or a traditional classroom simulation as did Ellie. Izzy seems, through her space choice, to separate the more formal work of learning about idioms from the more informal work of conversing. She does so with what could be argued as a more informal choice among her options for formal spaces.

Analysis.

Based on choices of instructional space alone, Ellie and Izzy seem to embody the two ends of the educational spectrum discussed by Billig et. al. (1988). Ellie's smaller number of instructional sites and her level of control over them incarnates the "formal, lecturing sort: pupils sit in desks facing the teacher, who controls all talk and activity." Ellie enjoyed the IRF pattern and even loosely patterned her conversation sessions on the IRF pattern as we will see below. Her courses were not lectures, but the interaction was highly structured and she was in charge. Homework was reviewed in-class, and was given regularly.

In contrast, Izzy's wide array of eclectic and unconventional spaces embodies the type of almost chaotically informal class that is "a hubbub of noise and activity as the teacher moves from group to group, supervising and facilitating each pupil's learning." (p. 44). She rarely invoked a recognizable IRF pattern, preferred repair moves that placed her more as a

conversational partner than a teacher, and directly participated in their activities, stopping to assist students who were not assimilating to the activity, or just to informally chat.

Performing Teaching, Teaching Performance

In this section, I begin by explaining my orientation to the courses through excerpts of routine examples of instructional series from both teachers. I follow this by a detailed description of the ways in which the teachers expressed and oriented to the purposes of instruction, noting the ideological dilemmas the teachers faced between the notions of fun and/or serious courses (Lester, Scherff, & Paulus, 2015). This was a dominant dilemma given the serious nature of education and the context of the *Second Life* environment that is presented as being fun. I then demonstrate the dilemmatic ways in which teachers used the power asymmetry inherent in the classroom construction to normalize techno-epistemological and hardware behaviors, both with consequences and tradeoffs for the teacher and learner.

I oriented to the performance of teaching as specific to the institution of Englishville and to the conversational nature of the courses I observed, realizing that formal education is both a process by which ideology is transmitted, but also a process that people have ideologies *of* (Billig et. al., 1988). I also come to these observations knowing that the values of each position in a discussion regarding education are not mutually exclusive, and ultimately are local expressions of "values from a common culture" (Billig et. al., 1988; p 45).

In one regard, I viewed the talk in Englishville as institutional, in that talk was bound up in how the participants oriented to their identities as student and teacher (Drew & Heritage, 1992). This orientation is made visible in Excerpt Two by a common pattern in Ellie's classroom discourse: Input-Response-Feedback (IRF, Hellermann, 2003; Sinclair & Coulthard, 1975; Waring, 2009; Wells, 1993). Classroom conversations differ from mundane conversations

(Heritage, 2004; Markee, 2004), as classroom participants often take up certain identities (e.g., teacher, student) and deploy specific rights (e.g., teachers assist students, control turn sequences, and can question students while students speak when instructed, listen attentively, and face the teacher). In this excerpt, Ellie has given her class a mystery narrative divided into smaller narrative chunks that students read in turn. Tatiana (a student) has just finished her turn with Ellie's feedback, and it is now Afton's (another student) turn.

Excerpt Two

1. Ellie: Good. ↑OK. Afton, next?
2. Afton: The door of: the study was: also open, and [they could see] a man's=
3. Ellie: [((types "of"))]
4. Afton: =body on the floor near the [desk.]
5. Ellie: [((types "was"))]
6. Afton: They realized immediately that (0.2) he was deat.
7. Ellie: OK. ((types "dead")) All right, so (0.5) repeat after me o:f:, vuh.
8. Afton: O:f:.
9. Ellie: Good. Was::.
10. Afton: Was:.
11. Ellie: And then >what we're looking at< he:re ((types "deaD")) is the final D of
12. dea::d, 'cause you don't want it to sound like a T, ri:ght? ((types "/t/")) So you
13. >want it to be a< ((types "/d/")) clear ↑D. And, so can you say these two words?
14. ((types "debt and dead")) Debt and dead.
15. Afton: Debt and dead.
16. Ellie: Very good. Excellent. OK, Tatiana (1.0) I'm sorry chhh heh heh going

17. compl(h)etely backwards today heh heh Pipi ((types "—")).

Ellie, having provided input in the form of a story sectioned in numbered segments of text at the beginning of the class, initiated Afton's turn to respond to the input in the text after accepting Tatiana's repairs in the "Good" of Line 1. During Afton's response and her subsequent feedback, Ellie used the text chat as if it were a blackboard, typing in what she wanted all to see, making sure to type a demarcation between different students' feed back as is seen with the "—" of Line 17. As there is no way to underline in this text chat as there would be if it were an actual chalkboard, Ellie compensated by using capitals as an emphasis indicator to draw student attention to a locus of trouble as in Line 11. She then provided (as in line 14) two words with similar sounds whose meanings change when the two sounds (the /d/ and /t/ in this example) are switched. One by one, Ellie *repaired* (suggested an alteration to correct a previous conversational contribution) the pronunciation errors Afton demonstrated in his speech sample, with Afton confirming that he had learned the repairs by repeating them, and thus his turn concluded (at least until it came up again in a few minutes). Ellie switched her directions momentarily at the end, choosing Tatiana to go next when it should have been Pipi that took the next section. This was remedied, and a classic performance of the IRF sequence was achieved. However, even in a routine IRF sequence, one can detect how *Second Life* has altered traditional classroom conventions such as the text chat substituting for a chalkboard and how Ellie must compensate for the lack of an underlining capability by using capital letters.

In another regard, I viewed the talk as mundane, as conversational sessions were designed by their instructors (Ellie and Izzy included) to have informal features, bound at times by a different set of rules where all participants have an equal hand in managing turn-taking and topic selection (Sacks, Schegloff, & Jefferson, 1978). The informal classrooms were a noisy

cluster of cooperative groups, wherein the teacher is more of a facilitator than a lecturer. An example of conversational talk is made visible in a typical scene from one of Izzy's classes. In Excerpt Three, Izzy has taken her class to the virtual demolition derby simulation described earlier. The excerpt picks up as the first cars students chose began to fail, and students entered the transitional phase of how to manage negotiating a return to the rezzer to select a new car.

Excerpt Three

1. Athena: oh ↑hah hah hah ha::h o::h I lost my car. I see the ↑wheels! Okay heh
2. heh. Oh, it's ↑kinda ↓broken.
3. Izzy: ha::h hah ha::h hah >get out of the way before you get run over!<
4. Athena: Is ↑your ↓car broken ↑too, ↓Em↑ma?
5. Emma: Ye:s, >I think I'm [the< first] one. °Or I was the first one.° Be care↑ful,
6. ↓Miles.
7. Athena: [Okay.]
8. Izzy: heh huh [huh huh hah hah hah hah hah hah hah]
9. Emma: [It's me, my new uh avatar. (1.5) That's ↑my ↓car.]=
10. Miles: =Ah, sorry.
11. Izzy: You you better fly: Emma fly: 'cause you'll get run over. heh heh heh heh
12. [.hh Oh ↑look at Miles] and Rory! heh hhhhh hah ha::h
13. Emma: [Yeah, I think so, huh?]
14. Athena: O::h >Emma, where are you?< I can't see.
15. Emma: [I'm so confused.]
16. Izzy: [If you happen], if you happen to be in the, in the arena in your avatar, fly so
17. you don't get run over. [It's very hard to see.]

18. Emma: [How do you say that?] Arena?

19. Izzy: [Yes. Arena], arena.=

20. Athena: [Okay, whose car is this?]

21. Emma: =Okay, arena.

22. Izzy: >I dunno but get in it.< Oh! ((a car explodes))

23. Emma: Be careful! hah hah hah

24. Izzy: hhhh hah ↑hah ↓hoh ho::h

25. Emma: Okay. [Athena got the same car as yours]

26. Izzy: [You guys are ruthless.]

27. Athena: Yeah.

28. Izzy: hhhhhh [ha::h]

29. Emma: [We're getting aggressive here.]=

30. Izzy: =I see that! (huh huh huh huh)

Izzy was fully engaged as a participant in the demolition derby, driving her virtual semi-truck as her students learned about the cultural phenomenon of demolition derby through exploratory activity. Izzy's participation is evidenced by laughter (Line 8) in response to Emma warning Miles to "be careful" (Line 5), as well as directing the class to "look at Miles and Rory" (Line 12) as they skirmished in their cars. As the cars began to explode, Izzy urgently directed her students to "get out of the way" (Line 3) using a quick rate of speech, even suggesting that Emma "fly" to return to the car rezzer (Line 11). When Emma failed to heed Izzy's advice and expressed that she was "so confused" (Line 15), Izzy dropped into what is hearably a pedagogical register to provide more contextual clues to Emma about her avatar being in the arena, and the need to fly because the smoke made it "very hard to see" (Line 17). Emma talked

over the last part of Izzy's contextual clues to pose a question about the pronunciation of the word "arena" (Line 18). Izzy modeled the pronunciation twice in Line 19, and Emma demonstrated acceptance and learning by repeating the word in Line 21. Later, Izzy spoke of her class being "ruthless" in the derby (Line 26). When Emma offered up a synonymous expression ("We're getting aggressive here", Line 29), Izzy encouraged an inference between the two ("I see that!", Line 30), but did not make it explicit.

While Excerpt Three can easily be labeled as conversational in nature, we also see that the two types of talk (conversational and institutional) can occur "on a moment-by-moment basis during the same speech event" (Markee & Seo, 2009, p. 48). Teachers are unlikely to insist on having their courses be wholly formal or informal in *Second Life*. Izzy was able to drop into a pedagogical register in Lines 16-19 in order to help students navigate the virtual world, even though she leans more to the implicit teaching shown in Lines 26-30.

Now that we have seen and discussed typical pedagogical interventions from each teacher, I will now examine how these teachers performed patterns of speech around the ideological dilemma of fun and serious classrooms. I will demonstrate how a discursive psychological lens eschews the tendency in traditional analysis to "narrow and even purify the messy, local complexity of teachers' classrooms" (Freeman, 1996).

Performing teaching: serious vs. fun.

The current ideological dilemma being discussed — serious and fun classes — exists because the two are arranged in modern discourses as opposites, something Billig et. al. (1998, p. 45), conceptualized as "positions extracted from a single dialogue." Indeed, this link between serious and fun dates back as far as the first century A.D., where Horace argued that the purpose of literature is to delight and instruct (Brink, 2011). Teachers recognize that traditional

instructional pedagogies can drive a wedge between them and their students, reducing students to "captives under the never-distant teacher's eye" (McClure 1990: 67). As teachers work to create their own pedagogical frameworks, they struggle to create environments where the Horatian adage is exemplified. Thrown into the context of *Second Life* — a virtual world which is sometimes conflated with a game — the expectation is that the courses will be primarily fun, which intensifies the dilemma for teachers who are the ones responsible for striking a balance. This struggle was certainly present in the classes I observed. This dichotomy of serious and fun is, at the most basic level, an expression of the archetypal dichotomy expressed by Billig et. al. (1988) as traditional or transmissional education versus progressive or student-centered education. This dichotomy has, as its core, a power struggle between teachers and students as the center of the educational environment. serious classes equate to the formal and transmissional nature of one end of the ideological spectrum, the one with the teacher in complete control and students with the duty to learn. At the other end of the ideological spectrum, fun classes are equated to the spaces where students have control over what and how they explore in terms of content and problems, and thus the freedom to learn.

