

METAPHORS FROM QUANTUM PHYSICS: ENHANCING ECOLOGICAL L2 SOCIAL
NETWORKING IN AN INTERMEDIATE ITALIAN COURSE

by

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“The transgression of disciplinary boundaries is a prerequisite for scientific advance” – Pierre Bourdieu

LIST OF TERMINOLOGY

Terminology

CALL: Computer Assisted Language Learning

CT: Complexity/Chaos Theory

DST: Dynamic Systems Theory

FB: Facebook

L2: Second Language

‘Like’: Button on FB that allows interlocutors to show approval of multimodal threads.

SNS: Social Networking Site

SLA: Second Language Acquisition

SLD: Second Language Development

‘Tag’: Button on FB that allows interlocutors to mark multimodal features or shared items.

TELD: Technology Enhanced Language Development

Thread: Consolidated digital platform for multiple contributors.

Wiki-like: Collective writing of a singular document, e.g.: contributors to a Google document.

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ABSTRACT

This dissertation discusses a case study of the pedagogical uses of social media as part of a larger ecological framework for language learning and critical discourse studies that was conducted during the spring 2014 semester of intermediate Italian. It was organized to balance postmodern theories with metaphors drawn from quantum physics. Every aspect of the course, and each interaction outside of class (including multimodal online resources), avoided the cause-and-effect approach often found in task-based and computer assisted language learning. Second language learners adapted to the paradoxical engagement of language and identity as simultaneous *process* and *product*, while reducing neither to fiction. The study broadly adapted a socio-cognitive-ecological approach (Larsen-Freeman, 2012) to shift the focus from differences in technology or method to the participants' perception of human possibilities through the affordances of technology. Participants were trained to navigate dynamic levels of ambiguity and possibilities of meaning while facing the static requirement by the academic institution to pass quizzes and exams, and complete homework assignments on the basis of a 'correct' answer. Recent studies in quantum physics and consciousness provided an elegant model that allows for the coexistence of seeming opposites. Agency, which was central to the participants' experience of discovery and play with variants within the elusive 'standard', allowed for conformity to, or deviation from, the collective. Data collection and analysis adapted 'system analysis' so that interpretation was within a more contextualized understanding of the emergence of complex systems resulting from self-organization, self-selection and co-evolutionary symbiosis. Adaptive teaching was used to meet the needs of the participants by beginning with outcomes and then working backward to explore why certain approaches, tools and tasks were, or were not, effective. The insights gleaned from the study demonstrate that higher levels of critical L2

discursive analysis enhanced by human-machine interactions do not require relegation to upper level division SLA courses. The participants' self-selected samples of their work reveal a story that is complex, dynamic and very human, told through the voices of those most often ignored in the processes of language planning, assessment and curriculum development.

CHAPTER 1: INTRODUCTION

1.1. The Point of this Study

I remember the night that I first read the short tale by Hans Christian Andersen, *The Emperor's New Clothes*. I was very young when I discovered it in an illustrated book in my father's library in Italy. It immediately seemed highly amusing but I couldn't grasp, at such a young age, the many ways that it was a parable about common human behaviors and beliefs throughout history. This is how I remember the story:

An Emperor consumed with vanity and fashion hires two designers because of their unique promise, which appeals to deeper levels of the Emperor's vanity. They assure him that they will design the finest clothes that are made from a peculiar fabric that is invisible to unworthy imbeciles. Everyone employed by the Emperor begins to pretend that they are capable of seeing the clothing for fear of being perceived as ignorant. Due to the fact that there were, after all, no clothes, the Emperor finds himself required to also feign admiration for the new attire. The day arrives for the swindlers to dress the Emperor and they mimic every step of the application process of each piece of clothing. While walking in an elegant procession, the common people quickly learn to play along with the deception, each motivated by an interior fear of being perceived as 'hopelessly stupid'. Perception, not fact, became the dominant assessment for value. However, one category of citizen was overlooked, including the potential damage that s/he may bring to the now kingdom-wide permeated deception. A child, unaware of the pretense, yells out that the Emperor is naked. The people in the kingdom needed this one admission of fact to finally feel free enough to agree to their own self-deception. Although the Emperor now has good reason to believe that he has been swindled and humiliated, he nevertheless continues the procession.

The tale probably rings familiar to the reader, even to those encountering the plot for the first time, because we have all – to one degree or another – experienced levels of social and self-deception that were eventually exposed by the innocence of someone not included in the illusion. In any discipline the invisible clothes may take the form of a philosophy, assumptions related to epistemology, or perhaps an unquestioned dominant theory or method that create intellectually challenging dilemmas. A very current example is the unquestioned – and rather common – statement that “There is no absolute truth”, in itself a highly dogmatic and unifying dogma. While not arguing for “absolute truth”, I do think that it is part of mental health to stop and question such dogmatic stances that, on the surface, seem liberating, but when compared to the multicultural beliefs, with which we rub shoulders every day, reflect a very historically-situated Western myopia and specific outlook on life. As the ‘invisible clothes’ gain acceptance by the majority, it is easy to cease challenging the ontological foundations of the fashionable trend, particularly if the individual is concerned that s/he may appear “hopelessly stupid” in the eyes of the ‘believers’. History provides us with precedents of such magnitude that we could see them as omens of the damage that human nature is capable of doing at its own expense. It is not merely a historical issue. It continues even today. Every age faces the demands of dogma that distort our view of the world and lead to all sorts of troublesome conclusions. Once upon a time it was the claim that the Earth was flat. 500 years ago it was the demands of geocentricism. In the twentieth century it was mechanistic determinism. In each case something has happened that silenced old rhetoric and paved the way for beneficial changes in thinking. History also teaches us that it is not uncommon for new paradigms to coincide with new technologies. Coinciding with the aforementioned paradigm shift is the Web 2.0, generally, and the revolution we call electronic social networking; Twitter, Facebook, and so on, specifically. Access to such technology makes

it very easy, and strangely, very hard, for dominant powers to shift public opinion. A tool for liberation here may be a tool for social manipulation ‘there’, although often it is both depending on the function. Related to SLA, is CALL research reinforcing certain metaphors that deserve to be challenged? The same could be asked of many other disciplines, such as Critical Discourse Analysis (CDA), and Queer and Gender Studies.

To bring all this together, I argue that recent trends in SLA have proposed metaphors related to – or in harmony with – ecology, to better help us understand language and identity within frameworks already made popular by postmodern thought. Specifically, Dynamic Systems Theory (DST) and Chaos/Complexity Theory (CCT) reinforce – and for positive reasons – the endless relativism already proposed by postmodern philosophies, such as performativity (often erroneously called a ‘theory’), with a resultant focus on the fluid relationship within the collective by which the illusion of individual ontology is sedimented while the referent is bracketed or always deferred. This approach applied to L2 pedagogy and L2 use has proven helpful in its challenge to previous dogmas or ‘standards’ and simultaneously problematic in its application to teaching, learning and assessing (Canagarajah, 2006), as well as in matters of social justice. The deconstruction of language and identity ad infinitum serves the useful purpose of exposing dominant discourses controlled by powers that determine what is, and is not, communicable and authentic.

However, we must also deal with the collateral damage of an approach that strictly focuses on the relationships of the collective, primarily the risk of silencing the voice of the individual who senses her identity and language as part of her truest self. Performativity, DST and CCT, all under the larger metaphor of Language Ecology (henceforth, ‘ecology’), while providing academia and social justice advocates the necessary tools to challenge many

oppressive 'us versus them' dichotomies, nevertheless, in isolation, do not seem to represent the fuller and broader paradoxical experience that we, as humans, encounter related to language and identity as simultaneous process and product, as social construct and authentic. Having reduced language and identity to socially-convenient fictions of "strategic essentialism" (Bucholtz, 2003, p. 401), the individual person - and her language - while now part of something we all 'do', nevertheless lose ontological power. Consequently, in order to establish an intellectual (and political) foundation for her identity and language, she is required to argue her social construction from a position of *ex nihilo*, which leaves her open to being appropriated by dominant powers who disregard the value of her agency to violate, if necessary, the collective. For this study, ecology is considered a broad umbrella framework that encompasses DST, CCT, and performativity because, although the focus of each theoretical 'sub-system' differs, the sociopolitical and academic results are rather quite similar. In many ways, while trying to correct the imbalances of modernist thought, postmodernism went so far in the opposite direction that it created new dogmatic extremes (such as the example above). This dissertation, then, while not rejecting these theories, seeks to provide some balance in our discussions on language and identity. In other words, although I may believe that "there is no absolute truth", to impose such a belief on people from cultures, religions, countries and histories that do not conform to postmodern thought would be, after all, a profound act of intellectual colonialism and imperialism. The question, then, remains as to whether or not my mind is free enough to step outside of my own postmodern indoctrination and see the world through the lens of the 'Other'. Furthermore, I ask, if such an experience of multilingualism and multiculturalism were truly part of our approaches to SLA, would there even be such a thing as 'Other'? Finally, what can we do to counter the extremes with which we have become comfortable and that distance us from the

rest of the world who doesn't think like us? Something is missing in our beautiful postmodern metaphors.

Therefore, given that the L2 classroom has moved into online collaborative communities and that postmodern approaches to SLA have created artificial dichotomies, I will seek to answer the following questions:

1. Do metaphors from quantum physics balance ecological SLA theories and afford agents the paradoxical experience of language and identity as simultaneous *process* and *product*, while reducing neither to fiction?
2. Are higher levels of critical thinking achievable at an intermediate level via L2 discursive analysis enhanced by human-machine interactions beyond the classroom?
3. Is it possible for participants to navigate dynamic levels of ambiguity and possibilities of meaning while facing the static requirement by the academic institution to pass quizzes and exams, and complete homework assignments on the basis of a 'correct' answer?

I ask these questions because, after engaging L2 learners for many years – and being one myself – and particularly after analyzing the feedback from the current case study, I propose that what we are missing is the way that quantum physics models offer SLA a balancing metaphor that helps us better understand the dynamic, ecological and post-performative SLA experience beyond the classroom walls, as well as the paradoxical ontological empowerment that is necessary for any critical analysis of discourse (L1 and L2) and matters of social justice. From a practical perspective, the study uses electronic social networking as part of the broader SLA ecology of the collective and the individual. This approach seeks to reconcile the conflicting dichotomies caused by the previous paradigm shifts, such as competence and performance, as related to both language and identity. In a very broad sense, we find persistent metonymic terms

in SLA that tend to reinforce two polar opposite, and thus far, unreconciled, perspectives: the brain as a computer (input, uptake, processing, output, etc.) and the mind as a dynamic and complex ecology (dialogism, relationship, system, emergence, etc.).

The dissertation is informed by and informs extant theories and methods by reclaiming the role of paradox as a healthy aspect of the development of language and identity for second language learners and facilitators who are considered equals by virtue of how we interconnect beyond the constraints of divisions such as us/them, teacher/student, classroom/online/outside of classroom, literature/grammar/culture, dynamic/static, complex/simple, and performative/authentic. Therefore:

- Language ecology is used as a framework for showing us how interconnected, fluid, dynamic and emergent language and identity are (DST) and how seemingly chaotic events or features of language and identity are, upon analysis, truly complex and predictable (CCT). Building on this, some small features or events sometimes lead to catastrophic results. Equally, assumed ‘large’ experiences, variables or factors may have very little impact. In this sense, the development of language and identity are interpreted as non-linear and, sometimes, non-chronological.
- Social networking is part of the extended SLA landscape and part of a local and global ecology for the participants. This will be developed by dialoguing with other disciplines, and the participants, regarding what is most beneficial and problematic about this broadening of the SLA domains.
- Critical Discourse Studies (CDS) is one of the key approaches for developing higher levels of L2 use and analysis while also having a tangible impact in matters of social justice and awareness. Performativity is used to deconstruct essentialist notions of

both language and identity and destabilize assumed ontologies. CDS then helps us question performativity itself and our assumptions related to us. It retains even a self-skeptical attitude that is always open to further considerations. New insights from L2 sources have the power to constantly correct our interpretation of what is ‘right’ or ‘wrong’, be it grammar, vocabulary, culture, discourse, ethics, politics, etc.

- Quantum physics, then, brings back all that is lost in the above approaches, stabilizes the deconstruction process, allows us to have snapshots of fluid and dynamic shifting systems, brings unity out of complexity and provides a space for multiple probabilities to collapse into one authentic and identifiable language and identity (product), all while not negating the opposite experience of process.

To summarize, this dissertation discusses a case study of the pedagogical uses of social media as part of a larger ecological framework for language learning and critical discourse studies that was conducted during the spring 2014 semester of intermediate Italian. It was organized to balance postmodern theories with metaphors drawn from quantum physics. Every aspect of the course, and each interaction outside of class (including multimodal online resources), avoided the cause-and-effect approach often found in task-based and computer assisted language learning. Second language learners adapted to the paradoxical engagement of language and identity as simultaneous *process* and *product*, while reducing neither to fiction. The study broadly adapted a socio-cognitive-ecological approach (Larsen-Freeman, 2012) to shift the focus from differences in technology or method to the participants’ perception of human possibilities through the affordances of technology. Participants were trained to navigate dynamic levels of ambiguity and possibilities of meaning while facing the static requirement by the academic institution to pass quizzes and exams, and complete homework assignments on the

basis of a ‘correct’ answer. Recent studies in quantum physics and consciousness provided an elegant model that allows for the coexistence of seeming opposites. Agency, which was central to the participants’ experience of discovery and play with variants within the elusive ‘standard’, allowed for conformity to, or deviation from, the collective. Data collection and analysis adapted ‘system analysis’ so that interpretation was within a more contextualized understanding of the emergence of complex systems resulting from self-organization, self-selection and co-evolutionary symbiosis. In order to adapt consistently to the needs of the participants, adaptive teaching impacted the data analysis by beginning with outcomes and then working backward to explore why certain approaches, tools and tasks were, or were not, effective. The insights gleaned from the study demonstrate that higher levels of critical L2 discursive analysis enhanced by human-machine interactions do not require relegation to upper level division SLA courses. The participants’ self-selected samples of their work reveal a story that is complex, dynamic and very human, told through the voices of those most often ignored in the processes of language planning, assessment and curriculum development. The dissertation opens a dialogue with other disciplines and welcomes ideas and insights that may continue to allow “language scientists to envision new concepts and venues for research that may assist the field in transitioning to a new conceptualization, and provide a clear direction for the next decade” (Onnis and Spivey, 2012, p. 125).

1.2. The Blinding Effect of Metaphors and Metonymies

In proposing a new metaphor that is not intended to replace previous metaphors, but rather, integrate and harmonize with them, a crucial first step is to understand the current dominant metaphors and their impact on our sense of perception. Paradigms and metaphors impact the way that we think, the way we see the world, self-esteem and our related capacity to

achieve. New paradigms and new metaphors challenge the limits and validity of the old while technology and metonymies, for better or worse, facilitate this shift. In fact, metaphor and metonymy influence one another (Charteris-Black, 2004) and establish both theory and methodology. Although the discipline of SLA has sought ways to move past the limitations of linear views of L2 ‘acquisition’, the dominant metaphor continues to resurface in courses related to this discipline and is reinforced through metonymic terms such as ‘input’, ‘uptake’, ‘processing’, etc. In a sense, we have not yet developed a vocabulary to discuss the paradigm shift and are at constant risk of allowing metonymic references to hinder the broader metaphors. This is also compounded by how continuous positive connotations establish the metaphor as ‘normative’ or literal (Halliday, 1978; Fairclough, 1989), exemplified in the way curricula are designed, the order in which vocabulary, grammar and culture are presented, as if there were a ‘fixed’ linear way in which all ‘brains’ apprehend and categorize meaning. Such metaphors even guide our lives and limit our sense of personal, professional and academic potential while, ironically, being radically ignored (Lakoff and Johnson, 1980). The metaphors that tell us how we think and are, and consequently, how we are able to learn and organize knowledge, eventually became a “staged, step-by-step organization of genre” (Eggins, 2004, p. 59). Once the system ‘makes sense’, there is no further need to revisit it. The Emperor’s New Clothes are ‘real’ to someone (even if only to the Emperor), and must not be doubted by those not in power who have not earned the privilege of equal intellectual status. Such is the essence of bigotry and its resultant oppression. The metaphor becomes assumed ‘truth’. Even the fields of Science and Semiotics – although different in emphasis, approach and purpose – tend to assume a certain ‘order’ to logic and patterns of meaning construction that are generalizable to all people, anywhere, at all times. However, science is discovering that the quantum mind does not always

follow the linear triadic semiotic path suggested by Peirce (Seshan, 2013)¹. The very idea that memories are always only related to past events is as challenged as the notion that consciousness follows perception. New evidence points to the possibility of a human mind functioning beyond the previously-supposed limitations of the time-space continuum. Intelligence agencies that depend on cryptology are beginning to see beneficial uses for quantum entanglement and psychologists are also beginning to apply principles from QP to help patients overcome trauma and addiction by physically altering the neuropath ways of the brain via acts of will. Science is at a new place in history, finally recognizing the dilemma of separating the observer from the observed and challenging the previous assumptions related to the ‘objectivity’ of the scientific method. If the NSA, DOD, FBI, and the CIA are paying attention to this huge paradigm shift and its implications for intelligence and analysis, could language educators also benefit from reshaping the design, delivery and assessment of language courses that position human potential at the center instead of static and decontextualized academic achievements? What if we could envisage a course where passing the quizzes and exams were ‘not that important’ when compared to the ecological transformation of communities, of individuals, of worldviews and of the ‘Other’? What if a language course carried with it the potential for exposing the mind to dynamic and static ‘realities’ of multiculturalism and multilingualism instead of gravitating to one extreme? What if language learners could learn to take initiative in their own development and understanding of what – at first – seems so foreign?

In the discipline of SLA, we are finding that the contextualized L2 experience is not that unique or different from most experiences in everyday life. Like most daily encounters with meanings, people, languages and identities, the human mind is already accustomed to – and

¹ Peirce’s lectures in logic, 1879-1884

rather comfortable with – the experience of “a non-linear process of phases and transformations” (van Lier, 2002, pp. 146), even if at first the mind feels overwhelmed by being granted such freedom of exploration. This is why an ecologically-oriented language facilitator [or a truly effective multicultural and multilingual trainer for international peace keepers] can no longer see language ‘learning’ and culture as the achievement of a solid and singular goal. At the same time we can also no longer merely see L2 acquisition as only dynamic and complex, especially when the mind is prone to ‘collapsing’ meaning and stabilizing apparent chaos. What we can say is that SLA (or rather, Second Language Development/SLD) is ecological, interconnected, adaptive, dynamic and static, complex and simple, simultaneously literal and virtual, and, consequently, contradictory and paradoxical. It doesn’t always ‘make sense’, but then again, neither does our human world. It certainly defies and resists easy quantification due to the ever-changing relationship between variables on different timescales and different starting points for data collection and analysis, not to mention the various epistemological and ontological assumptions that guide – and often limit – Second Language Acquisition (SLA) studies. That is not the same as saying that it has no significant impact, as the data will reveal.

For this reason, this dissertation steps away from the trend to merely propose a new theory or innovative method at the expense of extant ones. It does not propose mere clever pedagogy or life-changing technology. Instead of reinventing the wheel or rejecting the past, the dissertation tells a story that reveals what has been largely forgotten about the human learning experience: the human. It is a story of real university students who registered for an intermediate Italian course only to discover that they had signed up for an adventure of self-discovery, self-empowerment, and an eye-opening journey through the turbulent, dialogic, complex and dynamic worlds of language and identity. It’s a story about students who went beyond grammar,

culture and vocabulary to engage in their own version of critical discourse analysis. It's about a second or third language being used as a tool for social justice or global improvement projects. It's about seeing the world through the eyes of the 'Other' and, to some degree, dismantling such dichotomies. It's how social networking became a platform and central hub for expanding knowledge, deepening critical thinking, and discussing divergent views while also looking at the world from dialogic perspectives. The story is complex, but not complicated. It is dynamic but not chaotic. It is paradoxical but not confusing. The story is very human and it is told through the voices of those most often ignored in the processes of language planning, assessment and curriculum development. The dissertation tells this story via qualitative research related to a case study that bypasses the popular emphasis on causation and linear L2 acquisition in favor of more fluid approaches to language and identity development from the perspective of the students. It is a story about awareness and consciousness, of static and dynamic 'handling' of SLA. The story is framed within the premise that "if quantum consciousness plays a role in the organization of time, space and the laws of the universe, it certainly can inform our understanding of the complexity of dynamic and static experiences of language and identity" (Renigar, 2014)². Much like the ups and downs of any good story, it is a turbulent and exciting journey through apparent chaos to complexity that balances paradoxical dynamic and static states:

"Complexity theory deals with the study of complex, dynamic, non-linear, self-organizing, open, emergent, sometimes chaotic, and adaptive systems (Larsen-Freeman, 1997)" (as cited in Larsen-Freeman and Cameron, 2008a, p. 4).

We are, after all, adaptive systems on the inside as much as we are on the outside. Each classroom is a human-machine series of uniquely interconnected and interrelated systems

² Renigar (2014). "Second Language Social Networking and Quantum Consciousness", presented at the 'Toward a Science of Consciousness' Conference, Tucson, AZ, 2014.

affected by so many variables that the possibilities of ‘what affects what’ become dizzying. Marek and Wu (2013, p. 12) created a useful chart that illustrates the complexity and dynamism of such a contemporary human-machine experience. Point to any variable on the chart, to any ‘problem’ or solution and it doesn’t become too difficult to see how interconnected multiple variables are on different timescales of chronology, importance or impact. The suggestion by Marek and Wu that technology may contribute to part of the solution is not mere theory:

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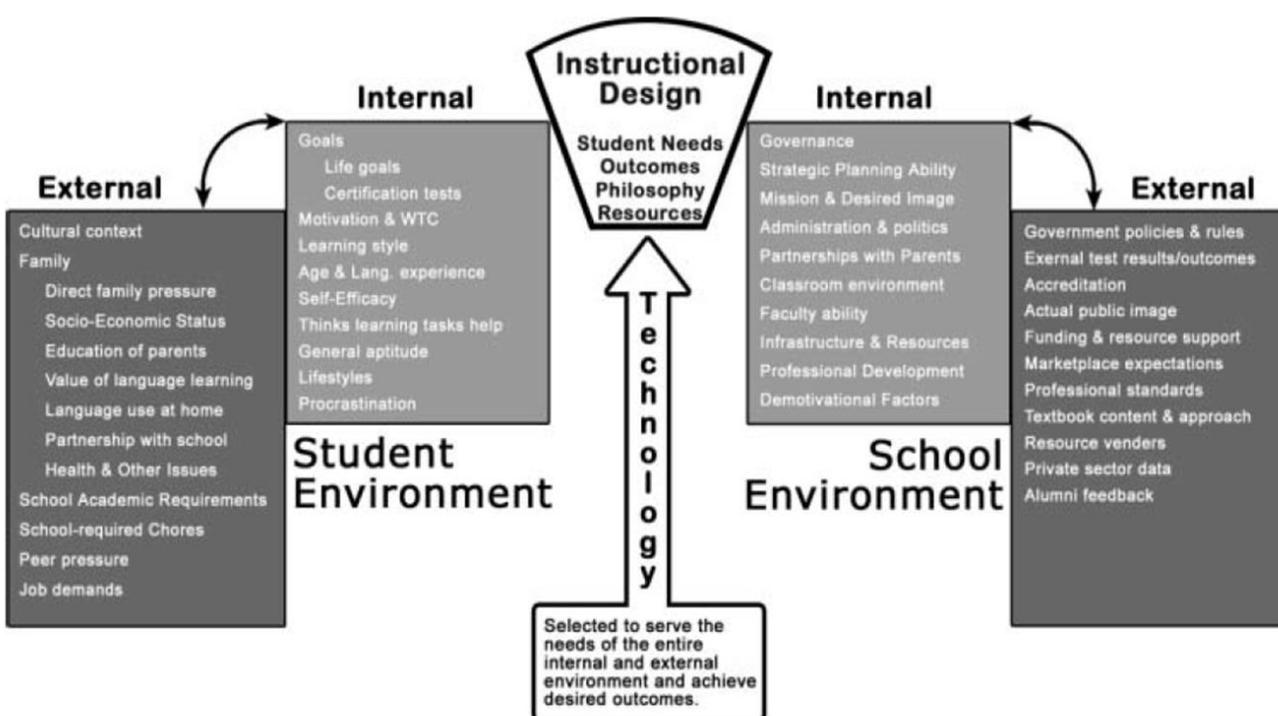


Figure 3. Final CALL ecology model (CEM).

Figure 1: (listed as Figure 3 in original text) Final CALL Ecology Model

In line with van Lier (2004) Marek and Wu provide the reader with practical contrasts between traditional and more ecological approaches to human dilemmas (p. 13), which must, of necessity

in the 21st century, imply a human-machine symbiosis:

Table 1. Ecology variables and responses.

Ecology variable	Uninformed response	Informed response
An EFL student's grandparent goes into the hospital, meaning that the student's presence at the hospital is required.	Student is counted absent from class, affecting grade.	Student is given excused absence and special help to catch up.
The student has insufficient time to study for a test due to time spent at the hospital.	Test cannot be rescheduled or taken late.	Student is allowed to take the test late, after reasonable time for study.
The student performs poorly on a test and receives a low grade.	Teacher has little sympathy for poor performance.	Teacher counsels and provides strategies for effective preparation for EFL tests.
The student's motivation drops.	Teacher uses traditional lecture/memorization approach that depresses motivation.	Teacher uses student-centered active learning EFL methodologies that elevate motivation, including the strategic use of CALL.
The student's actual skill does not keep pace with others in the class.	Teacher blames student for not studying harder.	Teacher counsels and provides remedial strategies, including remedial use of extra CALL.
The student takes the Test of English as a Foreign Language (TOEFL).	Student is not well prepared, performs poorly, and does not graduate.	Student is well prepared, performs satisfactorily and graduates.
Student seeks employment opportunities after graduation.	Less competitive.	More competitive.

Figure 2: Ecology Variables and Responses

Although such research points to the benefits of using technology for L2 pedagogical purposes, only recently have we enjoyed the benefits of technological resources that help us

better understand how the brain – and the quantum mind – ‘work’, what our thoughts really ‘do’ to us, what we do to our thoughts, and how the physical and the abstract energy of the brain dialogue to co-create each other (see <http://quantum-mind.co.uk/>). The idea that such internal mechanisms could be microcosms of how the world – and perhaps the universe – interacts on a larger scale is one central assumption of this dissertation. We now have a better understanding of the plasticity of the brain, how even addictions can be reversed, desires altered, and new identities forged by sheer acts of will and altered perceptions. Such concepts often stir up images of MRI imaging, N-400 spikes, eye-tracking experiments, and so forth. To a certain extent I am validating the neurosciences and other sciences that inform the psycholinguistic side of SLA. However, there is also overlooked evidence showing how the ‘quantum’ mind functions that comes from the social world of language use and, specifically, from the blending of L2 use and L2 pedagogy through technology. Respecting these findings, Technology Enhanced Language Development (‘TELD’, Renigar, Dissertation Proposal, 2014) moves beyond the acronym ‘CALL’ (Computer Assisted Language Learning) for several reasons:

1. Computers are no longer the only technology under discussion in educational circles.
2. Many language learners do not perceive ‘assistance’ as a unidirectional path. The human intervention often assists the computer in learning, growing, expanding in effectiveness, etc. In fact, many language learners are not looking for assistance as much as dialogue.
3. The idea of ‘language’ is a metonym of a static metaphor and, for now, a rather useful one. However, I resist the idea that such language is ever completely ‘learned’, as if there is an end point of achievement. For this reason, I prefer the use of the word ‘development’, an idea originally gleaned from Kramsch (2002).

Few socially-linked technologies evidence how the mind ‘sees’ and engages information like social networking sites (SNSs). The symbiosis of technology and human need never ceases to alter the trajectory of technological evolution and, perhaps, is now part of human evolution. Among the popular social networking sites, one has established a legacy worthy of academic consideration. From its inception in 2004, Facebook (FB) has been in a constant flux of change to adapt, as quickly as possible, to the demands of a user community that desires a tool that best matches how the mind plays with knowledge, relationships, information and other technologies; blurring the chronological, academic, professional and personal barriers in the process. Could engagement online teach us something more about how this generation ‘learns’?

The current study, however, does not rise from a vacuum or a mere curiosity to explore pedagogical uses of SNSs. The above-mentioned dilemmas and questions inspired a research-intensive pilot study (Renigar, 2013) that incorporated L2 pedagogical uses of FB beyond the classroom as part of a larger ecological view of language learning. Technology is ubiquitous in both personal and academic arenas (Smith et al., 2009) with SNSs being central to conversation, debate and critical thinking among geographically dispersed students (Robbins-Bell, 2008). Today’s distance between students and teachers is less about physical and geographical separation than about psychological and communicative perception (Deng and Yuen, 2009). Carefully integrated L2 uses of FB promote problem-solving, debate, and cognitive skills (De Villiers, 2010) in ways that surpass traditional methods, particularly because of how they afford the coexistence of the subjective with the objective, the linear with the non-linear, and chronology with multidimensional timescales, that is, a quantum view to the mind and how this understanding impacts the way we facilitate foreign language development. If we are to make progress, we cannot keep suggesting theories, methods and technologies in isolation, and we

certainly cannot do so when these have served to only maintain a status quo in dire need of improvement. New scientific visualizations for the language sciences (Onnis and Spivey, 2012) need to be explored, not ignored. They may be questioned, but should not be cause for alarm. The aim of the aforementioned pilot study was to contribute qualitative and quantitative data that informs this paradigm shift. It was a form of introductory ethnography, entering within a community of practice to observe, engage, explore and develop hypotheses rooted in both experience and participant feedback. Several observations quickly took center stage, such as the growing inability to separate humanity from technology or social networking from non-linear, dynamic and complex semiosis. This means that SNSs can be considered a neutral tool until their use becomes evident. For example, we could look at how SNSs played a central role in the recent protests and bloodshed in Egypt and why, in some parts of the world, specific SNSs are banned due to how they are deemed dangerous or easily appropriated and used by a dominant class. Just within the last few weeks of September and October 2014, such fears are legitimized even more by current news sources that point to the power of social media to draw converts to ISIS, spread propaganda (US, European, Middle Eastern, and more) and become the weapon of both those who wish harm and those who seek peace. I am often reminded at international conferences that the Western trend of having several computer devices per home is not as common in certain parts of the world where owning one computer would be considered a privilege of the elite, who also often dominate the political votes via social networking sites. The idea, then, of conducting a study on the impact of a larger metaphor (QP) to balance extant postmodern metaphors via a course that is extended through FB, carries with it a strong sense of responsibility to respect the potential that the tools hold. For good or bad, for healing or harm, this generation identifies with technology as an extension of the 'self'. This dissertation shows that, in spite of the dangers, this

human/machine hybridity favors certain positive outcomes, at least in the ecology in which it was used. In fact, there were some noteworthy differences between the results of the pilot study and the current study, demonstrating how differently distinct ecologies may react to similar pedagogical approaches and technologies. Analyses conducted on the results of the pilot study showed that FB's flexibility and inherent dialogism positively impact intellectual and social understanding. Participants claimed FB was helpful for peer-to-peer and teacher-to-student collaboration, and that it was a positive platform that allowed for language play with reduced fear of making mistakes. FB use resulted in higher levels of critical awareness of L2 use and its connection to foreign and domestic issues. It made learning easier because it is always 'one convenient click away' from the digital online semiotic landscapes most frequented by the participants (a concept that is challenged in the current study). When engaged with others on FB, participants claim to have used more L2 than required, with improvements even in the quality of L2 use (again, this will be challenged in the current study).

The pilot study strongly suggested that the observation of, engagement with, and imitation of, many varieties of the L2, expand our opportunities for L2 socialization. The study confirmed what Ellis and Larsen-Freeman (2006, p. 580) had already suggested, and that is that the artificial dichotomies in the disciplines related to SLA are mere illusions. The human experience embraces the whole and not merely one side of SLA:



Figure 1: Complementary pairs in Applied Linguistics

Figure 3: (listed as Figure 1 in original text) Complementary Pairs in Applied Linguistics

Considering, then, that language ecology and technology are as inseparable (van Lier, 2004) as ‘conflicting’ theories and methods, this dissertation allows hypotheses to build from the gathered ethnographic data in order to implement in the new study what previous participants have found to be most useful, meaningful and life-changing. Of particular importance to this study are the findings that indicate that SNSs, such as FB, may be ideal as central hubs for multimodal sources that facilitate semiosis. However, by virtue of the theoretical frameworks that guide this dissertation, I resist the inclination to focus exclusively on one technology,

method or methodology in isolation as ‘the key’ to SLA success. The case study will also challenge some of the researcher’s assumptions that guided the quantitative and qualitative analyses of the pilot study. While telling a story, this dissertation does not include a ‘The End’, but rather welcomes feedback from other researchers, language learners, teachers and other disciplines in order to continually improve – together – a form of education that leaves a positive mark on the lives of those who engage it and that goes beyond teaching/learning a topic to positively impacting the individual and the world for the better.

It is no surprise when conference attendees approach me to say that my ideas seem too polemic for language learning and teaching because of the potential for confusion that they assume will be the students’ experience, an unresolvable tension between the static and the dynamic, what Bernstein (1983) coined ‘the Cartesian anxiety’. Per Varela et al., 1991, p. 141 (cited by Larsen-Freeman and Cameron, 2008a, p. 6),

“This feeling of anxiety arises from the craving for an absolute ground. When this craving cannot be satisfied, the only possibility seems to be nihilism or anarchy. The search for a ground can take many forms, but given the basic logic of representationism, the tendency is to search either for an hour around in the world or inner ground in the mind. By treating mind and world as opposed subjective and objective poles, the Cartesian anxiety oscillates endlessly between the two in search of a ground”.

Larsen-Freeman and Cameron (2008a) challenge extant SLA dogmas but also introduce some ideas that, if taken to an extreme (which they clearly do not do), equally run the risk of merely replacing the old dogmas with a new one. They question the stability of the idea of a unitary second language and, like Canagarajah (2006), the notion of language itself. They reject a static view of acquisition, as if it were an endpoint of successful knowledge. We have seen the

benefits of such a performative view of language and will now better see how these tie into DST and CCT and all integrate into the broader metaphor of language ecology, which is balanced by exploring its currently unexplored side. As part of the delivery of the course, and in order to avoid gravitating to theoretical and pedagogical extremes, I had to first consider a series of crucial ‘What if?’ questions that I had been considering for many years, but that became particularly relevant after completing the pilot study and reading the feedback from the participants. The most relevant questions are as follows:

- “What if dichotomies that have been axiomatic in certain linguistic theories, such as the one between performance and competence, obscure insights into the nature of language and its learning rather than facilitate them?”
- “What if applied linguistics should be seeking to explain how language learners increase their participation in a second language community rather than, or in addition to, how they acquire the language of the community?”
- “What if learning another language is a matter not only of learning conventions, but also innovation, of creation as much as or more than reproduction? It would follow that teaching should not be characterized as helping students develop the same mental model of language that the teacher possesses, even if this were possible, because such a view would encourage the teaching of conformity to uniformity”
- “What if language learning tasks are not viewed as static ‘frames’, but rather more variably, evolving through use by individuals (Coughlan and Duff, 1994)? Furthermore, what if tasks are seen, not as providing input, which then migrates piecemeal to inside the learners head, but instead as providing affordances (van Lier, 2000)?” (Larsen-Freeman and Cameron, 2008a, pp. 9-11).

1.3. Purpose of the Study: Balance

One of the purposes, then, of the study is to foster collaboration in the resolutions of self-imposed limitations that we have created within SLA. I seek to open a dialogue as part of an already growing Conversation regarding the role of consciousness in ontology, education and social justice. It is a tall order, and a goal that must be achieved together as we move beyond talk of individual brains (and brain-as-computer metaphors) to consider broader, more dialogic interpretations of the ‘mind’: “What Einstein said about mind, in the absence of a theory of consciousness that, ‘you cannot solve a problem with the mind that created it’, may now be said in the light of Husain’s theory of consciousness that, ‘you can solve a problem only with the mind that created it.’” (Seshan, 2013, p. 311). Our philosophies have gone so far as to cause a paralyzing skepticism. When we do not seek change, it is because we no longer believe that there is fundamentally anything ‘real’ or ‘essential’ to change. This could apply to language as much as to identity. In the performative sense (explored in the next chapter), it is part of a game, and consequently, ‘fair game’ for powers of oppression and manipulation. Part of the path of emancipation is recognizing these philosophies, naming them, respecting their sociopolitical and academic roles, and then, finally, having the courage to move past them.

As we will explore in chapter two, one of the dilemmas resulting from extreme forms of postmodern L2 pedagogy is a relegation of all language (and identity) to fiction. The fundamental claim by Butler (1997) and Miller (2011) is that there is no underlying identity that is expressed via language and, consequently, there is no underlying ‘real’ language that is expressed via use. For now, as an introduction to these concepts, we should recognize the impact that this has on teaching, learning and assessing, to only mention three aspects of SLA, is an increasing problematization of L2 pedagogy itself (Canagarajah, 2006) and a foreseeable

disempowerment of the very concepts of language and identity and their interconnectivity. Such extremes in postmodern thought are now being challenged by advocates of social justice for the implied dismissal of all categorical binaries and human distinctions, resulting in sociopolitical chaos. If there is no such thing as ‘woman’ or ‘African American’ or ‘gay’ and ‘lesbian’, then there is nothing for which we should fight, no equality to be gained, no appreciating for the long history of civil rights and justice. Equally, if there is – ultimately – no such ‘thing’ as the L1, L2, L3, etc., then there is nothing – ultimately – to teach and learn that cannot be challenged and rejected outright as mere social construct. It boils down to the postmodern question of “Who are *you* to impose upon *me* an idea of what *your* L1 should look and sound like?” Although appearing to legitimize the linguistic underdog, such a perspective reinforces the ‘us-versus-them’ dichotomy and, in end, does not match the experience that language learners find when faced with a real need to know how to speak, read, write and understand the L2. Although such autonomous notions now permeate – in much gentler tones – the world of postmodern SLA (for example, see Canagarajah, 2006; Kramsch 2002; 2008; Kramsch and Whiteside, 2008), if left without a purpose or balance, the result of endless deconstruction is *just that*. Without the tools to reconstruct a sense of the authentic L2, there is very little for L2 learners to ‘authentically’ use or *be*. So we see at least two extremes. One side promotes language as process and the other side promotes language as product. The irony is not that one side is correct within such an ‘either-or’ dichotomy. The irony is that ‘both-and’ seem to have something valuable to contribute, but only one extreme has been allowed a voice (the postmodern thinker who denies the existence of any such thing as ‘real’) at the expense of those who, in the middle of such ambiguities, still can’t escape the ‘sense’ that there is something authentic about identity and language. The ‘and’ is tied

to the agency of the participants of the study and what they choose to do with the L2 that they develop and simultaneously acquire.

Language ecology, performativity ‘theory’, and DST/CCT all provide excellent and useful deconstructions of extant dogma, but then, in their own way bracket all sense of ‘the authentic’ outside of the realm of possibility. Infinite and incessant dialogism and endless semiosis took the place of knowledge, development replaced acquisition and, to use a popular metaphor, the journey replaced the destination, at least in importance. It takes only a moment of remembering our need to find a pharmacy, a restroom, an emergency room or a wedding venue to realize that the metaphor of ‘Life is a Journey’, while a wonderful concept, is simply not always reflective of our truest life experiences. None of this is, in itself too problematic, especially when we consider the value that such novel ideas have provided us regarding the complexity of the human experience. However, something was missing. These theoretical models were not able to explain the sense of self, consciousness, and individual awareness, transgression of the norm and that undeniable categorization of the authentic versus the fraudulent. This is why I sought a broader and more elegant model to balance these theoretical frameworks and discover a new way to welcome the coexistence of the subjective with the objective, the dynamic with the static, the process with the product, the social construct with the authentic.