As I endeavored to make sense of how Ellie and Izzy oriented to their teaching, I did not interpret their work as coming from a straightforward construction of an ideological position (serious/institutional/formal/traditional vs. fun/informal/student-centered). Rather, I interpreted their work as a collection of dilemmatic constructions coming from these opposed ideologies and rhetorically tailored to each interaction.

Ellie.

Ellie is a seasoned virtual teacher who, as seen in Excerpt Two, tended toward the transmissional style of teaching. In Excerpt Four, drawn from one of her classes, Pipi asked a

question that turned into a discussion of pedagogy and an interesting rhetorical use of fun in a classroom setting.

Excerpt Four

1. Pipi: Eh::, Teacher?
2. Ellie: Yes!
3. Pipi: Eh::, I: I have one question.
4. Ellie: Okay.
5. Pipi: Eh:: me eh:: go to Second Life to learn English, okay?
6. Ellie: Right.
7. Pipi: And eh:: and eh me one eh: problem the: hhh grammar, no?
8. Ellie: Yes.
9. Pipi: Main problem. Me: don't understand grammar.
10. Ellie: Okay.
11. Pipi: Only this, only this. And the ↑English eh: will be eh (1.0) will be
12. easy but the grammar uh hard.
13. Ellie: Right, right. So, you (1.0) you ↑understand ↓and you ↑can
14. communi↓cate, but we need to <teach you some> **verbs** (1.3) right? So
15. (1.1) we need to talk about ↑verbs ↓and different vo↑cabulary exercises.
16. For example, u:m let's:, °>let me get my< note card.° So yes, that will be
17. great. Today, let's go driving. >We're gonna fly the< helicopter. So we'll
18. see if Ahmad arrives. And um so let's practice a little bit. Let me give you
19. the °note ↑card (0.9) ↓for to↑day°. And (0.2) yes (0.2)um (0.9) Pipi we're
20. _definitely_ going to be doing grammar a::ll the time. (2.8) So you will

21. learn grammar.

Pipi is clearly a novice L2 speaker. The pauses, audible aspirations, restarts and related temporal phenomena are hallmarks of difficulties in speech production (Wong and Olsher 2000). Ellie oriented to this through monosyllabic answers, or exaggerated intonation and sound stretching in her longer answers. Despite the communication difficulties, Pipi and Ellie were able to engage in a conversation about pedagogy. Pipi self-diagnosed his problem with English as a need to learn grammar and "only this" (Line 11), as "English" was easy for him, but grammar was difficult.

Ellie's response in this excerpt is interesting in that it accepted (Lines 8, 10) and expanded on (Lines 13-15) Pipi's assessment, which served not only to give Pipi her opinion on his learning needs but also the vocabulary to voice his concerns in the way that Ellie believed was necessary. When Ellie began to talk about an example of how to give Pipi "different vocabulary exercises" (Line 16), she was hearably searching her inventory for a notecard. Once found, she proposed that the class "fly the helicopter" (Line 17). Ellie did a lot of discursive work in Lines 13-15 to clarify areas that she believed Pipi needed to work on, demonstrating to him pedagogical, real-world rationale for the fun example she then presented to the class. While waiting for Ahmad (another student) to arrive, she proposed practicing for the flying experience by reviewing the vocabulary notecard referencing directions. While Ellie's construction of a top-down classroom orientation had not changed, she seemed to be engaged in constructing a space for an ideology of fun to exist within Pipi's concerns for grammar training.

In Excerpt Five, Pipi delivered what is hearably a dispreferred response to Ellie's proposal of flying a helicopter as an appropriate activity for the day, which extended their interaction around pedagogy.

Excerpt Five

1. Pipi: E:h English e:m I think that (1.2) all the time eh the exercise exercise
2. and uh (0.5) and eh: training all the time.
3. Ellie: [Yes.]
4. Pipi: [Conversation] and read.
5. Ellie: Yeah, rea::ding esp(h)ecially ↑rea::ding:: ↓and coming and speak:ing
6. in class <u>reg</u>ularly, con<u>sis</u>tently again: and again: and again: and again. So,
7. you need to come ↑ very ↓ of↑ten: (.hhh) but ↑ also you need ↓ to (.hhh)
8. <u>watch</u> mo:vies, ↑<u>lis</u>ten to ↓ra::dio:,↑<u>read</u>: ↓online Engli::sh, ↑read ea::sy
9. ↓easy books, you know? Just have fu:n. Enjoy:.

Pipi's dispreferred response in Lines 1-2 countered Ellie's example of flying a helicopter as an appropriate activity for him. He persisted in his belief that he needed to be engaged in "exercise exercise" (Line 1) and "training all the time" in conversation and reading (Line 2). In Ellie's more explicit reply, she again did not reject Pipi's response, but rather agreed and extended his arguments with more granularity to include reading, consistent attendance, and oral participation (Lines 5-6). However, Ellie then provided further examples of spaces for enjoyment such as movies, radio, and books. She concluded by explicitly recommending that Pipi "just have fun" and "enjoy" (Line 9).

As Ellie constructed a personal pedagogy with Pipi during their interaction, she constructed an ideology of fun that served to rhetorically counter what she organized as Pipi's overly formalized sense of instruction. The resulting ideology did not displace the *process* of Ellie's formal, top-down, deductive teaching style, but rather created a space in their reality where fun, as a *place* of enjoyment, and the serious business of teaching could co-exist.

Izzy.

A contrast in many ways to Ellie, Izzy is a relatively new virtual teacher who generally has an inductive, informal teaching style as evidenced in Excerpt Three. In Excerpt Six, drawn from one of Izzy's courses, the beginning of a complex and dilemmatic series of discursive positionings takes place as she began to construct an ideology of fun/serious with Ahmad. Ahmad had just arrived to one of her courses which was being held at the bumper-car arena as a first-time visitor, and was trying to decide whether to join the Englishville community.

Excerpt Six

1. Izzy: Oh, let me TP Elijah (0.2) let me TP him right into the, right into the middle
2. of this crazy (2.0) ghhhh heh heh heh heh ↑heh ↓heh heh heh
3. Ahmad: [It's nice time.]
4. Izzy: [U:m] heh ↑heh heh ↓heh ↓hu:h .hhh U:m sometimes, I just like to have a
5. little crazy fun, u:h Ahmad and you happened to ↑come visit ↓on one of those
6. ↓days.

Izzy had a missing student (Elijah) who had apparently messaged her from Izzy's Gathering Tent. Izzy exited her bumper car and proceeded to teleport (or TP) Elijah "right in the middle of this crazy" bumper car game (Lines 1-2). Ahmad, orienting to "this crazy" as deprecatory, reassured Izzy that the activity was a "nice time" (Line 3). Izzy's clarification to Ahmad, while generally untroubled, was in itself a precursor to the dilemma that would unfold in her positioning around the ideologies of fun and serious. While she assured Ahmad that she was referring to "crazy fun" (Line 5) and that she liked it, she modified her stance by saying "sometimes" (Line 4), and assured Ahmad that he just "happened to come" on such a day (Line 5). This statement, a seemingly untroubled explanation to a new student about why class was

being held in a bumper car arena, contained elements of mitigation and contingency that is further developed with Ahmad below.

In Excerpt Six, Izzy constructed a generally untroubled position around the importance of fun in her courses. Four minutes later, in Excerpt Seven, she picked up her conversation with Ahmad which evolved into a self-repair for a potential misreading of her position.

Excerpt Seven

1. Izzy: So what do you, [um], what type of job do you do, Ahmad?
2. Madison: [((types "need to relog"))]
3. Elijah: Eh heh heh heh huh heh heh
4. Ahmad: (2.5) U:h, I am a software engineer, [Java programmer.]
5. Izzy: [↑O:::h]. Java?
6. Ahmad: Yes, [Java. Java language.]
7. Izzy: [Oh my Go:d.] (3.5) So you really have to um have good English
8. skills for that sometimes, yeah?
9. Ahmad: U:h yes. I'm u:h (0.2) uh start u:::m started English u:h when I need u:h
10. (0.2) uh read specification and other books u:h (3.8) fo:r Java language.
11. Izzy: A::h. (2.0) I'm gettin' you, Danielle, I'm g'(0.2) a:h you knocked Pip(h)I
12. (h)out huh huh [hu:h hah hah hah hah hah hah .hhhh]
13. Danielle: [heh heh heh heh heh heh uh hih hih hih hih hih hih .hhhh] Bump bump
14. ↑bump bump bump ↑bump uh [heh heh heh heh heh hih hih hih hih.]
15. Izzy: [Well (2.3) Ahmad,] u:m, this class is usually held on Englishville guh hah
16. hah hhhah hhah welcome bhack, Madison ungh huh .hhh she crashed! .hh u:m,
17. tuhhh .hh and we u:h (1.8) sit down and talk a:nd share about our day a:nd what

18. we did in the day and we use our conversation skills .hh hahnd hhhuhh .hh so
19. usually um (0.5) we're all sitting, we're not playing a game (0.2) hhhhuh ↑hah
20. hah.

This was not a typical multi-party conversation in which everyone was engaged in a central discussion. Rather, this conversation was an attempt by Izzy to incorporate aspects of her gathering tent conversations into this excursion to the bumper car arena. The conversations began to develop aspects of other types of online conversations, highlighted by threads of several simultaneous conversations in one space. When one concentrates on the conversation being constructed by Izzy and Ahmad, Izzy is hearably surprised (Lines 5, 7-8) both by Ahmad's profession and his need for serious English skills. An interlude followed where Izzy oriented to another conversation with Danielle. Izzy vowed to "get her" (referring to the bumper car game), and observed how Danielle "knocked Pipi out" (Lines 11-12), a thread which resonates with the "crazy fun" of Excerpt Six. Returning to her conversation with Ahmad, Izzy then distanced herself from the "crazy fun" characterization of her course in an attempt to repair her position to more closely mirror Ahmad's serious motives for being in the course. Once she learned that Ahmad was a Java programmer, her first reaction was to remark that he needed "good English skills" (Lines 7-8), which Ahmad affirmed with detail in Lines 9-10. Izzy then explained in detail what her class "usually" did, which she emphasized was "not playing a game" (Line 19), but rather sitting down and using "conversation skills" (Lines 17-18). While she emphasized fun in Excerpt Six as a less-troubled position, her shift of position in Excerpt Seven framed this particular class in the bumper-car arena as unusual. This shift rendered fun a more troubled position in response to Ahmad's reasons for taking the class.

Izzy endeavored to once again rework the two positions already available regarding her commitment to fun in Excerpt Eight. On another rolling restart day, a week later, Izzy had decided to take her class to a demolition derby. She used the beginning of class to explain their trip.