Let’s first look at a few simple examples of the science behind the metaphor and then explore broader frameworks of consciousness as related to the way the mind perceives and makes sense of meaning in a universe that seems to be – on the most fundamental level – pure abstraction of possibilities. I must clarify that this study does not interpret quantum physics in spiritual or metaphysical ways as made popular by recent books and documentaries that ascribe

certain ‘magical powers’ to the human mind. For this reason, I use the term ‘metaphorical’ rather insistently. Nevertheless, the integration and expansion of extant metaphors to a TELD-based course does assume a certain level of impact – positive, negative, or both – as it seeks to expose the participants to such a dizzying – and yet controlled and managed – view of the world via L2 use, and facilitate their expression of positive potential in that world, so as to inspire informed action for social change, tolerance, understanding and social justice. This study assumes that SLA/SLD can be part of a larger experience of life development where languages and identities grow together. This may sound grandiose until the reader considers how the acquisition and development of an L2 as related to the ecology of the user carries the power for personal and social change beyond the academic goals of the course or the institution. Radicals, for good or bad, are not born. With all the negativity in the news lately, why not imagine that language learners can make a ‘radical’ positive difference in the world? This study seeks to maximize ways for such potential to be experienced by structuring the course around principles gleaned from quantum physics that reflect not only what the mind ‘does’, but what the mind ‘is’. Let’s consider the following:

1. ‘The collapse of the wave function’: Young’s famous double-slit experiment demonstrated that matter and energy display the characteristic of waves of mere potentialities, until measured or observed. At the moment of observation a particle that has previously existed in every possible position “collapses” to one definite point. Whereas postmodern pedagogy emphasizes the lack of permanence and the unlimited nature of probabilities in suspension (‘your truth/my truth’), quantum physics allows for such emphasis while also subjecting us to an intellectually transgressive paradox, that of ‘fact’ that is directly linked to the engagement of probabilities and the observation of the

individual. We could imagine meaning related to identity and language as thousands of soccer balls in suspension on a field. “Where is the ball?” (What does that mean? Who is she really?), one could ask and, from a ‘quantum’ perspective we could say that the ball is in no one specific location and it is simultaneously in thousands of probable locations. Equally, the meaning of the L2 could mean no one specific ‘thing’ (especially from a poststructuralist perspective) and could mean thousands of possible ‘things’ (thinking of meaning as a product to be discovered). ‘Her’ identity may be in question, much like her speech, and all the probabilities of what makes ‘her’ a woman can be negotiated. So far, all of this fits well with the prevalent postmodern trend to deny any such ‘thing’ as authentic. However, by borrowing metaphorical models from Young’s actual experiment, we could then grab a specific ball, in fact, the only ball on the field and play soccer. You and I have interacted with the probabilities and ‘collapsed the wave function’ of possibilities down to one ball. We agree on that. That this could be applied to language and identity is then clear in the sense that language learners can become accustomed to the multiple probabilities of meaning while also not relegating finalized meanings to fiction. They can play with language variants while also understanding that there is such a thing as a ‘standard’ (at least at this time and place in history), the knowledge of which will help them pass the exams. This is not that different than the transsexual who senses herself to be a woman, authentically so, even in the face of postmodern feminism that reminds her daily that there should be no such concept as true gender. The transsexual simply ignores the possibilities offered by gender and queer studies and embraces her truest sense of self.

2. Every possibility however improbable occurs sooner or later: Unobserved, every particle of matter and energy assumes all possible states of existence (Schrodinger's "cat").

Meaning through language use is no different. The lack of decidability related to language and identity may stay in suspension for some time. As students see how the same use of L2 changes in meaning depending on a vast repertoire of multimodal semiotic cues, they are less prone to decide immediately what 'something means' apart from careful observation of the broader semiotic context. The paradox inherent in the adaptation of this principle from quantum physics is the reversal of the previous principle. That is, while claiming that a particular and finite possibility occurs (language, identity, and meaning); it paradoxically leaves open the possibility of multiple other 'realities'. At the same time, unlike postmodern thought that rejects the concept of the 'real' or the authentic; it completely embraces these and does not reduce them to fiction. The L2 really is an L2 as much as the woman needs to fight for equality in a man's world, and the African American and Lesbian/Gay/Bisexual/Transsexual (LGBT) community much challenge racist and heterosexist Discourse. This is not out of synch with the idea that there are multiple variants of the L2 that are just as real, many ways to be a woman, the anthropological fact that we all descend from Africa or that sexuality may be more of a sliding scale than it is a fixed identity. If the human mind can grow comfortable with such level of paradox, then it is wide open to receive a much broader experience of language and identity.

3. Higher dimensionality: The L2 mind does not experience language and identity in the four dimensions of classical physics (height, breadth, depth and time), but rather we are part of at least "eleven space-time dimensions" (Hawking and Mlodinow, 2010, p. 117).

Not all that is meaningful is ‘logical’. What is argued in quantum physics is that ‘ultimate reality’ – the 11th Dimension – may not be how we actually experience our everyday lives, which, per this framework, are somewhat like holographic images of the ultimate. This is significant as a metaphorical application to the sense of longing that L2 learners have when it comes to meaning and authenticity. If what s/he, the student, longs for in her quest for improved SLA cannot be fully defined or understood by the instructor, perhaps s/he is appealing to a sense that language play and fluidity, complexity and dynamism are all fine and useful but not – ultimately – her/his main goal. S/he may be reading Muslim texts in the L2 because s/he really wants to understand what Islam says about a particular issue. S/he may be talking with others in the L2 about gender and sexuality because s/he is trying to understand the ongoing sexism in Italy and how countless voters allowed for the acceptability of the sexual crimes of Berlusconi. S/he may want to reach beyond the scope (dimension) of the instructor and take the SLA experience further than the instructor could imagine. Not all that falls outside of the category of SLA is unrelated to the SLA experience.

4. Quantum “entanglement”: Every particle has a twin, each replicating the exact condition of the other—however far apart. Yet such information is transmitted instantly. That all matter is thus entangled underscores a universal interconnectedness, metaphorically expressed through CALL but experienced literally by the human mind: “Both learning and processing of language in children and adults, at various putative ‘levels’ of representation, appear to be highly integrated and interdependent, and function simultaneously rather than sequentially. The fact that half of the field sees these findings as trivially true and the other half argues fiercely against them suggests to us that the

sciences of language are on the brink of a paradigm shift” (Onnis and Spivey, 2012, p. 124). The metaphorical application of this principle directly relates to the inherent dialogism of language. How far ‘out’ is SLA willing to go to connect language to politics, history, medicine, ethics, geography, anthropology, microbiology, gender studies, race, entertainment, media, social networking, popular culture, etc.? As language learners begin to see how interconnected all things ‘can be’, they may start to find connections that were previously unforeseen and, thus, learn to analyze discourses with a critical eye and deconstruct assumption with a keen awareness of the intertextuality and interdiscursivity inherent in the world itself and life’s daily moments. Imagine this eye-opening consciousness being brought to the SLA experience. It would certainly help, in and of itself, to dismantle essentialist notions of the cultures related to the L2 and contextualize all new materials in an ever-expanding and globalized world, of which L2 learners are already an integrated and interconnected part, particularly because of technology.

The broader purpose of this study, then, is to raise awareness on the part of the participants in dialogue with the researches in dialogue with the readers and with other researchers, and expand the dialogue to the greater Conversation on global consciousness studies, since this touches on the heart of what it means to be human: “The capacity of the human mind to explicitly formulate what is held implicitly in consciousness—to make meaning symbolically, through thinking, language, art, or movement—constitutes an essential dimension of human learning” (Jordi, 2011, p. 189). As we will see in the next section, new findings on consciousness can go as broad and as specific as we need them to be in order to make a positive difference in the lives of others. It is not merely a matter of theory. As Hameroff and Chopra (2012) explain, it is not religion, but

rather science that leads us to consider interconnectivity and even the idea of a “quantum soul” as plausible. This “implies consciousness in the brain as described by Orch OR [Orchestrated Objective Reduction], as well as nonlocal features including:

1. Interconnectedness via entanglement among living beings and the universe
2. Contact with cosmic wisdom/Platonic values embedded as quantum information in fundamental space-time geometry
3. Consciousness as patterns in nonlocal fractal/holographic-like space-time geometry, able to exist at deeper planes and scales independent of biology” (p. 91).

1.4. Significance of the Study: We are ‘Quantum’

Seshan (2013) well states that “One can say we are entering an Era of the Mind, vis-à-vis the ‘Decade of the Brain’, of the nineties (p. 305). When discussing such concepts as the application of quantum physics to SLA, there is always the ‘so what?’ question, as well as the doubt as to the relevance of the topic to truly meaningful human issues. For starters, this study is significant because it acknowledges the universal tendency to do the opposite of what educators would expect: We tend to not incorporate what we learn, and for good reason. It is not because of poor pedagogy. It is part of being human, an individual flaw that may be transcended via a broader experience of consciousness: “Evidence from neuroscience points us toward the physiology of mind–body integration. However, it also shows that we have a significant structural and functional tendency toward nonintegration and dissociation of thought from embodied experience. Disconnection of mind from body, like mind–body integration, is a physiological proclivity not just an ideological construct. Biology provides us with the capacities, and we make the choices, develop the inclinations, and harden the patterns psychologically, socially, and culturally” (Jordi, 2011, p. 182).

If the proposal of a new pedagogy or method were the simple answer, then we could herald in the grand solution to learning. This is not the case. What we could seek to better understand is what it means to be human. How we think. What we do with concepts and ideas. What we are. Who we are. We could then adapt our theories, methods and methodologies to the most current situation. Understanding this is crucial because the human mind is – in many ways – a quantum experience ready for *experiential* learning, which is different than the acquisition of a series of ‘facts’. As 21st century educators we have an unparalleled opportunity to bridge disciplines and bring to the SLA classroom the best that we now know about consciousness. As Jordi (2011) explains: “To embody experiential learning requires not that we give preference to the body as the site where any single ‘moment of learning’ happens but rather that we embody the human mind as one important dimension of the distinctively human learning process. To do this we must engage with the specific capacity of the human mind in its relation to human consciousness, contingent as both these processes are on the existence of our bodily held brains” (p. 190).

However, one of the huge questions of our time centers on whether consciousness is restricted to the individual mind, as previously supposed. If there is an aspect of consciousness that is not restricted to the individual, but is rather interconnected to greater human experiences, then it seems reasonable to explore the impact of such an approach as part of the theoretical setup of this study. It is more than processing, so even SLA could benefit from models that move us beyond metonymic concepts (input, uptake, output, etc.) associated with the metaphor of the brain-as-computer: As Hameroff and Chopra (2012) state, “increased information processing alone does not solve all problems regarding consciousness in the brain. Penrose Hameroff Orch

OR³ further proposes tubulins can be quantum bits, or ‘qubits’ in microtubule quantum computers, and that such quantum computations connect conscious brain functions to the most basic level of the universe. This opens the door to consciousness being nonlocal, and in some cases possibly untethered to body and brain” (p. 85).

The concept of ‘non-local’ can be applied metaphorically to encourage the participants to stop merely relying on inward insights and wisdom and experience, or it can be perceived in the way that online SNSs provide that non-local instant interconnectivity. A myopic and lonely view of life impacts our potential, since to see potential as residing primarily within is to miss the enormous power of a greater ‘consciousness’ that is not restricted to our finite views of self, the world or even language and identity, in short, non-local. Such a concept of interconnectivity – no longer a mere theory – is by no means free of controversy or interpretations in conflict. For example, and to honor the science behind the idea, Dr. Husain (2010; 2013) “envisioned that the gap between the macroscopic and the microscopic phenomena is bridgeable, and farsightedly postulated a universal field of quantum-consciousness on the space-time, as a novel field of information pervaded by quantum-conscious signals, which he termed *nourons*, capable of faster than light communication. This vision turned out to be the foundation of solving the mystery of non-locality, on one hand, and the mystery in cognition of how meaning arises in a conscious experience from a physical brain and how it is represented, on the other” (Seshan, 2013, p. 306).

Although one group sees interconnectivity as a web, instantaneously and constantly connecting seemingly disconnected events, another may see the speed by which we are connected to be the cause of the seeming interconnectivity. Regardless, for the purposes of this study, and specifically for the metaphorical applications of these principles from quantum

³ This reference to the “Orch OR” was a fascinating discovery regarding the physicality of consciousness and the collapsing of meaning, or unification of meaning, otherwise interpreted as an end-point to semiosis.

physics, the result of these conflicting study is a sense of being connected and of sharing – in ways that sometimes defy logical explanation – a greater understanding and consciousness than could not be achieved alone. What if participants learned to shuttle between inner and outer semiosis in relation to the L2 with a level of ease that mimicked the way their minds naturally function?

To cite a rather lengthy, but crucial, quote, Seshan (2013) explains why there may be more to semiosis and language than we assumed. He states that Dr. Husain

“propounded a novel field of epistemic faculty of consciousness emerging from an interaction between the potential neuropsychological field [...] and the universal field of quantum-consciousness, on the analogy of emergence of electromagnetic field by the interaction of magnetic field and electric field acting at right angles to each other [...] meaning that is generated by the integration of multisensory information, based on the postulate that each sensory modality carries its own specific semantic potential, spontaneously gets transduced into neurosonemic energy in a semantically coextensive fashion, resulting into a unified conscious experience, termed, a neurosonemic concept, essentially independent of a natural language. [...] Rationale for neurosonemic representation in a semantically coextensive fashion comes from Peirce’s (1931; p.58) definition of semiotics as, ‘any form of activity, conduct, or process that involves signs, including the production of meaning. It includes the study of how meaning is constructed and understood.’ Here the meaning and symbol are identical. The role of language is an ingenious means in the transition of alingual neurosonemic concepts into linguistic concepts for effective communication. However, when the invariant meaning in a neurosonemic concept is described linguistically in terms of one or more statements, the

meaning may undergo a relativistic effect in its purport, as observed by Quine (1969) in his study on ‘ontological relativity’” (p. 307).

Navigating such ambiguities together, all while paradoxically embracing the notion that “you can solve a problem only with the mind that created it” (Seshan, 2013, p. 311), requires a certain level of agency on a personal and collective level, in short, a redefinition of ‘mind’ as more than that of an individual. At the same time the study is thus also significant for its emphasis on agency and the power of the individual to conform and transgress the collective in her/his impact on the world. This applies to the reader who is free to reimagine the story as it is told and bring to light aspects of the qualitative data that were ignored or missed by the researcher. This applies to the researcher and participants whose auto ethnographies do not necessarily imply generalization but do afford insights that may be appropriated by others interested in exploring broader ecological approaches to second language development.

While not claiming to be ‘the way it should be done’, this approach leaves the door open for further dialogue among language facilitators and learners/users. Finally, the freedom of agency also applies to the participants whose documentation of their own experiences stands ‘as is’, unhindered by poststructuralist threats of outside appropriation and reinterpretation beyond the intention of the agent. In other words, regardless of who reads this story, everyone involved is at liberty to collaborate on its significance while also respecting the individual voices and opinions already present.

The study is significant because of the respect that it promotes of extant theories and methods. To further respect the agency of the participants, the course participants were encouraged to welcome any approach or perspective that was useful in the development of language and identity, even in ‘codes’ (languages) other than those assigned to the participants

upon joining the course (largely prohibited in the Communicative approaches). That is, although there is a prevalent trend to promote the exclusive use of the L2 within language learning contexts, this course does not consider alternative codes or even code-switching to be a hindrance to language development, but rather as an inevitable and welcome part of living in a globalized context. That specific example can be expanded to see that, rather than claim that modernist and postmodernist views (or theories and methods) of SLA are ‘wrong’, this study proposes that such past views of language and identity served their purpose very well; and yet this study also proposes that we must move beyond the dogma of modernism and postmodernism and be willing to follow the participants on *their* journey, in *their* way of developing who they are and how they communicate in another language, both in literal and virtual L2 semiotic landscapes.

The study is also significant because it promotes personal growth that is simultaneous with academic growth and achieves this in a very natural and ecological way. If participants can demonstrate that their lives have been improved because of this approach, that their understanding and use of the L2 (and L1, L3...) is now connected to a bigger world, that the ‘Other’ is as much a mythological concept as the notion of geographical or gendered boundaries; then, as a facilitator, I will sense that the mastery of the L2 was merely a vehicle for something far more socially significant. The participants will be encouraged to withhold judgment on what is, or is not, a sociopolitical problem until they have explored as many angles on the topic from the perspective of others. Part of the training for this involves interviewing university students in the open spaces on campus as well as interacting with Italians online and finding out, in both cases, how people really think and feel about a variety of topics that are of interest to the participants. This ‘ecological’ way of being informed is discussed in the section on Critical

Discourse Analysis, which seeks to take participants to higher levels of critical thinking via the L2.

The study is thus also significant because it proposes that passing L2 exams and quizzes should be easier stepping stones to much more complex and nobler goals. If, in the process of developing a globalized and contextualized view of language and identity, the participants also improve in their ability to read, write, speak (and/or sign), and communicate digitally in varieties of the L2 – including their own version of the L2 – then perhaps that aspect of the course would be worthy of careful consideration as others do their own studies in different ways.

Nevertheless, I do not assume that this study implies generalizability. It is, after all, an open-ended story. I look back on my own academic history with profound gratitude for specific instructors who believed that I was capable of achieving far more than what was required by the course. They wanted to pass on a vision of something better for the next generation of learners. The bottom line is that such thinking was infectious and much of who I am today, particularly the best aspects of my understanding of the world, is due to such visionaries.

1.5. The Paradox of a ‘Quantum’ Model

To justify such an eclectic and bricolage view of L2 ‘teaching’ and a departure from typically linear and simplistic ways of researching the L2 environment, we could cite Pishghadam and Mirzaee (2008) who point out that one of the greatest hindrances to SLA progress has been the insistence on merely modeling previous teaching and research methods, with particular emphasis on ‘scientific’ approaches as “teacher-proof, guru-based, and, therefore, magnifying the role of experts”, a prescriptive, “positivist, progressivist, and patriarchal’ view of linear development” (p. 96). More controversially, de Bot (2008) has claimed that the complexity of variables make it impossible for the researcher to construct experiments that study development over time.

Although the scientific method continues to lead to great advances in science and society, it also “separates and isolates, fragments and disperses, making knowledge seem ‘flat’, without depths or hierarchies, and dividing it into a multitude of unconnected domains with boundaries that are constantly reforming” (de Rosnay, 2011, pp. 306-307). As particularly related to the broader philosophy of SLA, the exclusive use of the scientific method results in a “fragmentation of knowledge” that hinders “communication among the disciplines” (p. 307). In short, the scientific method is insufficient alone to describe the complexity of our world and to synthesize the simultaneous coexistence of dynamic and static ‘realities’. Ironically, the balancing metaphor of choice in this dissertation is that of QP, which is highly scientific. At the same time, as has been stated, it also seems to provide a clear solution to these theoretical dilemmas. We have seen that, unlike the assumptions inherent in relativistic thought, QP is a “branch of science that deals with discrete, indivisible units of energy called quanta.” Energy is described as “not continuous” in which the “elementary particles behave both like particles and like waves” and where “movement of these particles is inherently random” (librarythinkquest.org). QP demonstrates the scientifically verifiable coexistence of the dynamic and the systematic; the wave and the particle; potentiality and the collapse of the wave function (Hameroff and Penrose, 2013). The application of the principles from QP previously discussed in this chapter may define an idealized state that has often eluded SLA researchers who adopt dynamic and complex paradigms. De Rosnay’s 2011 explanation of the paradox became central to the setup and delivery of the entire course:

“There are two abysses, one on either side of the edge of chaos. On one side is total disorder, an anarchic turbulence that does not generate organization. On the other side is structured, inflexible, static rigidity. Between the two, as in a phase of transition, on the boundary between perfect order and total anarchy, there is fluidity, adaptability, self-

organization of forms, structures, and functions that are born and die in perpetual self-regulated renewal – the emergence of organization and complexity. It is in this narrow margin, at this precise boundary, in this state of unstable yet stabilized transition, temporary and yet permanent, that the mechanisms that build life, society, and the ecosystem are found. How can we understand and channel them? How can we use them to build symbioses that are beneficial at all levels of partnership between nature and human beings and their machines?” (pp. 311-312).

Metaphors from QP bring back the power of agency to co-create authentic environments of being (ontology) and ‘doing’ (Hameroff and Penrose, 2013) through language, with agency being the “socioculturally mediated capacity to act” (Ahearn, 2001, p. 112). We can have solid reason to imagine that such a metaphorical application to SLA cannot help but better value the whole SLA experience by embracing the paradox inherent in the experience itself. That paradox, though challenging – at times – to fully define, is best seen by looking at language and identity in action. The course was purposefully set up to violate the boundaries of the classroom by incorporating other spaces, primarily digital, for the paradox to develop as part of the participants’ analysis and engagement with the L2 on levels much greater than the sentential. Chapter 3 will look at how SNSs can be vehicles for much higher levels of critical analysis of discourses related to language, identity, and the ecologies and social justice contexts of both. However, first there should be a consideration of how language ecology (including DST and CCT) and performativity set the stage for a more balanced approach to critical discourse studies and social justice, including issues of gender and ecolinguistics. That is the purpose of the next chapter, which looks at the histories of ecology, ecolinguistics and performativity to demonstrate, retroactively, why the addition of a ‘quantum’ metaphor is, in fact, timely.

CHAPTER 2: THE ECOLOGICAL POST-PERFORMATIVE LANGUAGE LEARNER

2.1. The Ecological Experience is Dynamic, Complex and Performative

Returning to the informative diagram provided by Marek and Wu (2013) on the ecology of the L2 learner, when students come to class on the first day, as they walked through the door, look around at each other, assess who is safe and who looks suspicious, who is ‘cute’ and who smells badly or is wearing too much cologne, what certain tattoos or clothing slogans mean, etc., students reach inside to activate a broad ecology of their own history, experience, family, religion, beliefs, feelings, health issues, academic successes and failures, expectations, disappointments, relationships, and so much more. We interpret the outside based on this inside journey. The same students reach outwardly to assess their environment, the temperature, the lighting, the cleanliness or dirtiness of the environment, the emotional status of other students, where they can hide or show off, their positioning on the stage of this new show called ‘Intermediate Italian’. What is perceived as a physical environment is affected by forces often unseen by the students: politics – local, federal, international – curricula, demands of assessments, biases, dogmas, financial limitations, and much more. The students relate this new language course, sometimes comparing or contrasting it, with other courses during the semester – present and past – and the demands of family and friends. Is Italian necessary in Tucson? Is it important in the world? Will my career require it or am I doing this to ‘get a language requirement out of the way’? Do my parents want me to take this course because of our ethnic background? Would it give me a chance to travel to a ‘romantic’ country where everyone is just like the people in ‘Under the Tuscan Sun’, dramatic, sensual, traditional and contemporary at the same time, almost magical, and almost always beautiful? Would it help me deconstruct such essentialist notions? Would it give me a chance with that girl/guy I met the other night at the club

who recently moved from Milan to work here in Tucson? When we look at language learners from this lens, we can perceive almost countless performative aspects of ontology that, while appearing to be sedimented and ‘solid’, are rather ready to be destabilized and deconstructed. However, beyond the peeling away of simulations of simulacra (Baudrillard, 1981), a QP approach would also honor the discovery of something and someone authentic that resists and defies both deconstruction and social construct. That paradox will be explored.

The teacher who considers these variables, only to mention a very small and limited number of them, would – and hopefully should – feel positively overwhelmed by the responsibility of teaching anything of any value to such a complex and dynamic system in ‘danger’ at any moment of causing the emergence of something constantly new, unpredictable, divergent and chaotic. As long as the instructor remains inside herself/himself ‘at the front of the class’, s/he positions ‘self’ as ‘Other’, a delusional dichotomy – and quite a stressful one; and it can be sedimented as early as the first day of class. Walls are built. False identities are assumed. There are those who ‘learn’ and those who ‘teach’, as if such a distinction could exist in a world in which we are all always learning, improving, growing and changing.

This is the complex ecology I experienced on the first day of class. Consequently, part of the setup for such a course began with the first email that the students received, welcoming them to the course, where the idea that there is no ‘teacher’ is sedimented and ‘sealed’ on the first day of class when I inform the new students that I am merely a ‘facilitator’. I go to great lengths – via anecdotes and personal stories (some very humorous, to reduce the affective filter) – to assure the students that, just like them, I too love to learn, acquire, and develop and that, at the same time, none of us is ‘just like them’, but rather we are all bringing to the course our own unique ecologies. I also guarantee that they have much to teach me. By recognizing myself as merely

part of this newly emergent complex and dynamic system, I too must adapt, change and ‘go with the flow’:

“Complexity theory aims to account for how the interacting parts of a complex system give rise to the system’s collective behavior and how such a system simultaneously interacts with its environment. The field of complex systems intersects traditional disciplines of physical, biological and social sciences, as well as engineering, management, economics, medicine, education, literature, and others. It can, for example, apply to neurons in the human brain, cells and microbes in the human body, and flora and fauna in an ecosystem as well as to more social activities such as the way information flows over a social or computer network, the dynamics of infectious disease transmission, and the behavior of consumers and firms in an economy. Each of these phenomena works as a ‘complex system’ (Larsen-Freeman and Cameron, 2008a, p.1).

Unlike a study that sets certain limited criteria for data collection and analysis, and, for the sake of being ‘scientific’, stays aloof from the process as much as possible, the type of work required for a setup, delivery and data collection process related to a dynamic/complex systems approach to SLA is highly organic, evolving and outside of the assumed boundaries of space and time (classroom and class times). There was much work to be done with this dynamic and complex approach that began long before the course started and continued long after it ended. There were variables to be ‘calculated’ for their potentially negative or positive impact on other variables. There was constant monitoring, adjusting, analyzing. There was very little that ‘staid put’ so the ‘calculations’ often required reconfiguring to best match the new shifts and changes due to the fact that studying a complex system implies the study of a dynamic system: “Overlapping a great

deal with complexity theory is ‘dynamic systems theory’, whose lineage is more mathematical than biological” (Larsen-Freeman and Cameron, 2008a, p. 4).

There were connections to the sciences and the natural world that needed to be understood correctly, conclusions drawn from other studies that required appropriate interpretation, and theories that had to be applied cautiously (sometimes loosely) for the sake of the delivery of an effective – and not chaotic – course. The appearance of chaos, particularly to the participants in the early part of the course, needed to give way to the appearance of complexity. The case study, thus gives validity to the place that controlled chaos should hold in a healthy language development program:

“Chaos theory is a study of non-linear dynamical systems, i.e. systems that do not unfold over time in a linearly predictable manner. Such study has ‘revealed the chaotic nature of a wide variety of physical systems’ including certain classes of neural networks (van Gelder and Port 1995: 35 – 6). It is important to note, however, that in this context, chaos is not complete disorder, but is rather behavior that arises unpredictably in a non-linear system. Because of their complexity and because the trajectories of chaotic systems are susceptible to even minor perturbations, at no point in time in the evolution of such systems can chaos be predicted” (p. 4).

2.2. Blurring the lines between Language Ecology and Ecolinguistics

The critical analysis of L2 discourses (such as those related to ecolinguistics) implies a social justice focus that values language and identity as ecological phenomena. This often occurs in the online deconstruction of performative homologies by Power. The lines, then, of what is part of DST, CCT, performative or ecological, become blurred by virtue of the fact that the lines

of distinction are social constructs that are, largely, nonexistent when experienced. As the data will demonstrate, throughout the course, as a natural outgrowth of exploring through SNSs local and global issues related to Italy, some participants became particularly preoccupied with the negative ecological impact of Monsanto and similar corporations who promote genetically modified (GMO) crops. As will be discussed later, these participants analyzed the use of the L2 by Monsanto to persuade governments and corporations (and individual consumers) of the fictitious safety of GMO foods. What was curious about the participants' discussions and research conducted on FB was how – because of L2 use – they specifically spoke in terms that reflected language ecology (the interconnectedness and dialogism of language, identity, society, history, politics, etc.) one moment and in terms of ecolinguistics (language used for ecological purposes) the next moment. In short, the participants – without knowing what to call this new approach on FB – began to conduct their own version of Critical Discourse Analysis in the L2.

What, then, is language ecology and how may we connect it to ecolinguistics and, as will be discussed later, to the critical analysis of language use as well as larger discourses that are often manipulative and oppressive? Why is the blending of these two concepts so crucial to this current study, especially when, in academia they are truly distinct? Due to the theoretical nature of these concepts, we need to take a clear look at what these terms mean through their history and debates, all in order to better understand how the participants are blending theories, applications and genres. In some cases, we will find the participants shuttling between almost all of the theoretical frameworks discussed in this dissertation, often within the same paragraph or interview.

If we go back to 1967, we find that Voegelin, et al. made a revolutionary connection between linguistics and ecology, particularly in the way majority and minority language seems to

mimic the way species seek to survive. Five years later Haugen proposed the idea of ‘Ecology of languages’ rooted in the essentialist reduction of languages to easily identifiable distinctions. His connection was between the people who use the language, where it is used, variations within the language itself, attitudes regarding the language and the other languages that are also used in the environment as well as the Power that inscribes such languages through tradition or institutional imposition. This was followed by Mühlhäusler’s (1996) alternative of ‘Linguistic ecology’, which sought to be inclusive of the broadness of multimodal communication. He specifically resisted the idea that outsiders should be the ones to name languages. However, his main contention was rooted in the way that economic, religious and political colonization tend to diminish the richness of linguistic heterogeneity in areas of ‘conquest’, sometimes irreparably. Calvet’s (1999) latter definition of ‘Ecology of languages’ more closely approximates one of the purposes of this study, and that is to look at the benefits and problems of language identity as a broad metaphor that considers the interactions among members of communities of practice in dynamic – sometimes seemingly chaotic – and discursive ways and its expansion and modification within postmodern frameworks of SLA. Although theoretically the current study makes a clear distinction between language ecology and ecolinguistics (Calvet, 1999; Mufwene, 2010; 2008; 2005; 2001; 1996), it also values how some scholars have blurred those lines as much as the participants of the study did (Edwards, 2002; 2011; Mühlhäusler 1996, 2003; Fill and Mühlhäusler, eds. 2001). Regardless of shades of differences and semantics, nearly all researchers who adopt the metaphor of ecology see patterns in nature that are applicable to language use and pedagogy. Kibbee (2003) criticizes its Darwinian roots with its acceptance or chastisement of dominant languages and the death of languages as part of ‘natural selection’ and ‘survival of the fittest’ (Hale, 1998; Honey, 1997), thus equating dominant languages - such as

English - to political oppression, imperialism, ideological globalization (e.g. Capitalism) and the US imposition of linguistic homogenization (Phillipson and Skutnabb-Kangas, 1996). He specifically rejects “the equivalence of language to species, and the notion that the loss of a language is equivalent to the loss of a natural species” (p. 51), arguably one of the key concerns of the metaphorical application (Alter 1999; Nerlich 1990; Desmet 1996).

Those who challenge the Chomskian notion of innate characteristics of language, offer the alternate – and postmodern – view of language as *behavior*. Reflecting the skepticism and paradoxes that dominate postmodern thought, Kibbee undermines the assumptions of ecolinguistics/language ecology regarding the negative impact that the death of a language has on linguistic variation (Mühlhäusler, 2003) and suggests a socio-politically-determined paradox: language revitalization strategies used by Western scholars may lead to new forms of injustice (p. 53) as much as they may provide ways to keep dispersed people connected (p. 55). By focusing on the negative aspects of ecology, it would then be easy for some scholars to compare languages with viral species (Mufwene 2001) and explore the linguistic phenomena in terms of colony and habitat, with emphasis on the connection between political power and social structure, disintegrating the possibility of language use apart from human contact (Nelde, 2002). This is especially applicable when considering the imposed legislative processes related to language use (Williams, 2002) within socioeconomic ‘anthropospheres’ (Breton, 2002) and the ideologies that create the sense of division between people via perception of difference (Iannaccaro and Dell’Aquila, 2001). Almost a decade ago, the focus centered on the impact of globalization on language use and L2 pedagogy (Blommaert, et al., 2005a; 2005b; Blommaert, 2003), though, arguably, Creolistics was already pursuing such interests (Chaudenson, 2003; 2001; Singler, 1995). Regardless, the importance of exploring language on a variety of spatial-

temporal global scales greatly impacts our view of ‘the big picture’, or language ecology. In fact, the diversity of studies conducted on the connection between language and ecology is dizzying. The study of language ecology has, by inherent topic, taken on a wide range of issues that interconnect. A brief sampling of titles included under studies of language and ecology should suffice to demonstrate the broadness of the field. For example, forms of languages connect to each other and the environment to include talk of Agency and control (Gerbig, 1993), Animal erasure (Stibbe, 2012), Animals and humans (Stibbe, 2005a; Mitchell, 2006), Biodiversity (Stibbe and Zunino, 2009; Bastardas-Boada, 2003; 2002a, b; Harmond, 1996), CDA and vegetarianism (Marko, 2000), Climate change (Nerlich, et al., 2010; Nerlich and Koteyko, 2009a, b), etc. For a greater sense of how much diversity of research falls under this category, see Appendix G (Author’s Notes).

Directly related to my decision to use Ecology as the overarching theoretical framework that encompasses the other frameworks to be balanced by QP, is echoed in how Kramsch and Steffensen (2008) play with labels when they expand on Haugen’s concept of ecolinguistics as “the study of interactions between any given language and its environment” (p. 17) to - within the broadness by which ecology is generally defined - other approaches to SLA, including Chaos/Complexity Theory and dialogic ontology (spoken of as ‘holism’), all leading to the type of analysis that “relates linguistic data to the complex totality of the speakers’ situational positioning and the sociocultural and socioeconomic characteristics of the speech communities” (p. 18). Kramsch (2002) proposes that the metaphors of ecology and complexity theory better represent the fluidity and dynamism of the never-ending SLA experience (Larsen-Freeman, 2002; 2009; 2010a, b; 2011a, b, c, d, e; 2012), so much so that she suggested that the term ‘acquisition’ be replaced with the concept of ‘development’, especially relevant when we

consider that the acquisition process does not follow a singular timescale, as argued by Wallerstein (2004) and elaborated by Vigouroux (2009): “Both learning and processing of language in children and adults, at various putative ‘levels’ of representation, appear to be highly integrated and interdependent, and function simultaneously rather than sequentially” (Onnis and Spivey, 2012, p. 124). This idea would eventually lead me to coin the TELD acronym within an ecological, dynamic, quantum and complex contexts. Such a framework proposes that “any use of language, be it learning a language or using it to haggle, assert yourself, or exercise power does not derive from structures in the head... but are adaptations that emerge from the seamless dynamic of timescales” (Kramersch and Whiteside, 2008, p. 660) where “behavior emerges from the interactions of its components, as in flocking birds or schooling fish” (Larsen-Freeman, 2012). Showing the interconnectedness of this topic to SLA, CDA and social justice, through an ecological approach to language, the authoritative voices that have dominated SLA are respectfully upgraded to dialogic democracy, which complements the postmodern idea of the “peaceful coexistence of all beings, the preference for the small in opposition to the big, and the preservation of the weaker against the stronger” (Kramersch and Steffensen, 2008, p. 19). At the same time it challenges undue - sometimes exclusive - emphasis on “the victims of political exploitation and ecological devastation” (p. 20), from the mere perspective of the elite who claim the authority to determine who is a victim and who is a victimizer. This will be further explored in the section on Critical Discourse Analysis and Positive Discourse Analysis.

As mentioned at the beginning, this study does not reject or replace past theory or method as much as it seeks to open up dialogue between time periods and people. In this spirit, it must be emphasized that ‘ecology’ is also not intended to replace earlier metaphors. Rather it promotes “interaction among those persons themselves [and ideas] within that natural environment, and

the relative constraints on the necessary affordances for learning offered by that environment” (Kramsch, 2002, p. xiii). It is a way of seeing language relationally, reflexively in phenomenological terms (p. 8) subject to interpenetration, interdisciplinary interests, and multimodality. It considers non-actualized potentials and seeks to prevent premature closure of possibilities. It does not dismiss but challenges the limitations of the previous metaphors because the world has changed, creating a need “for sound judgment and on-the-spot appraisal in local interactions” (p. 4). Learning a language is no longer just about the acquisition of competence versus performance (Chomsky) in a series of rules and structures, but of “a repertoire of communicative contexts” and “a loose confederation of available and overlapping social experiences” (p. 163) in which the process of using language alters the structure itself. Mufwene (2001), in fact, argues that, unlike Saussure’s (1916) analogy of a chess game, we are not motivated or restricted by the rules of a game. Those who have embraced the use of scientific visualization for language must now recognize that even Kramsch’s previously stacked levels of linguistic representation are being replaced by trajectories in a multidimensional space. This is not a mere re-signification: “Processing language in the brain equates to traversing such a space in regions afforded by multiple probabilistic cues that simultaneously activate different linguistic representations” (Onnis and Spivey, 2012, p. 125). What we require, then, is a radical rethink; linguistic, ontological, cultural and disciplinary. van Lier (2002) quotes Pierre Bourdieu’s insight regarding one of several necessary steps toward a holistic direction: “The transgression of disciplinary boundaries is a prerequisite for scientific advance” (p. 140). The need is to build “bridges to deeper understandings of the uses and processes of language in personal, social, academic, and professional contexts” (p. 141). This relationship “between all the various organisms and their physical environment” (van Lier, 2002, p. 144) calls us to be ethologists who

observe the whole living entity. Although this sounds idyllic, because language and learning are never complete, that is, “the target is always moving” (Larsen-Freeman, 2002, p. 43) some have tended to discard the notion of an ‘essence’ to language itself, ignoring the possibility that – within an ecological framework – we can embrace the coexistence of dynamism and static states. Consequently, in relation to SLA and this study’s emphasis on TELD, ecological perspectives allow for freedom of exploration that favors a progressive and inclusive change of mind and direction, one that values what has come before, what is currently popular, and yet, is open to future changes. The issue is that of remaining open without turning ecology into ‘the’ metaphor of our time.

While setting up a study within an ecological framework, I’m also aware that healthy skepticism keeps us questioning whether we are unknowingly immersed in - or unaware of - certain Big “C” Conversations that are “essential” to a so-called “right” understanding of academic doctrine (Gee, 2005), and if by participation in - or absence from - such Conversations, we are contributing to the reaffirmation of prejudice. It could, in fact, be asked if an ecological view of language is – in itself – a western imposition and if a purely relativistic perception of language ecology is not only passé but ultimately makes the human experience largely vacuous with profound implications on self-esteem and sense of self-empowerment to achieve excellence in learning. Thus the balancing effects of metaphors from quantum physics as well as the need to emphasize agency. In fact, the potential dilemma with paradigm shifts, at least for the language ecologist, is the risk of merely replacing the machine metaphor with a dynamic model, while presented in epistemological humility, nevertheless runs the risk of becoming the only way we perceive the SLA experience. What has been forgotten in the new metaphor’s focus on interaction is the existence of the individual, without whom there would be no ‘group’. In fact,

we are now recovering the ‘antiquated’ notion that general interaction patterns do not necessarily make the population uniform (Paul, 1891; 1880) and individuals may, or may not, conform to the norm (Edwards, 2011; Nelde, 2002, Breton, 2002; Mufwene, 2008). Metaphors can always be reinterpreted through the lens of ‘how things should be’, so that we find language ecologists still framing discourses within the ‘mind is a machine’ metaphor as much as we do ‘the mind is a collective dynamic’. However, though both metaphors directly and indirectly assume homogeneity, neither obliterates the power of the individual to transgress the norm. The outliers should not be forgotten, especially in an age when social justice has taken center stage. Beyond the individual outlier, perhaps our view of language ecology should allow for the ‘habitat patches’ of metapopulations (Hanski, 1996). Related to ecosystems, the analysis of patch dynamics explores the makeup of smaller sub-ecosystems, the diversity of which forms the essential larger system. That is, the homogeneity and heterogeneity of the subsystem, in complex and dynamic interaction with other subsystems and the whole, create a landscape that is dynamic in potential, active or degraded states. Each habitat patch is large enough, and sufficiently close and conducive to sustain life (or, in our case, language). Migration to and from the ‘patch’ is normative and results in positive or negative change.