Excerpt Eight

1. Athena: Hi::, Miles! Hi, Miley. Hi:: [Izzy.]
2. Izzy: [Hi::!]
3. Athena Hi everyone. ((sits down on one of the cushions inside the Gathering
4. tent))
5. Izzy: No need to sit [down, Athena.] We're leaving (0.7) nnnguh huh huh huh huh
6. huh.
7. Miles: [Hell:o:.]
8. Athena: Leave?
9. Izzy: We're going u:h on a trip today. On Tuesdays, I try t'(0.2) we try to go
10. somewhere because usually u:m we get bounced out of here .hhhh [so]
11. Miles: [Yes.]
12. Izzy: Um:, on rolling restarts, so we try, I try to make Tuesdays our field
13. trip day, to do something fun. Sometimes you learn something, sometimes
14. we just are having fun heh , fhor nho reason hhah hhah .hhh ↑so to↑day is ↓that
15. day.

Of note in this excerpt is Izzy's re-characterization of fun outings. Izzy called up the trouble of rolling-restart Tuesdays (strengthened by Miles in Line 11) to untrouble her position of fun by holding the technology (rolling restarts) accountable for the excursion, modifying and

qualifying the troubling of her fun position in Excerpt Seven. She does this by laying the tension on technological failure and loss of her space in Englishville while highlighting the possibility of learning. In this she held her position as a fun teacher while creating a space for the serious work of instruction.

To summarize, various dilemmatic subject positions are in play in this stretch of excerpts for Izzy and Ahmad as they constructed the fun that this virtual space enables but which conflicts with the idea of serious learning. Izzy's courses were "crazy fun" but usually "sitting" affairs, fun was unusual yet habitual for rolling-restart Tuesdays, and fun had both a pedagogical goal and no goal at all. The fluidity of her interactions with Ahmad alone both troubled and untroubled these positions. As demonstrated here, one positioning led to a repair which was then reformulated in another class. The question of how to characterize Izzy's position remained open and ambiguous, and these various threads, as well as Izzy's repertoire of positions, continued to be available in future courses and discussions.

These constructions demonstrate that though these teachers would likely define themselves and identify with a particular side of the pedagogical spectrum of fun and serious, their orientations were deployed rhetorically in order to resonate with particular students in particular constructions. One way of framing the dilemma was to position fun as a place that could be mapped on the process of a serious pedagogy. For example, Ellie spoke of serious pedagogical issues with Pipi, her student. She was equally strident in stressing the importance of having fun in the educational process, which she defined with Pipi as input from popular media as well as games with serious applications in *Second Life*. By this, she conveyed the importance of fun as a space where serious learning could occur on an equal footing with exercises and drills. Another explanatory frame that was drawn upon was that of technological events: the idea

that support events (such as rolling restarts) can throw traditional pedagogy off its planned course and justify fun as an alternative. While the rolling restarts clearly had a disruptive impact on these classes, they were also a resource that provided Izzy with an easily recognizable justification for her orientation to fun in her pedagogy. In illustrating how attitudes surrounding fun and serious teaching can be rhetorically constructed in interaction, important issues of accountability, justification, and norms have surfaced. Not only do these accounts speak to the complexity of the interactions and to the strengths of an interactive methodology in highlighting these dynamics, but they also raise questions about the traditional methods and theories used in classroom research.

Teaching performance: transgressive technology and the legitimacy of knowledge.

As seen above, ideologies are used rhetorically and are fluid. One possible rhetorical use of an ideology, especially in an institutional setting, is to control power. In this sense, institutional discursive formations can have a critical orientation in that they have the potential to control or disrupt power. Dialog about teaching practices, in addition to being rhetorically and collaboratively formulated, can also serve to accomplish tasks such as (de)legitimizing and norming behaviors to conform to previously-established institutional standards.

In Excerpt Nine, we see a typical introduction to an idiom between Izzy and her students in the idioms class I observed.

Excerpt Nine

1. Izzy: OK? A::n::d...let's °↓see::° there's a couple [↑mo↓re.]
2. Miles: [Hm:::] put their thin- uh thinking caps on, of course.
3. Izzy: Now ↑how do you put on a ↓thinking cap? That makes no sense. How is

4. that possible?
5. Miles: hhhh hah hah hah .hhhh.
6. Izzy: Is it a hat? Does your grandmother knit it? >Where do you buy them?< Do
7. you purchase them from the grocery store? From the (0.2) the hat store? I don't
8. understand. What is a thinking cap? hhhhh hah hah Rory, what is a thinking cap?
9. Do you know?
10. Rory: Maybe it's your brain? uh huh huh
11. Izzy: U::gh. Yes, maybe it is your brain. Maybe it is. Maybe it is th- the ti-
12. time for you to think.

In Line 1, Izzy was hearably referring to a notecard with the idioms for the class that day, and remarked that there were "a couple more" to do. Miles offered the next one on the list, which was "putting their thinking caps on", after he struggled with the pronunciation of "thinking" in the middle of Line 2. Izzy then demonstrated how she emphasizes identification of idioms in her course by remarking how the expression made "no sense" (Line 3) when taken literally. She then went on to ask several questions in Lines 6-8, as if the "thinking cap" was an actual object in order to display the absurdity of taking the expression literally. She then asked a student (in this case, Rory) what the idiom could mean.

In Excerpt Ten, Izzy and Rory constructed one example of a "proper" display of knowledge in her class.

Excerpt Ten

1. Rory: ((Types "http://www.likecool.com/Gear/Gadget/Knitted Brain Hat/Knitted
2. BrainHat.jpg"))
3. Izzy: hhhhh hah hah hah (0.2) You found a brain hat, Rory?

4. Rory: Yeah, [yeah.]
5. Izzy: [Did you really?] Is it, is it, is it made out of metal? Oh no, it's °knitted°, [it's
6. a knitted brain hat.]
7. Rory: [hoh hhhh heh heh]
8. Izzy: Oh, wait, we have to STOP for a moment Miles and look (0.5) at this.

In Line 1, Rory provided a link to a knitted brain hat. Izzy was slightly amused with Rory's find, and asked if it was made of metal. Her immediate answer (in Line 5) indicated that she had clicked on the link to view the object, and realized it was knitted, much like her hat of the absurd example she gave in Excerpt Nine. At this point, she insisted to Miles that the class stop to take a look at the knitted brain hat (Line 8). Izzy's taking time out of class to have them view Rory's hat discovery was positive reinforcement of the idea of producing a virtual extension (in this case an object lesson) of the expression in question. Her exuberance was reinforcement that Rory had paid attention to a small detail of her "absurd" example in Excerpt Nine. As we will see below, Izzy also tended to reward students who were able to playfully offer similar idioms or historical examples of the idiom in question.

Of course, these unspoken rules, reinforced in interaction, would not be known to a new student. Akilah, in his first idioms class with Izzy, discovered quickly that not all technology was welcome in her courses. In Excerpt Eleven, Izzy struggled to explain the idiom *nitty gritty* to Miles.

Excerpt Eleven

1. Izzy: That's the best way >I can explain nitty gritty↑<. So if you: ar::e, u::m (2.0)
2. it's ↑almost ↓similar to getting down to ↓brass tacks, remember when we did brass
3. tacks?

4. Rory: Mmm, no.
5. Miles: [U::m, no:: I huh h huh.]
6. Izzy: [Yes you do, yes you do.] Because I ↑showed you, I ↑showed you
7. uHHHHHH huh huh huh hah. I think that was the first one we ↑did, >↓actually<,
8. so maybe you forgot. Um, it was brass tacks, that means [getting down]
9. to the basics. Nitty gritty.
10. Akilah: [((types //www.urbandictionary.com/define.php?term=nitty+gritty))]
11. Izzy: _Thank you_ Akil, Ak, Akilah, we try not to use the dictionary here. No
12. cheating. [chhhhhhh] hah ↑hah]
13. Rory: [huh huh]
14. Izzy: Nuh ↑chea↓ti::ng. If you ↑↑cheat, ↓tsnot ↑a good ↑thi::ng!

One point highlighted by this excerpt is that technology as a part of everyday use and interaction in these virtual worlds becomes enmeshed with the practices of this idioms class. Akilah (a new student) provided an answer to Izzy's question that came in the form of a link in text chat to the *Urban Dictionary*, which Izzy rejected by stating that using the dictionary was cheating. Constructing the answer in this way — as Akilah's technology choice being a transgression of class norms — allowed Izzy to provide an account for why she did not accept Akilah's answer. Using (or not using) technology in a transgressive manner is seen here as something for which Akilah was being held accountable. This transgression was tied to the legitimacy of his answer and, in extension, his claim to knowledge and learning. As teacher, Izzy was free to level this charge without being challenged, even though (as discussed in Chapter Three) this position is not settled pedagogy.

Negotiating the nature of language mastery, transgression, and technology is, however, a continuous process, requiring the joint efforts of the individuals involved. Each turn of talk can serve to give a new construction of what counts, and resist or reinforce existing constructions. Akilah, in a possible move to save face, later attempted to make a similar claim of cheating directed at Miles (a fellow student). In Excerpt Twelve, Izzy asked a question about the idiom "busy as a ___" that had students deciding whether the expression was best finished by (a) fly, (b) spider, (c) bee, or (d) grasshopper. Miles playfully used the term *locust* as a synonym for grasshopper, which Akilah didn't understand.

Excerpt Twelve

1. Izzy: Yes. ↑Busy as a ↓bee. That's right. ↑↑Busy ↓busy ↓busy uh huh huh huh huh
2. [huh huh huh huh.]
3. Miles: [As a locust.]
4. Izzy: Busy as a ↑lo↓cust?
5. Miles: Hh uh yes.
6. Izzy: °U::gh°. That doesn't even sound right uh hah hah huh huh [huh huh huh.]
7. Miles: [huh heh heh heh heh]
8. Izzy: You are [just busy as a locust!]
9. Akilah: [And what is locust?]
10. Izzy: >You were just busy as a locust< they're like grasshoppers, kind of.
11. Miles: Like grasshopper.
12. Izzy: Yeah, yeah yeah (2.0) .h sort of like a [grasshopper.]
13. Miles: [Саранча] ((Russian translation for locust)).
14. Akilah: Mm↑mm↓mm. You are cheating. [Mhm hmm hmm]

15. Izzy: [Ah hhhh hahhhhh .hh] now, I don't think…

16. Akilah: No cheating!

17. Izzy: I don't think he's cheating, I, I don't ↑think (0.2) ↓are you cheating, Miles?

18. Are you looking on Google? I will have to kick your ↑Goo↓gle. Google ↑off.

19. Miles: No, no.

20. Izzy: Nah. He doesn't, he's ↑ve↓ry ↑smart.

In this excerpt, Miles' playful attempt to use *locust* as a synonym for grasshopper received a dispreferred response from Izzy, who noted that it didn't "even sound right" as a replacement of the idiom "busy as a bee". As Akilah asked what a locust was, Izzy provided an answer that mitigated her dispreferred response to Miles by conceding that locust was at least a "kind of" (Line 8) synonym for grasshopper. Miles quickly repeated the answer provided by Izzy (Line 9), and Izzy agreed (Line 10). At this point, Miles provided Akilah with the Russian translation for locust, "Саранча" (Line 13). Akilah oriented to this answer in Line 14 as one Miles could not have provided on his own, but rather obtained with the same assistance Akilah was chided for earlier. When Akilah leveled the charge of cheating against Miles, Izzy also oriented to the charge as analogous to Akilah's *faux pas*, asking Miles if he was "looking on Google", and warning him to keep "Google off" (Line 18). To Izzy, the absence of any clue of the use of transgressive technology, along with Miles' denial, contrasted with Akilah's construction ("You are cheating", line 14). By replying to Izzy's question ("Are you cheating, Miles?", line 17) in the negative, Miles both reinforced the use of online dictionaries (*Google*, or *Urban Dictionary*) as transgressive, and redefined his knowledge of locust as the Russian *Саранча* as being legitimate. We can confirm this interpretation of the interaction by looking at the next turn in the conversation, in which Izzy affirmed Miles' denial ("Nah. He doesn't, he's very smart.", line 20)

as if suggesting that it supported her initial reaction ("I don't think he's cheating", line 17). Miles and Akilah, in their negotiation on how they held each other accountable to classroom norms, were overshadowed by Izzy's assumption of the role of arbiter and her orientation to the charge. This demonstrated how the stark asymmetry of distributed privileges played an important role in the nature of the construction of the trouble. Izzy's orientation served to reconstruct Miles' answer as legitimate and reinforced the illegitimacy of an Internet search to demonstrate knowledge in Izzy's course. Akilah continued to struggle with his troubled identity as a cheater.