The postmodern dilemma is the acceptance that socialization (the becoming) and language acquisition (the learning) meet through language use (Kramsch and Steffensen, 2008, p. 20), while also claiming that “speech does not reflect thought, it refracts thought” (Volosinov, 1986). We are then left with an uneasy ambiguity as to anything remotely ‘authentic’ about language and its users. Consequently, we are faced with new dilemmas related to both L2 teaching and assessment. Scholars like Canagarajah (2006) took us far away from static views of language to a classroom experience that embraces negotiation, situated performance,

communicative repertoire and language awareness. He even went so far as to delegitimize the debate between Standard English (Davies, 2002) and World Englishes (Lowenberg, 2002). There is no inner and outer circle of language possession, as proposed by Kachru (1986). Indeed, Canagarajah strongly opposes such essentialist notions of language, such as, “Indian English is valid for India, Nigerian English for Nigeria ...” (p. 231). Though Lantolf and Genung (2002) rightfully interpret the imposition of a methodology as seen as a form of abuse, “the capacity (and privilege) to project and impose one’s perspective on others without taking account of other’s perspective” (p. 178), the relativistic dogma of postmodern SLA is now imposing its own view.

The questions raised at the beginning of the study resurface more specifically as related to setting up a course that does, after all, require some form of assessment: How do we balance the idea that languages can be taught and assessed with Canagarajah’s emphasis on a globalized world, in which languages are hybrid, fluid, dynamic and non-standard? On the one hand, every time we insist that students perform the L2 like native speakers, we reinforce an essentialist notion of language, itself furthered through literacy programs, standardization processes, a national curriculum, etc. On the other hand, we seek to recognize that “embodied learners soft assemble their language resources interacting with a changing environment. As they do so, their language resources change” (Larsen-Freeman and Cameron, 2008b, p. 158) through “real-life experiences, such as when two or more interlocutors co-adapt during an interaction” (Larsen-Freeman, 2012, p. 211). One suggestion is that language ecology could recognize within the interconnectedness of languages, a ‘doing’ with language, as well as a ‘being’, semiosis as well as meta-analysis (Lapkin, et al., 2008), what has become known as ‘linguaging’ (Phipps and González, 2004), the “process by which communities of people engage with and make sense of

and shape the world through language; a process which tightly links the use of language to the social experience and sees it as changing and evolving with such experience” (p. 2-3), while reducing neither language nor identity to fiction. Today, much of that experience is taking place beyond the classroom walls and on the ‘Walls’ of a variety of SNSs. It is in these new digital semiotic landscapes that we could widen our SLA goals to allow for language to be a discursive field of neoliberalism, globalization and human capital (García, 2009) while also allowing it to emerge “as an embodied and situated activity” (van Lier, 2002, p. 146), with the “ecosocial processes” (Lemke, 2002, p. 70), and logical emphasis on ‘we’, in that “mutuality is a precondition for the development of indicational language” (van Lier, 2002, p. 155).

This is, after all, part of the process that seemed evident in the feedback that the case study participants provided. It was not a black-and-white view of language ecology, performativity, complexity or dynamism. The participants’ experience was best reflected in all of these and the static, structured, authentic and sedimented. They were, unknowingly, expressing the balancing metaphor of ‘quantum states’. This new ‘space’ of SLA/SLD and TELD is far broader and “not so bound to the habitus of class, gender, sexuality, or culture as Bourdieu’s idealized model of modernist identity presumes”, especially since we reflect the village as much as the village reflects us (Lemke, 2002, p. 75). Although language ecology poses some dilemmas that challenge us as SLA teachers, we must keep an open mind and an eye on the benefits of transdisciplinary trends. As Larsen-Freeman (2002) points out: “I’m not entirely sure what the methodological implications of an ecological approach might be. What it does do, I think, is prevent premature closure” (p. 91). A uni-disciplinary stance is out of place in a world where seemingly contradictory theories may coexist and “it turns out that both of those theories can be useful at the practical level” (Lantolf, 2002, p. 94). As Scollon (2002) reveals, Language

Ecology, both facilitates and allows synthesis. Beyond the theory, the desire to bring a fuller experience of humanity back to the postmodern classroom does not liberate language instructors from some of the oldest dilemmas of L2 pedagogy. For example, there is an unavoidable paradox inherent in trying to make students spontaneous (Watzlawick et al., 1967). This is why authentic conversations rarely result from pre-organized lessons but rather emerge beyond the instructor's planning (Bannink, 2002, p. 271). Also, paying attention to the classroom environment, it becomes obvious that students tend to change their speech when the instructor is approaching (Goffman's change in 'footing', 1979), so the instructor may need to set up assessment based on 'off task' moments, such as Bannink's use of story-type turns, overlaps, interruptions and collaborative floors to allow for "a certain level of unpredictability to the negotiation stage of the task" and consequently, "more unprogrammed meaning" (p. 277). An ecological approach within the classroom would welcome the emergence of what Goffman (1974) calls "framing", where "classroom realities and roles need to be temporarily overruled" (p. 282), to include plurilingualism, code-switching and "instances of language play, which is beneficial for language learning in a number of ways" (p. 283). For the sake of this study, language ecology will be interpreted as having endured a long journey of redefinition, adapting its focus on and interest in what is most salient at the time. Today, the paradigms of language ecology and ecolinguistics are expanding to include quantum physics (Onnis and Spivey, 2012; Hawking and Mlodinow, 2010) and macroecology (Edwards, 2011) as a means of better appreciating the interconnectedness and dialogism that will guide the next generation of foreign language learners, teachers and, more importantly, users. How this connects specifically to QP will be explored below.

2.3. The Benefits and Problems of Performativity

As already mentioned, one key concept that participants engaged with throughout the course is the paradox of language and identity as static and dynamic, or more specifically, as simultaneous product and process. In order to guide participants into a state of comfort with such paradoxical ways of handling the L2 and its related identities (or vice versa), it was necessary to expose participants to what it means to say that language and identity are performative while also emphasizing society's apparent obsession with being 'competent' in the L2 ('real' Italian) or being a 'real' man, woman, etc., particularly important declarations when discussing, for example, issues of social justice. The interconnected nature of the discourses related to the performativity of language and identity soon became clear to the participants (as they will discuss in their feedback) who were able to play with L2 language(s) and identities as 'convenient fictions'. At the same time, in order to allow for the shuttling between forms of performance, competence and performativity (a paradox from QP), as the facilitator, I needed to first better understand the nuances of these concepts in order to then apply them to the way the course and tasks were designed and delivered.

Joining a growing number of academic voices, I proposed an end to a long-standing debate in the discipline of SLA that centers on an unrealistic dichotomy: "From a complexity theory perspective, there is nothing static about language. There is no need to distinguish performance from competence" (Larsen-Freeman and Cameron, 2008a, p. 6). The participants were given examples of performance, competence and performativity by looking specifically at the evolution of gender roles in Italy (Ponti, chapter 3). These distinctions were then brought to discussions related to language use and usage via an exposure to a variety of ways of 'being' through Italian use. While rejecting neither competence nor performance, I do claim that performativity (which offers hues of both) affords a more nuanced framework by which to

understand the complexities of SLA and what it means to say “language is a behaviour, not a physical characteristic” (Kibbee, 2003, p. 51). I then qualify this statement by adding, “as long as we do not assume that there is ‘truth’ in performativity and treat it the way it treats any essentialist notion, as mere convenient fiction. In order to show the reader why these complex concepts are so important to this dissertation, it would be helpful to first take a step back and trace the unstable history of thought related to what is often incorrectly labeled a ‘theory’.

For the sake of context, such a theoretical framework must begin by looking at Chomsky’s (1965) adaptation of Saussure’s 1916 distinction between *Langue* and *Parole* as linguistic (grammatical) *competence* versus *performance*. Competence was the idealized speaker’s unconscious knowledge of static and constant language structure and performance the conscious production of imperfect and unreliable language. Such a view restricted the speaker to “intrinsic competence” (p. 4)⁴ within an unattainable utopia “beyond the level of actual or even potential consciousness” (p. 9) of a “homogenous speech community”, unaffected by social life (p. 3). Hymes’ ‘communicative competence’ (1970) moved beyond Chomsky’s emphasis on structural system to focus on meaning systems. He demonstrated that we cannot ignore the ‘rules of use’ – or rules of performance – since these often shape the dynamic structure (p. 278) that is acted out – or performed – by people. It is through this “social semiotic” that “people act out the social structure” (Halliday, 1978, p. 2), which is perceived as static. Consequently Hymes called for a critical “revised formulation” of competence and performance (p. 279), as Halliday demolished the dichotomy between ‘what’ and ‘how’ in language (p. 30). Widdowson (1978; 1998) further challenged static competence when he distinguished between ‘usage’ as the

⁴ An example of the conceptual broadening of ‘competence’ came from Canale & Swain’s (1980) explanation of communicative competence as grammatical (lexical and grammatical knowledge), sociolinguistic (multimodal sociopragmatics), discursive (coherence and cohesion beyond the sentence), and strategic (strategies to clarify communication disruptions), all of which blurred the line between what is ‘known’ and what is ‘performed’.

performance of the knowledge of structure and ‘use’ as the performance of the ability to use such knowledge of structure. SLA moved in the direction of socially-constructed meaning through communicative interaction (Richards and Rodgers, 2001, p. 161) via the performance – not of a pre-given structure or language – but of utterance acts (words), illocutionary acts (demands, promises, questions, etc.), propositional acts (reference; see Searle’s 1969 Speech Act theory), and perlocutionary acts (how such acts impact the recipient’s perceptions and behavior; see Austin, 1962). Ultimately, the goal was to incorporate usage and semiotic-based understandings of competence into life-long performance, summarized by the Common European Framework of Reference as “what language learners have to learn to do in order to use a language for communication and what knowledge and skills they have to develop so as to be able to act effectively” (CEF, 2001, p. 1).⁵ This sentence is a powerful combination of the experiences that L2 learners have in relation to language and identity, the static ones having been largely erased in performative (postmodern) thought. An incessant deconstruction of all essence is only part of the picture. It is not the ‘whole’ of how we recall events, use language to discuss such events, fight for civil rights based on categorizations, and determine if certain grammatical structures on an exam are ‘correct’. Even if the focus of performance had been, historically, on volitional action, the volition does not arise from *ex nihilo*.

Everything related to gender – and eventually, language – was about to change and the very ontological foundations of what we call ‘real’ would be severely shaken. In the mid-1990s Judith Butler proposed the idea that the aforementioned volitional actions do not express pre-existing identities (and languages), but rather bring them into the appearance of ‘being’. Identity

⁵ Austin’s ideas were not entirely novel and can be rooted in the philosophies regarding knowledge of the 18th century (Robinson, 2006; Esterhammer, 2001; Dick & Esterhammer, 2009), particularly Kant, Diderot and Rousseau (Sennett, 1993). Austin (1962) did not rely on the concept of theatre but on situated practice (see also Bucholtz, 2003).

(or language), in this framework, is constructed through performative repetition and “is real only to the extent that it is performed” (Butler, 1990, p. 278). Borrowing from Austin’s speech act theory, psychoanalysis, gender parody, and discourses of power and sexual construct, Butler reduced all ‘essence’ to phenomena sedimented through action. This would become known as ‘Performativity Theory’, though it is not a linguistic theory, as often assumed, but one among many philosophies that explain why, as language users, we embrace concepts such as ‘normal’, ‘natural’, and taken-for-granted ‘authenticity’ in our co-creation of the same (Kulick, 2003).

Butler’s perspective on this issue has far-reaching effects. Not only are feminist and queer studies dominated by her views on performativity (Weiss, 2011), but Butler has profoundly impacted cultural studies, politics (Breen and Blumenfeld, 2005, p. 3) and second language acquisition and teaching. This latter field builds on her construction of gender identity to reveal that languages follow the same illusory path to materiality (Miller, 2011). The very notion of ‘authenticity’ – so central to sociolinguistics – was replaced by “authenticity effects” that are “conferred” (Bucholtz, 2003, p. 408), a staged view of language and identity that owes much to Goffman’s (1974) metaphor-guided ethnography of speaking, though Hymes (1971; 1972a, b, c; 1973; 1975; 1981) extended the performance ‘stage’ to everyday encounters and interactions.

Coupland’s ‘high performance’ (2007) goes so far as to extend performance to any use of language that departs from the expected and brings attention to its stage-like qualities. This subtle transition from performance to performativity is crucial since *performance* is conscious and sometimes exaggerated linguistic stylization *for* the audience and not merely *to* the audience. As participants in the course discovered, it is social recontextualization of cultural texts (Bell and

Gibson, 2011) that materializes through the incorporation of the preceding voices that hint at all that has come before the present usage (p. 560).⁶

In performativity, it is not the choice to perform that matters. It is the fact that what is performed is, to a certain degree, unavoidable, the very spatial-temporal context in which language and identity are ‘done’ (Butler, 1990, p. 272). Butler’s denial of the physical body is not nihilistic as much as it is a resignification of the object as phenomenon. As Dolezal (2009) explains, in this framework individual awareness is not primarily propositional (not Rationalist and not Empiricist) but is action, or rather, the performance of the performative. Applied to language, the sedimented sense of materiality (language and identity) is the starting point for all other interactions, the ‘zero-point’. However, the intercorporeality of the body (or language) prevents it from becoming a mere ‘thing’, except in cases of dehumanization where the body is treated as an object. It becomes clear, then, that some of the foundations of performativity appear to be rooted in a desire to escape – and even prevent – oppression by means of awareness of the complexity of human beings as dynamic and dialogic phenomena. As related to this study, we could add that performativity helps L2 learners question the imposed ‘standards’ that have delegitimized other variants. By reducing even the standard to fiction, L2 learners should be able to enjoy a more fluid experience of the many L2s.

To go even deeper, for the case study participants, a useful difference, then, between performance and performativity is that the former focuses on the user’s creation (even reproduction) of social realities, while the latter also questions the static constitution of the user’s

⁶ Brissett & Edgley (2006), and Tracy et al. (2003) developed the idea of life itself as theatrical performance (such as Shakespeare). We find connections between the philosophy of Design and performativity as developed by Krippendorff, (2006); Vermaas & Kroes, (2007); Fry (2008); and Latour (2008). Performance and performativity in relation to agency and action were developed by Agamben (2001); Ahern, M., (2003); Arendt, (2006); Austin, (1976, 1971, 1970); Barad, (2003); Derrida, (1998, 1988, 1982); Habermas, (1987, 1984); and Lyotard (1984).

identity and the language itself⁷ (Bell and Gibson, 2011, p. 559). The second option is what ties in well with Critical Discourse Analysis (CDA) since, to a large degree, it achieves the same effect in its demystification and deconstruction of dominant ideologies. Returning, then, to a performative view of ontology, the intercorporeal body replaces the physical body and the interlinguistic replaces the language as all ‘bodies’ [including ‘languages’] cease to ‘be’ in themselves and merely become something that people ‘do’ through and with others (Behnke, 1997). Consequently, meaning and materiality meet through language and identity where “the filaments of intentionality that crisscross between and among us humans take sensuous form in language” (Csordas, 2008, p. 118), a form of “minstrelsy” (Bucholtz and Lopez, 2011) so recognizable as to be subject to purposeful “deauthentication, maximizing of intertextual gaps, and indexical regimentation of the performed language” (p. 680).

One part of the course explored the ways we demonstrate how the performativity of authenticity is connected to socioeconomic factors that determine insiders from outsiders (Pietikainen and Kelly-Holmes, 2011). Equally important was how the element of comedic enregisterment (Johnstone, 2011) opens up possibilities of unexpected linguistic forms that are co-constructed by the audience, dependent on the perception of acceptability or transgressivity of the boundaries of language(s) chosen by the performers, leading to harmony or intercultural conflict (Montarulia, et al., 2011)⁸.

Particularly useful to L2 users and participants in the TELD ecological environment, is the connection of the ontological illusion of identity to language (Pennycook, 2007b, p. 73). The

⁷ Habermas (1987; 1984) interpreted speech acts as communicative action; Bourdieu (1991) added the dimension of symbolic power; and Foucault (1990) spoke of discursive practice. Searle (1969) divided up speech acts into a clearly organized taxonomy; Grice (1975) focuses on implicatures and conversation; and Wittgenstein (1967; 1965; 1953) interpreted language as game activity.

⁸ “If a performative provisionally succeeds... then it is not because an intention successfully governs the action of speech, but only because that action echoes prior actions, and accumulates the force of authority through the repetition or citation of a prior, authoritative set of practices” (Butler, 1993, pp. 226-227).

very exploration of multiple registers within the same interlocutor is often enough to cause us to question, “Would the ‘real you’ please stand?” This prevents essentialist assumptions. In fact Pennycook sees within Judith Butler’s version of ‘performativity’ the potential for “new ways of thinking about language, identity and change (2004b, p. 2)” that defines ontology as action that is manifest through multimodal and ambiguous stylization and blending of ‘essences’ (Barrett, 1999). I should add that the dogmatic focus on ‘essence’ was central to Coupland’s (2007) criticism of variationist sociolinguistics, specifically its “dogged reliance on static social categories” and “imputation of identity-values to numerical patterns” (p. xi).

The application of performativity to SLA – and to this study – directly challenges the two assumptions of the ideology inherent in essentialism: “(1) that groups [or languages] can be clearly delimited; and (2) that group members [or languages] are more or less alike” (Bucholtz, 2003, p. 400). Even the simplest and most unmarked uses of language are rooted in performativity (Coupland and Kristiansen, 2011), often indexing co-constructed social meanings (Silverstein, 2003). Within this framework, language is parody that is mere “imitation without origin” (Butler, 2006, p. 175), “generated by power through repeated citations of norms and their transgression” (Boucher, 2006, p. 112). Our negotiation of language and identity “congeal over time to produce the appearance of substance, of a natural sort of being” (Butler, 2006, p. 43).

The main ideological conflict for SLA boils down to a simple – though not easy – distinction. If we deconstruct the performance of language through the lens of Butler’s ‘performativity’, it becomes a mere doing, “broadly construed, which constructs the social fiction of its own psychological interiority” (Butler, 1990, p. 279). On the other hand, language teachers, users and learners, are left with a need to identify ‘what’ it is taught, used and learned, especially when one considers that “the organism’s ability to categorize transcends

linguistic theory. It is central to all of cognitive psychology” (Jackendoff, 1983, p. 77). On the one hand, the human experience reveals that “words are understandable and open to explication because you are like me, we are alter egos, we both apperceive and project simultaneously” (Csordas, 2008, p. 119); on the other hand, such an experience is in tension with the problem of performing, not only identity, but even language itself with words (Miller, 2011). Speaking of performativity identity implies that people/users/individuals humanize their sense of self, as distinct from objectifying ourselves. As Csordas (2008) states, “perceiving another person is radically different from perceiving a thing” (p. 112). A performative view of language recognizes the uncomfortable possibility that we perform languages to establish the sense, not the fact, that there is a communicative ‘device’ ‘out there’ that a “unitary, systematic, autonomous entity” (English, Italian, German., etc.), ‘real’ only to the extent that ‘it’ is sedimented through the “(re)citation of a prior chain of acts which are implied in the present act” (p. 116) (Miller, 2011, p. 89).⁹

Performativity is, then, about achievement, affiliation, and relationship. That is the positive side of the philosophy. However, for there to be achievement, affiliation and relationship, even as related to SLA, a certain level of “strategic essentialism” is required (Bucholtz, 2003, p. 401) in order to have some sense of something to research: “For researchers, essentialist assumptions may facilitate analysis by enabling them to identify a previously undescribed group and offer a preliminary description; for group members, essentialism promotes a shared identity, often in opposition to other, equally essentialized, social groups” (Bucholtz, 2003, p. 401). The purpose of strategic essentialism is “to achieve a short-term goal with awareness of their limitations in the long term” (Bucholtz, 2003, p. 402). In fact, Coupland’s use of “standard” versus “non-standard” and mentioning of specific dialects and

⁹ In this sense language serves Relational and Identity functions (Coupland, 2001).

regionalisms, reveals that, while trying to escape essentialism, the author nevertheless ends up “aggregating” and essentializing based on identifiable characteristics of speech¹⁰, which is not the same as implying “totalized/completed meanings” (Reinelt, 2002, p. 205). It is merely a reflection of our human instinctive tendency – indeed strategic – to see the world through binary oppositions, be it language or gender (Schep, 2012, p. 870).¹¹ The very words on this page form sentences by virtue of essential traits of agreed-upon letters, and rules of their combinations. It is that ‘in between’ state of recognizing words that lead to meaning while also being open to new combinations that make our human semiosis so fascinatingly dynamic and static. The same could be said about human life. Women fight for equality because there is, ultimately, someone worth fighting for. The same could be said when analyzing Martin Luther King’s famous “I Have a Dream” speech, which – of necessity – recognizes the oppression imposed by one race on another. Harvey Milk’s fight for LGBT equality propelled some of the most memorable speeches in LGBT history and this, largely, because Milk appealed to undeniable facts that transcended nihilistic philosophies and declared gays and lesbians as worthy of equal opportunities as those who do not essentially categorize themselves as such. In fact, performativity “must be rooted in the materiality and historical density of performance” (Diamond, 1996, p. 5) and not the other way around, if it is to avoid the risk of ethico-political consequences of deontological ethics with the paradoxical result of moral and political individualism incapable of challenging hate speech or bigotry (Boucher, 2006).

Performativity underlies the essentialist performance that is also reinforced by the bias of

¹⁰ It is so inescapable that even Gibson (2010) predicates an argument about the perception of authenticity or inauthenticity of accents from America or New Zealand with the assumption that a distinction does, in fact, exist.

¹¹ Sociolinguists have worked hard to deconstruct authenticity: “Le Page’s acts of identity model (Le Page and Tabouret-Keller 1985); Bell’s (1984, 2001) concepts of audience and referee design; Rampton’s (1995) theory of language crossing; Eckert and McConnell-Ginet’s (1992) development of the community of practice model; Pratt’s (1987) proposal for a linguistics of contact; and Coupland’s (2001a) relational approach to identity” (Bucholtz, 2003, p. 407).

the researcher. Consider, for example, how Ladegaard and Bleses (2003) assume, based on pre-established categories, that past-tense morphology of children is affected by gender and that the vernacular or stigmatized forms do increase with age and are directly related to the same.

Koppel, et al. (2002) ‘determined’ that it is possible to identify the author gender of an unseen text by merely reading a small sample. Brantmeier (2003) ‘confirmed’ gender ‘differences’ in the comprehension of L2 reading as well as gender-based topic familiarity, enjoyment, and interest levels in L2 reading [a blend of performative assumptions on the part of the researchers and enough essentialist sedimentation on the part of students in order to recognize themselves within such categories]. Singh (2001) argued for gender-based ‘distinctions’ of lexical richness, specifically noun-rate, pronoun-rate, adjective-rate, verb-rate, clause-like semantic units, and type-token ratio [again, a blend of ‘learning to be male and female’ as much as the conflating possibility that some participants overtly ‘perform’ gender].

On the other hand, countering such focus on gender difference, Herring and Paolillo (2006) explored the relationship between language/gender/genre by means of a multivariate analysis of entries from randomly selected weblogs, sampling specifically for author gender and sub-genre with the dependent variables being stylistic. Interestingly, such a ‘multivariate’ approach indicates that genre, not gender, proved correlations, thus supporting the diversity, not difference, model. Some case studies report that genders can be perceived as distinct cultures (Mulac, et al., 2001), thus extending the performative sedimentation to larger populations.

Sturm, et al. (2007) list several gender-based rate-of-speech studies that expose essentialist notions of gender as well as the performativity of the same.¹² It is, however, the

¹² From Sturm, et al. (2007): Pindzola et al. (1989); Onslow & Ingham (1987); Prosek & Runyan (1983); St. Louis, et al. (2004); Huitar, et al. (1992); Stephenson-Opsal & Bernstein Ratner (1988); Munro & Derwing (1995); Riggerbach (1991); Smith (1978); Tingley & Allen (1975); Dromey & Benson (2003); Lumley (1933), Verhoeven, et al. (2004), etc.

studies on LGBT speech that best reveal the essentialism inherent in the aforementioned studies. By blurring the lines of gender and biological sex, it becomes evident that ‘what’, ‘how’ and ‘why’ people are gendered is not as clearly explainable as previously assumed. Balance and nuance are often brought to light via transgressive forms of behavior, such as when Kotis perform four sexual identities (man, hijra, girl, individual aware of all three identities), all recognizable to the ‘other’ via the performative sedimentation of notions of gender and the proximity of performance achieved by the individual ‘character’ at the time (Hall, 2005, p. 132).

Similar ambiguity was researched by Smyth, et al. (2003) who sought, unsuccessfully, to answer the question of “why some men's voices are perceived as sounding gay (homosexual) and others as straight (heterosexual)” (p. 329). The startling conclusion was that perception of sexual orientation is unrelated to essentialist notions of gender. In fact, it was discourse type, not gender, which had a significant effect: “more formal speaking style associated with reading a scientific passage may be interpreted as more gay sounding” (p. 337), thus pointing to the complexity of the layers that are performed to create the effect of essence. In fact when the researchers changed the criteria of judgment from the straight/gay paradigm to the masculine/feminine paradigm, they discovered that “sounding 'gay' and sounding 'feminine' are related but not identical concepts” (p. 342).

The fluidity of performativity was Cameron’s (2005) focus in showing how context alters what is performed and why it is staged differently according to audience expectations.¹³ On the other hand, though performance may be altered, there are aspects of sedimented performativity that may have congealed to such an extent as to be irrevocable. Levon (2006) tried to eliminate

¹³ Building on Cameron’s argument, African American drag queens blend what is considered to be the refinement and politeness of ‘women’s language’ with “a ‘street’ variety of African American Vernacular English, producing a racially and sexually ambiguous self” (Barrett, 1999, p. 491). At the same time, white American gay men’s use of African-American vernacular speech (‘girlfriend’, ‘Miss Thang’) and other vocatives emphasize the interconnectedness of language and identity, be it performance, performative or, per Serano (2010), ‘authentic’.

‘innate’ linguistic features of gay men [performance] by altering the pitch of a single male voice that had been rated by listeners as “extremely gay” and “extremely effeminate” in order to see if the perception of his listeners would change. However, there was nothing Levon could do to make his listeners perceive the speaker’s performance as masculine or heterosexual [performativity].

The allusion to the citationality of gay camp is a particularly useful example of the underlying performativity of the performance of a “discursive situation of highlighted nonauthenticity” (Harvey, 2002, p. 1150), since this is, to a large extent, what L2 learners also do with language. Once language becomes sedimented, the performativity becomes invisible as the indexical nature of language is self-perpetuating (Silverstein, 2003).

This is why, in this study, the participants were encouraged to explore how language, like identity, “lies on the borderline between oneself and the other. The word in language is half someone else’s. It becomes ‘one’s own’ only when the speaker populates it with his own intention, his own accent, when he appropriates the word” (Miller, 2011, p. 89-91), whether the speaker performs the ‘local’ (Pennycook, 2010) or the ‘international’ myth (Pennycook, 2007a).

As related to the so-called ‘target culture’ that is explored in the course, a performative view of SLA would see the L2 as a discursive model of culture that recognizes the value of “a kind of collective memory that exists through its re-reading, re-performance, and re-contextualization” (Bell and Gibson, 2011, p. 561) through a dizzying series of “discursive practices” (Miller, 2011, p. 89). For this reason, performativity informs SLA that acquisition is a life-long process, since language as system “is always ‘deferred’, “always in process but never arriving” (p. 90). It demystifies the concept of ‘target language’ and consequently the social reality that a L2 learner is a poor user of the L1 of the ‘Other’. The L2 then becomes “shorthand”

(Blommaert, 2005) for what we do with language, not for what we know about ‘it’ (Canagarajah, 2006, p. 234).

The case study participants benefitted from the play with performativity as a means of better informing the SLA experience by revealing the interconnectedness of language and identity. The participants experienced a blending of these very much the way it was highlighted in a study conducted in multilingual settings in San Francisco, where

“Spanish, Maya, English, Chinese, all acquire a subjective overlay of Mexican-ness, Maya-ness, etc. that makes uttering Spanish or Maya words more than the sum of their grammars or of the communicative roles they perform... the protagonists in these exchanges are performing not only themselves, but their cultures, their families, their countries of origin or the mythic and emotional memories that these historical realities have become” (Kramersch, 2008 p. 399).¹⁴

Such a view of the performativity of language and identity is not chaotic. It is complex, dynamic and as authentic as the participants need it to be. This is why I chose performativity, with all its contradictions and heated debates, as one central theoretical framework. This is also why I chose a balancing metaphor to prevent performativity and the extreme relativistic views of postmodern to sediment into dogma.

That being the case, the participants in such a course should grow comfortable with first deconstructing all language and identity to a point of utter destabilization, only to then see that the deconstruction of performativity lacks a balancing force for it to survive. That is, if people and their languages are nothing but simulations of simulacra ad infinitum, one ends up

¹⁴ Bucholtz (2003) proposes “an alternative vision for the sociolinguistic study of authenticity – one that, rather than presupposing the authentic as an object to be discovered, instead makes the notion of authenticity available for analysis as the outcome of the linguistic practices of social actors and the metalinguistic practices of sociolinguists” (p. 399).

questioning if there ever was, from the beginning, anything to actually deconstruct. The claim that language and identity are complex, dynamic, emergent and, more controversially – non-existent on a fundamental/ontological level (i.e. a quantum level) of pure abstraction – is nothing new in this day of postmodern skepticism and poststructuralist deconstruction of nearly ‘everything’. Perhaps the only surprise to researchers is the potentially dangerous assumption read into quantum physics, which tends to see little, if anything, as authentic, stable, static, or even ‘real’. That assumption forgets the paradox of a science that while arguing for mere probabilities also deals with finite and discrete states of being. A good question would be “So what?” since, not unlike Performativity ‘theory’, much of the speculative assumptions based on discoveries of QP is philosophy with questionable relevance to the daily lives of most people on this planet. That is, although we can trace sociopolitical reasons for the rejection of absolutes, such beliefs do not always apply to how we live, how we look both ways when crossing the street, the jobs we choose, the arguments we have in a marriage, the social justice issues we perceive as important, and, finally, the way we teach and learn to be ourselves (identity) and communicate that self to others (language, semiosis). If this dissertation is to have a positive impact, and if the related work is to have any relevance to the discipline of SLA, it must appeal to what is truly meaningful to the L2 participants while also speaking the ‘language’ of those who claim to teach foreign languages. It must bridge worlds, people, and disciplines and, consequently, broaden our vision of what SLA is about *today*. This vision is highly pragmatic. It minimizes the importance of postmodern philosophy or nihilistic interpretations of ontology, seeing within these, systems of thought that have done their part to dismantle previous dogmatic systems but that, ultimately, have run their course and have become increasingly as irrelevant and antiquated as structuralism and its ‘correction’, post-structuralism.

More current trends indicate that language learners/facilitators/users are not opposed to what may be learned from other disciplines as long as what is learned is really applicable and useful. If all we do with a new technology or method is introduce a new way of learning the three pillars of grammar, vocabulary and culture, then *that* is the extent of our success. However, if those three pillars are not our end goal, but mere foundations for a much more significant human project, then we have reason to hope that our efforts are not in vain. For this reason I contextualize complexity/chaos theory, dynamic systems theory, performativity theory, postmodern theory, and even quantum physics within a pragmatic view of language development.

It should be clear by now that, while the setup of the study relies heavily on Larsen-Freeman and Cameron's 2008(a) work (see also Larsen-Freeman, 2011a, b, c, d, e) for certain practical aspects of the delivery of the course and the data collection, I unapologetically make use of a bricolage of disciplines, authors, methods and theoretical frameworks; and I tailor many aspects of the study ecologically, in harmony with the participants' needs and perspectives, altering as needed whatever is necessary based on adaptive teaching. It would be assumed that setting up the delivery of a course for the intermediate level should be a rather easy task, especially considering that the University hands instructors of Italian a very good textbook (*Ponti*) upon which we build clearly delineated lesson plans, quizzes, exams and homework assignments. However, all setup aside, as a language facilitator one thing I have come to learn well is that my students come to class having already been subjected to good textbooks along with impersonal, linear and, quite frankly, boring and annoying pedagogical approaches that leave them exhausted (emotionally and physically), anxious, fearful, and suspicious of any instructor with too much enthusiasm. The idea of setting up an entire course – from the first day

of class until the last day – based on principles from quantum physics to balance static and dynamic experiences of language and identity, can be, in itself, a daunting challenge.

Without using words such as ‘performative’, ‘critical discourse analysis’, ‘chaos theory’, ‘collapsing the wave function’, and so forth, how do I deliver and then assess a course that encourages participants to see the exams as mere pauses in a much broader experience of life? For starters, it is important for the researcher to have a clear idea of the theoretical frameworks from more than one perspective. Furthermore, within this approach, there cannot be a reliance on only one theoretical framework, especially when diverse frameworks are interconnected by broader philosophical and political ties. As we saw above, although Judith Butler (1997) is associated with the performativity of gender, and Miller (2011), building on Butler, can now be associated with the performativity of language, as the participants demonstrate, the framework of performativity is not necessarily ‘the way’ or the absolute standard by which they *must* see language and identity. They are Butler’s ideas, not necessarily theirs. They apply in the abstract and, perhaps, in the concrete. Agency allows for such rebellion against a dogmatic interpretation of humanity. In fact, the participants’ feedback points to the breakdown of many artificially-imposed dichotomies in SLA. One such dichotomy is the distinction between language ecology and ecolinguistics, important on a theoretical level (as will be argued carefully in this dissertation), but from the perspective of the participants (already inclined toward social justice and already predisposed to doing a form critical discourse analysis), the dichotomy becomes largely a matter of abstraction. As the data will show, some participants seem to consider the distinction to be irrelevant to the larger picture of what the problems are, and how language is involved in both the problems and the solutions that the participants propose or recognize as valid.

CHAPTER 3: SOCIAL NETWORKING FOR CRITICAL L2 ANALYSIS

3.1. The Ecology of SNSs: Critical Analysis of L2 Discourse

Language developers within and outside of academia, the private sector or government positions, need more than a language course. Lower and intermediate L2 courses tend to focus on vocabulary and grammar with some readings and little critical thinking or analysis of discourse. However, one thing that is clear about the textbook *Ponti* used in the intermediate Italian courses taught at the UA is that students are expected to engage with difficult and often complex readings and topics, much like they would experience them if they were living in Italy. It is not uncommon for Italians at the coffee shop to dive into highly polemic topics of a sociopolitical nature. These discussions can often include emotionally-laden discussions related to religion, ethics, politics, and certain prominent figures. The L2 student needs to be prepared to engage in such polemic topics and contextualize the discussions within larger frames of discourse. The results of this study point to the possibility that intermediate L2 students are far more ready to go deeper into topics than most language classrooms recognize or allow. It also claims that social networking is where much of the analysis of discourse and related debate is initiated, fomented and developed for ‘real world’ use. While seeking to take SLA to new levels, implied in the research questions of this dissertation are related questions that the case study seeks to answer that are particularly relevant to approaches that are often considered ‘too difficult’ for language learners at an intermediate level: Do L2 users develop better in quantity and quality of L2 use by engaging the language through the lens of critical thinking? Do the analyses of L2 discourses and the power plays that such discourses reveal help L2 users better understand the language, culture, history and people within a broader global context? Does the implementation of some aspects of Critical Discourse Analysis (CDA) improve the participants’

very lives and connection to others? Do such practices of analyses lead to a better understanding regarding how, even at a discursive level, the L2 is both process and product? Although participants do not need to fully understand the history and variations of CDA, it is imperative that the instructor/facilitator who chooses to implement this within the ecological/performative/dynamic framework have a clear understanding on how to model the development of critical thinking skills and analyses of larger texts and discourses. This is particularly useful for when the facilitator notices connections, details, underlying assumptions, etc., that are not yet perceived by the participant.

Participants explored discourses online, often via SNSs and, in the process, began to understand that any discourse also references its history and is the ‘product’ of communal “boundaries that determine what can be said”, as revealed by the way language is used and “conventionalized into genres” with “specialized lexis and grammar (Halliday, 1978)” (McKenna, 2004, p. 15). This was actually an ‘accidental’ discovery on the part of some participants engaged in the analysis of how Monsanto uses the Italian language (and other semiotic cues) to sway politics that legitimize the use of GMOs in Italy, at the expense of public health, particularly at the expense of the wellbeing of the socioeconomically disadvantaged.

The critical study of such socioeconomically-rooted phenomena involve “the analysis of linguistic and semiotic aspects of social processes and problems” (Fairclough et al., 2011, p. 368) by, and for, the ethical and political agendas of a variety of disciplines that recognize within ideologies “particular ways of representing and constructing society which reproduce unequal relations of power, relations of domination and exploitation” (p. 371). Participants learn that there are two basic issues that must be addressed with such ‘bigger’ topics: the politics of social ideology and power and how language creates, sediments, materializes and sustains these

processes (Breeze, 2011, p. 495). Such a broad emphasis allows the participants' critical analysis to be applicable to a vast number of discourses and sociopolitical problems¹⁵, many of which are central to the interests of L2 learners/users.

Participants learn to welcome multi-methodological and multidisciplinary approaches within numerous linguistic, social, cultural, and philosophical and psychological traditions (Blommaert, 2005; van Dijk, 2012; Wodak and Meyer, 2009), all united by the conviction that any ideologically-dense, multimodal and semiotic text is sedimented in society via the social interplay of unaware agents and clever social structures of power (Wodak and Meyer 2009). Useful for SLA is the fact that CDA makes use of resources from “pragmatics, conversation analysis, narrative analysis, rhetoric, stylistics, sociolinguistics, ethnography, or media analysis, among others” (van Dijk, 2001, p. 352), although some have moved into a more critical line of thinking and even anti-disciplinary approaches to language research, such as the critical applied linguistics approach advocated by Pennycook (1997). Fortunately, for the participants who are not trying to be ‘experts’ as much as they are trying to better understand certain bigger discourses in Italian, there is the good news that there “is no single theory or method that is uniform and consistent throughout CDA (Blackledge, 2012, p. 616)”¹⁶. However, the facilitator does need to know certain basic historical facts so that s/he may best help L2 users stay on track in their analyses of the most challenging texts, videos, and audios of the semester. It is crucial that the participants also grasp how awareness must precede social change, which is CDA's focus par excellence.

¹⁵ Some examples include international military discourses (Achugar, 2007); CDA and culture (Zhang, et al., 2011; Scollo, 2011; Shi-xu, 2005); multimodal analysis of war photos (Machin, 2007); meta-analysis of CDA weaknesses (Chilton, 2005, 2004); positive approaches to CDA (Bartlett, 2012); corpus linguistics (Baker, et al., 2008); literature, media and arts (Carpentier & Spinoy, 2008), and more.

¹⁶ For contrastive examples, see Meyer, 2001; Fairclough, 2003; Weiss and Wodak, 2003. Kress & Hodge, 1979

For the sake of theoretical context and grounding, we consider that the connection between language, power and ideology took precedence in the 1970s as critical linguists (Kress and Hodge, 1979; Fowler, Hodge, Kress and Trew, 1979)¹⁷ adapted (and moved beyond) Halliday's descriptive systemic-functional linguistics, with its emphasis on socially-created meaning, to explain the underlying reasons that oppression (discrimination, dominance, etc.) is often not perceived as such by those who are oppressed (Fairclough, 1992, p. 9). It is what seems most innocent that is most stained by ideology, as evidenced in Gramsci's (1971) discovery of the connection between common sense and ideology as reflected even in everyday collective life, such as art, law and economic transactions. The invisibility and acceptability of such oppressive power is due to the naturalization processes of discourses (see Wodak, 2007; Blommaert, 2005). As McKenna (2004) explains, "It is the facility of taken-for-granted 'common-sense' that provides ideology with its strongest ideological effect [or doxa] the 'spontaneous belief or opinion [that] . . . would seem unquestionable and natural' (p. 112) or 'things people accept without knowing' (p. 114)" (p. 13). One aspect of the course that particularly stood out is the number of times that the participants (and potential participants) expressed a sense of dismay and shock when led to question what was assumed to be 'true'.

However, this course needed to move beyond a strict focus on oppression to embrace the dawn of emancipatory aspirations, specifically the possibility of change enacted by agents capable of rising above the socially-established 'reality' of power. By exposing the multimodal

¹⁷ Though Fowler, Hodge, Kress and Trew (1979) and later Hodge and Kress (1993) never used the term 'CDA', their work began to clarify it as an approach to social ways of looking at power and ideology. Fairclough may be the first to use the term CDA in 1985. See also Waugh, et al. (submitted), 'Critical Discourse Analysis: Definition, Approaches, Relation to Pragmatics, Critique and Trends'. To appear in *Interdisciplinary studies in pragmatics, culture and society*, Jacob L. Mey and Alessandro Capone, eds. Dordrecht: Springer Verlag, in the series "Pragmatics and Philosophy", edited by Alessandro Capone.

ways (see Djonov and Zhao, 2013; Machin and Mayr, 2012a and Machin, 2007; Kress and van Leeuwen, 2001; Thibault, 1991) in which we create our systems of social realities, including systems of oppression, (Machin and Mayr, 2012a), we find the reason for – and the means of – emancipation from the same (Hodge and Kress, 1988). This is why human cognition also becomes important due to the crucial need to raise deep awareness and critical thinking in order to distinguish impositions of thought and identity from personal desire (Wodak and Meyer, 2009; Meyer, 2001; van Dijk, 1993) as well as the semiosis and discourse (‘Context models’) that we have come to appropriate as ‘our own’ (van Dijk 2012; Tomasello, 2003; Wodak and Meyer, 2001).

This general idea (not the theoretical details) became particularly crucial to this study as the participants considered that “the symbolically dominated conspire and commit isolated treasons against themselves” (Everett, 2002, pp. 66–67, cited by McKenna, 2004, p. 13), a discovery that became particularly meaningful to the participants when researching the discourses surrounding GMO crops.

Adding a socio-cognitive perspective to CDA helps the participants better grasp the connections between the way language is used in society (micro) and those structures that would appropriate and dominate such use (macro), as well as how such ideologies are woven into the discourse itself (see also, Foluke, 2011; Isbuga-Erel, 2008a, b; van Dijk, 2006a, b).

Another way that ideologies succeed is through the use of confusion and complexity. Wodak (2011) recognized a French school of CDA, originating with Pêcheux (1982), which connects intellectual confusion with ideological persuasion, and scrutinizes “the way in which contradictions in society are inscribed in texts, as well as the way that readers are led to collude

in ideological discourses” (Breeze, 2011, p. 494)¹⁸. Such complexities of ideology point to the need for broader frames of analysis. This is what Wodak (Wodak, 2001, 2009) attempts to provide through her discourse-historical approach (DHA) to CDA and social justice by considering the multilayered levels of political oppression through discourse (see also Reisigl and Wodak, 2001; Clarke, et al., 2012; Graham, et al., Krzyzanowski, 2010; Khosravnik, 2010; Machin and Suleiman, 2006; and Pavlenko, 2005.).

The blending of sociolinguistics and CDA allows anthropological approaches to humanize and give a voice to ‘issues’ of inequality and oppression, such as immigration, ethnicity, race, sexual orientation, gender, and religious discrimination. However, the polemic of agency, central to this study, continued to resurface. It is Hymes (1996), then, who exposed the inequality and oppression within anthropology and sociolinguistics and how the use of language directly reflects and refracts inequality and oppression, arguing that language [we could add, even that of the researcher] may become “an instrument of exclusion and domination” (p. 6). An example of this hindrance to social justice comes from Foucault’s paradoxical advocacy of a materialist theory of discourse while – at the same time – advocating for an anti-Marxist bent, with its resulting denial of the very possibility of access to meaning. CDA proponents have heavily criticized this view due to its powerlessness in matters of social justice, though Foucault’s poststructuralist approach to CDA did manage to disrupt and challenge – rather uncomfortably - the underlying assumptions of many critical analysts who assume, rather uncritically, a circular left-wing political perspective as the starting point for ‘fact’, ‘justice’ or ‘truth’. However, the criticism of his postmodern approach to CDA was its disempowering

¹⁸ Per Breeze (2011) it is crucial to distinguish between the early CDA in Great Britain (Fairclough, 1985, 1989; Fowler, 1991), and its latter development by Chouliaraki and Fairclough (1999), as well as its sociocognitive turn with van Dijk’s group (1991), and Wodak’s “discourse historical school” (Wodak 1996, 2007), as will be discussed.

consequences to social justice, even on an intellectual level, since with no points of potential departure for meaning, the analyst is left to an arbitrary decision as to what should be considered worthy of criticism, or rather, the arbitrary choice of values; what would become known as ‘decisionism’ (Habermas, 1976; Macintyre, 1981). This dilemma was not restricted to Foucault. It was a moment of embarrassment for CDA as a whole. If there is no moral or intellectual ground upon which to base our reasoning, then there can be no credible argument formed for any reasonable political stance or discourse.

For this reason the current study seeks to avoid a prevalent tendency: it would seem that extreme postmodern CDA researchers are potentially left with no means of even defining – at least with a cohesive and coherent argument – concepts such as ‘oppression’, ‘discrimination’, ‘bigotry’, ‘racism’, or ‘sexism’, and no ability to offer credible interpretations of the sociopolitical struggles. With no starting point for defining the problem, there is only a small chance that anyone would venture a solution toward emancipation. This is why Hammersley (1997) asked if CDA researchers were, perhaps, “people who have chosen a particular standpoint by an act of will, rather than as a result of extended deliberation based on examination of the facts and issues” (Breeze, 2011, p. 500), a dilemma worth considering if we – as researchers and participants - as well as the difficult issues we investigate, would be taken seriously.

On the other hand, such an alarming – and borderline existential – dilemma may, in itself, be the smokescreen of discourses that seek to place a “libertarian spin on postmodern perspectives that describes the postmodern organization as having ‘no centrally organized system of authority’ (Crook, et al., 1992, p. 187). Although CDA may appear to be a boundary-less organization undermining bureaucratic hierarchy, as Dale and Burrell (2000) point out, notwithstanding Foucault, power nevertheless does centralize in definable clusters (around

capital and gender in particular)” (McKenna, 2004, p. 22). In other words, although CDA practitioners may not always be in agreement on theoretical or methodological approaches, there is an element of ‘self-evident’ oppression and emancipation that comes to the forefront as needing to be addressed. Of course the critics could argue that this too proves to merely be a matter of reinforcing the analysts’ a priori notions, labels and constructs¹⁹. This debate is why Blommaert suggests, according to (Breeze, 2011, p. 515), “a more disciplined approach to taking in contextual features, which would include three aspects that he believes are ignored by mainstream CDA, namely resources, text trajectories, and data histories”. Hasan (1999), in fact, proposes a “new radicalism” beyond the prevalent academic assumptions that see capitalism and imperialism as the sole source of “all our problems” (p. 151), relevant in an age in which left and right regimes have oppressed women, gays, the poor, and certain religious, racial, and ethnic groups, to name a few.

Part of such a call to clearer insight is the recognition that CDA’s mere observation of inequality and injustice has diminished neither, but rather has been a way of ignoring “the voices of those subject to inequalities. By erasing the messiness and complexity of the voices of social actors, CDA potentially offers a view from above rather than from below”. Its failure to see social dilemmas from the perspective of the victim is due to its narrow focus on “structures of power in society” (Blackledge, 2012, pp. 617-618). This is another reason that the current study promoted on-the-street and online interviews with people ‘in-the-know’ *prior* to assuming a definition of the problem and the solution. It became apparent that a socially-based CDA without emphasis on text, language or agency defeated the very purpose of the acronym. Without exploring the language of the user that reveals oppression, CDA proponents would be left with

¹⁹ See Blommaert, 2001, p. 15.

mere theories that ‘work’ regardless of the presence of people. There was also legitimate concern that this decontextualized CDA could become “an intellectual orthodoxy” (Billig, 2002: 44), and worse, “an institutionalized discipline with its own paradigm, its own canon and conventionalized assumptions, and even its own power structures” (Breeze, 2011, p. 493).

The participants of this study were encouraged to explore the histories of emancipated people by reading online sources in the L2 and looking at the issues from more than one political ideation. Much of what the participants found was not always negative or problematic, but rather it became clear that, when it comes to social justice, there was also much positive news to be shared on progress in the world. However, CDA’s largely negative focus, with its preference for theory at the expense of social change, improvements in social justice, grassroots movements, education and the voice of the oppressed, led to the hopeful creation of what would become known as Positive Discourse Analysis (PDA) (Luke, 2004; Martin, 2004; and Mosley and Rogers 2011). Rooted in the conviction that deconstruction of social problems is not synonymous with positive reconstruction and betterment of society, PDA sought to explore how emancipation overcame oppression (Bartlett, 2012) and how equality was achieved, that is, the positive side of the story of social struggle (Macgilchrist, 2007, p. 74). In spite of this more balanced approach, the failure of PDA to consider a detailed examination of contexts led to criticisms that labeled it as naïve, wishful, and not truly scholarly; these concerns are being addressed by PDA scholars in more recent research that focuses on educating in matters of social justice (see Rogers and Mosley-Wetzel, 2013; Bartlett, 2012). Two clear examples of this more informed approach are Freitas and Zolkower’s (2009) educational push to inform mathematics teachers on ways of deconstructing oppressive discourses in their field, and Catalano and Waugh’s (2013) exposure of unethical and illegal activities by corporate executives perpetuated

through metonymy's power to negatively shape public opinion to support or overlook such crimes (see also Saint, 2008; Machin and Mayr, 2012b; Achugar, 2007; Santa Ana, 2013).

Several participants expressed the ideas that knowledge is power and that education is the way to such knowledge. Education may, in fact, be CDA's new battleground for how oppression is sometimes assured 'naturalization' through commonly 'accepted-as-innocent' educational systems. This is leading researchers to consider sociocultural perspectives in education (Fairclough, 2012; Kress, 2012; Rogers, 2012; Gutiérrez, 2008; Lewis, et al, 2008) and the potential for education as a bottom-up method of achieving social progress. This new form of CDA and PDA seeks to move beyond the laziness of postmodern thought, that of mere exposure and awareness-raising, in order to challenge a pedagogy of inactivity made popular by intellectual giants such as Bourdieu, who denied "pedagogic action any role as a liberating force" (Hasan, 1999, p. 99). The bottom line for PDA is that positive social change cannot merely come from the top of academia but must also be part of the curriculum of the students who will be tomorrow's change in the world. This is especially relevant when we consider that CDA is rooted in the advancement of the causes of the social 'underdog', often maintained in a state of oppression due to conformity to the hegemonic social majority (Fairclough et al., 2011, p. 358).

Social activists and critical discourse analysts agree with the need to expose the political spin and the homologies that make such spin appear natural (Chilton, 2004; Wodak, 2009). However, CDA and PDA need help. We cannot fight oppression from the limited vantage points and perspectives of one or two academic fields. This epiphany is what is now leading scholars to argue for the tremendous social justice benefits that could result when "the logic and categories of different disciplines are brought into dialogue with one another" (Fairclough et al., 2011, p. 362). Critical theory's move beyond the dichotomies created by "the Foucaultian attack on

structuralism and what is essentially the distraction of extremely relativist postmodernism” allows for the coexistence of “Foucaultian poststructuralism and neo-Marxian theory”, with interdiscursivity being considered a more balanced way of looking at social problems and their solutions (McKenna, 2004, p. 11). The participants learned firsthand how disciplines can certainly learn from each other (interdisciplinarity); however, a challenge is being raised to transgress even these boundaries and pursue the type of global awareness that changes the very disciplines that dare to engage it. The new analysts (the ‘organic intellectuals’) are called to be “aware that their work is constantly at risk of appropriation by the state and capital” (Fairclough et al., 2011, p. 374), and encouraged to consider that the transdisciplinarity of Critical Discourse Studies (CDS) may be the ‘cure’ for previous academic myopia. As Fairclough et al. (2011) point out, the power of transdisciplinarity is in the way “the logic and categories of different disciplines are brought together into dialogue with one another” (p.362). This approach assumes that things don’t have to be the way they have been and currently are (Fairclough et al., 2004, p. 1) but goes beyond theory to offer solid solutions that are connected to ‘real’ social life (see Fairclough, et al., 2004). By letting the voice of the oppressed contribute to the solutions, this approach avoids PDA’s naiveté as well CDA’s tendency to explore the macro-context at the expense of the actual/micro/local context. It withholds from perceiving social injustice unless the voice of the people claim such oppression, problematic if the people have no way to voice their grievances. It listens to the critics and makes changes that benefit in ecological ways. It seeks co-reconstruction of solutions after co-deconstruction of problems, attracting “scholars from a considerable range of disciplines in the social sciences and the humanities who are beginning to develop new syntheses between discourse analysis and a variety of theoretical and methodological perspectives” (Fairclough, et al., 2004, p. 3). It avoids the “rhetoric of self-

praise” (Billig, 2002, p. 37) so prevalent in CDA and gives way to honest reflexivity and reevaluation of the purpose of criticism itself, with the ultimate realization that, though the role of discourse is crucial for the improvement of society, it is only one small part of a much larger process of social change (Fairclough et al., 2004, p. 3).

Central to the L2 classroom and social justice connection is the recognition that CDA’s hesitancy to establish fixed epistemological and ontological foundations led to insightful skepticism as to its relevance to culture in general and social justice specifically. In other words, this is exactly what an effective training program for L2 learners/users would want to avoid. PDA and CDS approaches seek to take the schools of thought in more positive directions while turning the question of social justice on its head: Justice, per whom? Whose version of ‘right’ and ‘wrong’ are we adopting in order to emancipate oppressed groups? As Zhang et al. (2011) point out, “there is now a large amount of work using the label ‘CDA’ emerging in other parts of the world, in other languages and under social and political conditions that are very different from those of liberal-democratic Europe” (p. 95). Perhaps in this new phase of CDS, we could most benefit from a basic common courtesy, Bakhtin’s notion of *polyphony* (1984) as related to the metaphor of music: “In music, polyphony (and counterpoint) involves two or more different melodic lines which move and sound different from one another, but which, when heard as a whole, work together harmoniously... There are different speakers, sometimes they clash (are dissonant), sometimes they are consonant (in agreement). But not any individual voice whatsoever will work harmoniously” (Zhang et al, 2011, p. 105). After all, isn’t the dismantling of the illusion of the ‘Other’ one of the reasons we teach language and culture in the first place? Is it not one of the best ways for operatives to enter into the reality of the ‘Other’ instead of promoting the distinction? The participants of my study seem to think so and demonstrate that an

intermediate level of L2 development is not too early for a move upward to bigger topics and deeper agendas, such as those investigated in CDA/CDS.

Therefore, it is only reasonable that, in a course that focuses on agency and claims to be dynamic, complex and ecological, and that in particular grants freedom to the individual to choose sociopolitical topics to be explored and analyzed, that the participants should also be free to choose their own technologies to accomplish the tasks. After all, very few of the participants use physical library resources as much as they do online resources. A quick glance at what is available through Google Scholar should suffice to show why paper books and articles are becoming increasingly scarce. SNSs are the places where participants of a certain age and at certain places in the hierarchy, exchange ideas, share artifacts, and develop their own discourses on a variety of interconnected topics. Participants are often part of multiple SNS platforms, sometimes merging them, such as when a participant places a Twitter feed on a Facebook thread, or posts a YouTube video on a blog. Choice of SNS is crucial for the expert. The experts, in this case, are the participants. However, the participants also learn to balance such freedoms with the requirements of the institution. One such requirement, per the syllabus, was the use of Facebook. Due to the ecological emphasis of the course, participants were given the freedom to use other SNSs. I did make a strong case with the participants for the use of FB, and this for very good reasons based on extant research and the pilot study of their peers. That last point is what participants found most persuasive. In spite of the commonly-known negative aspects of FB, I made it clear that there was a place – in an ecological course – for the extension of the classroom beyond the physical domain and that, although other technologies may be just as effective, I did have much experience and understanding on how to best achieve such an extension (at this time) via FB. What follows is the best and most extensive literature I could find on the topic that led

me to the technology portion of the pilot study and, eventually, to the ecological current study. I generally call this ‘The good, the bad and the ugly of social networking’. However, let’s start with the last category (the ugly) and then move back and forth through the literature (the good and the bad) so we can gain a more balanced and convincing view on why TELD facilitators may want to consider this technology.

3.2. The Good, the Bad and the Ugly of Social Networking

This section explores recent literature related to social networking as extensions and tools of the SLA classroom, looking specifically at the benefits, challenges, positive and negative effects, student reactions and engagements with such technology. One underlying question is whether or not FB lends itself to more than mechanical drills and superficial L2 use. Implied in the research questions is whether or not the participants engage FB as a multimodal hub for analysis that reaches beyond the basic goals of SLA. After briefly grounding the more current studies in the historical and contextual precedents that define and guide them, a simple argument is made for the need to further incorporate social networking as part of a positive, relevant and authentic 21st century SLA experience in a globalized context. Such a slice of academic discourse necessitates, by its very standards, strong evidence gleaned from interdisciplinary circles that would make the incorporation of social networking into SLA as obvious as the current use of computers.

In technologically advanced countries that allow for freedom of expression, it is perhaps an understatement to claim that the Internet is as revolutionary as the invention of the printing press. Today we cannot imagine our lives without Web 2.0 technologies, even though only five years ago few people could imagine its relevance to everyday life, much less, academic life (McBride, 2009). The same could be said of Social Networking Sites (SNSs). Now academic

libraries are on Facebook and Twitter, offering unprecedented conveniences for learners and teachers seeking ways to make resources most easily accessible and a desirable for retrieval (Woodard, 2009; Cohen, 2007; Breeding, 2009; Ganster and Schumacher, 2009; Lindsay, 2009), though sometimes problematic due to student passivity in research (Miller and Jensen, 2007) or desire for privacy (Connell, 2009).

The widespread use of SNSs is evident in the way college/university admissions offices currently reach out to students (Mattson and Barnes, 2009; Harris, 2008; Wandel, 2008; Violino, 2009; Tucciarone, 2009; Heiberger, and Harper 2008; Reuben, 2008). Social networking is how we collaborate, work, play, study and experience the autonomous joy of self-publishing through SNS-versions of wiki projects, blogs and a growing number of New Media (Warschauer and Grimes, 2007). The overwhelming majority of studies evidence the positive aspects of incorporating these Web technologies in higher education as extensions of our human acquisition limitations (Luke, 2006; Belz and Kinginger, 2002, 2003; Garrison and Anderson, 2003; Sykes, 2005; Arnold and Ducate, 2006; O'Bryan and Hegelmeier, 2007; Lord, 2008). The centrality that technology enjoys in our lives - being no less important and relevant than iPhones, FaceTime, Skype, and the Internet - breaks down the barriers that see CALL as an addendum to education, and place its existence at the very center of meaningful discourse, in harmony with human speech, gesture, or any other form of semiotic construction of signification (Belz, 2002). In fact, Facebook 'gestures' as well as 'expressions' are often blended into the SLA process via emoticons, which can now be incorporated as semiotic tools within the context of assessment and correction (Shih, 2011).

SNSs help L2 educators overcome L2 pedagogy's tendency to focus on early learners of a foreign language and not advanced learners. According to Thorne and Reinhardt (2008), one of

the reasons for this lack is that only 3% of those who study certain languages ever pursue anything beyond basic courses. Consequently, many in academia do not find it practical to spend much time constructing materials for such a small percentage of students, and those that do, manage invariably to make the emphasis literary and not linguistic. Within SNSs such categories disappear since language learners at all stages of L2 development are already interacting on Facebook and often navigating L2 semiotic landscapes, adapting SNS interactions according to their own level of communicative competence. In fact, social networking is becoming a central hub of communication, much like instant messaging (IM) is being used like email (Warschauer, 2004). Knowing how to engage on SNSs in the L2 (from a technological standpoint) becomes part of the L2 communicative process itself. The two can no longer be separated without interfering with this generation's way of expressing language and identity (Downes 2006; Blattner and Fiori, 2011).

3.3. Learning from Other Disciplines

Unfortunately, for those working in second language acquisition (SLA), second language (L2) pedagogical uses of SNSs remain a poorly explored field and “future research should investigate the less studied Web 2.0 technologies, such as Facebook, Twitter, and Second Life, as well as other widely used Web 2.0 tools, such as social bookmarking tools, mind-mapping tools, etc., in order to provide both researchers and practitioners with more information about various options for technology integration” (Wang and Vásquez, 2012). Thankfully, interdisciplinary and transdisciplinary approaches to SLA allow language educators to learn from the successes and challenges of other fields that have considered ways of implementing social media. A few things we have learned are worth considering. Having a presence online via SNSs is important to today's students (Harris and Rea, 2009; Buffardi and Campbell, 2008; Rhoades,

et al., 2008), with Facebook being the medium of choice for college students (Stutzman, 2006; Cassidy, 2006; Schroeder and Greenbowe, 2009), especially in Western societies (Godwin-Jones, 2010), for social bonding (Schwartz, 2009) of all ages (Tufekci, 2008). However, instructors may need to be sensitive to prevalent preferences for certain SNSs due to demographic developments (Perez, 2009a, b). Its use has become so ingrained that it establishes its own metaphors and memes. In some cases, progress is defined by its acceptance and ubiquity. Since Web 2.0 resources are developing at unprecedented speeds (Zhang, 2009), they are becoming more than mere academic tools and are shaping the very act of communication and how we conceive of languages (Warschauer and Grimes, 2007) within collaborative communities of practice (Antenos-Conforti, 2009; Dippold, 2009; Ducate and Lomicka, 2008; Kessler, 2009) that shape our socialization (Greenhow et al., 2009; Godwin-Jones, 2008; Winke and Goertler, 2008; Solomon and Schrum, 2007) and the linguistic performance of individual and collective identities. As Thorne (2008) states “the Internet is less a technological fact than a social fact” (p. 418). Beyond any specific discipline, we could add that the Internet is now an academic fact for how it is the way we create, disseminate and share information (Lomicka and Lord, 2009). The same could now be said of SNSs: With one click, they allow us to switch from social to academic environments, from chatting with a significant other to sharing documents for an exam. They break down the perceived barriers between personas (teacher, student, friend, acquaintance) and lead to a more fluid interaction with our various – and often interconnected – communities (Mills and Peron, 2009). SNSs help balance academic rigor with what is central to social life: friendship (West, et al., 2009; Pempek, et al., 2009; Madge, et al., 2009; Subrahmanyam, et al., 2008; Eberhardt, 2007). Perceiving self as part of a group, a community, is important in building trust and interactive learning (Kok, 2008). In fact, the “writable web”

(Karpati, 2009, p. 140) ‘respects’ the place of the individual in the collective of language learners (Lomicka and Lord, 2009), which makes it suitable for SLA beyond the classroom walls (Durkee, et al., 2009).²⁰

Sites such as Facebook, Twitter, etc., allow students to gain emotional support for their creative work, thus increasing motivation to excel (Greenhow, 2009), not merely through methodical rigor, but through the spontaneous free flowing that occurs through the experience of social media in association with academic requirements (Dunlap and Lowenthal, 2009). These are integral tools of this generation (Nikirk, 2009) that do not necessarily process information as linearly or chronologically as previously assumed. Nearly a decade ago Thorne and Payne (2005) already realized that upon entering college, the typical student would have been exposed to a disproportionately large number of hours in regular contact with technology as compared with a minimal amount of time spent reading. This predicament would seem compounded by the explosion of technological innovations and their increasingly easier access and affordability (consider the price of the first Apple computer!). On the other hand, we cannot assume that students engaged with social networking are reading less extensively than before, especially when we consider the way digital natives construct their own multimodal semiosis – a form of bricolage that is far more extensive and complex than the previous generation could have imagined.

SLA is no longer bound by the geography of a classroom, a library, or even the physical limitations of a textbook.²¹ Though virtual worlds are poorly explored in education, the fields of

²⁰ Per Shih’s (2011) Facebook research, many studies that seek to promote blended learning are rooted in social learning and constructivist theories. The focus has shifted to multiperspectival semiosis within communities of practice.

²¹ Since the 1980s instructors have been encouraged to use the communicative method, instructed to use authentic materials, be learner-centered (Brown, 1994) and to focus on dialogue and social ways of ‘being’ in the

business have already been implementing them for their numerous positive affordances on learning and motivation (Dreher et al., 2009). Teachers that offer virtual office hours via Facebook chat increase the level of student satisfaction, as compared to traditional face-to-face office hours (Li and Pitts, 2009). SNSs break down the barriers of the electronic and face-to-face interactions since they have become extensions of the physical (Trubitt and Overholtzer, 2009; Salaway et al., 2008), motivating teachers and students to interact in ever more complex and dynamic ways that foster deeper levels of L2 acquisition (Mazer, et al., 2007). The importance of virtual worlds is that they move the learner beyond the passive position of observer and instigate planning and implementation of strategies for negotiation (Wagner and Ip, 2009), where students socialize, engage in ‘meetings’ and simulate the types of interactions to be encountered face-to-face (Wang and Braman, 2009), all through enjoyable play (Shen and Eder, 2009). SNSs are where students do more than vent. They tell their life stories, interests, likes, and dislikes (Alexander and Levine, 2008; Boon and Sinclair, 2009; Nealy, 2009). It is the SLA instructor’s privilege, then, to facilitate this same achievement in the L2.

3.4. The Efficiency of Social Networking

Synchronous Computer-mediated Communication (SCMC) is one of Facebook’s most used features. Long before the ‘FB’ acronym would become self-evident, SCMC was already making a name for itself in SLA circles. Kern’s (1995) discovery that L2 learners were achieving more production in SCMC environments than in the classroom was just as astonishing years later, as reiterated by Thorne (2008, p. 420), and for a good reason: the difference was significant

L2. Per Levelt (1989), conversation was “the most primordial and universal setting for speech and the canonical setting for speech in all human societies” (p. 29). Even van Lier (2002) viewed conversation as essential to SLA because face-to-face interaction would lead to unpredictable outcomes and allow for the potential of equal (democracy) in communication. Technology – and SNSs – is altering that very paradigm.

with an average 12.3 turns in SCMC vs. 5.3 turns in face-to-face oral discussion.²² The evaluation of the linguistic quality of the output determined that “students’ language output was at an overall greater level of sophistication in terms of the range of its morphosyntactic features and in terms of the variety of discourse functions expressed” (p. 470), just one more reason to make Web 2.0 technologies an integral part of foreign language education for this generation of digital natives (Blattner and Fiori, 2009; Farris-Berg, 2005).²³ In fact, the sociolinguistic value of being socialized through SCMC into the way one makes requests, clarification or forgiveness (Sotillo, 2005) shows how such electronic landscapes tend to mimic the natural flow of conversation within and outside of the classroom (Ewing, 2000). Being a cost-effective means of communicating instantly around the globe (Shetzer and Warschauer, 2000) makes SCMC a desirable SLA tool that results in greater L2 output on the part of learners (Abrams, 2003) who enjoy the imaginative creativity the technology affords (Smith, et al., 2003; Liu and Sadler, 2003; Coniam and Wong, 2004). The problem of staying focused on the task, (Salaberry, 2000; Liu and Sadler, 2003) is not as critical as originally assumed, especially considering the fact that student production in SCMC environments is often two or three times that of mere oral production (Thorne, 2008). However, it is crucial that the instructor prepare and plan accordingly.²⁴

3.5. Potential Drawbacks

²² Today’s SLA researchers build on discoveries dating back to the 1990’s since it was *the* exploratory phase for computer assisted language learning (CALL) research. Arguments by Kern (1995) and Chun (1994) are considered the strongest of the early Synchronous Computer-mediated Communication (SCMC) studies and are still relevant today.

²³ Chun (1994) concluded that SCMC use promoted increased morphological complexity as compared to non-SCMC written work.

²⁴ Most of the studies in this area confirm that there is a significant improvement in oral proficiency compared to the control group, especially if we are able – through SCMC – to decrease the anxiety often associated with SLA (Kötter, 2001; Liu & Sadler, 2003; Coniam & Wong, 2004).

Though boyd and Ellison (2007) made the definition of Social Networking clear to the academic community and as of June 2011 over 500 million people were using Facebook, in 2010 scholars were still questioning the pedagogical validity of this ubiquitous medium (Shih, 2011) and researchers were failing to fully explore its pedagogical potential (Clack and Gruba, 2010; Thorne and Reinhardt, 2008). For example, when Warschauer spoke at a 2009 conference in Japan he claimed that he didn't know of any L2 pedagogical uses of FB and that it was really a social tool, not a learning tool (Kabilan, et al., 2010). Sometimes L2 users will find most fault with the medium itself (Facebook), seen as frustrating to the educational process, especially relevant for older students (De Villiers, 2010) and older instructors who are not familiar with the new technology (Schwartz, 2009). Such educators may simply need to come to terms with the social reality that SNSs, such as Facebook, are part of many students' and educators' daily lives (Tapscott, 2009; Stutzman, 2006; Tufekci, 2008). They may need to gain familiarity with the SNSs and learn how to use such ubiquitous tools for SLA purposes (Winke and Goertler, 2008; Mishra and Koehler, 2009; see also, Faculty Focus, 2009). The shift to higher tech SLA applications, such as SNSs (Windham, 2005), largely due to efficiency and student enjoyment is causing the L2 instructors still 'stuck' with low tech tools usually associated with teacher-centered instruction (PowerPoint, Word, etc., see Ertmer, 2005) to rethink their skepticism in relation to progress (Garrison and Kanuka, 2004), especially relevant when we consider that the choice and use of the technology itself may negatively impact student affect and L2 production (Smith and Gorsuch, 2004).

When considering the incorporation of social networking sites, we must consider the possibility that students' L2 production may have different affordances inside and outside of electronic environments, such as when being socialized into practical aspects of language, like

framing topics and taking turns (Shetzer and Warschauer, 2000; Ewing, 2000). Of particular relevance to L2 SCMC uses of Facebook, some earlier studies indicate that the communicative engagement sometimes moves beyond the academic environment, and allows the SLA process to continue long after the class is over. Though this is often positive, it also has the potential for allowing for the continued development – and ‘fossilization’ - of L2 errors (Coniam and Wong, 2004). One way of possibly preventing this when using one medium for all students is the strategic implementation of “[Pellettieri’s] dyadic groupings, in opposition to small and large group interaction” and “task type, specifically goal-oriented tasks” (Thorne, S. and Payne, J. S., 2005, p. 375) through technologies as extensions of our human faculties (Belz, 2002; Warschauer, 2005).

3.6. Balancing Concerns with Benefits

There are also practical issues that relate to social safety. General privacy concerns of SNSs are raised in relation to identity theft (Stutzman, 2006) and balancing public (professional and academic) and private life (Mitrano, 2008; Peluchette and Karl, 2010; Kolek and Saunders, 2008; Martinez, et al., 2009; Acquisti and Gross, 2006; Tufekci, 2008; Shelton, 2009) as well as specific ones related to SLA (Blattner and Fiori, 2009; 2011; McBride, 2009), and the amount of teacher discourse that is appropriate (Mazer, et al., 2007), since too much disclosure hinders the educator’s credibility in the eyes of the students. Blattner and Fiori (2009; 2011) look specifically at uses of FB and sociopragmatics. At the same time, there is evidence that the appropriate incorporation of SNSs lends credibility to the language instructor because it is perceived as an act of embracing such tools as part of the L2 learner’s authentic culture (Garrison and Kanuka, 2004). This is an especially delicate balance to maintain since studies suggest that informal relationships between teachers and students produce better academic outcomes

(Sturgeon and Walker, 2009), especially if students have an outlet like Facebook where they can express concerns and frustrations (Selwyn, 2009).

Others see potential challenges to authorship (Fountain, 2005) and some focus on the affective reaction of students, particularly the fact that some students strongly resist the incorporation of Facebook as a L2 pedagogical tool (Reinhardt and Zander, 2011). Though it is clear that the majority of FB L2 users see the medium's ability to facilitate a more fluid individual and collective creation of identity that fosters collaboration among members of communities of practice (Mills and Péron, 2009), some students resist it because of the perception that the prevalence of non-standard versions of the L2 will hinder proper SLA (Mitchell, 2012). One concern related to the online community created through Facebook is the fear of being misled by the inaccurate postings of others other than the instructor (De Villiers, 2010). This is a justifiable fear since the Internet is notorious for countless sources of misinformation, eccentric forms of language as well as offensive sites. Even if not misled, sometimes L2 learners can become discouraged when others do not respond to their posts (De Villiers, 2010). Another potential drawback of L2 uses of Facebook is the tendency to extremes in disregarding form in favor of communication (Mills, 2011). At the same time DePew (2011) would direct a challenge at the institutions that see students as "inadequately literate" (p. 54) due to surface mistakes, with a focus on such inadequacies. The balance that is attempted (through Facebook and classroom activities) is to see mistakes as part of, and not a hindrance to, the learning process. The idea of a standard target language to be achieved is interpreted as a form of colonialism, and a proposed solution is "that in spite of these students' grammar and usage errors, they can make complex and deliberate rhetorical choices when composing in other contexts, such as social media spaces (e.g., Facebook)" (p. 56).

Per DePew, Facebook provides a space for the development of a “third culture” that expands learners’ rhetorical repertoire. The methodology consists of case studies in which multilingual participants grant the researcher a ‘tour’ of their social networking pages, deemed more ethical than a textual analysis done in the absence of the author. Per the study, though the reasons for signing up for FB were varied, certain features of L2 use stood out, such as the ability to shuttle between registers, negotiation of identity, socialization into crude humor, the use of incomplete sentences (mimicking spoken language), code switching, error adjustment, dealing with the embarrassment of faux pas, and more (pp. 63-70). This often-missed connection of the social to the pedagogical is crucial. According to Mitchell (2012), students join FB because of the perception that it will improve their lives and their relationships with friends who are already on the site, however the benefits of such motivation include “socio-pragmatic patterns in greetings and vocabulary/slang” (p. 472) by means of observation of authentic language use and the ability to engage the target culture.

In spite of the concerns raised, the overall consensus is that “students’ attitudes and perspectives towards the Facebook-integrated [language] writing course were in moderately high consensus” (Shih, 2011 p. 9). The fact that students are already on Facebook, makes it a convenient ‘space’ to engage academically (McBride, 2009) and explore – autonomously – new forms of the L2. Harrison and Thomas’ (2009) ethnographic research shows the L2 pedagogical affordances of Web 2.0 in areas of interactivity, participation, and peer feedback with a focus on SNSs designed for L2 learning, demonstrating the positive social experience that SNSs expand relationships to include new ones. People who use SNSs tend to spend one third of their leisure time connecting to people they know as well as people whom they have never met in person. Such blending of the social and academic on Facebook, being part of the L2 learner’s real

experience, results in the type of incidental learning that “usually happens in the process of completing tasks ... and/or in the online environment... through observation, repetition, social interaction, and problem solving...” (Kabilan, et al., 2010, p. 180), backing up the previous discovery that the enjoyment of language learning through online tools supports the creation of a ‘stress-free study-group’ environment where the use of technology “reduces the cognitive demand of L2 language production and may enable students with measured low-span working memory to produce more complex language than would otherwise be the case” (Thorne, 2008, p. 422). As society adapts to new ways of acquiring information, the field of SLA is faced with the encouraging and positive challenge to be a part of this

“historical period marked by radical transitions in how everyday communicative activity is carried out. These transitions include emerging genres of language use, an increase and diversification in patterns of information consumption, powerful possibilities for producing and disseminating information, and changes in the granularity of information sharing between spatially dispersed coworkers, friends, and family members” (Thorne, S. and Payne, J. S., 2005).

Some studies, in fact, focus on the social advantages of SLA uses of technology (Belz, 2002, 2005, 2007; Tudini, 2003; Thorne, 2003). By virtue of its ability to connect globally-dispersed users, Facebook lends itself to a very natural form of L2 ‘telecollaboration’,²⁵ specifically for a phenomenon that, on the surface, appears negative. Members of different cultures are bound to misunderstand each other at times, however, in SLA such “missed” communication (Ware, 2005) is perceived as essential to the SLA process. The fact that on Facebook this happens

²⁵ Language and culture are essentially inseparable (Agar, 1994; Kramsch, 1993, 1998; Scollon & Scollon, 1995) and mutually constructive phenomena.

openly (on the Wall) or privately, allows the user to vary the level of negotiation of meaning due to number of included participants.

O'Dowd and Ritter (2006) compiled a structured inventory of possible failures in telecollaboration, and Belz (2005) concludes that 'teaching the conflicts' is the very *raison d'être* of such engagements, a form of networking, even social networking. Stevenson and Liu (2010) reiterate the fact that social networking tools excite L2 learners also because of how they facilitate acquisition directly from native speakers beyond the confines of the academic institution. Harrison and Thomas (2009) tweak the term 'Networking' to consider that, since SNSs are mainly used in the L1 to maintain existing relationships, it is hypothesized that using this medium to promote L2 use and acquisition would result in actual networking, or the establishment of new relationships. Due to the need to elaborate these ideas within a framework that was inclusive of the social development of identity, the authors chose to build on the constructivist approach to social interactionism due to the emphasis on continuous reflection and meaning-making inclusive of students and teachers: "Successful learning is seen as being dependent on how learners interact with the people around them in order to overcome problems they cannot solve by themselves, so that they can move to the next stage of development that lies in the ZPD" (p. 115). This was a direct challenge to the sufficiency of quantitative studies alone to appropriately grasp the dynamics of social interactions, especially important given the discovery that the development of relationships online can often be as lasting and significant as the relationships developed in person (p. 116). The study confirms the benefits of agency and autonomy, especially as language learners take the process into their own hands. Such collaborative spaces allow for the language learner to take charge of his/her acquisition process as the instructor becomes a facilitator (Karpati, 2009) with readily available authentic and

relevant SLA tools. Mills (2011) also discovered that Facebook complemented the language classroom by how it allowed students to make connections to course content and establish meaningful and contextualized interactions within online L2 communities. Kabilan, et al. (2010) focused on student affect and perception of the usefulness of Facebook as a SLA extension of the classroom. The overall consensus of students is that Facebook “can be an online learning environment to facilitate English language learning in terms of (1) students’ improvement of language skills and, (2) students’ motivation, confidence and attitudes towards English language learning” (p. 183).