Finally, Akilah demonstrated his knowledge in a *legitimate* fashion in Excerpt Thirteen, after Izzy received an answer to her question of what the "magic word" was in English.

Excerpt Thirteen

1. Izzy: Doesn't matter ↑where you are ↓living, ↑where you grew ↓up. What↑ever
2. language you ↓speak, the word (0.2) ple:ase (2.1) is [the magic word.]
3. Miles: [Ple:ase] (1.0) get lost.
4. Izzy: Hah [hah hah hah hah hah] ↑↑ha:h ↓hah hah hah hah
5. Rory: [Huh huh huh huh huh huh huh]
6. Akilah: Bad Miles!
7. Izzy: Get to steppin' (0.7) Get to steppin', [please] (0.2) get to steppin' huh hah
8. hah hah hah hah hah.
9. Miles: [Steppin'?]
10. Izzy: I don't know, do you remember I told you about that one, get to steppin'?
11. Miles: [Mmmhmm.]
12. Akilah: [How do you write?]

13. Rory: [No, I don’t] (0.9) I don’t.

14. Izzy: .hhh °Get (0.5) to stepping° (types "get to stepping") (3.0) Just like get lost,

15. it's the [same thing, means the same thing.]

16. Miles: [Aaahh. Hit the road.]

17. Izzy: That's right, hit the road, Jack, and don't you, don't you talk back? [don't you

18. ↑come ↓back.]

19. Miles: [and don't you come back] no ↑more no ↑more (0.4) no more. ↑Hit the

20. road, ↓Jack, and don't you ↑come back ↓no more.

21. Izzy: No ↑more [no ↑more no ↑more] no ↓more.

22. Akilah: [Wha’d you say?]

23. Izzy: Ahghh [hah hah hah ↑↑hah] hhh °hah hah hah hah Akilah° huh huh .hhh huh

24. huh .hh that was good! You guys (1.0) are too funny!

25. Miles: [Hah hah ↑hah hah ↓hah.]

As in Excerpts Eleven and Twelve, Excerpt Thirteen features an account of what types of knowledge were allowed by Izzy in this idioms class. Through describing the idioms in a particular way, Miles and Akilah were able to construct two examples of legitimate displays of learning in this class. For example, Miles’ use of the synonymous idiom “hit the road” (Line 9) to demonstrate his understanding of the idiom “get to stepping” (Line 7) earned Izzy’s approval (“That’s right”, line 10). Another example was Miles and Izzy singing the chorus line to the Ray Charles song after Izzy mistakenly recalled it in Line 16. Akilah finally demonstrated his understanding of a preferred display of knowledge by giving the next line of the Ray Charles song that comprised the birth of the idiom (“What do you say?”, Line 21), which Izzy riotously rewarded with a hearty laugh and praise (“That was good!”, Line 22).

The constructive element of talk becomes in these excerpts a means of defining both the technological behavior of participants, and a means to legitimizing claims to knowledge and learning as defined institutionally. Conversation then becomes a rhetorical function in that participants can portray a particular version of events in a way that accounts for their actions (Potter, 1996). For example, Miles was able to account for his own knowledge (locust or *Саранча* as a kind of grasshopper) through contrasting his actions to those of Akilah (who displays a reference to the *Urban Dictionary*). By Miles and Izzy jointly producing an account of what was "acceptable" they could then construct Akilah's actions as transgressive, which shielded Miles against criticism and compelled Akilah to normalize his knowledge claims to whatever was institutionally acceptable. However, the discursive work required to explain the pedagogy to Akilah at the outset would have been no more than the discursive work that Izzy and Miles performed during Akilah's move to charge Miles with cheating. Ultimately, Izzy saved no time wielding her asymmetry of power, and actually engaged in a considerable amount of discursive work to bring Akilah into a normative position.

Teaching performance: transgressive technology and the hegemony of the teacher.

Izzy's discursive work above evidences that teachers identify variables which they feel compelled to control in any given classroom. Virtual worlds only complicate matters by adding a technological layer of variables that teachers believe they don't have the time to manage. As such, one pedagogical orientation to technology is for teachers to establish rules and promulgate ideologies of technology to preserve, legitimate and normalize pedagogical interests. These rules and ideologies can serve to marginalize the lived ideologies of students. Such moves in the classroom are subject to challenges by students, and when this happens, much discursive work is required to maintain the ideology, which makes one question whether any time is actually being

saved. An example of such a struggle is found in Excerpt Fourteen below. This excerpt is taken from the beginning of one of Ellie's classes, and involves an exchange between Ellie, Ahmad (a new student in Ellie's class), and Athena (a regular student in Ellie's class). The conversation followed a request typed into chat by Ahmad for technical assistance in getting his microphone to work, and Ellie asking whether Ahmad is using a Mac or PC.

Excerpt Fourteen

1. Ellie: So let me ask you a few questions. U:h (0.5) So is it USB? ((Ellie types "Do
2. you have a USB mic? Is it USB?")) Okay that's my first question: is it USB?
3. Ahmad: No, it's not USB mic, it's uh::
4. Ellie: Okay, yes. That's the problem (0.5) because now we require USB, because the
5. sound is just not good if you don't have USB. So, can you buy? Can you buy a USB
6. headset?
7. Ahmad: Oh, OK, um::, it's not um:: (0.5)one moment...
8. Ellie: Okay, so (0.4) and Athena, you're gonna get USB also, right?
9. Athena: ((Types "Y"))

This excerpt shows that participants are able to construct sound quality in different ways by using different expressions and emphases in their talk, which in reality demonstrates how power seems to be articulated through what seems to be only diagnostic comments about the technology. For example, by stating that: "the sound is just not good if you don't have USB" (Line 6), Ellie presented a diagnosis that showed a particular orientation to sound problems that shifted accountability from Ellie back to Ahmad. In this context, line 6 is hearable as 'your audio is poor because you don't have USB'. This is clearly not the case. Although his microphone was not working when he first reached out to Ellie, it is clear that he was able to

resolve his problem as he is speaking to Ellie for most of this conversation. Ellie then asked Athena the same question (Line 9) which Athena answered using text chat (Line 10). Ellie's use of "also" in Line 9, combined with the lack of a diagnostic for Athena, suggests that Ellie and Athena had negotiated a similar agreement about USB headsets in a previous class.

By looking more closely at Ahmad in Excerpt Fifteen, one can see how he constructed the issue of sound differently, and simultaneously offered a more positive evaluation of his situation.

Excerpt Fifteen

1. Ahmad: Okay.I: do it eh:, mm:, but now I have ↑noise, yes?
2. Ellie: Oh, >no problem<, you can... No problem. Just, you know, you know, just buy
3. it when [you can]
4. Ahmad: [Okayhheh hehokay.]
5. Ellie: It just means your sound will be mu:ch better for everybody, you and for the
6. everybody. And so, how about you, Athena? Do you, um (0.5) uh agree you're going
7. to buy a USB headset? (7.0) Can you hear me, Athena?
8. Athena: Yes, yes, I hear.
9. Ellie: Oh, okay. So, I just want to be sure you understand what we're talking about.

While Ahmad clearly capitulated to Ellie's demand ("Okay I: do it", Line 1), he challenged the insinuation that his audio quality was poor by initiating a counter question sequence to Ellie ("but now I have ↑noise, yes?", Line 1). Ellie, now sequentially obligated to do answer turns, oriented to the challenge not as a technological one, but as an economical one ("just buy it when you can", Line 3) and emphasized Ahmad's accountability for compliance while deflecting her personal accountability for the rule ("your sound will be mu:ch better for everybody", Line 5).

In order to regain sequential control of classroom interaction, she countered by asking Athena the same question in Lines 6-7. The tenor of Lines 6-7 suggest that Ellie did not take up Athena's typed response (Excerpt 14, Line 10), and that these lines represented more work by Ellie to assure compliance. As Athena had already typed her agreement, her delayed positive response to Ellie's two-pronged question in Lines 6-7 ("Yes, yes, I hear.", Line 8) answered only one question: that Athena could hear Ellie. Ellie's reply in Lines 10-11 oriented to Athena's response as dispreferred, acknowledged Athena's understanding of the situation, and implied that her consent had been previously constructed.

As these excerpts show, the language classroom does not exist in a vacuum, but is rather an exemplum of "the broader, social and institutional settings within which classroom interactions take place" (Edwards, 1997b, p. 33). In the classroom, many types of authority are (re)presented for the benefit of teachers. A critical approach to these discourses allows us to open these discourses that support normative and orthodox structure to analysis. Teachers, among the many aspects of their profession that they must master, have a particular need to develop the skills necessary to analyze the discourses at play in their own courses in order to understand their orientations and how they are operationalized in interaction. This will assist them in blurring the crippling line between research and praxis. In doing so, teachers become more fully engaged producers and consumers of pedagogical frameworks.

Performing learning: conversation talk vs. teacher talk

In this section, I add an example of a typical sequence of ordinary conversation to complete my demonstration of ways in which learning was achieved in conversational and pedagogical registers of discourse (Biber, 1999; Seedhouse, 1997; Markee and Seo, 2009). Next, I share examples of some patterns that I noted across the classes, focusing on zones of

interactional transition (ZITs; Markee, 2004) between conversational and instructional talk. I noted participants' everyday fluctuation between conversational and pedagogical modes of talk in particular worked to trouble communication and ultimately learning. In my analysis, I noticed that when there was an exchange between one discursive framework and another (for example, from a conversational framework to a pedagogical framework), misunderstanding became a noticeable pattern worthy of examination. Markee (2004) described these as zones of interactional transition (ZITs). When these transitions occurred, which could happen "on a moment-by-moment basis during the same speech event" (Markee & Seo, 2009, p. 48), I observed that an assortment of troubles would arise as teachers and students adjusted from a conversational system (where all had an equal hand in managing speech exchanges) to a pedagogical system (where roles and responsibilities were much more stratified). These fluctuations were exacerbated by the conversational nature of the classes, Englishville's commitment to interaction as a goal, and an absence of nonverbal or in-world cues that would alert a student to the discursive register in play. As with previous sections, a smaller number of excerpts were selected from the larger corpus of data on the rationale that they illustrated the patterns.