3.7. The TELD Value of Wiki-like Uses of SNSs

Facebook Wall postings and creation of personal pages of interests, fan pages or groups to be ‘liked’ and engaged by others gives Facebook a ‘blog’ or a ‘wiki’ feel for many users. This results in significant improvements in writing, especially relevant considering how blogging has now moved to Facebook in ways that are unique to the individual writer.²⁶ Other times, assignments require L2 learners to co-create threads on certain topics, often leading to the final creation of a singular text. This form of Wiki technology that Facebook allows has particular value when we consider how collaborative wikis can help L2 learners approximate a particular register or genre, resulting in formally homogenous texts, despite the fact that they were edited by multiple authors (Emigh and Herrings, 2005). This is a phenomenon that is central to the way scholarship and authorship is developing in the west (Hazari et al., 2009).²⁷ Wiki-like projects

²⁶ Thorne, et al., (2005) found that students preferred to blog in the L2 instead of maintaining a traditional journal and found the ability to make their own work public while also viewing the work of others to be a very enjoyable experience.

²⁷ As Anderson & McPherson (2011) point out, “Multimedia scholarship is often produced through intense collaborations that extend across very different disciplinary traditions, including the humanities, the arts, computer science, and engineering. Projects produced by Vectors connect scholars, designers, editors, and technologists in close, iterative collaborations that last many months (p. 141).

have been shown to improve acquisition by at least 204% (Ras and Rech, 2009), especially when blended with other technologies that are preferred by students (Williams, 2009) that develop the “affinity space” (Gee, 2004) for digital literacies (Knobel and Lankshear, 2009).

Mitchell (2012) points out that three dominant motivating factors for online engagement with other language learners are “friendships (new and old), cultural learning, and a desire to try new things” (p. 483). Facebook builds a sense of community, free from the constraints often imposed on students as learners (Mills, 2011). Through situated learning theory, Mills understood the symbiotic relationship between intermediate L2 learners’ participation in the process of developing relationships and their ability to gain knowledge within online communities of practice: “higher order functions develop out of social interactions” and “language learning needs to be conceptualized as both a social and cognitive process” (p. 2).

Facebook tends to break down the barriers between peers, learners, teachers, family, experts and novice, resulting in the development of communities of practice where individual and collective identities may be expanded beyond the academic contexts. Equally relevant is that Reinhardt and Zander’s study (2011) succeeded with intermediate language learners, where negotiation of meaning and negotiation for meaning take center stage (Blattner and Fiori, 2009). They further explored how Facebook resources allow for *immediate* and *tailored* feedback between peers, students, native speakers and instructors, something impossible on such a broad scale prior to Facebook’s introduction in 2004.²⁸ Such uses of blended teaching (Facebook as extension of the L2 classroom) for instruction, instruction, peer assessment, and interaction

²⁸ Since past theories fail to explain the integration of comprehended L2 into the learner’s own system (Chapelle, 2009), we need a place where students learn “from real-life language use” and examine “it beyond the social and cultural confines of their L1” (Blattner & Fiori, 2011, p. 35) that is attractive to this generation of more autonomous language users. For Blattner & Fiori, such a space exists online via Facebook.

improve the students' writing skills and motivation and increase the students' enjoyment of the acquisition process, especially based on "the instructor's teaching techniques, teaching enthusiasm, and sense of humour" (Shih, 2011, p. 11). This emphasis on planning 'fun' was echoed by Kabilan et al, (2010), who concluded that the students' satisfaction and value of online tasks are largely the result of the instructor's careful integration of Facebook. In other words, you cannot just 'toss' language learners into a virtual semiotic landscape and expect positive results. Of worthy mention is their citation of Yancey's 2009 discovery that students tend to view the writing done on Facebook – among other online resources – as 'communication' whereas they see academic work as test-taking 'writing', a startling result that doesn't 'just happen' unless the students are properly guided. Equally crucial is Kabilan et al.'s emphasis on Facebook's potential for incidental learning, the "unintentional or unplanned learning that results from other activities ..." (p. 180). The list of what those activities could be varies according to the choice of the SNS. For example, many stand-alone services online (email, chat, blog, etc.) are consolidated on Facebook (Solomon and Schrum, 2007), transforming the educational space into a space that is "hip, hot and happening" (Vander Veer, 2008, p. 158). Facebook "has the potential to find means to link informal and recreational writing with academic writing" (Godwin-Jones, 2008, p. 7).

Wang and Vásquez (2012) offer useful guidance in their consolidation of recent studies that relate to SLA uses of Web 2.0 technologies, showing how the major areas of SLA can effectively be taught outside of the classroom setting, including SLA uses of SNS, such as Antenos-Conforti, 2009; Halvorsen, 2009; Harrison and Thomas, 2009; McCarty, 2009.²⁹

²⁹ Each of the consolidated studies (p. 418) could be easily applicable to SLA within sites such as Facebook: L2 writing (Antenos-Conforti, 2009; Armstrong and Retterer, 2008; Arnold, et al., 2009; Ducate & Lomicka, 2008; Kessler, 2009; Lee, 2010; Lund, 2008; Mark & Coniam, 2008; Raith, 2009; Zorko, 2009), Attitudes and perceptions

Although not replacing the classroom, online work certainly balances it and makes up for certain inherent lacks. DePew (2011) discovered that L2 learner's multimodal online writing strategies, in interaction with rhetorical situations, make up for the typical impositions of writing assignments which hinder multilingual development. Where composition courses promote the idea that students are deficient users of the L2, social media environments demonstrate the opposite. Whereas surface mistakes are often interpreted as literacy inadequacy, the dialogism inherent in Facebook interactions would see mistakes as part of, and not a hindrance to, the learning process. A proposed solution is "that in spite of these students' grammar and usage errors, they can make complex and deliberate rhetorical choices when composing in other contexts, such as social media spaces (e.g., Facebook)" (p. 56). Furthermore, Facebook provides a space for the development of a cultural amalgam and expands learners' rhetorical repertoire. The credibility of such claims comes from studies that demonstrate that the experimental group develops a better ability to shuttle between registers, negotiate identity, learn humor through socialization, code switch, mimic spoken language through the use of incomplete sentences, adjust each other's errors, and deal with the embarrassment of faux pas (pp. 63-70). In short, Facebook allows for the acquisition of the L2 that not only mimics 'real life' but is part of how we communicate today with "rhetorical decisions ranged from being flippant to being deliberate and sophisticated" (p. 70).

(Antenos-Conforti, 2009; Armstrong & Retterer, 2008; Chen, 2009; Dippold, 2009; Ducate & Lomicka, 2008; Pinkman, 2005; Lord, 2008; Soares, 2008), Learner autonomy (Alm, 2009; Halvorsen, 2009; Kessler, 2009; Kessler & Bikowski, 2010; Pinkman, 2005), Pronunciation/Oral (Deutschmann, et al., 2009; Lord, 2008; Sun, 2009; Travis & Joseph, 2009), Literacy (Choi, 2009; Lee, 2006; Halvorsen, 2009), Culture (Elola & Oskoz, 2008; Jauregi & Banados, 2008; Lee, 2009), Identity (Choi, 2009; Halvorsen, 2009; Petersen, et al., 2008), Learning community (Baten, et al., 2009; Petersen, et al., 2008; Yang, 2009), Peer feedback/review (Dippold, 2009; Liou & Peng, 2009), Technology comparison (Castaneda Vise, 2008; Chen, 2009; Stevenson & Liu, 2010), Interaction & Discourse (Peterson, 2006; Williams & van Compernelle, 2009), L2 reading (Ducate & Lomicka, 2008), Listening strategy (O'Bryan & Hegelheimer, 2007), Motivation (McCarty, 2009), Knowledge construction (Lund, 2008; Lund & Rasmussen, 2008), Communication skills (Viswanathan, 2009), Grammar (Castaneda Vise, 2008), Comparison of instructional methods (Abdous, et al., 2009).

If the instructor is creative, SNSs can even blend the way we are socialized into L2 identities. Mills' 2011 study incorporated a form of global simulations with L2 uses of Facebook (in French). Triangulation was used in the inductive coding analysis of the postings and post-project survey of 17 students along with their online interactions. Because the study involved the creation of fictitious characters living within a Parisian community, it promoted a natural flow to narrative development. The tagging and minified features of Facebook allowed for the amplification of shared narratives and the preservation of data. Students were required to participate in Facebook as part of their grades and "Whereas in-class activities, quizzes, and compositions were often form focused, the goal of the Facebook interactions was to promote meaning-focused discussion, creative exchange, and language socialization" (p. 9). Conflict and heated discussion were not discouraged, as these too are part of L2 acquisition. The result of this approach is that the students began to engage as members of three interconnected communities of practice: the Parisian, the fictitious apartment, and the classroom communities, begging the question of how this really differs from 'real' life.

3.8. Higher Critical Thinking through SNSs

Facebook is often used to discuss topics such as identity, politics, ideology, religion, and work (Pempek, et al., 2009). After looking at studies that focus on lower level and intermediate level L2 learners, it is important to point out that Facebook can also be applied to upper level language divisions and even postgraduate students (De Villiers, 2010) for higher level academic discussions to both expand their intellectual knowledge and continue to build community. Since Facebook is a useful platform for credible socialization and debate (p. 1) it could easily be also used as a transitioning tool between language levels, especially when instruction in grammar and vocabulary is no longer the focus as much as discourse and more abstract concepts of dialogue.

As in this case, Facebook allows for academic researchers and academic guests to join the participants in non-invasive ways. With proper moderator guidance, participants were led to research scholarly articles to bring into their Facebook discussions. The analysis of the online asynchronous discussion groups was based on a framework of “five dimensions: participative, social, interactive, cognitive, and metacognitive dimensions” (p. 8). The participative is not based on mere quantity but on units of meaning. The interactive is based on turn-taking in relation to topics discussed. The cognitive analysis focused on problem solving and the metacognitive was analyzed based on how the participants developed their cognitive skills. Overall, students claimed to have learned from their in-depth interactions with others on more difficult topics with responses such as, “Discussion gave me perspectives that would not be encountered by merely reading the article” (p. 10). Most importantly, though the content of the discussions was, of academic necessity, heavier than what would be expected at a lower/intermediate level, some students perceived no boundaries between enjoyment and learning: “There was an informal and relaxed style. Participants felt free to ‘talk’ and express in ways themselves in ways in which they felt comfortable. Light hearted banter and humour occurred alongside serious and deep contributions” (p. 13).

The postmodern fragmentation of language and identity described in the previous section on performativity could benefit from neglected spatial metaphors (Johnstone, 2004; Britain, 2010a) – and their relationship to time - to redefine ‘communities of practice’ (Eckert and McConnell-Ginet, 1992; Lave and Wenger, 1991) and further challenge the limitations of the variationist geographical focus (Britain, 2010b) by exploring the equally valid physical and ideological constructs of space (Johnstone, 2004), such as communities in a classroom versus communities on Facebook. Furthermore, this study could benefit from more careful attention to

the impact of the co-evolutionary process of languages, the ‘niche construction’ (Odling-Smee, et al., 2003), while respecting the language user’s agency to conform or transgress, as lessons in how the L2 is authentically used and transformed through use. Ultimately, “The fact that half of the field sees these findings as trivially true and the other half argues fiercely against them suggests to us that the sciences of language are on the brink of a paradigm shift” (Onnis and Spivey, 2012, p. 124). The challenge of this study, then, is to be a part of the paradigm shift that creates SLD environments where L2 users “shape the very context in which language is learned and used” (Kramsch, 2008, p. 97). SNSs are part of this ecology and part of the participants’ extensions of identity and language use that often defy local social norms due to the way that SNSs interconnect us with multiple other ecologies around the globe. More importantly, in a day in which the US has been so strongly accused of ecological abuses around the globe, I see this form of education as reflecting a way of altering our course of history and taking steps forward toward local and global improvements.

CHAPTER 4: THE IMPACT OF THE PILOT STUDY ON THE CURRENT STUDY

4.1. Overview of Pilot Study

With such an overwhelmingly positive and growing body of literature on how the practical pedagogical uses of FB outweigh the negative, in the spring semester of 2013 three sections of two intermediate Italian language courses participated in a pilot study at the University of Arizona. 39 questionnaires were completed and submitted. After a semester of using Facebook to explore ecological approaches to SLA, students provided feedback through a questionnaire designed to elicit reactions to more ambiguous, complex and dynamic engagements with language as not only a social process but also a ‘quantum’ experience of multiple possibilities of potential meaning ‘collapsed’ through interpersonal and intrapersonal engagement. By seeking a new metaphor (quantum theory), the goal was to avoid the essentialism inherent in modernist views of language and identity while also providing some grounding to postmodern teaching and assessment as a means of strengthening some of the weaknesses of language ecology. The questionnaire was the result of a long-term independent study regarding pedagogical uses of SNSs under the supervision of Dr. Robert Ariew. The primary aim of the questionnaire was to assess the academic results and students’ impression of such paradigm shifts through the use of social networking as a pedagogical tool. To summarize the positive findings, the feedback from the questionnaire (later explored in detail) revealed the following overarching concepts, insights and opinions:

- Facebook’s flexibility and inherent dialogism positively impact our intellectual and social understanding.

- Overall results show that FB is useful as a pedagogical tool and helpful for peer to peer and teacher/student collaboration.
- It was a positive space that allowed for comfort with exploration within a perceived community of practice that reduced the fear of making mistakes.
- It resulted in higher levels of critical awareness of L2 use and language itself as well as its connection to foreign and domestic issues.
- Convenient, 'one-click' away.
- Central hub for videos, articles, links, pictures, PowerPoints, Word documents, PDFs, Exam reviews, online verb activities and homework clarification.
- Participants used more L2 than required and the quality of use improved. This was verified by comparing early to latter 'posts' and classroom interactions.
- Observation, engagement with and imitation of varieties of L2.
- Improved L2 *and* L1 speaking and morphological complexity with awareness of link between the development of language, culture and identity.
- Communicative acts punctuated with digital feelings, gestures and expressions (emoticons), culturally embedded acts that were expressed through the technology itself.
- SLA for socialization and, conversely, socialization improves L2 development.
- How to 'be' and how to 'communicate' were inseparable parts of the interactions.
- Reframing of ontology, multiple expressions of identities elicited by multiple engagements with multiple versions of the L2 in its vast diversity.

There were specific theoretical concepts that were gleaned from the pilot study. These will be presented first prior to discussing the weaknesses and limitations of the study to frame the overwhelmingly positive aspects of the same:

1. By modeling the facilitator, the participants discovered how to balance static and dynamic views of language and identity while reducing neither to fiction. The participants discovered that, much like in contemporary science, language use profoundly challenges endless relativism or purely static states. It sees within the interrelations probabilities that, once collapsed, due to the observation of the observer, are defined for the interlocutors, but also open to further dynamic reinventions, reconfigurations, and negotiations for meaning and of meaning.
2. The ever-expanding dynamic nature of language ecology grants us a 'bigger picture' of the language user beyond the classroom. Facebook is part of that experience.
3. Due to the limitations of the current SLA classroom, Facebook may be one of many emergent pedagogical tools worthy of further exploration and implementation.
4. What SLA needs is a new vision of language performativity or post-performativity. More so, a post-postmodern view of language and identity may better 'fit' this generation of language users.

The pilot study was, in many ways, very flawed but equally insightful. The more I presented this developing work at conferences, the more limitations and weaknesses were brought to my attention and potential biases were exposed. There were five main weaknesses to the pilot study that greatly helped solidify the current study:

1. A key weakness was the lack of theoretical grounding. Although I modeled aspects of the philosophy of performativity, approaches to L2 critical discourse analysis, and metaphors drawn from dynamic and complex systems and quantum physics, the pilot study did not clearly define these frameworks and, consequently, was constantly at risk of deviating from the intention of the study.
2. One practical weakness was that, while claiming to be a dynamic course, the assessment was reduced to one lengthy questionnaire delivered one time at the end of the course. Dr. Steve Thorne pointed out in personal conversation how the very setup of the course as well as the data collection process needed to be dynamic in the sense that it required a series of assessment tools in different forms, at different times and through different approaches.
3. Another weakness was that, while FB was greatly appreciated by the participants, not much freedom was granted to explore other forms of technology that the participants may have considered more relevant or user-friendly.
4. A further problem is that, when originally collecting screenshots of the participants' work on FB, I did not rely on the participants to provide me with what *they* considered most relevant, meaningful and insightful. Perhaps the story that they wanted to tell may have been slightly different than the one I told by being selective in the choice of participant interactions on FB.
5. Finally, the final questionnaire was overwhelmingly positive in its emphasis with little place for negative feedback. Although this was not intentional, it does lead to potential imbalances in participants' responses to questions.

Each of these weaknesses have been addressed in the current study, starting with a clear understanding of the theoretical frameworks (argued individually in the next chapter), to a careful setup, delivery and assessment from a dynamic, emic, performative and complex framework balanced by practical applications of principles from quantum physics. However, it would be useful to show some examples of the negative and positive participant feedback – in the participants own words – as demonstrations of what needed to change and what needed to remain in the current study. Much to my negative surprise, when I opened the first two questionnaires, I was struck by how opposite the replies were. For example, compare this example:

3. I would welcome further use of Facebook in my learning experience

Not at all	<u>Somewhat</u>	Maybe	Yes	Very much
-------------------	-----------------	-------	-----	-----------
4. I would rate the usefulness of Facebook as a pedagogical tool as

Useless	<u>Rarely helpful</u>	Helpful	Very Helpful	Excellent
----------------	-----------------------	---------	--------------	-----------
5. I would rate the usefulness of Facebook in respect to collaborative peer to peer enhancement as

Useless	<u>Rarely helpful</u>	Helpful	Very Helpful	Excellent
----------------	-----------------------	---------	--------------	-----------
6. I would rate the usefulness of Facebook in respect to collaborative teacher to student enhancement as

Useless	<u>Rarely helpful</u>	Helpful	Very Helpful	Excellent
----------------	-----------------------	---------	--------------	-----------
7. Facebook allowed me to learn by feeling more comfortable to experiment

Not at all	<u>Somewhat</u>	Maybe	Yes	Very much
-------------------	-----------------	-------	-----	-----------
8. Facebook allowed me to learn by reducing my fear of failure or making mistakes

Not at all	<u>Somewhat</u>	Maybe	Yes	Very much
-------------------	-----------------	-------	-----	-----------
9. Facebook enhanced a sense of classroom community

Not at all	<u>Somewhat</u>	Maybe	Yes	Very much
-------------------	-----------------	-------	-----	-----------
10. Facebook broke down the barriers to learning discomfort

Not at all	<u>Somewhat</u>	Maybe	Yes	Very much
-------------------	-----------------	-------	-----	-----------
11. The use of Facebook while in class made the learning process (circle all that apply)

Tedious	Repetitive	Engaging	Informative	Other	<u>Useless</u>
----------------	------------	----------	-------------	-------	----------------
12. The use of Facebook while in class was

Boring	Rarely fun	<u>Somewhat fun</u>	Fun	Very fun
---------------	------------	---------------------	-----	----------
13. Facebook raise my critical awareness of second-language learning and use

Not at all	<u>Somewhat</u>	Maybe	Yes	Very much
-------------------	-----------------	-------	-----	-----------

Figure 4: Pilot Study Quantitative Example #1

To this example:

3. I would welcome further use of Facebook in my learning experience
 Not at all Somewhat Maybe Yes **Very much**
4. I would rate the usefulness of Facebook as a pedagogical tool as
 Useless Rarely helpful Helpful Very Helpful **Excellent**
5. I would rate the usefulness of Facebook in respect to collaborative *peer to peer* enhancement as
 Useless Rarely helpful Helpful Very Helpful **Excellent**
6. I would rate the usefulness of Facebook in respect to collaborative *teacher to student* enhancement as
 Useless Rarely helpful Helpful Very Helpful **Excellent**
7. Facebook allowed me to learn by feeling more comfortable to experiment
 Not at all Somewhat Maybe Yes **Very much**
8. Facebook allowed me to learn by reducing my fear of failure or making mistakes
 Not at all **Somewhat** Maybe Yes Very much
9. Facebook enhanced a sense of classroom community
 Not at all Somewhat Maybe **Yes** Very much
10. Facebook broke down the barriers to learning discomfort
 Not at all Somewhat Maybe **Yes** Very much
11. The use of Facebook while in class made the learning process (**Highlight** or **underline** all that apply)
 Tedious Repetitive **Engaging** **Informative** Other _____
12. The use of Facebook while in class was
 Boring Rarely fun Somewhat fun Fun **Very fun**
13. Facebook raised my critical awareness of second-language learning and use
 Not at all Somewhat Maybe **Yes** Very much

Figure 5: Pilot Study Quantitative Example #2

This pattern of extremes continued throughout the entire questionnaire:

Student A

31. Facebook affected my communication skills in Italian by (be specific)
 _____ Honestly, I dreaded everything about using it. Learning a foreign language at a university I
 would probably expect something better than using a social networking site. Adding an educational
 aspect to Facebook takes away the fun part of involving yourself in social media.

Figure 6: Pilot Study Qualitative Example #1

Student B

31. Facebook affected my communication skills in *Italian* by (be specific)

Facebook definitely made me more excited to use Italian in my everyday life, and not be embarrassed about it. After I typed something, I felt like I could have spoken it to any other classmate with confidence. This is rare for me, for I am very self-conscious about my accent when I try to speak Italian. I also interacted with many people over Facebook whom I would not have interacted with in the classroom alone, so this affected my communication skills in Italian for the better; it enabled me to interact with more people who are also studying the language and who are trying to learn just as I am.

Figure 7: Pilot Study Qualitative Example #2

Student A

35. Related to question #34 (introvert & extrovert) I found Facebook to be (be specific) _____
I did not like Facebook. It was not something I took too seriously.

Figure 8: Pilot Study Qualitative Example #3

Student B

35. Related to question #34 (introvert & extrovert) I found Facebook to be (be specific)

I found Facebook to be a place where I could interact with my classmates and the professor openly and without fear. I usually do not like to talk in classes because I am very self-conscious, but I knew that when I posted on Facebook I would not be judged by the classroom, because we were all learning. There is no doubt that I found it easier to interact with others on Facebook rather than in the actual classroom.

Figure 9: Pilot Study Qualitative Example #4

Thankfully this ended up being the largest exception. Most of the questionnaires lingered somewhere between these three examples from random sampling:

2. Beforehand I was - **resistant** - **skeptical** - neutral - hopeful - excited - that Facebook would provide a useful learning tool.
3. I would welcome further use of Facebook in my learning experience
Not at all **Somewhat** Maybe Yes Very much
4. I would rate the usefulness of Facebook as a pedagogical tool as
Useless **Rarely helpful** Helpful Very Helpful Excellent
5. I would rate the usefulness of Facebook in respect to collaborative *peer to peer* enhancement as
Useless **Rarely helpful** **Helpful** Very Helpful Excellent
6. I would rate the usefulness of Facebook in respect to collaborative *teacher to student* enhancement as
Useless **Rarely helpful** **Helpful** Very Helpful Excellent
7. Facebook allowed me to learn by feeling more comfortable to experiment
Not at all **Somewhat** Maybe **Yes** Very much
8. Facebook allowed me to learn by reducing my fear of failure or making mistakes
Not at all **Somewhat** Maybe Yes Very much
9. Facebook enhanced a sense of classroom community
Not at all **Somewhat** Maybe **Yes** Very much
10. Facebook broke down the barriers to learning discomfort
Not at all **Somewhat** **Maybe** Yes Very much
11. The use of Facebook while in class made the learning process (**Highlight** or **underline** all that apply)
Tedious Repetitive **Engaging** Informative Other _____
12. The use of Facebook while in class was
Boring Rarely fun **Somewhat fun** Fun Very fun
13. Facebook raised my critical awareness of second-language learning and use
Not at all **Somewhat** Maybe **Yes** Very much

Figure 10: Pilot Study Quantitative Example #3

2. Beforehand I was - resistant - skeptical - **neutral** - hopeful - excited - that Facebook would provide a useful learning tool.
3. I would welcome further use of Facebook in my learning experience
Not at all **Somewhat** Maybe Yes Very much
4. I would rate the usefulness of Facebook as a pedagogical tool as
Useless **Rarely helpful** **Helpful** **Very Helpful** Excellent
5. I would rate the usefulness of Facebook in respect to collaborative *peer to peer* enhancement as
Useless **Rarely helpful** **Helpful** **Very Helpful** Excellent
6. I would rate the usefulness of Facebook in respect to collaborative *teacher to student* enhancement as
Useless **Rarely helpful** **Helpful** Very Helpful Excellent
7. Facebook allowed me to learn by feeling more comfortable to experiment
Not at all **Somewhat** Maybe **Yes** Very much
8. Facebook allowed me to learn by reducing my fear of failure or making mistakes
Not at all **Somewhat** Maybe **Yes** Very much
9. Facebook enhanced a sense of classroom community
Not at all **Somewhat** Maybe **Yes** Very much
10. Facebook broke down the barriers to learning discomfort
Not at all **Somewhat** Maybe **Yes** Very much
11. The use of Facebook while in class made the learning process (**Highlight** or **underline** all that apply)
Tedious **Repetitive** **Engaging** **Informative** Other _____
12. The use of Facebook while in class was
Boring Rarely fun **Somewhat fun** **Fun** Very fun
13. Facebook raised my critical awareness of second-language learning and use
Not at all **Somewhat** Maybe **Yes** Very much

Figure 11: Pilot Study Quantitative Example #4

2. Beforehand I was - resistant - skeptical - neutral - hopeful - excited - that Facebook would provide a useful learning tool.
3. I would welcome further use of Facebook in my learning experience
Not at all Somewhat Maybe Yes Very much
4. I would rate the usefulness of Facebook as a pedagogical tool as
Useless Rarely helpful Helpful Very Helpful Excellent
5. I would rate the usefulness of Facebook in respect to collaborative *peer to peer* enhancement as
Useless Rarely helpful Helpful Very Helpful Excellent
6. I would rate the usefulness of Facebook in respect to collaborative *teacher to student* enhancement as
Useless Rarely helpful Helpful Very Helpful Excellent
7. Facebook allowed me to learn by feeling more comfortable to experiment
Not at all Somewhat Maybe Yes Very much
8. Facebook allowed me to learn by reducing my fear of failure or making mistakes
Not at all Somewhat Maybe Yes Very much
9. Facebook enhanced a sense of classroom community
Not at all Somewhat Maybe Yes Very much
10. Facebook broke down the barriers to learning discomfort
Not at all Somewhat Maybe Yes Very much
11. The use of Facebook while in class made the learning process (**Highlight** or **underline** all that apply)
Tedious Repetitive Engaging Informative Other _____
12. The use of Facebook while in class was
Boring Rarely fun Somewhat fun Fun Very fun
13. Facebook raised my critical awareness of second-language learning and use
Not at all Somewhat Maybe Yes Very much

Figure 12: Pilot Study Quantitative Example #5

To get to the specifics, the entire questionnaire, although heavily flawed and potentially leading, rendered the following quantitative results (qualitative examples will be provided following this section):

Total number students who received questionnaire: 45

Total number of questionnaires completed and submitted: 38

The questionnaire

1. Ciao! My name is _____. On Facebook I go by _____.
2. Beforehand I was – resistant (4) - skeptical (15) - neutral (9) - hopeful (3) - excited (9) - that Facebook would provide a useful learning tool.
3. I would welcome further use of Facebook in my learning experience
Not at all (1) Somewhat (5) Maybe (6) Yes (17) Very much (9)

4. I would rate the usefulness of Facebook as a pedagogical tool as
Useless (1) Rarely helpful (3) Helpful (13) Very Helpful (17) Excellent (6)
5. I would rate the usefulness of Facebook in respect to collaborative *peer to peer* enhancement as
Useless (1) Rarely helpful (0) Helpful (7) Very Helpful (21) Excellent (9)
6. I would rate the usefulness of Facebook in respect to collaborative *teacher to student* enhancement as
Useless (1) Rarely helpful (0) Helpful (11) Very Helpful (16) Excellent (10)
7. Facebook allowed me to learn by feeling more comfortable to experiment
Not at all (2) Somewhat (5) Maybe (3) Yes (15) Very much (12)
8. Facebook allowed me to learn by reducing my fear of failure or making mistakes
Not at all (3) Somewhat (9) Maybe (4) Yes (14) Very much (9)
9. Facebook enhanced a sense of classroom community
Not at all (2) Somewhat (6) Maybe (0) Yes (20) Very much (10)
10. Facebook broke down the barriers to learning discomfort
Not at all (3) Somewhat (3) Maybe (9) Yes (18) Very much (5)
11. The use of Facebook while in class made the learning process (Highlight or underline all that apply)
Tedious (4) Repetitive (4) Engaging (31) Informative (17)
Other: fun (2); useless (1); very helpful (1)
12. The use of Facebook while in class was
Boring (1) Rarely fun (1) Somewhat fun (7) Fun (19) Very fun (10)
13. Facebook raised my critical awareness of second-language learning and use
Not at all (1) Somewhat (3) Maybe (6) Yes (24) Very much (4)
14. Facebook enhanced my overall awareness of foreign and domestic issues
Not at all (4) Somewhat (7) Maybe (6) Yes (9) Very much (12)
15. The use of Facebook clearly integrated with our existing coursework
Not at all (1) Somewhat (4) Maybe (4) Yes (17) Very much (14)
16. Facebook facilitated learning by allowing me to engage according to my natural attention span
Not at all (2) Somewhat (5) Maybe (6) Yes (12) Very much (13)
17. The integration of Facebook was respectful of my unique learning style
Not at all (3) Somewhat (5) Maybe (4) Yes (17) Very much (9)

18. Facebook created a sense that learning is a more human experience
Not at all (1) Somewhat (3) Maybe (1) Yes (21) Very much (12)
19. Facebook enhanced learning as a more relevant experience
Not at all (2) Somewhat (0) Maybe (5) Yes (23) Very much (8)
20. What are the nicest things about using social networking as an extension of the language classroom?

21. I enjoyed having classroom activities that were just one click away from my profile page
Not at all (3) Somewhat (4) Maybe (2) Yes (12) Very much (15)
22. I find it important to be able to add the following on Facebook (Highlight or underline all that apply):
- Videos (30)
 - Articles (33)
 - Links (32)
 - Pictures (29)
 - PowerPoints (25)
 - Word documents (24)
 - PDF documents (20)
 - Exam reviews (25)
 - Other (please list): homework clarification (1); online verb activities (1)
23. Facebook helped me in the *academic* development of (be specific)

24. Sometimes I found myself using more foreign language than actually required
Not at all (3) Somewhat (6) Maybe (6) Yes (17) Very much (6)
25. Facebook helped me see Italy in more diverse terms
Not at all (1) Somewhat (7) Maybe (5) Yes (16) Very much (9)
26. Facebook helped me breakdown the sense of 'us' versus 'them'
Not at all (4) Somewhat (6) Maybe (7) Yes (17) Very much (4)
27. Mimicking the way Italians write in different genres and registers improved my *writing*
Not at all (1) Somewhat (7) Maybe (6) Yes (16) Very much (7)
28. Mimicking the way Italians write in different genres and registers improved my *speaking*
Not at all (4) Somewhat (6) Maybe (9) Yes (12) Very much (6)

29. Facebook helped me really use the language and not just learn about it
 Not at all (0) Somewhat (3) Maybe (2) Yes (22) Very much (11)

30. When typing on Facebook I used the following online resources for assistance (be specific):

31. Facebook affected my communication skills in *Italian* by (be specific)

32. Facebook affected my communication skills in *English* by (be specific)

33. Some specific examples of vocabulary and grammar structures that I learned to master through my interactions on Facebook with classmates and the instructor are:

34. On a scale of 1 to 5, with 1 being introvert and 5 being extrovert, I consider myself
 1 – 2 – 3 – 4 – 5

1 (0)

2 (11)

3 (16)

4 (10)

5 (1)

35. Related to question #34 (introvert and extrovert) I found Facebook to be (be specific)

36. What did you accomplish beyond the task? Can you think of an example or two where you participated more on Facebook in Italian than was required. How did it feel to be spontaneous in the foreign language? Did you find yourself more creative when off task? Please explain.

37. What has this semester's interactions on Facebook taught you most about yourself?

38. Do you remember an ‘aha’ moment where something about the culture, grammar or vocabulary really clicked because of your interaction on Facebook?

39. What did you learn about politics, foreign and domestic, that you did not know before interacting on Facebook with classmates in Italian?

40. What aspect(s) of your culture did you find were similar to contemporary Italian culture?

41. In the near future, I would like to be a part of a presentation on this topic

No (5) Maybe (11) Yes (2) Definitely! (14)

42. In Paul Renigar’s upcoming presentations on Ecological Perspectives of Second Language Acquisition, I would particularly like for other foreign language instructors to consider the following screenshots and explanation of my work on Facebook as examples of... (please attach your screenshots below with your own comments and analysis of the Facebook interaction).

4.2 The Ecological Impact of Facebook

Some of the participants of the pilot study were excited about the theoretical frameworks, perhaps more as a curiosity or novelty. For most the ideas were not that important since the theoretical concepts seemed quite foreign to passing an exam or learning to give a presentation in Italian. What the participants were most excited about was seeing the practical side of the theory – ‘where the rubber meets the road’ – the implementation through technology. Many had never used Facebook as a learning tool. As will be discussed later, like many scholars, the participants often viewed social networking as a ‘play zone’, a place for fun, friends, and social engagements. The classroom was often perceived as a place for the austere memorization and regurgitation of cold facts.

4.3. The Participants’ Voice: In Their Own Words

When it comes to explaining why language educators should consider Facebook, beyond the literature reviews and the quantitative analyses, the participants' explanations make for a most compelling case. Although we have already witnessed resistance to academic uses of FB, such resistance was minor compared to the overwhelming majority of positive opinion. What follows are some untouched screenshots as examples of the participants' feedback. Consequently, errors were included exactly as written. The idea that social networking, language development and enjoyment could all be part of the same experience beyond the classroom was enough to cause me to pause and consider ways of improving upon the weaknesses of the study and developing a theoretical framework broad enough to accommodate what is at the heart of their observations. I remind the reader that the participants were not restricted to one class. Different classes had access to the same FB page. This will become clear as the participants reference peers from other classes. Also, since these are screenshots taken directly from the participants' feedback, sometimes there is a lack of consistency in including the original question. When participants mention photos, these are the screenshots that were provided from FB, some examples of which will follow the participants' comment section.

Question #20: What are the nicest things about using social networking as an extension of the language classroom?

It was a welcome change of pace. I would say that the best aspect was that I could converse and interact with my peers in Italian (the language we are learning). Also, some of the activities would involve critical thinking and it forced one to transition into using more advanced Italian, rather than simple declarative statements.

Figure 13: Pilot Study Question #20, Example #1

I think that social networking gives us a more age-relatable approach to second language. On Facebook, we can search Italian websites online and provide examples of the work that we understand or relate to in each chapter. For example, earlier this semester my 202 class was learning about social problems in Italy and we were told to post an article or paste a link to a website pertaining to that subject which gave us a more updated and recent view of what is really going on in Italy. This also showed me what each student in my class was interested in which in turn interested me. I think this method is more effective versus reading a possibly outdated textbook written by professors not columnists or journalists.

Figure 14: Pilot Study Question #20, Example #2

Question #23: Facebook helped me in the *academic* development of (be specific)

23. Facebook helped me in the *academic* development of (be specific)

Instead of focusing on strict grammar structures learned in a strict classroom setting I was able to write more freely. As a result, I was able to write in Italian in ways I was previously nervous to do in class because I did not want to be wrong or not make sense. I like that I am able to be more risky on Facebook with what I say and if I do say something that does not make sense in Italian I can be corrected by the professor and learn more. One problem I have had in the past (learning French) was that I would sound like a book when speaking to native speakers. My goal is to sound more natural when speaking a foreign language and to me that means not necessarily learning and following all the standard rules.

Figure 15: Pilot Study Question #23, Example #1

I believe that Facebook helped me develop real language skills. I learned how to have a conversation in Italian rather than rigidly answering questions in the formal sense. On a non-classroom related note, I think that Facebook helped me develop real relationships with my classmates. I think that typically, once students are no longer living in dorms, they stop making friends and connections with the other students in their classes. I am a senior and I have witnessed classrooms full of students not talking to each other all semester. I think that using Facebook might seem odd at first but in the long run, and under the silliness of it, students really are benefitting from it.

Figure 16: Pilot Study Question #23, Example #2

Question #31: Facebook affected my communication skills in *Italian* by (be specific)

Facebook affected my communication skills in Italian by giving me the opportunity to slow down and formulate my answers before responding to a previous comment. In class, it often takes me a bit to process the question in Italian before I can think of a thoughtful answer and then translate that into Italian before responding. Communicating on Facebook allowed me time for this process. However, it was often the case that other students did not participate on Facebook until the very last minute, making the practice of discussion via social media difficult to have completed before class.

Figure 17: Pilot Study Question #31, Example #1

Facebook affected the speed in which I understood and communicated in Italian. On Facebook when someone is talking to you or asking a question I feel that I need to read what is being said and think of an answer quickly. I also feel that the ability to SEE visually what is being said helps me understand the grammar usage much more than simply speaking in class. I often feel overwhelmed when speaking in class and cannot speak the correct grammar as easily as I can read or write it.

Figure 18: Pilot Study Question #31, Example #2

Question #35: Related to question #34 (introvert and extrovert) I found Facebook to be (be specific)

35. Related to question #34 (introvert & extrovert) I found Facebook to be (be specific)

I found Facebook to be a place where I could interact with my classmates and the professor openly and without fear. I usually do not like to talk in classes because I am very self-conscious, but I knew that when I posted on Facebook I would not be judged by the classroom, because we were all learning. There is no doubt that I found it easier to interact with others on Facebook rather than in the actual classroom.

Figure 19: Pilot Study Question #35, Example #1

The more comfortable I am the more extroverted I am. In a classroom setting I am more of an observer whereas on Facebook I felt like I could be more liberal in my speech. In addition, I was able to discuss more complex topics because I was able to look up vocabulary that I was not previously exposed to in class. Not only was I able to learn more advanced grammatical structures but I also expanded my Italian vocabulary because I was encouraged to look up new words to use when discussing more intricate topics with my classmates.

Figure 20: Pilot Study Question #35, Example #2

Question #36: What did you accomplish beyond the task? Can you think of an example or two where you participated more on Facebook in Italian than was required. How did it feel to be spontaneous in the foreign language? Did you find yourself more creative when off task? Please explain.

In the photos above I was able to discuss a controversial topic that got people fired up and talking. It was such a hot topic that there was little time to worry about grammar or vocabulary and so I just went with it. I was able to “feel” the language and just go with what sounded right to me. In the pictures below I was able to interact with another student in a similar way I would if we were speaking English. It made me feel more confident in my Italian and therefore I continued the conversation even though we got off the topic we were assigned.

Figure 21: Pilot Study Question #36, Example #1

It was fun and easy to Like peoples’ comments to easily acknowledge and agree with a student. Facebook made it One Thousand times easier to share or talk about a video/ article in class some one posts it on the wall and you are one click away from a discussion. Instead of getting off tasks and going onto Facebook, I found myself “What seemed to be getting off task” and surfing Italian websites, Pintrest or Twitter for cultural trends and political events occurring.

Figure 22: Pilot Study Question #36, Example #2

Question #37: What has this semester’s interactions on Facebook taught you most about yourself?³⁰

This Facebook experience reassures that I am not the only student that has questions and concerns about what is going on in class. I didn’t realize how much I missed social interactions in class and how much I actually learn and retain when doing so. In college the classes are so huge and it’s impossible for students to be heard, but with Facebook every student has a voice.

³⁰ The formatting for these screenshots (line spacing, font, etc.) may differ due to the fact that they are unaltered from how the participants submitted them so that the reader may perceive further insights gained from the entire semiotic construct.

Figure 23: Pilot Study Question #37, Example #1

I found myself interacting more than I usually do. In other classes I usually feel just like an “occupied seat” to some professors because I hardly participate. I’m usually there to learn then leave. I’m never the one to raise up my hand and ask questions. In this class I found myself participating more than usual, and I believe it’s due to the help of the interactions we’ve had on Facebook. What this has taught me is that it’s better to be acknowledged than being just another “occupied seat”.

Question #38: Do you remember an ‘aha’ moment where something about the culture, grammar or vocabulary really clicked because of your interaction on Facebook?

At times my peers and I would be doing an assignment and being serious, but then one of us would make a joke or be sarcastic in Italian. It taught us a whole new level of communication that wasn’t being taught in the textbook.

Figure 24: Pilot Study Question #38, Example #1

Question #39: What did you learn about politics, foreign and domestic, that you did not know before interacting on Facebook with classmates in Italian?

39. What did you learn about politics, foreign and domestic, that you did not know before interacting on Facebook with classmates in Italian?

Previous to my interactions on Facebook, I knew absolutely nothing about foreign or domestic politics, because I simply never had an interest in politics. However, each time we were assigned an essay on something related to the chapter, at least one of the students wrote about politics (often in Italy, but they incorporated information on American politics as well). After reading the essays, I would be inspired to check Italian news sites for more information on these topics. One specific topic was the drug Krokodil, which the Russian government did not seem to care about until it had spread there. This showed me that politics is a dirty business; politicians do not often care about those struggling beneath them, unless it is personally affecting themselves negatively. Having read enough American news on the subject, I began to see that politics appear to be the same no matter what country you are in.

Figure 25: Pilot Study Question #39, Example #1

4.4. FB Evidence to Support the Qualitative Feedback

Further evidence to support many of these claims by the participants could be found on the social networking site itself. What follows is a sampling of participant engagement on Facebook with explanations as to the significance of these examples:



Figure 26: Pilot Study FB Image #1

[TRANSLATION: Here is an explanation (PPT) that compares the two grammatical forms. Let me know if it helps and we can speak about it further. Remember also the materials on D2L that are very useful as review. However, as a class, we can write our comments under this thread.

Good thanks.

I found a study room in the main library for tomorrow at 10.

Everything OK now? The best thing is to use the language in such a way that you don't have to think so much about structures but rather the meaning of what is communicated. Right?

Paolo, when we were studying, in one exercise about the 'si impersonale', there is a phrase that reads, "It's good to go on vacation". Do we change that to "Si è bene? (It is good – grammatically wrong construction)?" **** and I were practicing and found a similar one, and also one with "it's better" (used as adverb). We were thinking that they should be changed to the si impersonale but it's in conflict with the rule on 'to be' with third person singular + masculine plural adjective.]

In this example Mauro posted a PowerPoint on the class Facebook page to make it available to all the participants. The PowerPoint was a review that I had sent him via email to help them prepare for the exam. 16 participants saw this posting and Diane added a link from another university to help broaden the review. We can immediately see Mauro's approval and thanks, followed by Diane's statement to have found a study room in the main library. She then tells me that she finds a potential discrepancy on the review sheet that I have given in class and the dialogue goes on. I cut it off here just to show that in one thread we find multimodality, affirmation (lines 1 and 2), practical planning (line 3), clarification and engagement with the instructor (lines 4 and 5) as merely one of the participants, resulting in a very relaxed register of language use. In framing the casual question about a new grammatical structure, the participant is also 'trying out' recently acquired grammatical forms that were developed in the previous chapter of the textbook, specifically the use of the subjunctive. This is, in other words, a safe place to learn new forms while exploring ones that still require sedimentation.



Paolo Renigar

Ricordatevi di fare la 'Course Evaluation' online! Grazie!!! :o)
<https://tce.oirps.arizona.edu/TCEOnline/OnlineSectionsForStudent.aspx>

Figure 27: Pilot Study FB Image #2

[TRANSLATION: Congratulations!

Thanks! Congrats to you too! I didn't realize that you had one something!

Haha. Me either.

And you, Borbi. But I can't tag you.

Yes. Congrats to Borbala. Nice ceremony.

Thanks. Yes, Truly.

Remember to do the course evaluation online! Thanks!!!]

In this post, Luca simply sends out a congratulations to two participants, one of which is technically the ‘teacher’. This post is seen by 16 participants and liked by four. It is significant that at least two of the people who have seen the posts and liked it are Italian language instructors teaching other courses. Although I was absent at the time, they are engaging my students and fomenting an environment in which we are all part of the language development and language use experience. Notice that Luca’s only complaint is his inability to ‘tag’ Faye, and this due to the fact that she is not connected to him as a friend or as an instructor. So there are limitations that can be placed on how close or distant this ‘family’ is, and often for very good and professional reasons.



Figure 28: Pilot Study FB Image #3

In class I had been explaining that the use of the subjunctive in Italian is dependent on whether the sentence begins in the present or the past, each use instigating two, and only two,

possible outcomes. I had also mentioned that a previous student had illustrated this quite well by drawing tuning forks, however, at the time of facilitating that lesson, I was unable to find the illustration. Suddenly I received a ‘tag’ on Facebook from a current student, Luca, who comically said, “Paolo, here is your tuning fork... I did it on my own lolol (-)”. One of the other instructors showed her approval by liking the drawing, and nearly all the participants expressed appreciation for a visual that helped them remember, rather swiftly, how to conjugate verbs expressed in such a difficult form of grammar.

One concern raised at conferences is how to ‘see’ the students’ work in such a chaotic ‘ocean of social networking’. Thankfully, Facebook has features that allow you to consolidate participant work in different ways.



Figure 29: Pilot Study FB Image #4

Without the need to translate – especially considering that these are largely unrelated posts - I can look at Linda's interactions and consolidate by date. If I needed to look at any one of these posts in detail, I could simply click on the post to see the full thread. A thread may, in fact, look more like the following (for the sake of space, only shown in part):



Ciao [Myriam](#). E' un foto ridicolo. Penso che la donna nel foto e' molto ha alterato. E' molto sessista perche' si propaga le ideale di corpo che e' impossibile. Cosa pensate?



<http://www.popehat.com/wp-content/uploads/2009/10/ralph-lauren-photoshop-skinny-model.jpg>
www.popehat.com

Like · Comment · Follow Post · Share · March 31 at 4:46pm

Seen by 16

Ovviamente è stato alterato lol, ma chi potrebbe pensare che Jack Skellington si vede bello nella realtà? Pare che il torso si muova liberamente delle gambe come nella casa degli specchi!
March 31 at 9:01pm · Like

Mi ricorda di questo
<http://www.hongkiat.com/blog/52-worst-photoshop-mistakes-in-magazines/>
March 31 at 9:10pm · Like

Sì, molto ridicolo! Niente è vero!
April 1 at 1:09am · Like

Non capisco il problema del photoshopping. Tutte le pubblicità usa photoshop e tutti lo sanno. sì, è ridicolo...ma la gente deve smettere di essere le vittime ignoranti. Se io veda una foto di un unicorno rosa in una rivista, non crederò che sia reale. ugualmente, se io veda una foto aerografata di un modello magro, non sarò traumatizzata e non diventerò bulimica...
April 1 at 3:08am · Like



Figure 30: Pilot Study FB Image #6

[TRANSLATION: Hi ****. It's a ridiculous photo. I think the woman in the photo has been altered a lot. It's very sexist because it promotes an ideal body image that doesn't exist. What do you (all) think of it?

It's obviously altered. LOL. But who would think that Jack Skellington is really pretty? It's like the torso moves freely from the legs like in a house of mirrors!

It reminds me of this (attaches link)

Yes, it's ridiculous. None of it is real.

I don't understand the problem of Photoshop. All the commercials use Photoshop and everyone knows it. Yes, it's ridiculous but people need to stop being ignorant victims. If I were to see a rose-colored unicorn in a magazine, I would not think it's real. Equally, if I see an airbrushed image of a skinny model, I won't be traumatized and I won't become bulimic...

Yes, the image that young women try to reach can create grave problems. Some may starve themselves or become bulimic, which harms the body.

Yeah, this is wrong. Our society has created a culture of bulimia and I blame the models.

I think that models should be midsized women, not a sickly person. It's not pretty in my eyes.

I agree with you guys. I think that this photo is sad because people follow fashion, not health. Not all new things are good today. For example, I like this photo because it reveals the facts (adds link).

Yeah, today's facts are sad. LOL (said in sarcasm, based on image).

Models in the past were beautiful!

How do you think fashion will be in the future? Probably skinnier models?

Yeah, I think models in the future will be even thinner (if such a thing were possible LOL) but I hope that eventually the models are heavier, not excessively heavy, but heavier. LOL

Yep, she is way too thin. I think that this may be Halle Berry. I don't think the photo is real. I think it has been heavily 'photo(shopped)' (thread continues).]

This thread is a solid example of the non-linear and multimodal way in which participants dialogue in the L2 when online. Not only are the participants engaging in FB dialogue, on a class page, but they are also branching outward toward websites and other online sources, reading newer threads and then backing up to 'catch up' on previous thread posts, showing approval via the 'Like' feature, etc. All of this is accomplished with a fluidity that becomes part of the communicative process. Another concern that has been raised by conference attendees is the possibility that the amount of writing may be lacking with this medium. I address that concern by pointing out that when participants engage a topic such as eating disorders in the modeling community, and especially if the participants are eager to share a point of view, the writing can become quite extensive, though segmented more like natural dialogue. Also, the inclusion of other articles, links, websites and videos, expand the dialogue elsewhere while simultaneously retaining a 'space' online where participants can converge, share and continue the discussion.



Figure 31: Pilot Study FB Image #6

[TRANSLATION: I forgot to ask you about this music video and your opinions! Do you, or do you not like clothing from thrift stores? Why?

Also, can you identify specific clothing items?

I like this song a lot! Macklemore's fur coat is beautiful!!! I want a fur coat...

Have you ever purchased second-hand clothing or do you prefer them new?

I prefer new clothes but I bought some second-hand clothes for a thrift shop 'party' two weeks ago. You?

Last week I went to the thrift shop to buy Hawaiian style shirts for a birthday party. LOL I think that used clothing stores are great for Halloween costumes. Do you think that there may be some messages in the video on fashion?

Hahaha. Thrift shops have lots of Hawaiian style clothing. I agree with you. I think Macklemore sings about fashion to say that fashion can become the life of some people, and he seems to think that this is unfortunate. I agree with him.

(quotes part of song) are lyrics that demonstrate that the song (thread continues)]

This thread is a clear example of creative ways in which participants use Facebook to blend vocabulary review with musical genre taste and humor. Here Diane is sharing a video and also seeing if other participants can name clothing items in the video (part of the vocabulary for that chapter). The video exposes others to Diane's taste in music, leading to banter (in the L2) between Diane and Luca regarding the choice of clothing in the video and lyrics of the song, both leading Luca to joke about the secondary topics (secondary to the vocabulary review) while also engaging more real world-like use of the L2 for reasons that are far more meaningful to him.



Figure 32: Pilot Study FB Image #7

[TRANSLATION: I know how to use the subjunctive but not how to use the 'che' (what). Any help?

You don't know when to use 'quale' (which)? You mean when to use (lists four forms of the subjunctive)

All of them.

If the first part of the sentence begins with I think that, I believe that, it's important that (that is, in the indicative), then you can ONLY use present or past subjunctive.

1. I think that Silvia goes to the party. 2. I think that Silvia went to the party yesterday.

What is the difference between 1 and 2?

1 is present subjunctive and 2 is past subjunctive.

In the second phrase you have yesterday, a keyword that indicates the past.

Good.

So when the phrase begins with the present: I think that, we doubt that, we would like... you can ONLY use present or past subjunctive.

Do you understand so far?

(Borbala moves on to discuss the second set of examples)]

One blatant omission in this interaction is any comments on my part. In this case, I was out of town and unavailable to engage the students. Gary came to the Facebook page with a question related to grammar and another instructor of Italian – who was teaching another class – was able to fill in for me and carry on an entire conversation in the L2 while also encouraging him along the way and suggesting further practice examples and explanations. This broadening of the sense of ‘community’ was one of the most appreciated aspects by participants of using social networking as an extension of the classroom.



Figure 33: Pilot Study FB Image #8

Not everything language instructors teach touches on everything language learners want to know. A clear example of this phenomenon is the fact that, in an age of technology, we do not teach how to text in the L2. Unprompted by me (the facilitator), Diane took it upon herself to investigate the use of text language in Italian. On the class page it appears as seen here. By clicking on the document, the Word document (below) opens up with Diane's findings.

Abbreviazioni SMS

Usate la fonetica per sentire per capire il senso degli sms!

+, -, x	più, meno, per
xxx	tanti baci
tvtb	ti voglio tanto bene
C sent	ci sentiamo
dv 6	Dove sei
prox	prossimo
xché	perché
xsona	persona
ki	chi
ke	che
qlks	qualcosa
qlkl	qualcuno
qnd	quando
qndi	quindi
qnt	quanto
qst	questo
Frse	forse
Sn	sono
Smpr	sempre
Dmn	domani
Dp	dopo

Figure 34: Pilot Study FB Image #9

The previously-mentioned criticism that Facebook doesn't promote longer writing opportunities for L2 learners is countered by many examples (not reproduced in this dissertation) where L2 participants post several pages of their work on FB as an opportunity for others to read

and interact with it. Examples could be shown of essays of a couple of pages that are attached as PDFs or Word. Depending on the level of the course, these documents could grow considerably in size. I take this opportunity to mention that the Skype feature of FB also allows for verbal dialogue with visual cues from the interlocutors, a useful feature even when engaging native speakers as a way of studying the whole semiotic construct of conversation.



Figure 35: Pilot Study FB Image #10

[TRANSLATION: HI *****! As you (all) know, I'm an animal lover and am studying veterinary science. Animal rights are an important aspect of my studies. I find the content of the article to be shocking. What do you think?

Title of article: Belgian artist tosses terrified cats down a flight of stairs: It's art.

Poor little cats! It reminds me of *Nine hundred* (1976) a film by Bernardo Bertolucci that took place during the rise and fall of fascism. In the movie a boy makes a crown made of live frogs (using thread that passes through their heads) to wear on his head as a joke. And a fascist tied a cat to a wooden table. It was obvious that the animals suffered in the scenes and I didn't like it.

This movie sounds really sad. I hate it when people harm animals for fun. From the perspective of a scientist, I support animal testing, but only if it has a purpose.

If you have the courage... (adds link) (dialogue continues below)]

An ecological view of language would see much value in a thread such as this one, in which a participant opens up about her veterinary studies and her defense of animal rights. Her interests took Linda to a site in Italy that discusses animal abuses in the name of art. This stimulates a highly controversial and critical dialogue between Linda and Diane. Their decision to navigate such difficult linguistic waters is fueled by their passion for the topic. As can be seen by the sample below, the discussion continued and even began to involve others in the dialogue. This is an example of the non-linear, complex, emergent and dynamic aspects of language.



Figure 36: Pilot Study FB Image #11

[TRANSLATION: People don't cease to surprise me!

Fortunately we now have the Humane Society to ensure that animals are more protected during filming.

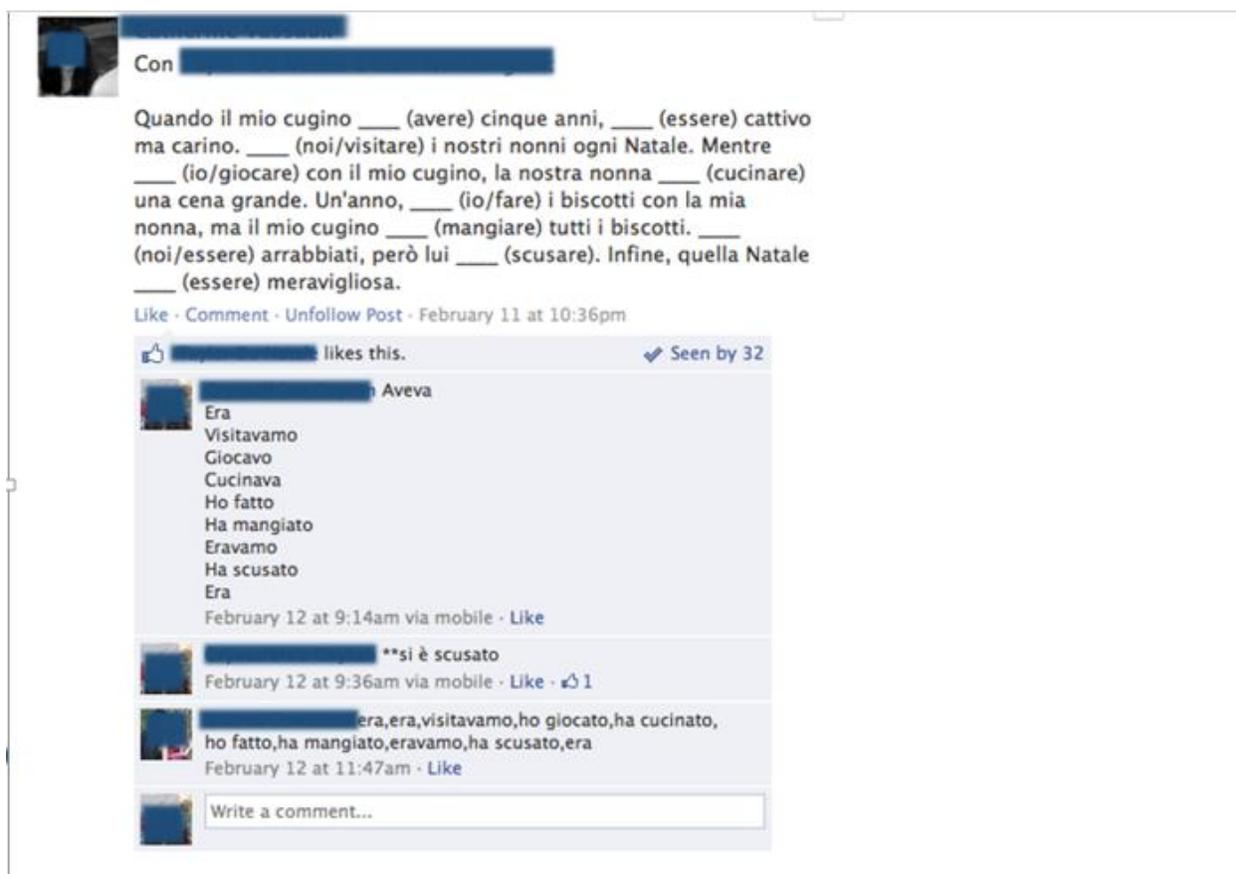
I don't think there is a Humane Society in Italy, at least not like we have here.

It's so sad. I don't think animals should be abused. Especially cosmetics experimentation on animals.

I was thinking about medical experiments. Like when they use rats to find cures for cancer. Diphtheria, Diabetes, Tuberculosis and Poliomyelitis are all diseases that have been cured or improved thanks to animal experimentation.

True and interesting because the animals... (discussion continues)]

Finally, below are two examples where participants commented on their own work. Due to the fact that it is a mere grammar exercise, for the purposes of this chapter, no translation is required. Instead, I would encourage the reader to look at the inventive nature of using SNSs for reviews and the personal comments added in English by the participants. It is crucial for TELD that the topics can range from a self-made grammar review to be completed with other participants – a task that participants usually found to be a positive and enjoyable challenge – to the discovery of the benefits of wrestling with more difficult authentic texts in Italian as contrasted to the expected ‘boring’ approaches to literature reviews.



I enjoyed being able to do a mini “study guide” exercise created by an Italian student from another class that I did not know.

Figure 37: Pilot Study FB Image #12



Figure 38: Pilot Study FB Image #13

4.5. Technology Enhanced Language Development (TELD)

Based on the above evidence from the pilot study, it is clear that the decision to focus on FB as a tool is justified. The ecology of technology is empowering us to pursue new discourses and forms of authorship, new ways of seeing ‘creativity’ and community (Kern, 2006).

Technology is a precious possession of this generation used regardless of personal or academic space (Smith et al., 2009) with SNSs being central to conversation, debate and critical thinking with the incorporation of geographically dispersed students (Robbins-Bell, 2008). They foster strong collaboration (Wankel, 2009). In fact, Deng and Yuen (2009) argue that today’s distance between students and teachers is less about physical and geographical separation than it is about psychological and communicative perception. As the pilot study demonstrated, carefully integrated L2 uses of FB promote problem-solving, debate, and cognitive skills (De Villiers, 2010) in ways that surpass traditional methods. In fact, it is not an overstatement to claim that developmental readers [writers, speakers, and listeners] particularly need the affordances of FB

This is an example of a situation when we were asked to find articles in Italian and then write a brief description of what the article is about. I found Paula’s article interesting so I decided to comment on what she had to say and question some of the behavior occurring in the article. Rather than simply look for an article, bring it to class and explain it while people daydream, Facebook provides the opportunity for students to sit and work their way through an article in another language so that they can somewhat learn at their own pace and continue to practice Italian language outside of the classroom.

(Bowers-Campbell, 2008). This is not to be minimized, especially when we consider the popularity of such sites and the sheer amount of multimodal L2 activity that they spontaneously generate. As the feedback suggested, FB happens to be the most popular of such sites that provides an immensely gratifying experience (Joinson, 2008), worthy of exploration for how such enjoyment may translate to SLA goals. Related to this is how SNSs create in the user a sense of ‘flow’, the experience of losing track of time due to full engagement with an enjoyable activity (Tufekci, 2008; Vie, 2007). Since students gain L2 skills when involved in SNSs and establish relationships in the process, L2 educators have at their hands a tool that may inspire lifelong and willing learners (McBride, 2009). The overwhelming majority of the evidence points to the undeniable fact that this generation of students, who will be tomorrow’s educators, will see a changed landscape in language education that includes social media as regularly as we now include email (DePew, 2011). It is not merely a tool of SLA. It is part of it.

CHAPTER 5: METHODOLOGY

5.1. Research Questions

Given that the L2 classroom has moved into online collaborative communities and that postmodern approaches to SLA have created artificial dichotomies, I will seek to answer the following questions:

4. Do metaphors from quantum physics balance ecological SLA theories and afford agents the paradoxical experience of language and identity as simultaneous *process* and *product*, while reducing neither to fiction?
5. Are higher levels of critical thinking achievable at an intermediate level via L2 discursive analysis enhanced by human-machine interactions beyond the classroom?
6. Is it possible for participants to navigate dynamic levels of ambiguity and possibilities of meaning while facing the static requirement by the academic institution to pass quizzes and exams, and complete homework assignments on the basis of a ‘correct’ answer?

5.2. Case Study, Agency and Ontological Power

The research began with a case study of 6 participants conducted during the spring 2014 semester of intermediate Italian. The class met 50 minutes 4 days a week for a total of 16 weeks. Throughout the course, I assigned two repeating tasks, which are ‘*FB as a central and multimodal hub*’, and ‘*Genre-bending Wiki-like semiosis*’. These repeated tasks were identical in delivery of activities but different in topic: Task 1 ‘Stereotypes and cultural misunderstandings’; Task 2 ‘*Deconstructing the fashion industry*’; and Task 3 ‘*Traditional and alternative Italian families*’. Because the tasks are almost identical in format, one detailed example of task 1 and 2 should suffice to illustrate how the data analysis was practically constructed, delivered, and elaborated.

5.3. Research Beyond the Classroom

One thing must be said upfront, although it should be clear from the theoretical frameworks: This is not task-based research. This is about an approach that is applied to every lesson, to every interaction inside and outside of the classroom, to include online discussions, debates and humor. That being the case, there are certain tasks that can be illustrative of the approach (discussed in a forthcoming section), but for the sake of better understanding this specific study, the reader should resist the prevalent tendency to assume linear causation and open up, like the participants, to non-linear, multivariate and non-chronological ways of looking at educational experiences.

In 2002, Bannink focused on students' perception of the experience inside and outside of the language classroom. She wanted to emphasize unexpected "positive and negative instances of 'real' negotiation for meaning" (p. 267). The one way she achieved this best was by observing beyond the task, which is, taking note of students' work when students did not know that they were being observed. The metaphors from quantum physics should be obvious, although Bannink never mentioned them: We now know that particles on a quantum level behave differently when being observed than when they are not being observed. By documenting data without the awareness of the observed, Bannink claims that "a certain level of unpredictability to the negotiation stage" was beneficial and that it allowed for "unprogrammed meaning to emerge in the group interaction". This is one of the reasons that I set up the data collection not to be based on materials I had necessarily observed and deliberately selected. However, I also found that participants valued my presence as part of the ecological community, and not outside or above it (very crucially related to how participants even conducted their own versions of CDS research, as will be discussed in the participants' feedback). When studying different methods to

apply to this study, I often found it easy to see value in ‘this’ or ‘that’ method but was often left wondering why, in isolation, the method didn’t seem sufficiently complete for the magnitude of the ecological approach I was taking. Fortunately I found a ‘listening ear’ that seemed to understand my predicament:

“Because of the complexity of language and learners, a resourceful teacher will need to call upon a wide range of activities and techniques to support learning. However, we are not simply saying that [...] anything goes. A complexity approach is not relativistic (Cilliers, 1998)” (Larsen-Freeman and Cameron, 2008a, pp. 197-198).

For reasons such as the ones expressed above, the current study, from the inception of the course to the way exam preparation is organized, was built around four components that were made clear to the students on the first day of class and throughout the entire data collection process:

1. It’s all connected

“... from individual minds up to the socio-political context of language learning, and the cross timescales, from the minute by minute of classroom activity to teaching and learning lifetimes... Learning involves the connected brain-body-world of continuity [...] and ecological approaches” (Larsen-Freeman and Cameron, 2008a, p. 198).

2. Language is dynamic (even when it’s frozen)

“... even if a frozen or stabilized version of the language is used in the syllabus, grammar book, and test, as soon as the language is ‘released’ into the classroom or into the minds of the learners it becomes dynamic” (pp. 198-199).

3. Co-adaptation is a key dynamic

“Language classrooms are full of people co-adapting – teacher with students, students with each other, teacher or students with learning contexts. Stabilized patterns of action, including language action, emerge from coadaptation on various timescales” (p. 199). That being said, co-adaptation is not necessarily positive or negative by itself and must be managed by the facilitator if language progress is to be attained.

4. Teaching is managing the dynamics of learning

“Attending to variability around stabilized patterns can suggest how patterns of classroom action might be changed to increase the benefit to language learning, by finding ways to perturb systems out of attractors and into new trajectories... Teachers do not control their students’ learning. Teaching does not cause learning; learners make their own paths (Larsen-Freeman, 2006). This does not mean that teaching does not influence learning, far from it; teaching and teacher-learner interaction construct and constrain the learning affordances of the classroom. What a teacher can do is manage and serve her or his students’ learning in a way that is consonant with their learning processes. Thus, any approach we might advocate would not be curriculum-centered nor learner-centered, but it would be learning-centered – where the learning guides to teaching and not vice versa” (p. 200).

It should be clear that the current study adapts the above four points to include paradox rather than a preference for a reinterpretation of the whole experience through the lens of one side of the spectrum. As an example, the current study would reword the second point “Language is dynamic (even when it’s frozen)” to state that “Language can be simultaneously dynamic and static and paradoxically as authentic in both states”. Building on a hypothetical model of a language classroom as a complex system (as proposed by Larsen-Freeman and Cameron 2008a), the intermediate Italian classroom studied here that met Monday through

Thursday was a “trajectory of a sociocognitive complex system. The elements and agents of the system include the learners, the teacher, the books, the language items being used, the physical environment” (p. 201), the online environments of Facebook, blogs, Twitter, websites, etc. Class talk, group talk, pair talk, online talk were some of the modes of interaction in which participants “soft assemble their language resources for the action at hand”. The particular lesson on any average day connected time in semiotic landscapes beyond the classroom and the tangible resources of the classroom. The teaching style varied from day to day due to the topic being discussed, the well-being of the instructor (physical and emotional), online versus in classroom personas, and so forth. All these variations gave “rise to distinctive, emergent patterns of behavior in the coupled system” (p. 201). When participants were brought together for group work the dynamics of the groups resulted in the emergence of a ‘persona’ that sometimes differed in class from the online group ‘persona’ and other times, or in the case of other participants, remained constant. However, the nature of the tasks also served as a parameter for the groups and, consequently, as guideposts to allow for coherence and cohesion within a diversity of expressions. What became clear from the interactions is that participants are individual ecologies made up of various subsystems, environments, variables, and influencing factors. Each system is nested in another system and is affected by the whole, moving inward or outward. A picture emerges of a continuously moving and shifting ontology that is as real in its totality as it is in the components of its ‘parts’. The shifts could move outward to curriculum, University standards, socio-economic or socio-political factors, ethical and philosophical constraints, religious beliefs and so forth, or could move inward to that one crucial moment on the exam or quiz, or to that ‘aha’ moment when the individual connects concepts,

sociopolitical/cognitive-linguistic issues and ideologies that previously seemed incompatible or unrelated.

The current study sought to remedy the myopia of the pilot study and be as truly ecological as possible while balancing the performative, dynamic and complex nature of language and identity with the sense of what is authentic and clear. I also revised the surveys and questionnaires and eliminated leading questions and included negative or even uncommon and seemingly unrelated questions (the reader will notice a question in one of the example questionnaires below. The question asks about the state of coffee. This is designed to keep the participants' mind active and engaged with the unpredictable). More so, this example of the new questionnaire is not the single source of data collection but rather merely part of a larger series of dynamic assessments throughout the course. As an example of what was learned from the pilot study, the reader could compare the questionnaire from the pilot study to the following questionnaire:

End of Semester Questionnaire (CURRENT STUDY)

Highlight or underline the most accurate response:

1. Ciao! My name is _____. On FB I go by _____.
2. Beforehand I was - resistant - skeptical - neutral - hopeful - excited - that FB would provide a useful learning tool.
3. I would welcome further use of FB in my learning experience
 Not at all Somewhat Maybe Yes Very much
4. I would rate the usefulness of FB as a pedagogical tool as
 Useless Rarely helpful Helpful Very Helpful Excellent
5. I would rate the usefulness of FB in respect to collaborative *peer to peer* enhancement as
 Useless Rarely helpful Helpful Very Helpful Excellent
6. I would rate the usefulness of FB in respect to collaborative *teacher to student* enhancement as

- | | Useless | Rarely helpful | Helpful | Very Helpful | Excellent |
|---|------------|----------------|--------------|--------------|-------------|
| 7. FB hindered my ability to feel more comfortable to experiment with language | Not at all | Somewhat | Maybe | Yes | Very much |
| 8. FB allowed me to learn by reducing my fear of failure or making mistakes | Not at all | Somewhat | Maybe | Yes | Very much |
| 9. FB enhanced a sense of classroom community | Not at all | Somewhat | Maybe | Yes | Very much |
| 10. FB increased my learning discomfort | Not at all | Somewhat | Maybe | Yes | Very much |
| 11. The use of FB while in class made the learning process (Highlight or <u>underline</u> all that apply) | Tedious | Repetitive | Engaging | Informative | Other _____ |
| 12. The use of FB while in class was | Boring | Rarely fun | Somewhat fun | Fun | Very fun |
| 13. FB raised my critical awareness of second-language learning and use | Not at all | Somewhat | Maybe | Yes | Very much |
| 14. FB enhanced my overall awareness of foreign and domestic issues | Not at all | Somewhat | Maybe | Yes | Very much |
| 15. The use of FB failed to integrate with our existing coursework | Not at all | Somewhat | Maybe | Yes | Very much |
| 16. FB facilitated learning by allowing me to engage according to my natural attention span | Not at all | Somewhat | Maybe | Yes | Very much |
| 17. The integration of FB was disrespectful of my unique learning style | Not at all | Somewhat | Maybe | Yes | Very much |
| 18. FB created a sense that learning is a more human experience | Not at all | Somewhat | Maybe | Yes | Very much |
| 19. FB failed to connect language and culture | Not at all | Somewhat | Maybe | Yes | Very much |
| 20. What is the most difficult aspect of using social networking as an extension of the language classroom? | | | | | |
-
-

21. I enjoyed having classroom activities that were just one click away from my profile page
 Not at all Somewhat Maybe Yes Very much

22. FB allowed me to centralize the following (**Highlight** or underline all that apply):

- a. Videos
 - b. Articles
 - c. Links
 - d. Pictures
 - e. PowerPoints
 - f. Word documents
 - g. PDF documents
 - h. Exam reviews
 - i. Skype
 - j. Blogs
 - k. music
 - l. Other (please list)
-

23. FB helped me in the *academic* development of (be specific)

24. Sometimes I found myself using more foreign language than actually required
 Not at all Somewhat Maybe Yes Very much

25. FB helped me see Italy in more diverse terms
 Not at all Somewhat Maybe Yes Very much

26. Sometimes I found myself using less foreign language than actually required
 Not at all Somewhat Maybe Yes Very much

27. Mimicking the way Italians write in different genres and registers improved my *writing*
 Not at all Somewhat Maybe Yes Very much

28. Mimicking the way Italians write in different genres and registers improved my *speaking*
 Not at all Somewhat Maybe Yes Very much

29. FB failed as a tool for really using the language
 Not at all Somewhat Maybe Yes Very much

30. Coffee is a liquid

True _____ False _____

31. FB affected (positively or negatively) my communication skills in *Italian* by (be specific)

32. FB affected (positively or negatively) my communication skills in *English* by (be specific)

33. Some specific examples of vocabulary and grammar structures that I learned to master through my interactions on FB with classmates and the instructor are:

34. On a scale of 1 to 5, with one being introvert and 5 being extrovert, I consider myself
1 – 2 – 3 – 4 – 5

35. Related to question #34 (introvert and extrovert) I found FB to be (be specific)

36. What has this semester's interactions on FB taught you most about yourself?

37. Do you remember an 'aha' moment where something about the culture, grammar or vocabulary really clicked because of your interaction on FB?

38. What did you learn about politics, foreign and domestic, that you did not know before interacting on FB with classmates in Italian?

39. What aspect(s) of your culture did you find were similar to contemporary Italian culture?

40. In the near future, I would like to be a part of a presentation on this topic

No Maybe Yes Definitely!

5.4. Meet the Participants: Introductions through Narrative

The decision to do a case study involving six participants was due to several considerations rooted in the adapted theoretical frameworks:

1. This study centers on the impact of dialogism and ‘collective consciousness’ on semiosis within, and beyond, the use of the L2. For there to be consistent dialogism that allowed for polyphony of voices and perspectives, there needed to be more than two or three participants.
2. More case studies nested within one larger case study allow for the visible emergence of patterns of conformity to, or transgression of, the majority opinion online and in group interactions.
3. A larger number of participants better informs the researcher of areas or aspects of the course that require modification, elimination, expansion, etc. There is a necessary and constant adaptation to dynamic, complex and – often – emergent systems. It would have

been difficult to afford such flexibility with a smaller number of participants under observation.

4. The metaphorical application of principles from quantum physics include concepts such as interconnectivity, immediate impact at a distance (in this case, through technology), and collapsing of multiple probabilistic cues into one agreed-upon ‘fact’. For each of these, it is crucial to explore the shuttling between plurality and singularity and not only between dynamic and static states and subjective and objective ‘authenticity’.

Participants were all enrolled in the Italian course and were taking the course as a requirement. However, they were selected on the basis of 1) having signed the Consent Form, and 2) having completed what was required to be considered a participant (surveys, narratives, interviews, questionnaires). Of the 28 students who signed the Consent Form, only six qualified as participants. This decision to select participants this way avoids the biases that arise by first reading the students’ work and then deciding whom to include. I purposefully did not read the students’ work but rather simply set aside all completed forms by name and was able, this way, to narrow down who qualified after the end of the course (those participants who met the criteria 1 and 2 mentioned above). The participants introduce themselves through a series of narratives and interviews were woven throughout the course. This was aimed to humanize the participants and recognize the individual affected by multiple variables within an ecological collective. The topics discussed in the essays also became part of discussions between the instructor and the participants both in class (when appropriate) and in private interviews.

The aim of Narrative 1 was to break the ice, learn about the participant, and begin the emic emphasis of the study: perceiving from the participant’s vantage point. The participants received a sheet of paper lined on one side with the following introduction:

Using only this front page, compose a narrative addressing the following topics:

- 1. Demographic (age, gender, etc.) information that you consider important and other aspects of your identity.*
- 2. Personal and professional aspirations.*
- 3. Concerns about the course.*

The aim of Narrative 2 was to learn about disciplines and academic interests that would require ‘bridging’ by the researcher. The participants received a sheet of paper lined on one side with the following introduction:

Using only this front page, compose a narrative addressing the following topics:

- 1. What is your educational history?*
- 2. Have you learned more inside or outside of classrooms? Can you give one or two examples?*

Both Narrative 1 and Narrative 2 were assigned toward the beginning of the course and were given to all potential participants. In fact, all documents related to any and all forms of data collection were made available to all potential participants, although I was not made aware of who the actual participants were until the course was completed and all final grades were uploaded to the University of Arizona’s grading system (UAccess). Once the course was completed, special attention was paid to the way certain self-perceptions were reshaped as the course progressed and how even certain ‘facts’ were retold and altered due to how memory itself was reconstructed through complex and dynamic interactions. In other words, there were phases and levels of self-disclosure and self-discovery that became evident when earlier feedback was

compared to later feedback. The reader should remember that I did not have access to any of the forms filled out by the participants until their final grades were entered and it was, then, determined who signed the Consent form and who also completed all the required surveys, questionnaires, and narratives.

4.4.1. Simona

As a starting point of reference of participants, I begin with Simona. In the first narrative ‘Life stories, identity (ies), and personal aspirations’ Simona states:

“I’m twenty and I’m a poet. I’ve written 2 novels and a novelette. I’ve been published 3 times in 2 different literary magazines. I was raised in Boston by my grandparents while my parents pursued careers – we moved when I was 12 to Virginia suburb of Washington, D. C. Where I graduated high school before moving to Tucson all my own for school. I plan on graduating with a degree in Creative Writing with a minor in gender and women’s studies. I hope to make a career with my poetry and fiction, possibly pursuing a master’s degree in CW and teaching a writing class workshop. I hope to move from Tucson to San Francisco, Denver, Portland or Seattle, as well as revisit the numerous places I’ve been and explore those I have not. I hope to become a social justice advocate through any influence I have with English and Italian language skills in any small way to enlighten and move as many minds as I can, as well as be moved and live a fulfilling existence”.

In the second narrative ‘Educational history and professional aspirations’, she states:

“My first language was Italian, having learned English in preschool and I spoke both English and Italian growing up. I went to a Catholic school from kindergarten to the fifth grade in Boston; once my family moved to Virginia, I went to a public middle school and a public high school

where I graduated with high honors. I find that while I learn a lot outside of classrooms what I learn within them cannot be undervalued I never could have learned about geometry or learned how to administer oxygen to a patient in my day-to-day life (maybe excepting in-field, first-hand experiences). Most days I prefer a well-made presentation over a homework assignment, and the classroom environment really helps my learning process. That being said, just about any creative aspect applied to required concept can be beneficial too. My 9th grade Earth Science class made an “ABC’s Book of Earth Science” as a project, and not only did I do very well, I was able to retain a lot of the information because of the effort I put into creating it”.

4.4.2. Santana

Narrative #1: “I am 41 years old, female, married (for the second time), mother of three, hairstylist, student, avid reader, caregiver. In 2010 I changed everything about me (except my job). I realize that I wanted to be more than a hairstylist and after two years of preparation left a long-term, non-healthy relationship. I want to be the best me possible. Professionally I want to do what makes me happy. I do that now, but the erratic schedule, poor pay, and strain on my body has made me realize that I need a new direction. I enjoy the course, a little more vocabulary review would be nice”.

Narrative#2: “I finished my associates of science spring 2013. Before then I graduated high school in 1990. I have learned academically in classrooms, however I feel that true practical learning (life experiences) only happen outside of the classroom. I feel that the classroom preps you for outside the classroom. You can read about discrimination and study it, but until I was in a Denny’s with my non-white (then) husband and mother-in-law and was told the restaurant suddenly had run out of food that I truly understand it. (Yes a totally true story about the Denny’s Blythe, California right inside the border off I-10)”.