Untroubled learning in conversational and teacher talk.

As we have already seen what untroubled pedagogical turns look like for teacher-student interaction in Excerpts Two and Three, a look at conversational learning in a student-student exchange in Englishville will complete a frame of reference from which to look at moments when zones of interactional transition occur and how learning and teaching is troubled in these transitions. Language learning can and does occur in ordinary conversation. Excerpt Sixteen demonstrates a type of conversational learning that took place between Rory and Miles before

one of Izzy's classes. Rory was attempting to discuss the difficulty he had arriving at Izzy's tent that day.

Excerpt Sixteen

1. Rory: Is ↑there a ↓problem with uh Second Life today? Because I lant (0.2) I landed
2. i:n (1.0) a: (1.0) in=
3. Miles: =In the wrong place?
4. Rory: Yeah in wrong place. It was far from here.

Rory successfully executed one repair on his own. After saying "lant" in line 2, he paused briefly, displaying that the utterance was not correct. He then replaced "lant" with "landed". After his successful repair, Rory then demonstrated difficulty to Miles with his repeated starts, pauses and sound stretches later on in Line 2. Miles took up Rory's repair request by providing a suggestion in Line 3 in an interrogative tone. In Line 4, Rory confirmed that he had accepted Miles' suggestion ("Yeah"), demonstrated that he had learned the repair by repeating it (minus a definite article), and continued the conversation by mentioning that the wrong place was "far" from the tent. Implicit repair requests like the one in this excerpt were a common repertoire for this type of learning. In these situations, a speaker (either through the use of fillers, hesitation devices, circumlocution, or approximation) demonstrated difficulty, and the preferred response was a repair on the part of the other conversant(s), followed by acceptance of the repair and continuation of the conversation.

ZITs and (not) learning the right word.

I observed patterns across the classes that demonstrated troubled talk and learning in ZITs wherein not everybody was operating in the same discursive register. As explained earlier, fluctuations between conversational and pedagogical modes of talk led to transgressions of

normative communication patterns based on confusion surrounding the register in play. ZITs are especially difficult when the pedagogical content includes conversational topics such as introductions. In Excerpt Seventeen, Ellie began a new class and decided to focus the first class on introductions. As Ellie's class began she asked Ahmad, a new student, to introduce himself to her and Tatiana (one of Ellie's regular students).

Excerpt Seventeen

1. Ellie: Alright. Okay so let's um:: ↓now, >what ↑we're gonna do< toda:y is we're
2. gonna get to kno:w (0.2) uh Ah↑mad (1.0) ↓because he's ↑new:. So, Ahmad, can
3. you tell me something (0.2) about yourself? And tell me (0.2) I see you have been
4. in Second Li:fe for 11 months (1.3) So: tell me about that. Introduce yourself to
5. ↑Athena and to ↓me.
6. Ahmad: Uh, oka:y .hh u:h I am from uh ↑Russia Damgrad ↓uh (0.2) I am a:
7. s:oftware ↑engineer, Java pro↑grammer .hh u::h and: er:um hh I: like: .h my job
8. uh .h um:. I am uh:: twenty-six 26 years ↑old uh (0.5) .hhh ↓uh: I like uh ↑sports
9. ↓uh:: (0.2) um: .h often uh I:: .h I go to: ↑gym. .hh uh I like uh ↑sky, mmm, like
10. riding down, [um::]
11. Ellie: Oh, >did you say you like< ski:ing? Is that what you said, ski:ing?
12. Ahmad: Skiing, yes, yes [uh::]
13. Ellie: [Yeah] (1.5) and I like to go to _the_ gym (1.1) °_the_ gym°.
14. Ahmad: I like uh skiing um in Boulder Mountain, .h uh huh heh .hh um:, in
15. summer I uh: like um:: .h uh swimming eh in: um ↑water, ↓um: in ↑river (0.5) .h
16. um: in Damgrad.

Ellie opened the class by orienting to the introductions (a conversational activity) as an instructional activity. She began an IRF sequence by asking Ahmad to produce a standard introduction and then to speak to his experience in *Second Life* as he had been involved in *Second Life* before he became interested in Englishville. Ahmad acknowledged the request ("Uh, okay", Line 6) and began. In Line 9, Ahmad was trying to explain that he likes to go to the gym and he likes skiing, but demonstrated difficulty with taking up the proper gerund (skiing) or pronunciation ("sky", Line 9) as he began to circumlocute ("like riding down, um"; Line 10), a marker for a repair request. In responding to Ahmad's repair request, Ellie provided the gerund he was looking for. Ahmad repeated the gerund, confirming the repair, and moved on. Ellie then quickly added another increment which corrected a missing definite article in Ahmad's introduction ("I like to go to _the_ gym..._the_ gym", Line 13). Line 13 demonstrated that Ellie had been monitoring Ahmad's speech with an eye toward skills development (in this case definite articles), and Ahmad's repair request gave her the opportunity to point out this error. In so doing, Ellie constructed a ZIT in which she moved the discussion from a conversational orientation to a pedagogical one. Ellie's first repair occurred in the context of Ahmad's repair request in the conversational register. However, the additional repair occurred in the context of a ZIT to pedagogical talk, where repair is institutional and specifically pedagogical. Ahmad did not realize that Ellie had switched from a conversational to a pedagogical register, and he oriented to the additional correction as a dispreferred response to his repair request. As Ellie's initial repair satisfied Ahmad's request, Ahmad neglected to acknowledge the second repair. This shows that, at this point in the talk, Ahmad was still orienting to the norms of ordinary conversation. Ellie did not take up Ahmad's lack of response to her second repair. We cannot know for certain if a learning moment occurred or was missed. We can, however, surmise that

the learning moment was troubled as neither the researcher nor the teacher has observable evidence that Ahmad learned the definite article.

While Ahmad was primarily oriented to the repair that Ellie provided in response to his repair request, Ellie oriented to the moment as an opportunity to provide additional correction for an error she detected while monitoring. This is perfectly acceptable in a pedagogical register as we saw earlier, but Ahmad oriented to it as a dispreferred response because he was operating in a conversational register. The confusion led to a troubled learning moment. One cannot easily dismiss this lost moment as an inability of the student to comprehend the teacher's repair move, since Ahmad demonstrated earlier that he knew how to handle a repair.

Teachers can be equally accountable for troubled learning in ZITs because of the way they listen to students for their accuracy and fluency. This focus on form has been criticized for being carried out as an obscure listening exercise by teachers, if done at all (Darn, 2006). As a researcher, I can observe only how and what participants orient to in their interactions. In my observations, I have noticed that monitoring, as a pedagogical exercise, often leads to vague orientations to conversational content, which leads to troubled learning moments as Excerpt Eighteen demonstrates. Continuing with his introduction, Ahmad began to speak of his hometown, and Ellie, taking up this orientation, asked him some questions about it.

Excerpt Eighteen

1. Ellie: Now ↑tell me the ↓name of your city again?
2. Ahmad: U:m, my c: my city: is um (0.2) in↑dustrial, ↓uh: we have million ↑people, um:
3. Ellie: What is the ↑name ↓of your city?
4. Ahmad: Uh: Damgrad.
5. Ellie: Could ↑you spell that?

6. Ahmad: Yes uh [we]
7. Ellie: [Oh,] Damgrad, °OK. Got it.°
8. Ahmad: Uh: Damgrad, 1 million ↑people, ↓and uh we have um:, mmm another: another
9. city um: .h near Damgrad uh, it's um: Ankeless, it's uh (0.5) it's a Russian mmm (0.5) uh
10. it's a ↑Russian satellite ci↓ty for Damgrad.
11. Ellie: Mhm: (1.1) a ↑sis↓ter city.
12. Ahmad: Yes, a sister, yes uh, u::m, u:h what heh, what next?

Ahmad continued his introduction as an ordinary conversation, answering Ellie's questions as they came. Ellie continued to orient to the exchange as pedagogical: she had provided the input, and she was monitoring the response for potential feedback. She also showed some evidence of using a search engine for assistance. When Ahmad told Ellie the name of his town ("Damgrad", Line 4), Ellie requested clarification by asking for the spelling. Before Ahmad was able to answer, Ellie intervened ("Oh, Damgrad, OK. Got it.", Line 7). From this point forward, the extent to which Ellie was multitasking and/or monitoring cannot be known. However, Ahmad was offering specific details about where he lived: another city near Damgrad (Line 9) named "Ankeless". He is hearably attempting to construct a relationship between the two cities, but did not possess the appropriate repertoire. After the starts and pauses in Lines 8-9, Ahmad finished his repair request by circumlocuting that Ankeless was "a Russian satellite city for Damgrad" (Line 10). Were Ellie fully involved in the conversation, she would easily have pieced together Ahmad's cues and provided the repair of *suburb* to Ahmad. However, her repair in Line 11 is unusual, because her response token "Mhm" resembles what Schegloff (1981) calls a continuer, which is an indication that Ellie was orienting to Ahmad's turn as still in progress. She then briefly provided a repair. One possible interpretation of this excerpt is an indication of Ellie's

level of engagement with Ahmad's turn. Ellie's repair seemed to orient only to the conversation immediately preceding Ahmad's repair request, and not to the other cues provided by Ahmad earlier in his response. This explains why she offered the repair of "sister city" (Line 11) instead of "suburb". Ahmad confirmed the repair, and has learned that suburbs are (incorrectly) referred to as sister cities in English.

I suggest that this demonstrates the importance of teachers reflecting on how pedagogy is performed in the virtual space in order to contemplate more effective ways to teach. Non-verbal cues that are unlike those that teachers and learners are accustomed to in the physical life-world make it harder to signal and understand the moment-to-moment flow between registers that are sometimes taken for granted in a brick-and-mortar space. Also, the privacy teachers enjoy to multitask in the virtual space makes it harder for them to perform vital pedagogical tasks. Student errors that under other research paradigms could easily be ascribed to the students' novice language skills could actually be caused or, at the very least, exacerbated by the teacher. As demonstrated in these excerpts, student errors could be due to lack of teacher engagement in their conversations. These errors could also be caused when teachers fail to make students aware of a zone of interactional transfer. This disconnect is aggravated by the teachers' ignorance that these zones are being made at all. Also demonstrated in these excerpts is that an interactional inquiry is capable of developing a complex, emic analysis of observable discourse (such as a teacher providing an incorrect repair), and an analysis of its implications independent of an exogenous theory of teaching or learning.

ZITs and (not) learning the right identity.

In addition to moments when teachers missed student repair requests due to being distracted by pedagogic activities, another pattern that appeared in the data were moments when

students were not orienting to teachers' pedagogical signposting of class information. This led to interesting disruptions, and even questions of accountability as we see in Excerpts Nineteen and Twenty. In Excerpt Nineteen, Izzy explained the basic rules of the demolition derby and helped students enter their vehicles.