4.4.3. Liz

Narrative #1: “There once was a girl named Liz. She was 19 and travel to Arizona in pursuit of a degree from the University of Arizona. Liz love learning about the way people act and why they acted so. She also love the arts so she decided to study psychology and art. Every day she strives to be creative see the beautiful things in life. Liz always loved to learn about different cultures and she wanted to travel the world. One day she hopes to open up her own business when she is older. School is a medium challenge for her. The time is going to be one of the tough obstacles she will have to face. Rachael wants to get a B or C in Italian 201 and be prepared for Italian 202”.

Narrative #2: “My educational history began like other children in preschool. I continued the regular track to elementary school and middle school. In high school I took dual enrollment (college classes) alongside my high school classes. These classes helped familiarize myself with the college pace. I am a psychology major with a minor in business and art. I believe I learned more in a classroom environment. In a classroom I am more focused to learn the material. It is very difficult for me to focus at home because I am constantly distracted by my roommates and other things. I’ve learned more inside of the classroom. For example my oceanography class did not meet in the usual classroom. Said we had an online lecture where my professor posted lecture notes and an outline. Information didn’t keep as well as it would have if I were in class. I think the act of sitting in taking notes while listening helps me retain more information. Notes and PowerPoint online are great studying resources but they are not effective for learning new information taking tests and quizzes online are very uncomfortable to me and I feel that I do worse on online tests”.

4.4.4. Matt

Narrative #1: “I am a 20-year-old male. I am different from most people my age nowadays. I wear a kilt, box, and love to surf. I love being outside, hiking, fishing, and hunting in the mountains are some of my favorite pastimes. I love music and have a diverse taste in it. I am one of the few people I know who enjoys listening to anything from Metal to Frank Sinatra, I even like to listen to symphonies as well. Personally I want to become less shy and more sure of myself. I also want to become more organized. I would also like to be successful in be a father someday. Professionally I want to get a job I enjoy and want to return to every day. I want to make enough money to live happily and own my own house someday. I do not really have many concerns about this course. From what I understand it is exactly what myself and my grandfather thought a language class should be. I am concerned though about using technology because I am not really good at using it though”.

Narrative #2: “I’ve always had difficulty in school. I have a hard time staying motivated. But always enjoy learning new things. In school I have always liked reading the most. I am not the best student but am definitely not the worst. When enjoy a class no matter how difficult it is I try my hardest I feel I have learned more outside the classroom. I do not like structure of most traditional classes. I like to learn on my own from many different sources. I’ve been using you for help in school since seventh grade. Using that, I was able to pass Math and Spanish. I also like the idea of using what I have learned in real-life situations. When I was learning Spanish my parents would take me to places like Nogales said I could practice it and really learn to speak the language”.

4.4.5. Christopher

Narrative #1: “I’m a 20-year-old male student of Hispanic (maybe Nordic) descent. As my social network pages say, I’m a computer geek who is a mechanic at heart. I enjoy tinkering with

anything that gets into my hands. In a few years I see myself graduating from the University and starting my career and information technology. Professionally, I see myself working an IT position at an office and putting my Italian minor work if the company I work for does business in Italy, Spain or Mexico. The only concern I have for this course is the heavy social network integration. I know for a fact that it will become more rigorous since the course's focus is now tech-based".

Narrative #2: "As far as my educational background goes, I attended public school (K-12) and Nogales Unified School District in Nogales, Arizona. Prior to taking the Italian course at UA, I had an Italian neighbor would talk to me in Italian. Unlike most in the Italian course, I have no Italian family roots [illegible] and I also wanted to learn a third language. It didn't matter where I learned although I learn more history through a club name after the "DeAnza" trail that runs through Nogales to San Francisco. I have also learned chemistry better on YouTube than in the actual class. I wasn't pressured with tests or homework and the formulas stuck in my head really well".

4.4.6. Susan

Susan decided to write her narratives in Spanish, since I gave all the freedom to write their personal narratives in whatever language they felt most comfortable. What follows is a translation into English.

Narrative #1: "I am 21 years old, I'm a woman who was born in Boston, Massachusetts but I grew up Sonora, Mexico almost my entire life; I grew up with Mexican beliefs and cultures and they also grew up Catholic. My first language is Spanish, for this reason it is sometimes hard for me to communicate in English. I love to draw! That is why my goals are always related to

improving artistic techniques. I've always used art as a means to grant people smile; since this is the case this is the main reason why I want to become an art teacher, I want students to know that art is much MORE...what colors there are and how to combine them, and also that is a great part of the world in which we live and express ourselves every day. Truthfully I do not see any problem this course could cause me. The professor does his best to make everything clear and I have learned much more quickly with the professor's methods. For example at times he tries to make connections between Italian and Spanish so that I can learn a bit better".

Narrative #2: "I was a student in a Mexican school when I was in kindergarten and elementary school. When I moved on to middle school my mother registered me for a school in the United States. Adverse there were many problems: they wanted to put me back a year because, since I came from Mexico, they came to the conclusion that I knew NOTHING of English, when this was not true I studied in Yuma County from middle school to high school. After 80 credits in high school I moved to Tucson Arizona continue with my studies at the University of Arizona. I have learned outside and inside the classroom is good for me to go to class to listen to the course and better understand the concept behind what one must learn; but the fact of learning should not only occur in classroom but also outside of the flesh so that one may practice what one learns I can think of an example related to this class Italian 201: the teacher helps us a lot in class is a good teacher but the fact's practice Italian outside of class via the Internet seems to me a fabulous idea! I have learned many words that he has not had time to I've experience such a thing thanks to the Internet page 'Deviantart.com'. By displaying my art, people give me constructive feedback and I use that improve my art style".

5.5. Research Paradigms

From getting to know Simona, it becomes apparent that what is needed to further analyze her interactions within an ecological and dynamic system is some criteria that are applicable to all participants. Larsen-Freeman and Cameron (2008a) suggest a ‘complexity toolkit’ for researching such complex systems. The following principles are applied to the study:

- “When focusing on a particular aspect of a complex system, other aspects or systems are taken as the environment in which the focal aspect or system changes. This lets the background continued to be dynamic while we focus on foreground activity”.
- “The ‘initial conditions’ of the system are very important, i.e. how the system is set up when it commences the activity we are interested in, since these conditions form the system’s landscape and influence the trajectory of the system as it changes”.
- “Connections and relations underpinned change in dynamics in the system, both among the system’s components and outwards into other systems. They need to be understood in order to understand why the system behaves as it does and how further change might be instigated”.
- “It is important for
 - co-adaptation between linked systems
 - emerging patterns of stability, and variability around stability, as the various language classroom subsystems involve and self-organize
 - points of change or transition when the system shifts in one behavior to another”.
- “In understanding a complex dynamic system, all possible influences on any behavior of the system need to be considered, not just the most obvious” (p. 230).

5.6. Incompatibility of this Approach with Causality, Variables and Static Groupings

Although mentioned at the beginning of the dissertation, by now the reader should have a much clearer understanding as to why this case study largely disregards causation approaches to an experience that is so human that it requires far more than data. It deserves a story rooted in the required rigorous research expected in academia that recognizes qualitative research as – at least, if not more – crucial in helping us understand what it means to be a language learner/developer who is also fully human:

“Viewing the research foci of applied linguistics as complex systems would encourage us, at least, to question this approach to causality. The unknowableness and interconnectedness of systems makes it much more difficult, if not impossible, to isolate independent variables ... Since agents and elements in complex systems are interconnected, it is highly unlikely that a single cause will give rise to a complex event. The grain of sand may trigger an avalanche, but it does not on its own cause it. Rather, they’re likely multiple and interconnected causes underlying any shift or outcome”
(Larsen-Freeman and Cameron, 2008a, p. 232).

Some scholars take this idea even further. As cited by Larsen-Freeman and Cameron (2008a), Byrne (2002) dismisses the very concept of ‘variable’:

“... let us understand clearly, once and for all, that variables don’t exist. They are not real. What exists are complex systems, which systems are nested, intersecting, which involve both the social and the natural, in which are subject to modification on the basis of human action, both individual and social. (Byrne, 2002: 31)” (p. 233).

Such a radical view of research does not necessarily translate to the notion that there is nothing ‘out there’ to explore. In fact, this dissertation has already been establishing a strong

case against such hyper-postmodern views. We can, and should, explore co-adaptation in complex systems. In other words, although performativity has, rather subtly, philosophically dismissed the ‘existence’ of women, men, heterosexuals, homosexuals, Caucasians and African Americans (while often arguing the very opposite), that has not stopped the success of feminists and people of all races and ethnicities from achieving new dreams and social change. Equally, although Miller (2011) has deconstructed the very notion of language (L1 or L2), that does not stop educators and learners from developing and acquiring the L2, using languages and participating in their creations.

To further guide this study, beyond theory and method, there were issues of principles that needed to be considered. As stated before, this dissertation avoids talk of replication and generalizability. However, it does make practical use of certain principles to ground the methodology taken from Larsen-Freeman and Cameron (2008a, pp. 241-242):

- “1. Be ecologically valid, including context as part of the system(s) under investigation.
2. Honor the complexity by avoiding reductionism. Avoid premature idealization by including any conceivable factors that might influence the system. Always be open to considering others.
3. Think in terms of dynamic processes and changing relationships among variables. Consider self-organization, feedback, and emergence as central.
4. Take a complexity view of reciprocal relationships, rather than invoking simple, proximate cause-affect links.
5. Overcome dualistic thinking, for example, acquisition versus use or performance versus competence. Think in terms of co-adaptation, soft assembly, etc.

6. Rethink units of analysis, identifying ‘collective variables’ or those that characterize the interaction among multiple elements in a system, or among multiple systems, over time.
7. Avoid conflating levels and timescales, yet seek linkages across levels and timescales. Include thinking heterochronically.
8. Consider variability as central. Investigate both stability and variability to understand the developing system”.

5.7. Complexity Approaches to Data Collection and Analysis

As a point of reference in the collection of data, the third edition of the textbook *Ponti: Italiano per il Terzo Millennio* (Tognozzi and Cavatorta, 2013) was used as a springboard for all tasks and related activities, which generated the data to be analyzed. That being said, this study is not about task-based research. Participants were monitored, interviewed and surveyed. The self-reported answers from qualitative and quantitative surveys and questionnaires were intended to demonstrate, among many things, if students do, or do not, gain awareness of/become aware of interconnectivity through Wiki-like tasks. These tasks involved the creation of multimodal and dialogic ‘flooding’ of FB threads, the process and final product of which was analyzed by looking at multilayered data of multiple variables.

Data collection was adapted from de Rosnay’s (2011) ‘system analysis’, so that interpretation is within a more contextualized framework of analysis of symbionomics, specifically, the emergence of complex systems resulting from self-organization, self-selection and co-evolutionary symbiosis (p. 312). One underlying assumption of this dissertation is that both progress and backsliding are an integral part of an ecological approach to SLD.

Since, from a complexity theory perspective, ethnography is also a complex and adaptive system (Agar, 2004), it became obvious that as I collected data, I was led to new ways of asking questions in different contexts. Certain data started connecting to other data in ways that I could not have imagined at the beginning of the study. Patterns began to emerge much like a “fractal-generating process” (Larsen-Freeman and Cameron, 2008a, p. 243).

The course was always open to the impact of adaptive teaching. What is particularly useful about this approach is that it maintains a certain level of unpredictability in the course where changes are governed by the needs, desires and insights of the participants (agency) rather than on the imposition of power from above (institution). Paradoxically, the researcher is required to maintain the requirements of the institution and prepare the participants to excel on exams and quizzes and essays. The question, then, is “What does such an approach look like?” During the course, observation of the participants resulted in the awareness that some of the topics we were discussing (based on the textbook) were of little interest to some individuals and cherished by others. At the same time, the grammatical structures and vocabulary and sociopolitical discourses that needed to be mastered in order to do well in the course, all contributed to multiple topics of crucial importance. If, for example, the chapter required the participants to understand the use of the preterit and imperfect as well as direct object, indirect object and reflexive pronouns, there really was no need to force all participants to learn about the rise of feminism in Italy when their own interest, such as GMO foods, drug addiction, civil rights, and gay rights, could all be developed in the L2 with the same required grammar structures and similar vocabulary. The adaptive teaching approach would quickly find the resistors and quick adaptors and rework the portion of the course in order to respect the agency of the individual participants.

5.8. Delivery of Tasks

All potential participants (all students) participated in all tasks. The tasks were merely part of a larger flow of interactive activities, assignments, games, debates, dialogues and presentations – all in Italian – that contextualized the tasks for data collection. Examples of tasks not specifically addressed in the setup of the data collection were included in the portfolios. All potential participants were asked to create such portfolios to display their work, their frustrations, ideas, epiphanies, learning experiences, etc., and – more importantly – to display their emic (personal, participant-based) perspectives on the whole. Class often began with stimulating visuals, humor, videos or games meant to engage participants to lower the affective filter and settle into a short period of L2 use. When on FB, this was achieved by similar multimodal means but was engaged in written format (as opposed to spoken), although Skype is easily available for all participants who prefer such modality.

Week 2: Two narratives in writing (Word document in L1):

- a. Life stories, identity(ies), and personal aspirations.
- b. Educational history and professional aspirations.

Throughout course: Narrative through oral interview.

Week 3: Pre-Task #1 Survey (see Appendix B).

Week 4: **Task 1a** ‘Stereotypes and cultural misunderstandings’ (*central and multimodal hub*).

- Part 1 of 3.
- Part 2 of 3.
- Part 3 of 3.

Week 5-7: **Task 1b** ‘Stereotypes and cultural misunderstandings’ (*Wiki-like semiosis*).

Week 8: Survey (see Appendix C).

Week 9-10: **Task 2a** ‘Deconstructing the fashion industry’ (*central and multimodal hub*).

Week 11: **Task 2b** ‘*Deconstructing the fashion industry*’ (Wiki-like semiosis).

Week 12-13: **Task 3a** ‘*Traditional and alternative Italian families*’ (central and multimodal hub).

Week 14: **Task 3b** ‘*Traditional and alternative Italian families*’ (Wiki-like semiosis).

Week 15: Survey (see Appendix C).

Week 16: End of semester Questionnaire (see previous chapter that compares this to the pilot study questionnaire).

Post Course: Final Interview

5.9. Description and Justification of ‘Tasks’

Informal online and in-class interviews:

The research aim of this initial in-class informal interview was to examine the participants’ level of adaptation to shifts in topics, linearity or non-linearity of information sharing, comfort or discomfort with ambiguous or unfamiliar topics. The ecological aim was to have the participants discuss some of the topics they discussed in the written narratives and to get to know each other better as a community. Each participant was encouraged to include the following in the discussions:

In light of your two narrative essays, let’s discuss these three topics: 1. Change, 2. Ambiguity, 3. Knowledge. Be as honest as possible. Remember that my role will be that of ‘the devil’s advocate’.

Pre-Task 1 Survey (Appendix B):

This survey captured initial emic perspectives on technology, enjoyment and learning. The same survey was repeated at the end of the course to detect whether change in perspective had occurred regarding language, culture, identity, SLA and/or TELD.

Justification for Task 1a, 2a, 3a (central hub)

Multimodal ways of writing ourselves “into being” online (McBride, 2009; boyd, 2007, p. 3) are part of the new literacy practices. As we (participants and facilitators) navigate sites and online resources to populate the FB page (or thread), patterns of *how* and specifically *where* we choose to visit sites and navigate the modules (Domingo et al., 2014, p. 5, 7) will become evident. Speaking to the ecological emphasis on agency, this form of “modular navigation” gives us the power to choose our own reading path (Lemke, 2005). The visitor may find a ‘thread’ (module) in progress and often reads the latter threads before backing up to gain context (non-linear and non-chronological). Though to an initial outsider this may seem chaotic, students engaged on FB still find it coherent. This is “the effect gained from engaging with a semiotic entity, where the reader assesses that ‘everything that is here belongs and belongs together’” (Domingo, et al. 2014, p. 8). Mistakes as well as purposeful and playful deviations from the so-called ‘standard’ L2 have been shown to develop “rhetorical decisions” that range “from being flippant to being deliberate and sophisticated” (DePew, 2011, p. 56, 70). Since members of different languages and cultures are bound to misunderstand each other at times, “missed” communication (Ware, 2005) is an essential part of healthy SLD.

Task 1a (part 1 of 3), Stereotypes and cultural misunderstandings (central hub):

As an example of the approach used throughout the course, I discuss a certain task, while also reminding the reader that this task is nested in a series of other activities, discussions and contexts that prevent the task in isolation from being interpreted as ‘causative’ of certain results: First, after reading the introductory text of Chapter 1 of *Ponti*, two groups of participants were given 20 minutes to ‘flood’ (consolidate from multiple sources) two designated FB threads with multimodal forms of vocabulary either not found in the textbook or alternative uses of the

vocabulary, all related to Italian foods and related stereotypes (images, words, videos, articles, blogs, etc.). The first thread was titled, “Cos’è il *caffè corretto*?” The textbook definition of the vocabulary term is *coffee with liquor*, but the use of the word ‘corrected’ implies other interpretations. The second thread was titled, “Cos’è il *caffè macchiato*?” The textbook definition of the vocabulary term is *coffee with a little milk*, but the literal translation is ‘stained’ and was introduced within several other contexts in which this word is used with a different intention. Vocabulary was organized into dynamic, not static, semantic fields. These could be from physical objects to abstract concepts (including metaphors and metonymies) and how people link color to race or moral qualities, such as black and white, evil and good, etc. to ideologies (e.g. the stain of evil, white as ‘pure’, etc.). During this process, the facilitator purposefully introduced transgressive uses of the vocabulary or even contradictory definitions or uses of the same by ‘tagging’ individual participants on FB with the new materials. Uses of the word ‘correct’ varied from positive action, as in ‘error correction’, to approval “correct!”, etc. Uses of ‘stained’ were also applied to marble, clothing, theological or moralist uses, etc. Approval by the facilitator of definitions and concepts leading to the goal of the first chapter of the textbook were demonstrated by providing a ‘Like’ to the participants’ work or by emoticons, singular words, sentences or related links or FB pages to confirm their selection. When this portion of the task was completed, the participants reviewed the contributions by the other members and analyzed discrepant uses of vocabulary, arguing for, or against the cohesion and/or coherence of the materials. Unusual grammatical structures, non-standard forms of the L2 and variability of vocabulary use were all part of the ‘languaging’ (Phipps and Gonzalez, 2004) experience at this ‘wrap up’ session. The question was then posed as to what impact this task had on expanding the participants’ understanding of the connection between language and culture as well as the need

to consider ever-shifting contextual cues that may alter the semiosis related to the vocabulary.

Second, participants were divided into two groups on FB. They found two group threads: **1. Stereotypes**, and **2. Cultural misunderstandings**. Each group was asked in the thread itself, “*What type of grammatical structures do you think are required to discuss these topics? Include the discovered vocabulary and justify your answers via examples gleaned from online L2 resources that demonstrate the language in use. You will have 25 minutes to outdo the other group, so work together!*” As before, the facilitator posted multimodal resources that either confirmed or contradicted the selections made by the participants, this time specifically bringing in multicultural uses of the L2, dialectical variations, and socio-cultural contexts to reveal the sedimentation of transgressive forms of the L2. Multimodal examples were posted by the facilitator with particular emphasis on the choice of the past tense, the present, the future, the conditional, and so forth. Participants began to blend the use of the L2 with forms of meta-analysis (languaging) as well as performative stances of identity achieved through the L2, such as L2 expert, informed contributor, team player, skeptic, rebel, etc. (see Miller, 2011, for excellent examples of L2 performative identity).

Task 1a (part 2 of 3), Stereotypes and cultural misunderstandings (central hub):

Here I discuss another task that is merely a part of an entire approach to the course and, in no way generalizable as ‘causative’ of progress, but rather related to a much broader ecology of variables that worked in harmony to improve critical thinking: The class was divided into groups. FB posts were sent by the instructor to the students in each group. Each post included a short video to be discussed privately in groups. Each video was a commercial marketing Italian culinary products. Two participants in each group identified vocabulary and grammatical items that reconnected to the previously-discussed lexico-grammatical selections, while two

participants in the same group discussed how effective the commercial was at selling the product, who the target audience may be, and the aesthetic appeal of the semiotic construction of the commercial. Finally, two participants in the same group analyzed underlying messages, assumptions, cultural contexts, stereotypes, erasure, and thus, problematized the commercial. Participants were informed that they must be ready to present a summary of their arguments and findings reduced to a single paragraph created in a single thread (see the next section on Wiki-like tasks). This portion of the larger task required no more than 30 minutes. Although each member was focusing on the topic assigned, s/he was also exposed to the other topics being developed by other group members, all complementing a fuller understanding of the broader issues being explored.

Task 1a (part 3 of 3), Stereotypes and cultural misunderstandings (central hub):

Building on the previous task, and a series of dialogues with the participants, the facilitator publicly and temporarily interrupted the dialogues taking place and directed all students to the main FB page to continue a hybrid machine/face-to-face discussion. Here, still using the L2, the facilitator had the groups share their findings and seek connections among topics and discoveries. Participants were asked to share their resources under the final link, including their finalized summaries (Google documents, etc.). Lastly, as part of their weekend homework, the facilitator asked the groups to read through their classmates' notes and prepare for a debate on Monday. Once class was dismissed for the weekend, the facilitator continued to monitor the participants' work online, sometimes minimizing interaction in order to notice 'beyond the task'. As part of the debate preparation, each participant was encouraged to find FB pages related to their topics; temporarily 'Like' the pages or temporarily 'Join' the groups in order to be granted access to how various Italians really write and speak about the topics. By

joining or liking related FB pages, participants were exposed to numerous other ‘recommended’ pages as further resources during the in-class debate. The next class day the debate began with the two original questions: “What is corrected coffee?” and “What is stained coffee?” These same questions were asked again in the final interview after the course had finished. The richness of all that had come before to lead up to that point encouraged analysis on the part of some participants that bypassed the textbook’s literal definition of these terms to include larger socio-cultural discourses, politics, and marketing, with related discussions on how to analyze language use through metaphor and metonymy. Potential participants’ engagement on FB was also measured using features that allow for quantification. Materials to be analyzed qualitatively were selected by the participants, based on what the participants claimed to be most important about the experience. The facilitator refrained from selecting data to be analyzed. To alleviate some of the burden that could be associated with such a monumental task, the potential participants were asked to create the previously-mentioned portfolios as the course progressed that were representative of their work, perspectives, insights, learning experiences and difficulties with TELD.

Post-Task #1, Survey (Appendix C):

This survey was given to capture emic perspectives regarding connections between language and identity. It opened the possibility for participants to express both concepts as product or process. The survey was repeated twice throughout the course to verify if the QP principles applied throughout the tasks and the course altered the participants’ static or dynamic stances on language and identity. As will be discussed below, such a dynamic assessment (Poehner, 2008) did reveal shifts in the perceptions of the participants. Analyses focused on participants’ use of modernist, postmodernist, or post-postmodernist discourses on the topics, on

blending of ideologies, backtracking of positions, and the multiple timescales of various aspects of culture related to the L2.

Justification for Task 1b, 2b, 3b (Wiki-like)

The entire course was designed and delivered to be highly collaborative and dialogic. The feedback from the participants revealed this approach to be both helpful and problematic. However, the justification for the incorporation of Wiki-like projects is due to extant research that demonstrates that such collaborative work at least doubles knowledge acquisition (Ras and Rech, 2009), especially when blended with other technologies that are preferred by students (Williams, 2009). This helps develop an “affinity space” (Gee, 2004) for digital literacies (Knobel and Lankshear, 2009). Most of the compositions throughout the course followed this model. The mentioned tasks allowed for the construction of language and identity by means of improvising, blending genres, patching together contrasting or contradictory elements, and creating and modifying meanings to suit the context (Budenski, 2009, p. 44). The lack of linearity was also physical (not just temporal) in that the semiosis changed depending on whether groups were engaged with a thread (vertical), a movie or video (static), audio (imagined spaces) or with a PPT or album (horizontal or sequential, if going frame by frame). This form of online communication challenged power relations of authorship and readership and profoundly impacted the “uses, forms and functions of writing” as the relationship between multimodal ways of communicating take on “new functions”. Modality was, in fact, “the social means for making meaning tangible and visible” while authority was “shaped by the design and use of navigational features, linearity, modularity, and reading paths” (Domingo et al., 2014, pp. 1, 2). A still image or a video did often achieve most efficiently and rapidly what could have taken pages of words to achieve before. Participants engaged with online writing as multimodal genre, multimodal

affordance and as medium where language develops as non-linear phenomenon. Even reading activities required attentiveness to “all the modes which are in play, to their functional load, to their respective arrangements, and to their disposition on the page” (Bearne and Kress, 2001, cited in Budenski, 2009, p. 91).

Task 1b: Stereotypes and cultural misunderstandings (Wiki-like)

From week 5 onward participants used various multimodal forms of Wiki-like features of FB to develop a similar register or genre (language as product and ‘target’) and to develop a more global understanding of other perspectives (language as performative process). The task also allowed for the consolidation on a single thread of a multicultural understanding of how different ‘subjective’ Italians perceive the same ‘objective’ topics. One example is how participants were encouraged as a class to click on the facilitator-created interactive PowerPoint (PPT) titled ‘Favole dal mondo Arabo’. In this PPT, a blend of images and questions lead viewers to challenge assumptions about the essentialist associations of Italians with Catholicism by introducing Italy through the perspective of Italian Muslims. The world of fashion (a popular topic of discussion related to Italian culture) was introduced by current ‘counter-cultural’ pushes for modesty in fashion promoted in Islamic runway shows. Culinary arts were complimented with references to Halal foods. Sacred texts and religious sites (assumed to be Catholic) were semiotically destabilized by the overt presence of Islam in Italy. Participants read an article on the growth of Islam in Italy. Then, participants were introduced to two fables in Italian that were translated from Arabic and made accessible to Italian children. The facilitator coupled both fables with images intended to help in understanding the meaning of new lexical items (a seemingly non-poststructuralist activity). The first fable, although superficially rather simple due to its linear and clear telling of the adventures of several talking animals, proved to be somewhat

more difficult since potential participants were prepped to engage negotiation *of* meaning (meaning *in* the text). That is, they were given reason to believe that the text provided a unitary moral lesson or socio/religious/political agenda. In light of this setup, they were then asked to create, dialogically, a coherent linear summary of the story. The participants' work was monitored. I must clarify that at no point did I overtly emphasize an ultimate arrival to a 'target' truth. Such an approach to the text was largely assumed by the readers. The search for an unambiguous meaning eventually proved problematic, chaotic and frustrating. Although the participants' ideas, speculations and questions were addressed in the classroom, the facilitator did refrain from encouraging one interpretation as more valuable than the next. The interactive nature of the PPT allowed participants to test their understanding of basic facts as presented in the text, while not pushing for any deeper level of semiosis. After several minutes of writing and negotiating in the L2, the participants did not reach a consensus on the story line. The facilitator then suggested that the participants disregard their assumptions of what a fable 'should be' and 'how it should be organized', and, instead, explore online 2-3 famous fables from the Middle East and some common morals to the fables. The participants were encouraged to examine the structure of fables that have been translated into Italian and, finally, consider the cultural and social contexts that may inform both the writing and the reception of these fables. The class was then divided into the previous groups. Each group read the second PPT fable, which described a far more adventurous and dynamic storyline. The question was then posed, "*what is the point of telling this story to children?*" The moral of the story was antithetical to the Western emphasis on heroes and victories and promoted, in a rather subtle way, virtues of humility, community and honor. Now, having discarded notions of what a fable 'should be', participants in each group created their respective summary and analysis of the text. Again, to test understanding of basic

facts, the PPT had been designed to be interactive while the higher order critical thinking skills were left up to the affordances of the participants (more so than the technology), the opposite of the previous activity (Kim and Kim, 2013).

By dialoguing and writing together while imitating the way other Italian fables are written, participants were able to provide a summary that could then be shared with others until a collective understanding of the text dialogued with the individual interpretations, reducing neither to unimportance. The summaries were then evaluated in the classroom by all participants. Wiki documents that showed the most coherence and cohesion, and that were also supported by the most relevant and authentic online sources, became representative of the participants' collective efforts.

End of semester Questionnaire (Appendix D):

This rather extensive questionnaire was given as a weekend assignment. The questionnaire focused on the negative or positive aspects of using FB as an ecological extension of the classroom. Emphasis in the analysis of the data was on emic perspectives that show validity, or lack thereof, of the chosen QP theoretical (metaphorical) framework via FB activities, interactions and tasks. The analyses also consider emergent trends, unexpected results, unforeseen consequences and ecologically-interconnected perspectives.

5.10. Affective considerations

As anticipated, during the first half of the course, participants perceived a sense of chaos and discomfort and many were highly uncomfortable with ambiguity. The case study details below how this changed throughout the course. For now it is sufficient to state that by engaging with each other, online resources and people, the activities and the facilitator, participants were able to be a part of the emergence of complex coherence and cohesion out of seeming chaos.

They were able to experience the paradoxical coexistence of static and dynamic meaning and learned when to let meaning fly through dynamic complexity and when to ‘collapse the wave function’ of semiosis and dialogism in order to establish meaning. The case study details below reveal the individual (not just collective) differences brought to the ecological environment, such as age, personality, and learning preferences, agency, choice. The participants took initiative in their own research and work (dynamic and fluid) while balancing this with the fact that the institutional context has structure (UA and course requirements, textbook linearity of topic and language development, etc.). The case study also demonstrates a larger narrative (a life story) of participants on different trajectories and timescales of acquisition/development, of individual and collective choices to appreciate or dislike, and incorporate or reject, certain aspects of the process.

CHAPTER 6: FINDINGS - THE IMPACT OF 'QUANTUM' TELD

6.1. Overview

This is the heart of the study where the emic perspective of the participants takes center stage and patterns begin to emerge, seeming chaos gives way to complexity and the paradox of language and identity as simultaneous process and product becomes evident. In this chapter the participants will discuss their experiences, changes in perspective and challenges related to the theoretical frameworks and the technological exploration of the course. Furthermore, due to the ecological and social justice focus of the course, the participants will elaborate how their very lives, self-perceptions, understanding of sociopolitical contexts and power are all interconnected. There is something very human about this chapter. All theory and pedagogy aside, the reader will find the emergence of a 'glocal' (global and local) picture of society, a barometer of the world through the lens of a microcosm, and, hopefully, look at the contemporary state of language education from a perspective that is often forgotten in language reform policies.

6.2. Qualitative Insights

The reader will soon notice a rather different emphasis between the insights shared during the pilot study and those shared during the current study. This is not a negative or positive difference, but rather, perhaps, a change due to shifts in public opinion on such topics as social networking in general and for learning purposes, local and global views of citizenship, assumptions and impositions from leftwing and rightwing media sources, growing apprehensions related to safety and privacy, and, finally, a notable move away from the philosophical trends of postmodern thought. In this sense, these participants have something powerful to say to educators that seek to remain 'in touch' with the pulse of this generation. We must remember that

what these participants share is the fruit of extensive and long-term dialogue with a dizzying number of other interlocutors who are integral parts of the Conversation. Although the study is not generalizable, the opinions of the participants are worthy of profound consideration by educators even beyond academia. I particularly feel compelled to emphasize the importance of this in relation to the need for a strong reform in language education at the federal level, since operatives of military and government agencies who are being trained in multilingualism and multiculturalism have such a powerful impact overseas on the image that the US carries abroad (beyond the current discourses of militaristic imperialism), on foreign and domestic political shifts and on, potentially, the opportunity to transcend ‘us versus them’ dichotomies toward a goal of world peace.

6.3. Agency

One recurring discovery on the part of the participants – evidenced in the data – is how much more capable they are at achieving personal and professional goals than had been previously assumed. Rejecting the ‘spoon-fed’ mentality, the participants embraced their own power to take the initiative to succeed in unprecedented ways. The participants were able to see how issues of agency and self-empowerment had been somewhat suppressed in modernist and postmodernist paradigms, even when such paradigms promised the very opposite. What the participants decided confirmed that they are neither a mere collective nor a computer, but powerful individuals within a community, valuing how each member is capable of conforming to or deviating from the collective.

6.4. ‘Bigger than SLA and Broader than TELD’

Although this study focuses on participants within an intermediate course of Italian at the University of Arizona, it should be clear, upon reading the participants' feedback, that what they discovered about themselves and the world has ramifications that reach beyond our academic SLA goals and institutions. When we consider that some of the students went from passive approaches to world issues to becoming social justice advocates, we can see that there are unforeseen potentials to this type of approach that will take time to be revealed. Equally important, the change in perspective from essentialist notions of language and identity to open-minded engagement with human diversity may have some role, great or small, in making a positive impact on the planet. In a time when foreign and domestic conflict is on the rise, we, as educators, have a unique opportunity to expand any class and topic we teach/facilitate to a dialogic platform to raise global consciousness while impacting the local community for the better. If all this seems rather grandiose or 'missionary', then I encourage the reader to press onward and calmly consider what the participants have to say. This study is, in fact, their story.

Before looking at the qualitative data, it is crucial to remember the research questions and see if these are answered by the data and, if so, how. The questions again are:

1. Do metaphors from quantum physics balance ecological SLA theories and afford agents the paradoxical experience of language and identity as simultaneous process and product, while reducing neither to fiction?
2. Are higher levels of critical thinking achievable at an intermediate level via L2 discursive analysis enhanced by human-machine interactions beyond the classroom?
3. Is it possible for participants to navigate dynamic levels of ambiguity and possibilities of meaning while facing the static requirement by the academic institution to pass quizzes and exams, and complete homework assignments on the basis of a 'correct' answer?

6.5.1. Case Study 1 (Simona)

Simona's engagement with others in person and online resulted in certain shifts of perspective that are noteworthy. Some examples can be seen by contrasting and comparing the Language and Identity survey that was administered two times in the course. On the original survey, when asked to express the first thing that came to mind when hearing certain words, to the word single quote 'Muslim', Simona's first response was: "hijabs, Islam, 5 pillars, prayer". Toward the end of the course her answer shifted to "Middle East, Europe, Italian, and immigration/emigration". What is noteworthy of the shift is her broadening of the concept of Muslim beyond stereotypical boundaries. She is now considering Islam as part of a European common faith and an integral part of other Italian realities. However she is also broadening this to include sociopolitical issues such as immigration and how multiculturalism and multilingualism are two sides of the same coin (research question #2). This is an example of the metaphor drawn from QP's discoveries of the particle duality (multiple probabilities versus collapse of wave function through observation) and of entanglement (the interconnectivity factor), which is related to research question #1. This conclusion is based on the analysis of the participants' work as a whole and placing her answers in the broader context, as the reader will soon assess. For example, when describing 'Culture', in the first survey she mentions: "worldwide images of arts, traditions, ceremonies". However in the second survey later in the course she moves beyond static words to state "the thousands of ways we build our world and interact". Notice the emphasis on 'we' and the idea of development on a social level.

In the same survey participants were asked to look at a particular photo and answer how it relates to religion. The photo was of a Muslim family. In the first survey, Simona simply states that it is "a Muslim family in Italy poses for family photo". However, in the second survey,

although she still references Italy indirectly, she reaches outward to state “the blending of cultures, they all live together”. Considering that her growing open-mindedness related to Italian culture grew based on her interactions online, this answers research question #2: Are higher levels of critical thinking achievable at an intermediate level via L2 discursive analysis enhanced by human-machine interactions beyond the classroom?

The semester of navigating ‘standard’ and ‘non—standard’ forms of Italian, of facing multiple probabilistic cues of meaning and yet, simultaneously, collapsing meaning when necessary, seemed to impact Simona’s understanding of dubious dichotomies. For example when asked to describe the difference between language and dialect, her first response was that “language has formal rules” and dialect is “colloquial and informal within a region”. By the end of the course she starts off her definition by placing the word language in quotations. Notice the shift in perspective, and the connection between the emic and affective: “‘language’ encompasses dialects and dialects are part of language. Dialects ARE language just as real” (her emphasis). This affective and emic connection, and the shift in both is evident in her first response to the controversial question “Is African American vernacular English ‘real’ English?” Her first response was handwritten in very large font: “YES WHY NOT? America is a free country and you can speak any language you want!” Notice the aggressive nature of this response which ties into her passion for social justice. Simona was interpreting my question as potentially rooted in bigotry. However as the course progressed, and as she engaged multiple expressions of her L1 and L2 online, her response to the same question changed to a more positive outlook: “of course it is! It is a type of English like British English, Texan English, Indian English, etc.” This vision of language, specifically used to look at variants of Italian, did not hinder her academic progress as she maintained a consistent high A in the course (related to

research questions #1, reducing neither process nor product to fiction; #2, higher levels of critical thinking enhanced by human-machine interactions beyond the classroom; #3: navigating dynamic levels of ambiguity and possibilities of meaning while facing the static requirement by the academic institution to pass quizzes and exams, and complete homework assignments on the basis of a 'correct' answer).

To specifically address research question #2, the Technology and SLA Survey proved to be even more telling of the impact of a dynamic, complex, and quantum approach to TELD. In this survey the participants were again asked to write whatever words came to mind when first seeing certain words on the survey. Simona described 'technology' as "the Internet", but later described it as "new media arts". She described 'education' as "pre-structural (toddler) education", but later described it as "post-contemporary practice". Notice the shift from a static 'thing' to movement and the attainment or achievement of a goal. 'Language learning' was first perceived as "immersion", but this gave way to "integrative", again spiraling outward to think of language as inclusive and yet launching this concept outside of a static containment zone. Her initial understanding of 'meaning' was "definition", which was later expanded to "value of life"; and although she originally defined culture as "traditions", her later understanding of the concept included "the global economy and the blending in culture" (notice that she did not say the blending of culture). When asked what she liked least about higher education, her first response was "the politics of it". This ambiguous answer became very sophisticated in her final answer: "the patriarchy, the systemic oppression". Thus, she does seem to get more specific throughout the course about what she thinks and feels about social justice issues, a development recorded via FB.

The End of Semester Questionnaire revealed that Simona was initially very skeptical about using Facebook as a learning tool, but that she eventually rated its usefulness for collaborative peer to peer enhancement as “excellent”. She believes that the technology used in the course fostered an enhanced a sense of community, was engaging, informative, but also “a bit overwhelming”. She claims that the use of Facebook raised her critical awareness of L2 learning and L2 use as well as her overall awareness of foreign and domestic issues (research question #2). She found this to be a more human experience, although she disliked the confusion it creates, particularly “the interdependency of each classmate. This causes some anxiety when not every peer does their share/their best”. She enjoyed the convenience of activities being one click away from her profile page and found that her ability to converse in the L2 moved toward fluidity and that she was using more L2 than required by the course. Per the questionnaire, Simona claims that it improved her L2 speaking more than her L2 writing and also improved her English by allowing her “to think of new constructions and build new paths for my creative thoughts!” The consistent deconstruction of traditional tasks via ambiguous, unfinished, dialogic ever shifting approaches did have a positive impact Simona’s perception of the tasks: “by doing my tema on Facebook, it became a dialogue and I was able to more easily synthesize the different elements of my learning into one cohesive whole” (research question #3). In other words, although the approach included bricolage, multimodality, and the often frustrating ambiguity of symbiosis, the use of Facebook as a central hub and as a reference point allowed for complexity to develop from seeming chaos and for coherence and cohesion to start forming where all elements originally seemed rather random (research questions #1,#2).

When asked what she learned about foreign and domestic politics that she did not know before interacting on Facebook with classmates in the L2, Simona’s social justice emphasis came

to the forefront. She was concerned about the corruption in Italy, the structure of the government and how it relates to Italy as a whole. That is, how politics is connected to society, to the arts, to education, to the economy, etc. She was particularly moved by the “opinions of those who fight against the use of GMOs in food” (research question #2).