Excerpt Nineteen

1. Izzy: Okay .hh we are at the demolition derby. Demolition derby <means you um> have
2. fu:n a:nd the last person with their truck (0.2) or their car ↑wins. You
3. just keep hitting each other with your cars and your ↑trucks, u:m, they start to fall apart,
4. they start to houh huh huh huh .hhh you lose points, and the one who has their truck still
5. intact .hh still all intact at the end wins. >It's just a fun game, you don't win anything, you
6. just win.< Okay, Athena, .hhh now <here is where you can rez> ↑your ↓car or ↑your
7. ↓truck. You pick the car or the truck that you want by <u>pressing</u> (1.7) the black arrow
8. keys. Do you see these black arrow keys?
9. Athena: Mm hm, [yes.]
10. Izzy: [Okay.]
11. Miles: Yes.
12. Izzy: Who wants to: u:m (0.3) now you (2.0) we gotta wait for, hold on, don't start
13. pressing the keys now (0.5) ['cause we all] have to take a turn.
14. Miles: [Okay.]
15. Izzy: .hh We're going to u:m: (0.5) each one of us take a turn to [get the car] that we
16. want.
17. Emma: [((types: "back"))]

18. Izzy: >Welcome back Emma<, and then it will rez, it will show up it with (2.5) it will

19. appear, you will see it (1.0) over here on the other (0.2) side (0.2) of (2.0) the board.

20. [Okay?]

21. Athena: [Okay, okay.]

22. Izzy: ↑When (0.8) when ↓it ↑comes ↓here, when the ca:r co:mes here (1.1) then you sit in

23. the car, mo:ve it by pressing your arrow keys out of the way so that the next person can

24. get their car. Then wait for all of us to get our cars in the middle of the arena, which is

25. here. (3.0) Okay? So put your car out here once you get your car you come out here and

26. just wait for the rest of us to get our car. Alright?

Of the several interesting features to note in this excerpt, I will call attention to the references Izzy makes to cars and trucks. In her opening remarks, which are hearably in a pedagogical register, she addressed her students about the class objectives and some guidelines for conduct. Izzy makes it audibly clear that "↑trucks" and cars are in play (Line 3). As she turned to help Athena (the first student) as a model for others to watch and learn (therefore still addressing the class), she continued to speak of selecting and rezzing either a car or truck (Lines 6-7). After Athena picked her car, Izzy dropped her reference to trucks and referred to cars only (Lines 20-23). Izzy continued to refer to the vehicles as cars (possibly a metonymic shift) throughout her conversations with individual students as they came to the vehicle rezzer to select their vehicle.

As students completed their selections and it became Izzy's turn to select a vehicle, she noticed that everyone selected tiny and fast cars. Izzy reveled in the thought that she would have a distinct advantage over her students because she selected a massive semi-truck. Excerpt Twenty begins as everyone remarked on Izzy's large truck. Feeling they had been misled, Rory and Emma protested.

Excerpt Twenty

1. Rory: It is unfair!
2. Izzy: Oh no, it's, it's, you had the choice to pick your car anghh hah [hah huh.]
3. Rory: [But] (2.1) your one is ↑not a ↓car. You told us that we can choose only cars.
4. [But you chose a truck.]
5. Izzy: [No I didn't, I said (0.3) I: said] pu:sh the a:rrow ↑key, then you know you said I
6. like that one. uhhhhheh [↑O↓kay. ↑O::↓kay]
7. Rory: [But you said I want you to pick only] only car! (laughs)
8. Izzy: I did not ↑say that you could select ↓only cars, that is ↑↑not the ↓truth!
9. Emma: A::h! I get that, yeah yeah yeah.

Rory did not acknowledge Izzy's introduction regarding the vehicle selection process and troubled Izzy's vehicle choice as unfair. At this point, Izzy could accept Rory's assessment, disagree with his description of "unfair", or reject his assessment altogether. Not surprisingly, Izzy rejected Rory's assessment, reminding him that he had his choice of car, a term which Izzy continued to offer as a metonym for the vehicles (cars and trucks) available. Rory, in Line 3, developed his accusation by interpreting the metonym literally, suggesting that Izzy had no intention of encouraging students to select trucks, and this helped instantiate what was *unfair*. The ensuing pattern suggests that Rory has successfully constructed what seems to be a troubled identity for Izzy: the identity of being unethical in her assistance at the vehicle rezzer for the promise of a tactical advantage in the game. Izzy resisted Rory's characterization through a review of their conversation at the vehicle rezzer in Lines 5-6 (where she characterized herself as an impartial assistant in helping Rory operate the rezzer). She then strongly rejected his claim

altogether in Line 8. Nonetheless, Emma hearably resonated with Rory's account by suggesting that she did not believe Izzy.

While it is important to discuss the mechanics of the misunderstanding, what is perhaps more fascinating is the use of affect in this situation as a rhetorical device. Rory's behavior would have likely been considered out of bounds in a brick-and-mortar classroom, but the context of an informal classroom in a virtual demolition derby arena not only afforded him the latitude to display irritation and open opposition to the teacher, but the performance actually gave enhanced credibility to his claim. His display was further evidence of the veracity of his truth claim that Izzy cheated.

Misunderstandings such as these created by ZITs can have far-reaching consequences. In this instance, the question of what was learned in these excerpts will remain ambiguous. Did students learn to pay better attention to the teacher, or to not trust her? This troubled position was added to Izzy's repertoire of positions that was to be carried forward in the long conversation (Maybin, 1994) between teacher and students in Englishville culture. Virtual field trips such as the one described in the above excerpt are not unlike similar trips in the physical realm. While Izzy invested a considerable amount of discursive work ensuring that everyone was instructed, it was clear that many were not paying attention, as they were milling about and discovering the space. Many could hear Izzy, but could not see the board she was using to demonstrate how to select a car. Izzy did not present the complete set of vehicles available to the group. These are the types of scenarios that must be thoroughly researched before taking learners to an unfamiliar sim, otherwise misunderstandings are inevitable.

ZITs and (not) learning the teaching game.

Role-plays, like games and other types of playful problem solving, conflate the processes of learning and assessment (George Lucas Educational Foundation, 2008). The power of role-play in Englishville lies in its ability to simultaneously employ elements of fun, learning, and assessment. Role-plays are a type of elicitation and allow teachers to make systematic observations of language performances from which inferences can ostensibly be made about the state of a learner's language ability (Rebuschat & Mackey, 2012). Billig et. al. (1998) have characterized elicitation as the means through which class knowledge is explicitly drawn out from and implicitly offered to students. Put differently, elicitation is essentially a game, a form of assessment of not only language performance but performance of the role of student within the pedagogical paradigm.

Excerpt Twenty-one shows how Ellie's students fare in the game of elicitation during a role-play in the Englishville helicopter. Ellie had just explained to Pipi the difference between a *building* and a *tower*. Pipi, referring to the notecard for the lesson, asked Ellie to make a U-turn.

Excerpt Twenty-one

1. Ellie: Okay (2.0) Oh, you mean uh:: hang on lemme (0.2) are you looking at the
2. notecard? Is that what you're reading? Go: to: ↑the:: (4.9) okay, I see make a U
3. tu:rn, okay do you see uh: the next one? (3.0) Do you see after number seven
4. number eight?
5. Pipi: Yeah yeah the place {_____(4.2)}
6. Ellie: Okay, do I do I go? Do I go straight?
7. Pipi: Uh, yeah, yeah.
8. Ellie: Okay, okay, good. °Let me get my click, okay°. Good. Okay, just tell me

9. (4.1) °okay° (17.5) ((does a U-turn as the helicopter reaches the end/border of the
10. sim)) (18.1) Is it directly here? Do I go on this street here? Should I go here? Is
11. this the direction? Is this the way to the helicopter place, Thelma?
12. Thelma: °No°.
13. Ellie: No? Uh am I going the wrong place, the wrong direction? Is this a mistake?
14. Thelma: Um...I don't know.
15. Ellie: Oh, you don't know ehuh are you lost? (Huh ↑huh ↑heh heh heh ↓heh heh)

This excerpt provides examples of students guided by a series of elicitation devices deployed by Ellie to help Pipi and Thelma correctly finish the exercise. Ellie side-tracked Pipi's U-turn request by asking where that directional command came from (Lines 1-2). She then asked Pipi to read number 8 ("go straight"), which he does in Line 5. Having given Pipi the directional cue, Ellie then asked if she should "go straight" (line 6), to which Pipi agreed. Ellie responded encouragingly ("Okay, okay, good.", Line 8). Guided by a series of strategic questions and prompts by Ellie, Pipi eventually responded with the correct directional command. Pipi appeared to have learned the directional command, but it is difficult to avoid the notion that Pipi was successful in paying attention to the communicative cues provided by Ellie and not mastery of the material. Specifically, Ellie was just as engaged in knowledge input as she was in elicitation (Billig et. al., 1988, p. 53).

Thelma was a passenger in the helicopter as Pipi took his turn navigating. As Ellie piloted the helicopter in lines 8-10, she attempted to elicit a response to her navigational queries regarding directions back to the helipad at moments when one would expect them. She first attempted to elicit a response by direction ("Okay, just tell me", Line 8), then by quiet reminder ("°okay°", Line 9). When Pipi and Thelma failed to acknowledge Ellie's elicitation cues and

Ellie reached the border of the sim, she turned the helicopter around in the direction of the helipad and fired off a round of questions. The first question ("Is it directly here?", Line 10) was rhetorical, as the helipad was clearly not in sight. The next three questions (Lines 10-11) contained the discursive clue that Ellie provided in her elicitation to the students: the helipad was directly ahead from their location. She then asked Thelma if they should proceed, which gave Thelma the role of navigator. Thelma's timid '°No°' hearably confirmed her inability to respond to the cues Ellie provided. Ellie then employed an intricate trio of questions (Line 13) to mark Thelma's answer as dispreferred. Ellie first troubled Thelma's answer, then asked Thelma to confirm her position that Ellie had made "a mistake" (Line 13). Thelma's response of "I don't know" (Line 14) compelled Ellie to recast Thelma as "lost" (Line 15). Ellie then asked Pipi to navigate a return to the helipad. It is again obvious that Thelma was lost, but what is less obvious is whether this can be ascribed to poor language performance or a poor performance of the elicitation paradigm in this construction.

It is interesting to note that this ostensibly informal, student-centered exercise was not as informal in practice with Ellie. This approach, while in a helicopter high above Englishville, still involved a power asymmetry between teacher and pupil, and between personal learning and institutional goals. One is left to agree with Billig et. al. (1988) that "rather than stemming from two distinct and opposed ideological bases, they may well be alternative expressions of a single, though dilemmatic, ideology" (p. 54).

Chapter Summary

In this chapter, I shared the findings related to my research question: How do participants perform "teaching" and "learning" in language courses conducted in *Second Life*? To provide context, I first provided a thick description of the field sites of classes. I then used data from

these classes to analyze what teaching generally looked like in the classes. After, I investigated the struggle between the ideas of fun and/or serious classes as a means to rhetorically construct these ideas. Next, I considered how power was used by teachers to normalize student behaviors to institutional expectations, and explored the consequences. Finally, I studied conversational instances of learning and the struggles students had in performing learning when dealing with shifts between conversational and pedagogical modes of interaction in their classes. In the next chapter, I put forth conclusions and discuss this research project, positioning the findings within a broader body of literature, and suggesting several implications for teachers and researchers.

Chapter Five: Discussion, Implications, and Conclusion

The purpose of this dissertation research is to investigate how language teachers and students in a multi-user virtual environment actually perform and make relevant concepts of language learning within their virtual classes. The research question that guided this study was: How do participants perform "learning" and "teaching" during language courses conducted in *Second Life*?

I interrogated the fluid and contested concepts of serious and fun pedagogies, technology as a locus for broader discussions of power asymmetries, and how transfers between conversational and pedagogical registers invoke learning troubles and power negotiations. I also attended to the ways in which teachers rhetorically accounted for ideological dilemmas in their pedagogy while reinforcing what were acceptable communication and technological patterns. The research question and my methodological decisions informed what I understand to be the implications of this study. Throughout Chapter Four, I implicitly and, at times, explicitly pointed to some of the implications of this work. In this chapter, I now detail this study's implications, positioning them against broader bodies of literature.

Summary of the Study

In Chapter One, I began by introducing the reader to a statement of the problem and the purpose of the study. I then presented the research question and discussed its significance. Next, I explained my analytic approach with its accompanying limitations and delimitations. Finally, I defined several relevant terms, and made explicit my own positionality. Chapter Two contains a literature review that elucidated current CALL orientations to learning theory, virtual worlds, discursive psychology, and power asymmetries in computer-mediated language classrooms. I then presented the history of CALL and SLA as disciplines, viewing my historical retelling as

only one of many possible interpretations, with a purpose of justifying my methodological decisions. I also reviewed and analyzed relevant qualitative empirical studies of discursive psychology projects in SLA and CALL, with the aim to position this dissertation research within a larger scholarly conversation in CALL and SLA. In Chapter Three, I discussed the theoretical framework which informed this work, making explicit the epistemic and ontological assumptions of critical discursive psychology. I then described this study's method, delineating how I designed the study, gained access to the research site, collected and analyzed the data, and strived to transparently share my findings. While few studies drawing upon discursive psychology present a thick description of the site and the participants, I began Chapter Four with a more extensive description of the field sites of Englishville courses. My goal in doing so was to focus on providing a contextual background for the analysis of the chapter. Within Chapter Four, I also shared my major findings, focusing on the performance of serious and fun in pedagogy, the use of technology as a rhetorical trope for power negotiations, and the troubled learning associated with zones of interactional transfer.

Chapter Overview

I begin this chapter by discussing the broader implications of this project. Then, I introduce several implications for teachers who work within virtual environments. I also share some specific research implications, indicating the ways in which this study's findings can inform how researchers approach the examination of language learning communities in virtual worlds. Finally, I offer suggestions for future research both from the findings I shared and the data that was beyond the scope of the research. In this final chapter, I also add my conclusions and suggest the importance of carrying on an interrogation of the hegemonic discourses in language teaching and learning.

Challenging the Hegemonic Discourses of L2 Research/Pedagogy

I situate the findings of this study specifically in the body of literature associated with CALL, and virtual worlds study. However, as I positioned virtual world language learning at the intersection of language education, CALL, and 3D multiuser virtual environments, I necessarily invoked literatures involving L2 classroom discourse and SLA.

Similar to other studies that orient to these pedagogical moments as located in a culture of technological use (Thorne, 2003), this study's findings point to how technology is not a detached ancillary of the classroom experience, but rather is embedded in the collective interactions of teacher and student. As very little discursive or qualitative research has focused on exploring virtual world language learning theories as performed by those whose curriculum is exclusively within the virtual environment, this study's findings offer a new means by which to orient to virtual classrooms in language-learning research. Rather than assuming that established understandings of the physical classroom and its accompanying pedagogy somehow organize online discourse (Walsh, 2006), this study's findings suggest that the discourse of technology in the virtual environment indeed has the power to problematize the very notion of a seamless transfer from physical classrooms and pedagogy to virtual applications. This problematization was demonstrated in the ideological dilemmas surrounding informal or formal orientations to the virtual classroom, as well as how to reinscribe traditional tools (such as chalkboards) in the virtual space.

While SLA has an analytic mindset of a language learner as a deficient communicator (Firth & Wagner, 1997), the findings of this study build upon Markee and Seo's (2009) work related to zones of interactional transfer (ZITs). These ZITs, being fraught with errors as the discursive rules necessarily change between different discourse registers, also highlight the ways

in which this analytic paradigm accounted for errors of both learners and teachers that participants and outsiders may have described as linguistic deficiencies. Thus, this study's findings provide opportunities to reframe and reinterpret how participants orient to their communication and behavior. No longer must language communities be constrained to the a priori notion that errors are endemic of a lack of language ability that can be solved by more closely approximating native language speakers. In this study, I repeatedly observed students failing to correctly assimilate a teacher's feedback. This was not due to their language (in)ability, but rather because teacher and student failed to exist on a common discursive register. Reframing to account for this gap may have a profound impact on how students are perceived and create pedagogical frameworks for students in the classroom. This could potentially lead to questioning and reframing other types of classroom assessments.

Unlike cognitive studies that orient to classroom discourse as an issue of understanding or misunderstanding a global schema that facilitates or disrupts the learning process (Hatch, 1992; Schank & Abelson, 1977), the findings of this study point to how learning can be conceptualized, not as a process grounded in researcher categories, but as a local set of interpretative repertoires embedded within a particular community of social relations. For example, unlike Toyoda and Harrison (2002), who analyzed their data for schemata that supported their claims of cooperative work within virtual worlds, this study's findings sought to value thinking by attending to the dilemmatic aspects of interaction (Billig et. al., 1988). I argue that the importance of this study is found, not in focusing on pre-formulated schema sequences of speech or behavior, but rather on how participants used interpretative repertoires to trouble or reinforce traditional paradigms and classifications as "deficient communicators" (Firth & Wagner, 1997). Pipi, for instance, struggled to communicate with teachers and disregarded instructions, but was positioned as

skilled, responsible, and motivated. On the other hand, Ahmad, who arguably demonstrated higher communication skills, was once positioned as a cheater because of how he arrived at his knowledge. An attempt such as Toyoda and Harrison's (2002) to quantify appropriate communication and behavior with grammatical schemata would ignore what is arguably the more dilemmatic (and more salient) data from the context of Englishville.

This study's findings point to other shortcomings in extant research paradigms, validating the researcher's adoption of a much different research model. Unlike cognitive research into affective states while using *Second Life* (Balcikanli, 2012; Ho, Rappa, & Chee, 2009; Sadler & Nurmukhamedov, 2008; Wehner, Gump, & Downey, 2011), which depend largely on questionnaires and interviews and concentrate on the way virtual worlds affect us, the findings of this study encourage an appropriate engagement with psychological topics that imbricates affect and discourse. This study also demonstrates that affect can be used rhetorically to negotiate sense-making and power (Wetherell, 2012). Rory's use of affect to rhetorically position Izzy as a cheater in her demolition derby class demonstrates that, rather than perceiving oneself as being affected by the virtual, this study finds that the notion and infrastructure of the virtual are resources that are deployed rhetorically by participants to achieve ends and negotiate power.

The findings of this study build upon social approaches to language communities by further troubling the concept of a static or monolithic individual dimension, even in highly localized contexts. The ways in which teachers talked about and deployed constructions of fun and serious orientations in their classes were always rhetorical. These constructions were at times divergent not only with the constructions made with other students but also within conversations with the same student. Unlike SLA studies that seek to evaluate the effectiveness of serious games or to repurpose recreational games as serious games (Rankin, McNeal, Shute, & Gooch,

2008; Rankin & Shute, 2010), the teachers in this study speak to the struggle to define pedagogical recreation in rhetorical ways that echo the conventional dichotomy drawn between traditional and progressive pedagogy. This may suggest that the struggle between formal pedagogical *gravitas* and playful environments such as *Second Life* may not be a pedagogy versus technology struggle, but rather a struggle between old versus new pedagogy. As technology has always existed in classrooms (even the chalkboard was once considered emerging technology), the struggle can be reconceptualized as traditional technology and emerging technology that is more amenable to progressive frameworks.

As I conducted this research, I was mindful of Egbert et. al. (2009) and their call for integration of teacher voice in CALL research. I picked up their call in the context that positions and truth claims are always negotiated, and teachers are an integral part of that negotiation in the classroom setting. Any given phenomenon, subject or object can have various significations and uses in different contexts and life-worlds. The construct of learning does not exist as a static essence (Barthes, 1973), but is always already open to critique and adaptation. If what "learning" means is a social convention, the narratives that we orient to as sound epistemology concern and involve us collectively.

This study contributes to a conversation about power in the MUVE classroom by recognizing Phillips' (2008) work on formal ideologies of power relations. It builds upon Kumaravadivelu's (1999) approach to investigate lived ideologies of power that (in the case of *Second Life*) transcend the formal ideologies espoused by Warschauer's (1998) interpretation of the critical theory of technology for CALL. Extending Kumaravadivelu's approach by assuming that power is apparent in the performance of teaching and learning, the findings of this study demonstrate the potential to rhetorically construct these performances in ways that reframe or

reinforce normative patterns of classroom communication. The traditional ways of constructing notions of deficient/competent language learning reflect a series of institutional choices made at various moments in the life-worlds of research and instruction. Institutional and research paradigms are slow to recognize learning that does not conform to the traditional scope and sequence of an established pedagogy (Dubreil, Young, & Canfield, 2010). This study's findings demonstrate that teachers and researchers can withdraw from collectively-inherited intellectual commitments and create new frameworks for positioning participants in the learning process if they so choose. In doing so, it is my belief that we can shatter the dominant discourses of SLA that pathologize learners and stereotype roles, where now exist only fractures.

I offer below some implications for teachers and researchers, and also some desiderata for future research.

Implications for Teachers

From the findings of this study, I suggest three primary implications for teachers that are situated in what I propose that this research provides for practitioners. First, I suggest new ways to reflexively consider a polylithic orientation to teachers' pedagogical commitments to fun and serious aspects of their courses. Next, I propose that teachers reflect upon how their orientations to classroom practices are institutionally contingent. Finally, I urge teachers to consider that missed learning moments and misunderstandings on the part of students may have more to do with a gap in communicative registers, thus posing a need to guide and remain engaged with students than a need to fill a linguistic gap.

At present, pedagogical frameworks for CALL exist somewhere in between a tool-based, effectiveness notion of technology and an individual, deficit orientation to non-native speakers. Extant research has established that teachers simply apply approaches from their physical

classrooms in the virtual space (Zheng & Newgarden, 2012). However, when we reframe the question of teaching in a virtual world as teachers seeking to strike a balance between the fun expectations of *Second Life* and the serious expectations of pedagogy, we see that the conflation of *Second Life* with a game problematizes a seamless application of a physical classroom pedagogy. This complication requires teachers to engage in rhetorical work on an individual level with learners that deals with the dominant pedagogical storyline of traditional classroom interaction and the assumptions of play behind virtual worlds.

Both frames draw on the dominant pedagogical narratives upon which teachers may want to conform or contrast personal experiences, and position themselves differently. These frames also provide a resource that teachers can fashion to their own goals. Enabling teachers to look at themselves in this way may free them from the ideology that being unattached to a method or a particular pedagogical position is in some way inferior. This would allow teachers to creatively reframe their own pedagogical cadres with the objective of constructing meaningful learning experiences for each student. The reflection that this virtual environment can impart might also cause teachers to engage in similar reflection upon other contexts in which they teach. Literature on multiuser virtual environments and language learning remains largely exploratory in nature and draws attention to the need for consideration of teacher roles (Peterson, 2011). Rather than conceptualizing the role of teacher as a praxiological process to be revealed in research, I considered teaching as an *act* performed in interaction with students. In this act, teachers position themselves in contrasting ways according to the situational context in which they find themselves, which enables them to assert agency over their classes.

Secondly, this study endeavors to broaden the band of questioning concerning the ways in which power is displayed through the discursive practices of the classroom (Popkewitz &

Brennan, 1998). Primarily, the study includes a critical orientation to non-native speakers, traditionally viewed as deficient communicators (Firth & Wagner, 1997) void of any cultural and/or ideological capital (Kumaravadivelu, 1999). A discursive reflection of classroom practices is one way teachers could come to recognize and respect the various forms of cultural, epistemological, and technological capital of their students, thus opening themselves to alternative possibilities and pedagogies that account for these various forms of capital in a way that could problematize institutional paradigms.

Finally, given that ZITs between conversational and pedagogical registers of discourse cause much confusion, teachers would do well to first recognize, then reflect upon their own patterns of establishing these ZITs. Teachers can then implement behaviors prompting students to note a shift in register. Signposting, be it verbal ("Pay attention! This is important"), an object deployed in *Second Life* to attract attention (fireworks, blaring trumpets, etc.), or using the text chat to reinforce critical pedagogical communication, makes it more likely that students will recognize that there has been a shift in communicative register and assume their role in that register.

Implications for Researchers

The approach of this study is wholly different from previous research in CALL and can also be at odds with recent attempts to redefine CALL in other social or discursive ways. The approach has nonetheless been informed to some measure by all principal stances toward researching psychological and social themes in CALL. This approach is thus indebted to the dialogue and innovation that have come before, just as it seeks to contribute to a new line of inquiry, both theoretical and methodological, in CALL.

First, I propose that this study highlights a new approach to computer-assisted language learning research using data collected from natural situations. Studying technology as it is deployed in institutional situations (a virtual language classroom, for example) has exemplified the manner in which learning may be reconceptualized as an interactional practice rather than concentrating on individual behavior or assessment. My analysis strives to demonstrate the potential for studying the cultures of technology use in situ as opposed to the normative lens of interviews, or to ecologically-invalid experimental simulations. I also used the data examples to underscore fundamental issues that are largely absent in the dominant effectiveness literature on technology in virtual language classrooms. I believe that the theoretical frameworks of this project could be adopted by CALL researchers to explore the potential for analyzing virtual worlds in a more emic, naturalistic way.

Second, I believe this study demonstrates the advantage of assuming a discourse approach that eschews reliance upon exogenous theory in favor of drawing upon a plethora of ideological positions. I suggest that the rigor of this project is found precisely in moving within and between ideological positions to demonstrate concepts which complicated and layered those positions. For instance, teacher and student accounts of various classroom concepts varied within and across classes. Teachers drew upon different repertoires according to the rhetorical context to exert power in their classes. Also, while few discursive psychology studies include context to the degree contained in this study, I suggest that the thick descriptions I included speak to the inherent value of situating discursive findings in the culture-of-use (the "broader cloth" of social practices) and the situated, every day practices of participants. Thick descriptions allowed me to renounce a hidebound application of the conventions of conversation analysis, or of broader post-structural notions of discourse. I suggest that this study points to the

ways in which understandings are enriched by respecting both the analysis of specific instances of language-in-use and the analysis of ways of thinking, acting, doing and being in the world. While I do not claim to have arrived at the definitive answer to my question or to an end-point of this research, I argue that no attempt at research can claim the irreproachability of success. Rather, my hope is that this study as a qualitative project moves me, and in extension the CALL discipline, to continuously challenge the representations made by research. While doing so, I acknowledge the political need to represent and find significance.

Finally, I am mindful that my accounts are independent of cognitive accounts of teaching and learning. My orientation to language education is agnostic as to whether cognition underlies language learning. I also do not claim that this study evidenced long-term learning, though longitudinal work could be carried out using this methodology.

Recommendations and Desiderata for Future Research

In the study, teachers and students accounted for problematic behavior as explainable, solvable, and seen through the prism of technology malfunctions. This served as a rhetorical device to both assume and defer accountability. The ubiquitous presence of technology allowed participants to be accountable for their own problematic behavior while deferring that accountability to a presumed faltering piece of technology (not shown to be directly responsible). However, participants held others directly accountable for their problematic behavior, conflating participants with technology and pathologizing the problematic behavior. CALL literature has highlighted the importance of the efficacy of technology and the affordances of technology in language learning (Garrett, 1998). As discussed previously, earlier studies tended to treat technology as an object to be independently assessed with a goal of recommending or not recommending use. However, if constructions of technology can be demonstrated to be fluid and

produced discursively, problems are then raised with the assumptions of earlier research, and deserve further scrutiny. Thus, it is my intent to return to the stored video recorded data and attend more closely to how technology was deployed discursively by participants during moments of problematic behavior.

Second, as CALL researchers continue to investigate the comparative effectiveness of written chat with oral conversation, I maintain that it is paramount to collect and analyze data with consideration to how different modalities of communication are actually used in virtual worlds. Much of the research comparing written chat and oral conversation (Payne & Whitney, 2002; de la Fuente, 2003; Fernández-García & Martínes-Arbelaiz, 2003), was conducted at a time when the two modalities did not coexist in one platform, or did so poorly. Those studies generally found the type of language produced in written chat was similar to oral conversation and could effectively replace conversation in CALL activities. Students who participated in both text-chat only and oral-only exercises outperformed those in exclusively oral conversation activities. In my study, the observations provide clear evidence that when both modalities were simultaneously available, teachers used text chat as though it were a blackboard, using capitals as an emphasis indicator (because underlining is not possible in text chat), and typing demarcations between feedback that occurred in different turns of talk to make the log more accessible to students. Text chat was used by students for entrance introductions and open questions to the teacher when someone else held the floor and speaking would have been a dispreferred action. In the class I observed where voice was temporarily not available, the language used was markedly different than either traditional verbal or written registers. I intend to return to the data to consider how participants' actual use of these modalities troubles existing comparative

effectiveness studies. I will also suggest how to conceptualize a more ecologically valid inquiry into multiple-modality platforms.

Third, though there is extensive research that explores race, gender, sexuality, and class in the language classroom, very little discursive research exists which interrogates non-native speakers or communication styles and behaviors that fall outside of competence in the target language as a subject of critical inquiry (Kumaravadivelu, 1999). Further research is needed that attends to the ways in which the category of non-native communicator is deployed, resisted, and at times, even subverted (de Certeau, 1984). I champion research employing qualitative methodologies that work against orientations to the target language speaker as a deficient communicator. I propose to revisit the data in order to analyze how recognizing and respecting personal purposes, attitudes, and preferences can be reconciled with instructional and institutional aims and objectives.

Chapter Summary

In this chapter, I first highlighted how this study's findings are situated in relation to the broader body of CALL and SLA literature. I then transitioned to discuss the implications of this research for teachers and researchers. Finally, I put forth this study's next steps, showing along the way that this type of study can produce rigorous analyses of virtual language classroom behavior, independent of cognitive paradigms of learning but still holding a great deal of psychological verisimilitude for participants.

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Appendices

Appendix A

Transcription Conventions

The transcription conventions utilized were developed by Jefferson (2004) and adapted for use within the context of this research study.

Convention	Use
[text]	Indicates the start and end points of overlapping speech.
=	Indicates the break and subsequent continuation of a single utterance.
(# of seconds)	A number in parentheses indicates the time, in seconds, of a pause in speech.
(.)	A brief pause, usually less than 0.2 seconds.
([2.5])	Denotes that the transcriber was unable to understand what was said. The length of the parenthesized space reflects the length of the unretrieved talk.
. or down arrow	Indicates falling pitch or intonation.
? or ↑	Indicates rising pitch or intonation.
↓	Indicates falling pitch or intonation.
→	Denotes a particular sentence of interest to the researcher
,	Indicates a temporary rise or fall in intonation.
-	Indicates an abrupt halt or interruption in utterance.
>text<	Indicates that the enclosed speech was delivered more rapidly than usual for the speaker.

<text>	Indicates that the enclosed speech was delivered more slowly than usual for the speaker.
°text°	Indicates whisper, reduced volume, or quiet speech.
ALL CAPS	Indicates shouted or increased volume speech.
_____	Indicates the speaker is emphasizing or stressing the speech.
:::	Indicates prolongation of a sound.
(hhh)	Audible exhalation
(.hhh)	Audible inhalation
(text)	Speech which is unclear or in doubt in the transcript.
((text))	Double parentheses indicate comments or notes from the transcriber, e.g. about features of context or delivery or annotation of non-verbal activity.
[h]	Denotes that there was laughter within the talk
heh	Denotes laughter there was laughter within the talk
text	Denotes added emphasis on the text in the talk

Appendix B

Institutional Review Board Approval Letter

THE UNIVERSITY of TENNESSEE
KNOXVILLE
Office of Research & Engagement
INSTITUTIONAL REVIEW BOARD (IRB)

1534 White Ave.
Knoxville, TN 37996-1529
865-974-7697
fax 865-974-7400

March 2, 2015

Douglas W Canfield
UTK - Modern Foreign Languages & Lit
207C Humanities and Social Sciences
Building 1115 Volunteer Boulevard
Knoxville, TN 37996-0470

Re: UTK IRB-14-09414 B-XP
Study Title: The Discursive Construction of Language Learning in Multiuser Virtual Environments

Dear Mr. Canfield:

The Administrative Section of the UTK Institutional Review Board (IRB) reviewed your application to **continue** your previously approved project, referenced above. It has determined that your application is eligible for **expedited** review under 45 CFR 46.110(b)(1). The IRB reviewed your renewal application and determined that it does comply with proper consideration for the rights and welfare of human subjects and the regulatory requirements for the protection of human subjects. Therefore, this letter constitutes approval of your renewal application. Approval of this study will be valid from February 18, 2015 to February 17, 2016.

In the event that subjects are to be recruited using solicitation materials, such as brochures, posters, web-based advertisements, etc., these materials must receive prior approval of the IRB. Any revisions in the approved application must also be submitted to and approved by the IRB prior to implementation. In addition, you are responsible for reporting any unanticipated serious adverse events or other problems involving risks to subject or others in the manner required by the local IRB policy.

Finally, **re-approval** of your project is required by the IRB in accord with the conditions specified above. You may not continue the research study beyond the time or other limits specified unless you obtain prior written approval of the IRB.

Sincerely,

Chair
UTK Institutional Review Board

Vita

Douglas W. Canfield was born and grew up in Northern Utah. He earned a Bachelor of Arts in French and in History in 1992 from Weber State University in Ogden, UT. In 1995, he completed his Master's Degree with a concentration in Medieval French at the University of Utah. An accidental language technologist, he has directed language resource centers and international media centers at a number of universities and has been a content specialist, curriculum writer and ESL teacher with universities in brick-and mortar classrooms and also with private firms in *Second Life*. He currently directs the Language Resource Center at the University of Tennessee in Knoxville. Upon acceptance of this dissertation, Doug will have graduated with a Ph.D. in Educational Psychology and Research with a concentration in Instructional Technology from the University of Tennessee at Knoxville in 2015.