Her last written response on the questionnaire revealed a dismantling of walls of difference within the ‘us versus them’ dichotomy. When asked what aspects of her culture she found similar to contemporary Italian culture she replied, “almost all of them! We are also similar. With Facebook I learned to see those similar interests – food, music, social media, film, and fashion – is all so similar!” When we consider that her feedback is answering research questions #1 and #2 with a resounding “yes”, the reader could consider that this approach did not have a negative impact on her grades. In fact, her overall grade in the course was a high A, thus demonstrating her ability “navigate dynamic levels of ambiguity and possibilities of meaning while facing the static requirement by the academic institution to pass quizzes and exams, and complete homework assignments on the basis of a ‘correct’ answer” (research question #3).

Simona’s final interview reveals her ability to go beyond mere learning of grammar, culture, and vocabulary to a very critical analysis of discourses in the L2. She began researching the Corporation Monsanto and was particularly disturbed to discover – in her opinion – how manipulative the website is and the discourses that hide facts from the public, that legitimize gain at the expense of the poor, that promote poisonous products in terms of healthy sustenance, and how such discourses are carried out on a more global scale. As will be seen in her work on Facebook, there is a particular example that she shared where she claims, “I looked up Italian politics on my own while we were working in chapter 3 of the textbook – I wanted to see what the situation was in Italy... After I had learned about the politics in Italy and shared with my

class, I integrated it with the exam review questions we had put on Facebook! [...] In response to political equality, etc. we engaged in a dialogue online!” (research questions #2, #3). Simona is referencing a series of discussions conducted by participants on Facebook that blur the lines between language ecology and eco-linguistics by virtue of how they looked at the use of language in its environment – or in the case of Monsanto, outside of its US ecology – and the L2 related to the overthrow of Monsanto. She devoured any materials she could find related to genetic engineering of food and crops and rightly shared these with others in order to discuss further. From a performative perspective, she positioned herself as an activist with a social agenda. However, she constantly blurred the lines between academic requirements, personal interests and enjoyment. It was not uncommon for Simona to go way beyond what was expected by the course. In fact she even states this clearly in her feedback: “For this tema, we ended up doing way more than was necessary! We learned a ton and had a great time! It didn’t feel like we went way over the word count required at all!” Thus, while enjoying the process, she also achieved “higher levels of critical thinking... at an intermediate level via L2 discursive analysis enhanced by human-machine interactions beyond the classroom” (research question #2).

In summary, more than most participants, Simona expressed many concerns about the ambiguous nature of the course. She seemed particularly bothered by the way that clear answers were often withheld (by the instructor) and meaning was often held in suspension for a time until extensive multimodal dialogue afforded participants the power and agency to collapse and express meaning (research question#1). Her sense of responsibility grew as the course progressed and to a large degree is still continuing. She needed far more than to pass quizzes and exams and discovered, rather indirectly, how much simpler these are when compared to the dynamic, complex and ‘quantum’ nature of meaning, culture, language and identity. This new

perspective became rather evident a couple of months after the course had finished and we conducted the final interview. Simona learned to do critical discourse analysis in her own way and, as of our last exchange related to the study in October 2014, is still continuing on this path of self-discovery and global discovery.

The self-selected work that Simona chose to share with her own comments, reveals a truly dynamic and complex view of language and identity with hints of the balancing effects of ‘quantum’ metaphors that do not reduce either language or identity to the extremes of essentialism, strategic essentialism or performative fiction:

The screenshot shows a Facebook interface. At the top, there are browser tabs for 'Paolo's 201 Spring 2014'. Below the browser tabs, there is a navigation bar with 'Duca' and 'UofA Homepage'. A search bar contains the text 'ring 2014'. Below the search bar, there is a news snippet from 'RESAPUBBLICA.IT' with the headline 'Il kebab: Contiene carne di topo, gatto e cane. Allarme dall'Inghilterra' and a sub-headline 'Il governo britannico è preoccupato per il kebab perchè teme sia fatto con carne di...'. Below the news snippet, there are interaction options: 'Like · Comment · Share' with 1 like and 3 comments. The main post is from 'Paolo's 201 Spring 2014' and is dated 'May 8 at 7:24pm'. The text of the post reads: 'Penso che ho visto un errore sul il documento per il ripasso per il finale! Pagina quattro, (at The top), che un testo così, <<...un giorno libero al mio capo, così noi _____ (partire)>> ma sulle risposte! si dice << così noi _potevamo_ (partire) giovedì...>> Che ti pensi, Paolo?'. Below the post, there are three comments. The first comment is from an unnamed user, dated 'May 8 at 7:27pm', and says 'Forse il riposta giusta è "siamo partiti"'. The second comment is from another unnamed user, dated 'May 8 at 7:28pm', and asks 'Anche una domanda: la polizia è singolare o plurale? Perché quasi risposte dicono "la polizia ha aperto", ma anche si dice "loro _hanno cominciato_ a fare..."'. The third comment is from 'Paolo Renigar', dated 'May 8 at 8:30pm', and says 'potevamo e siamo potuti partire vanno bene. Dipende da quello che vuoi dire. Polizia e' sempre singolare come in Inglese. Non diciamo 'The Police Force say', ma 'The Police Force says'. However, i poliziotti (the Police officers) dicono, cominciano, fanno.'

Figure 39: Case Study FB Image #1

Simona: “I had a question about the final exam review, and posting my question to FB got me an immediate answer that everyone could use!” Although we see Simona challenge the idea of language as product (her response to the question regarding AAVE), here we do see her happy to have some L2 ‘product’ because of its usefulness (research question #1). What Simona does not say here is that she was challenging me directly. In the FB thread, she begins by saying, “I think that I found a mistake on the document for the final exam review! Page four (inserts assumed mistake) What do you think, Paolo?” This is very important because – from an ecological perspective – I always encouraged us to learn from each other, to make mistakes without fear and challenge each other. The fact that Simona caught my mistake made her feel more like a peer. She continues on with exam reviews done her own way (translation not required):



Figure 40: Case Study FB Image #2

Simona: "I added pictures to my review questions to help my peers learn in a different way"

Simona developed her own 'linguistic binding' by often posting multimodal references to vocabulary, grammar, culture and discourses. It was how she would bypass the L1 to link various modalities to their related linguistic referents in an ever shifting semiotic ecology. For example, in the creation of their own music group and first Italian song, notice the multimodality in the following thread. The discussion starts with a final slide of PowerPoint, goes to text, then image found online to image created by Simona. This leads to the creation of lyrics (second example).

Meanwhile, notice to the right how Simona is receiving suggestions of groups to join on FB based on what she writes, fruit of a clever marketing algorithm that, if used carefully, can expand one's interests and interactions (research question #2).

The screenshot shows a Facebook group page for "Paolo's 201 Spring 2014". The page displays a conversation about psychedelic rock. The posts include:

- A post from April 12 at 5:54pm: "mi dispiace, non mi sentivo bene. Purtroppo, non so molto di musica e strumenti ma penso che psychedelic rock sia interessante".
- A post from April 12 at 11:20pm: "Non so questa musica, ma ok. Se sapete, cominciamo!".
- A post from April 13 at 7:30pm: "hai visto il PowerPoint? C'è tanti così, è anche possiamo combinarli. Tipicamente in psychedelic rock, usano la chitarra, il keyboard, la batteria, è anche altre strumenti, come il sassofono (Pink Floyd dark side of The moon), o il theramin (scifi effetti)".
- A post from April 13 at 7:52pm: "Ah, vero? e che bello. Penso di questa immagine per la copertina perchè è psychedelic 😄 hahah". Below this post is an image of a colorful, abstract, psychedelic landscape.
- A post from April 13 at 8:05pm: "Unlike 1. Pensavo di questo sta mattina, opinioni?". Below this post is an image of two people in a mirrored, symmetrical pose.
- A post from April 13 at 8:08pm: "Like 1".

On the right side of the page, there is a sidebar with the following information:

- ABOUT** 60 members
- Closed Group**
- What should people post in this group?
- Add a Description
- 60 members · Invite by Email
- + Add People to Group
- SUGGESTED GROUPS** See All
- INTERNET SURFING CLUB [URLUMINATTI]** 2,903 members + Join
- Aces of Arizona** 65 members + Join
- LGBT INCLUSIVE** 22,974 members + Join
- Ivory Keys - a Stevie Nicks Demo G...** 3,397 members + Join
- Lake of Fire Hill Tribe (Hillbillies)** Baran Balkan joined + Join

At the bottom of the sidebar, it says: English (US) · Privacy · Terms · Cookies · More · Facebook © 2014



Figure 41: Case Study FB Image #3

Simona: “With two other members of the class, we created a band named “Durante Giove” During Jupiter—we created album art and wrote lyrics together! Here I posted poems by famous Italian poet Giovanni Pascoli for inspiration!” What Simona means by ‘inspiration’ became clearer through interviews in which she expressed the value of mimicking genres and registers, while creating her own voice via a highly complex and growing bricolage of internal and external resources. She plays with multiple versions of the L2 while trying to mimic it as product, all while moving forward in her academic progress (research questions #1, #2, #3).



Figure 42: Case Study FB Image #4

Simona: “Here I am doing a ‘ripasso’ [review] for the exam the next day. I wrote questions for others to answer, and for potential inclusion on the oral exam portion of the tests!”

Notice how Simona tags individuals in a thread that is visible to everyone. This is a clear vision of language as “product”, where only one answer will do, even though she has navigated multiple possibilities of vocabulary meanings before (“process”, research question #1). This exercise is contrasted to her way of dialoguing online that closely approximates the way a conversation would play out around a dinner table or a study group where specific individuals are addressed while those beyond the immediate interlocutors are invited to participate in the development of the ideas. She thus shows comfortableness with bottom-up approaches (vocabulary or grammar exercises that invite dialogue) or top-down approaches where dialogue

gives way to language analysis. In this case, the dialogue is useful to a static exam preparation (research questions #2, #3).



Figure 43: Case Study FB Image #5

Simona: “More “ripasso” where I used fill-in-the-blanks. I actually learned more from my peers’ answers than from my questions!”

One of the advantages of human-machine interactions beyond the course (research question #2) is that it affords a greater number of people to engage us in critical thinking. Of the many features of FB that help foster this environment is the feature that reveals how many different people have visited specific posts or threads. In the case of the FB course page, it was not limited to merely the students in one section. It was also not limited to only present students but open to

previous students who had taken the course, thus amplifying the dialogic nature of the page. This is evidenced in how this particular thread is ‘Seen by 31’, a much larger number of people engaged with her (nearly four times larger) than the actual number of students in the physical classroom. Looking at the metaphorical application of principles from quantum physics, the physical limitations were no barrier to the immediate effects (‘quantum non-locality and entanglement’) afforded via the technological medium. Present students of another class and past students no longer with the course could all interact with Simona’s community of practice, immediately, with instant or delayed impact, depending on the individual’s readiness and willingness to engage others.

Previously, we read where Simona stated: “I looked up Italian Politics on my own while we were working in chapter 3 of the text book—I wanted to see what the situation was in Italy”. Related to research question #3 (Is it possible for participants to navigate dynamic levels of ambiguity and possibilities of meaning while facing the static requirement by the academic institution to pass quizzes and exams, and complete homework assignments on the basis of a ‘correct’ answer?), Simona’s comments seem to indicate that, for her, the answer is positive: “After I had learned about the politics in Italy and shared with my class, I integrated it with the exam review questions we had to put on FB!” Notice the blending of UA requirements, class [instructor] requirements, personal growth in understanding, the sharing with Simona’s specific class, and the expansion of all the above to a broader community beyond the class and the course.



Figure 44: Case Study FB Image #6

[TRANSLATION: I think it is unjust. Everyone has the right to marry.

I see divorce as an action that is not celebrated. So the first couple has the stupid idea of going off to get married on the day that they first met. The last couple can't marry because of public opinion and the government.

Worth thinking about, right?

Unfortunately this type of problem can't go away until the older generation goes away. Children understand equality but they are taught to hate. These children grew up and now they are the generation that hinders progress]

Simona: "In response to political equality, etc. We engaged in a dialogue online!"

This is a telling sentence on Simona’s part. “In response to political equality” targets the issue itself without a focus on the language of such discourse. This was a pattern that Simona seemed to develop in her desire to do more than ‘just talk’ about hot topics. She, a social activist – among many other identities – responds to and acts upon real issues that impact the sociopolitical landscape, of which she is clearly a part. So “Are higher levels of critical thinking achievable at an intermediate level via L2 discursive analysis enhanced by human-machine interactions beyond the classroom?” For Simona, and not necessarily for all participants, the answer is “yes”.

Paolo's 201 Spring 2014
February 23

Hai sentito di la protesta "Occupy Monsanto" alle porte? La sfilata nazionale è il 24 di Maggio.
Like Comment 1 12

Paolo Rengar likes this

Chi è Monsanto?
February 23 at 11:24pm · Like · 1

Monsanto è una azienda che fa la specialità in tecnologia biotecnologica. È la prima azienda che ha modificato geneticamente una cellula di pianta, e hanno creato le OGM. Monsanto è celebre perché hanno creato «-Agent Orange-». Usavano questo chimico nella guerra di Vietnam, e ha fatto (è continua di creare) gli effetti collaterali e pericoli per tutti che erano esposti.
February 23 at 11:25pm · Like · 1

Sono felice che Americani prestavano attenzione definitivamente dei risultati rotti di OGM.
February 23 at 11:31pm · Like · 1

Stesso! Sapete che ingredienti GM sono proibito in città Europeo Unione da aprile 1999? Gli OGM sono le prodotti «-di un processo di laboratorio di prendere geni da una specie e inserirlo dello altro-» per ottenere un tratto o caratteristica che volevano. Questo è qualcosa esotismo che per in Stati Uniti!
February 23 at 11:32pm · Like · 1

Esatto! Dr. Puzos dal istituto di Rowett in Scotland compiva prove di OGM su ratti nel 1990's e ha trovato che entro giorni dieci mostravano "crescita cellule che sono state potenzialmente precanceroso". Il argomento era grande in Europa, ma purtroppo, le notizie era praticamente inesistente negli Stati Uniti.
February 23 at 11:36pm · Like · 1

Diva Questo è orribile! Ho sentito che ci sono molti problemi potenziali di salute legati agli OGM che includono il cancro, le complicazioni di fertilità, "crescita organo inibito", celiachia, e molti altri.
February 23 at 11:38pm · Like · 1

Dove si può trovare gli OGM?
February 23 at 11:41pm · Like · 1

culture GM negli Stati Uniti che sono commercializzati: soia (34%), cotone (30%), canola (30%), barbabietola da zucchero (35%), mais (38%), papaya messicana (più di 50%), e anche zuccrine e zucca gialla (più di 24.000 ettari). Oltre a questi, c'è carne, uova, e prodotti di latte da animali che hanno mangiato gli OGM. Cose non commestibile includono fructose, sapone, detersivi, collanti e lagnostruttura.
February 23 at 11:50pm · Like · 1

Per questo più gente devono partecipare nella "Occupy Monsanto". Abbiamo un diritto sapere quale cibi mangiamo contenere OGM.
February 23 at 11:52pm · Like · 1

Sì! È un peccato che molti americani sono ancora disinformati sui pericoli di mangiare OGM. Ci sono tanti articoli e molto di più ricerca in corso che è disponibile per chiunque di leggere sull'internet.
February 23 at 11:53pm · Like · 1

Vero! Dare uno sguardo a questo articolo che ho trovato. Spiega OGM e come il evitare stuggente. <http://naturalrevolution.org/...the-good-bad-and-ugly/>

The Good, Bad and Ugly about GMOs | Natural Revolution
naturalrevolution.org
There is a mountain of information about GMOs, (genetically modified organisms) ... See More
February 23 at 11:55pm · Like · 1

Fantastico! Dovremmo partecipare alla "Marcia contro la Monsanto" pagina su Facebook!
<https://www.facebook.com/MarchAgainstMonsanto/The-1a>

March Against Monsanto
It's time to stop Monsanto from destroying our planet! Find A...
February 23 at 11:56pm · Like · 1

Figure 45: Case Study FB Image #7

[TRANSLATION of first part of dialogue: Have you heard of the upcoming 'Occupy Monsanto' protest? The national march is May 24.

What is Monsanto?

Monsanto is a company specialized in biochemical technology. It was the first company to genetically modify a plant cell and they created GMOs. Monsanto is famous for creating 'Agent Orange'. They used this chemical in the war in Vietnam and it caused (and continues to cause) side effects and dangers for everyone exposed.

I'm glad that Americans are paying special attention to the harmful effects of GMOs.

Same here! Did you know that GMO ingredients are forbidden in Europe since 1999? GMOs are products created by taking genes from one species and inserting them into another – to obtain a certain desired trait. This is something we should ban in the United States!

Exactly! Dr. Puezta, from the R Institute in Scotland was doing GMO experiments on rats since 1990 and noticed that within days they developed potentially precancerous cells. The argument was strong in Europe but practically nonexistent in the United States.

This is horrible! I heard that there are many potential health problems related to GMOs that include cancer, fertility complications... (dialogue continues into stats and related links)]

Simona: "For this tema [essay], we ended up doing way more than was necessary! We learned a ton and had a great time! It didn't feel like we went way over the word count required at all!"

This self-selected thread shared by Simona is a unique example of her connection between Language Ecology and Ecolinguistics. Simona is very aware of the ever-expanding ecology of language use and, having read extensively and carefully on the topic of her personal interest (GMO foods), she then uses the L2 to argue a very persuasive case against Monsanto and then encourage actual activism to combat the identified injustice. Notice how she begins by bringing up historical precedents of a highly controversial nature. Then she contextualizes legal battles to legalize and criminalize GMO foods. She expresses personal opinion "Questo è orribile!" to be further persuasive, expanding her arguments to include medical conditions that are caused by GMO foods. Then she positions her demonized 'product' closer and closer to her interlocutor

(Chrissy) by giving specific statistics on common products that Chrissy most likely purchases. This is evidenced not in Simona's selection of specific foods but in her inclusion, with such foods, of socially-assigned 'female' products, such as makeup and bubble bath. Her 'ecolinguistic' approach references one final and persuasive argument: There is no reason for people to be ignorant of the impact of GMO foods since there are so many available articles and ongoing research available to anyone who reads online. In other words, she is claiming that the most informed and advanced readers will know why this is an important topic. Having set the stage of 'conversion', she then prefaces social justice activism in the most contrastive positive light: "Fantastico!" She draws her interlocutor's attention to a FB page promoting a nation-wide march against Monsanto. Finally, the CDA/CDS nature of how this project developed, including all the class discussions, debates, online readings, personal interviews that the participants conducted with people on campus, writing, presentations, etc., was blended in a rather smooth way with the course requirements. Notice how Simona's claims that "we ended up doing way more than was necessary!" In other words, per the above tasks, activities and interactions, it became rather secondary to meet the course requirements in speaking, writing, listening and reading. In fact, one crucial observation about the case study participants is how they seem to speak of exams and quizzes as mere stepping stones to greater goals and achievements that go beyond the mere 'acquisition' of the L2. This discussion was during the third chapter of the textbook, in which we considered sociopolitical issues of power and oppression. On the exam, which happened to be the midterm, Simona did remarkably well. Therefore, we see in such examples that online resources can foster higher levels of critical thinking (research question #2), and that navigating such difficult levels of 'uncharted linguistic territory' can be useful even for academic goals (research question #1).

In light of this, it is helpful to look at Simona's elaboration of some of these ideas in feedback that she provided once the course was over. That is, beyond just the research questions, what is her emic perspective regarding the whole experience of being part of such a study? During the final interview, Simona provided lengthy answers worthy of being considered in their uninterrupted entirety. She blends her understanding of the theoretical frameworks and pedagogical tools (previously discussed in the related chapters) and 'retells' the story of the course from the perspective of someone already in touch with her inner world and open to rethinking her assumptions about her perceptions of the world 'out there': "I think I can say that I noticed our Italian class was different than any Italian class I'd had before that (that being, my primary and secondary educational levels as well as my university level L2 courses). When I heard about using FB to learn and communicate with our classmates, I was skeptical, but had long considered the possibility for its use in language learning. As far as L2 courses in the past have gone, they've been disconnected and abstract, aiming at something that doesn't seem possible: students able to form a cohesive whole by observing a small 'unit' of a 'whole' identified as the 'essentials' of a specific language. In other L2 classes, the anxiety of speaking the second language out loud came with fear of being judged and marked down by a teacher seen as authoritative power within the language."

The interconnectivity and dialogism as exemplified via social networking shine through Simona's comment: "Using Facebook seemed to relieve all that stress, and the ability to use the internet (a multinational universe of knowledge) gave us the feeling of studying a language that is *alive*. Knowing current events and thinking about them, discussing them in the L2 is easier, and gives the students context with which to use that vocabulary they've just learned. Better yet is learning vocab without memorizing a list—in a series of sequential thoughts and phrases, with

daily conversations, at home activities, Facebook links to news sources and articles, vocabulary integration was made much easier”. Here we see positive answers to research questions #1 (process and product, #2 (the enhancement of human-machine interactions) and #3 (dynamic and static requirements of institution).

Related to the identity focus of part of research question #1, curiously, Simona resists the performative assumption that actions (process) make the individual (product). This is clear in her ability to distinguish between a pedagogical method and the instructor who relies on such a method: “When I came into the course, I knew that language couldn’t be only what my teachers of the past had made it out to be. I took French for three years—one in middle school and two in high school, somehow advancing through the class without always understanding what the teacher had just said, sharing similar experiences with my peers about another of so many mediocre test scores. It was only once I went to France on a student exchange that my classes had any context; however, I found I wasn’t able to recall any useful constructs, only example sentences that I could loosely recall from the dizzying 90 minute class periods. I, like the other students in my class, tended to lay blame on the teacher, but unlike my peers, I was able to eventually realize that the teachers weren’t at fault, but instead, the approach teaching of foreign languages was ineffective. It was only when I came into Paolo’s class that I realized this was possible. I assumed that the method could not be improved on, and that language learning had to reside in prior background knowledge, an incredible aptitude, or a psychic ability. When Paolo told us that words have multiple definitions (past those in the text) it opened our minds to using the word not in a ‘lock-and-key’ situation. Paolo encouraged re-defining words and their use in different contexts. He related our personal stories to what we were learning at the time by

beginning class with his own personal story to stimulate conversation, and letting us tell ours in response—then, he would blow my mind by connecting it to the day’s lesson”.

Simona was no longer satisfied with being treated like an intermediate language learner when she knew herself to be a consummate professional and brilliant woman. The more I came to know Simona, the more I could sense how a traditional approach to SLA would hold her back from her potential. She wanted, at all costs, to dive into deeper waters, as she states here: “When we began to look into the current events in Italy, it opened a world for me that I didn’t even realize I’d always had access to. I looked into the political scene of the Italian Government. I found out about the instability of the parliament, about the successful government coup led by Matteo Renzi, then about how less than a quarter (specifically, 22%) of Italians approved of him as Prime Minister” (related to research question #2).

Her understanding of the ecology of language blended smoothly with her social justice concerns. She developed a way of using the Italian language that reveals a keen practical approach to ecolinguistics: “We also did research into the death of a celebrity or research into the use of GMOs by the Monsanto Corporation. A partner and I found information that was relevant to why people seek to ban GMOs from food, then created a text through our conversation explaining what GMOs are, why they are unhealthy, and information on becoming involved in the movement to ban them. The conversation was written in Italian and posted so that the class could see it. We even discussed it in class the next day!” Considering that this was all integrated as part of the preparation for the midterm, and considering her overall excellent grades throughout the course, such higher levels of critical thinking achieved via SNSs (research question #2) and more ambiguous and unfamiliar navigation of the L2 enhanced, and did not

hinder, her academic progress (research question #3) which required her to treat language as a product destination all while enjoying the process journey (research question #1).

Simona also recognized the limitations of a performative view of language, something she also developed in relation to identity: “There was definitely a portion of the class that focused on feminism, racism and sexual orientation. By discussing feminism during the Second World War, we came to understand the evolution of gender roles in the United States today. We also looked at the development of Europe, specifically Italy, after and during that same period. The idea that gender is socially constructed is gathered from these different concepts throughout the class. By showing Italians of many cultures, then also being shown multiple religious groups within Italy, the idea of personality being essential broke down. I personally do have a background in Butler and Miller’s works from my GWS240 class (Gender in a Transnational World), which facilitated my grasping of the false ‘connection’ between what is constructed but seen as essential, like gender identities or a language as a ‘product’.” Considering that this research was engaged critically online with others and harmonized with excellent grades throughout the course, the connection here to research questions #1, #2 and #3 should be obvious and, in Simona’s case, all answerable in the positive. Again, as we will see, this is not the case for all participants.

When asked to identify the quote regarding “... *two abysses, one on either side of the edge of chaos. On one side is total disorder, an anarchic turbulence that does not generate organization. On the other side is structured, inflexible, static rigidity. Between the two, as in a phase of transition, on the boundary between perfect order and total anarchy, there is fluidity, adaptability, self-organization of forms, structures, and functions that are born and die in perpetual self-regulated renewal – the emergence of organization and complexity...*” (De Rosnay, 2011, pp. 311-312), Simona comments, “That boundary really does sound like our

Italian class—the ‘structured, inflexible, static rigidity’ sounds a lot like the old language classes I’ve taken, too. The difference might be Paolo’s refusal to teach an outdated picture of what Italian ‘culture’ is, encompasses or excludes and is open to different perspectives of it. The way that the different chapters were integrated to form the cohesive whole is that ‘ecosystem’ idea working, but at the same time, there were parts of the class that I felt were chaotic, without direction, and it took time for the connections to become clearer as the section continued”. Here we see how such an approach is not always comfortable and may not always ‘work’ at all times. This is a pattern that will be elaborated further in the dissertation.

Simona’s comments regarding the primary tool of choice for the course are also telling of how few people see value in what became one among several useful technologies for the participants: “When I began the course and learned that we would be using FB and other SNSs to learn and interact with our classmates and Paolo, I was skeptical and held the same idea, that FB and the like are only social tools. When I would tell other people about this—other teachers, friends, family—they were just as, if not more, skeptical than I was. They weren’t able to understand how Facebook facilitates learning. Once we began integrating our learning objectives with our online activities, I definitely noticed that the language seemed to flow more easily via posts on the Facebook page.” This is another positive answer, which, at first seemed negative to research question #2, such as her next comment that validates the use of SNSs beyond the classroom: “By seeing the way that others posted onto the Facebook page, I was able to learn and adjust my own responses and understand better. Not only that, but the way that we could all be present in an ‘online classroom’ made simultaneous responses possible and immediate correction of mistakes much easier.” Simona elaborates her positive views of FB for pedagogical purposes, mingling academic goals with ways in which SNSs help overcome physical and social barriers:

“It was simpler to work with my classmates when using FB—for example, in the music chapter of this past semester, I was paired with Samantha and Santana, neither of which I knew very well. Even though I had to begin and carry them through the mini-project, our interactions were worthwhile to me. We played with the idea of a fictional band and came up with a name, an album cover and even lyrics. This would not have been possible in ‘the real world’ as we all have extremely different lifestyles and schedules. Facebook interaction made ‘meeting up’ seamless and more natural, because the three of us were all on different L2 levels.”

Furthermore, the use of a ‘quantum’ approach, although initially somewhat intimidating, certainly resulted in a way of facilitating a course that values what the participants value, starting with their own sense of self-worth: “In my previous Italian classes, I never felt the need to go ‘above and beyond’ the curriculum—that was mostly because I saw no real way to do that. The word to describe this aspect of our Italian class is ‘options’. We were encouraged to try to apply what we learned in new ways. By this, I mean using FB to write our *temas*, or working together to create a dialogue instead of a traditional, strictly hypothetical paragraph. We also worked on *real* issues—instead of being told to ‘pretend you’re writing to a pen pal in Italy; tell her about yourself, where you go to school, etc. and use...’, [research question #2] a classmate and I learned about the impact of genetically modified foods, went out and interviewed people about what they knew, and worked together via FB to create a thread talking about our GMO research, in Italian. By doing this, we also made our work public and accessible to everyone in class.”

Speaking more to the ecology of the participants, facilitator included, there had to be a demolition of artificial walls and dichotomies that – left standing – would potentially hinder a fuller personal, professional and academic development for everyone involved. By the end of the course, Simona’s feedback encourages me to think that we succeeded in leveling the ‘learning’

field as much as we did the perceived physical boundaries of language development: “I suppose that now that the course is over, I’d like to add that a learning environment doesn’t necessarily have to encompass a classroom. Before the course, I really wasn’t sure if that was true, as I have always done my best work within the walls of the classroom. Also, the idea of telling an instructor about my personal life, educational history, dreams and aspirations seemed very odd to me. It made me hold back and be more private about my personal life’s details. I found out though, that it wasn’t only about us revealing ourselves as students, but also as people. I learned a lot about Paolo and his life, as well as the lives of my classmates, and it helped me understand their learning situations. By knowing something about my instructor, it was easier to have an informal relationship with him, to see him as more human, to learn from him, and to see him in a mental environment outside of teaching Italian. This, I found, meant a lot to me. I was able to see my teacher as a peer, willing to help, instead of an omnipotent superior that I should be afraid to give an incorrect answer to.” The reader, like the writer, may wonder if this variable may have been one important contribution among so many other ones. The data doesn’t clearly answer that, however it does point to how important this was to Simona on a personal level. As her L2 ‘instructor’ (peer) I witnessed tremendous growth that seemed to synchronize with her affective filter dropping. An informal environment is very important to her.

Collaborative work was very purposeful, specifically fostering environments where critical thinking was encouraged, debate prevailed, and multiple perspectives were discussed. This became a regular part of exam and quiz preparation where the ambiguity of online discussions and explorations gave way to concrete answers on an exam (research questions #2, #3) and helped academic progress: By working together, we pooled our strengths, using multiple cultural spheres to think about the process at hand. There are some things I would have preferred

to work alone at, but this was mostly because of my resistance to work with others. Once I tried those activities I was reluctant to try as a group, I found our learning process quickened considerably.”

Regarding the fables that were translated into Italian from Arabic, Simona touches on something absolutely crucial to anyone seeking greater fluidity with the L2. Often meaning within the L2 text is not as important as the collective experience in the L2 of trying to decipher it. That is, the reward gained from being asked to decode what may be un-decodable, is not in anything specifically related to the artifact as much as it is in the relationships that are established in the process. Simona says it this way: “When we worked with these fables, I had a hard time understanding them. The terms in the story were used in ways that confused me, but encouraged me to reach out and ask others. Before class started, a peer and I sat down outside the classroom, pulled up the story and worked it out together. This seriously helped us both understand, and, being from different backgrounds, we were able to piece together a ‘moral’—albeit, not necessarily a correct one, but one that made sense to us, together and helped us contextualize the stories.” These stories were explored multimodally online (FB posts, PowerPoint, comparative fables in Italian, websites, etc.) and discussed in class. As the facilitator, I admit that the fables were difficult. The search for a product meaning, and the process of ‘getting there’, all being achieved in the L2, did have an impact on the levels of critical thinking that were achieved (research question #2).

When providing different students with different answers and definitions for the same questions or vocabulary words or grammatical issues, a process would begin in each that required constant monitoring on the part of the facilitator (research question #1). However, exposing all participants to the progress of others allowed for a unique way of developing

individual progress to accommodate the collective direction, requirements, and goals, as Simona explains: “From the beginning of the semester to the end of it, my opinions on using social media to learn a language completely changed. I firmly believe in the possibility and hope that this goes further than it has. Being able to all be ‘present’, all learning, but doing different tasks, while also being able to see the progress of your classmates, is an invaluable tool that I hope I won’t have to go without in the future. Having access to the processes of others and not being afraid of the consequences of getting a wrong answer will definitely improve a person’s confidence in speaking the language, and learning from the mistakes of others in a non-threatening environment helps everyone come to a higher level of achievement together.” (research question #2). The fact that Simona articulated it the way she did, showing a clear grasp of the power of remaking our world together, goes far beyond language acquisition and reaches much nobler dreams of how humanity may best learn through the eyes of ‘Other’ and, in the process, make the lines of division virtually invisible.

6.5.2. Case Study 2 (Susan)

Susan introduced herself in the narrative as a Spanish speaker somewhat uncomfortable with English who was learning Italian. Throughout the course she showed herself to be swift to adaptation, open to ambiguity, ready for change. There was a noticeable difference in her perspective of static conditions giving way to dynamic activities, and objects or fixed items becoming more abstract (research question #1). In the first survey (Language and Identity) the word ‘Catholic’ was originally associated with “Saints” but later with “personal practice”; ‘story’ went from “message” to “process”; ‘moral’ and ‘culture’ went from “life values” and “background”, respectively, to “attitude in society” and “identity”, respectively. We see here a shift to a more personal perspective and the value of agency and perspectives starting from

within. More radical shifts of thought are revealed in contrasting her answer to the question “Do you feel comfortable with uncertainty?” Of foremost importance is the fact that she originally answered “no” and later answered “yes”. However, her explanations are worth heeding. When first stating that she was not comfortable with uncertainty it was “because I don’t like feeling lost when being engaged or part of something (like someone had to translate the meaning of the sentence to me to continue)” (we see here language as product only, a seemingly negative answer to research question #1). Susan, then, has linguistic and cultural reasons for disliking ambiguity and uncertainty. The fact that she is still wrestling with English leads her to desire specific and clear answers. Contrast this then to her response at the end of the course to the original question “Do you feel comfortable with uncertainty?”: “Yes, because it adds that fresh like feel to my reactions or solving problems skills” (notice the shift to process). That is an outstanding turn in perspective that values the experience of entering into the complexity and dynamic nature of the world over comfortableness with communication in a particular code. This shift can be seen also in contrasting her answers to the question “Do you prefer a ‘yes’ or ‘no’ answer to your questions?” In the early response the focus was on doing, while the latter response focuses on discovery. Beginning of course answer: “No. I like to develop more my critical thinking, so questions requiring more than a yes or no answer are best for me”. End of course answer: “No, because I like *to know the reasons behind the answer* almost all the time” (emphasis mine).

Another notable shift in thinking that exemplifies agency and self-empowerment is her end of course answer – contrasted to her beginning of course answer – to the question “What do you consider to be three essential traits that define a belief?” First answer: “trust, strength, passion”. Second answer: “self-identity, comfort, personal choice”. When asked “How does culture shape language?”, Susan’s early response was a series of examples on how words that were once used

to mean one thing now mean something else. However, her later response included “it all depends on the region that languages being use; for example the hometown where I come from is a border town, which is why is normal to hear citizens in their speak ‘Spanglish’ is a mix of English and Spanish”, thus changing her emphasis from the evolution of language to multilingual competence *and* performance of codes directly related to her own life experience (a positive answer to research question #1).

From the beginning of the course Susan showed an interest in not merely learning about the world but also in making a difference: “What I like about higher education is that it has brought me a more open perspective of the world that I live in and about the contemporary issues that surround me; it makes me understand my world and come up with creative solutions to my problems”. When contrasted with her answer to the same question at the end of the course – particularly after she engaged others and variations of the L2 online - the shifts in thinking are subtle but significant (research question #2): “It [higher education] expands my knowledge and it has helped me have more interesting views and opinions from our contemporary society”. That is, Susan is no longer merely looking outward at issues related to other people in the world, but she is now standing side-by-side with others looking at those same issues from new vantage points of view.

Regarding the usefulness of FB for academic achievement, at the end of the course Susan recalls the following about learning through enjoyment: “I’ve experienced this so far in this Italian 201 class, ever since we started doing the Facebook method, I’ve learned to develop sentences way faster than before by sharing things that I think my classmates will enjoy.” This seems to only answer questions #2 and #3 in part, in that human-machine interactions did develop her ability to talk about sociopolitical topics in the course (the sentences to which she

refers) and also helped her do well on the static goals of the institution. These are, however, not complete answers to the research questions.

Susan's responses to the End of Semester questionnaire were overall positive in that she found FB to be a useful pedagogical tool, although she also thought that it somewhat failed to integrate their existing coursework as well as with language and culture, thus an overall negative answer to research question #2. Another criticism she raised regarding FB, one worth considering for educators is that "Posts get easily lost, so it is hard respond to them in time or sometimes even notice them". Susan was not that impressed with the assumed convenience of the class FB page being one click away from her personal profile, further evidence that this approach and choice of technology do not accommodate her needs.

However, FB did help her academically, specifically "my comfort of writing more freely and by memory; the experience was more comfortable since the answers weren't out loud in front of the classroom, so it's somewhat prepares you for what to actually say during verbal practice in class". We can clearly see her legitimate need for an L2 that is very much 'product', and little development of the paradox addressed in research question #1. Like others have stated, she found that mimicking *the way* Italians write and speak was very helpful. In particular, what Susan appreciated about FB was that "it feels more like a fun social area than a class project in general" where "when sharing a video or picture on the wall, or when leaving a comment at someone's post; is like you still want to be part of the fun or conversations".

What she learned about herself through interactions on FB is "that I have more fun watching the videos that my friends share and talk about them [in the L2] rather than doing a lot of class homework or in class activities". She uses FB to continue conversations from class but for her, the classroom is where the majority of learning takes place. This is a clearly negative

answer to research questions #2 and #3. We do not find any reference to critical thinking or evidence of ambiguity being balanced by academic requirements.

6.5.3. Case Study 3 (Matt)

Matt's transformation during the course was rather dramatic. The surveys, questionnaires, and interviews all pointed to an increasingly broad view of culture, language, identity, and even L2 pedagogy. From the Language and Identity Survey – which, as a reminder to the reader, was administered shortly after the course began and again close the end – there is notable shift in awareness. Some examples follow:

When asked to define 'Catholic', Matt first answered "Church", but later wrote "religion found throughout the world", thus re-contextualizing a belief system beyond physical boundaries. The same occurred with the word 'Muslim', first linked to "Middle East" and later to "religion studied and followed by many different people". The emphasis then shifted to diversity that is connected to a belief system instead of a belief system that dominates a geographical boundary. 'Story' went from "book" to "a telling of events", that is, from a static object to action related to experience. Similarly, 'fable' was first linked to "legend" but then later defined as "a story that has been told over the years by many different people". Like I mentioned at the beginning of the analysis of Simona's work, this shift in perspective is not merely rooted in these words, but in the broader context of Matt's feedback, as should become evident. In fact, the broadness with which Matt interpreted language and identity is also seen in his resistance to the essentialism inheritance and certain words: "ancestors" is the word he originally linked to 'culture'. However, by the end of the course he viewed 'culture' as inherently integrating "many different kinds of culture", and thus, "is found everywhere"; a clear resistance to the 'us-them' dichotomy often present even in the way we explore 'other' cultures from the vantage point of

our own myopic perspective. In fact, ‘perspective’, for Matt, was originally a matter of “different views”, which were then expanded to mean “worldly, not just from a few people”. There also seems to be in his feedback and interactions an increased appreciation for dialogism. When asked if he preferred a ‘yes or no’ answer to his questions, he first answered “no, because nothing is a simple yes or no”, a matter-of-fact view of reality as a static ‘thing’. When asked the same question at the end of the course, Matt still replied “no”, but added “because yes and no doesn’t explain why”, a far more curiosity oriented question that requires dialogism in order to answer. Even his understanding of so-called ‘nonstandard’ forms of language went from a more static view (“it is an English dialect”) to a more dynamic and complex view of the same (“it is just an evolved and changed form of English”). I interpret this as a shift in perspective between product and process, although I do not necessarily see it as paradoxical. So it is only a partial positive answer to research question #1, in the sense that the participant could be quoted as seeing language (maybe even identity) as both process and product, but not simultaneously. However, I do see glimpses of higher levels of critical thinking that were developed via human-machine interactions (research question #2), since this shift came after such online engagements.

The coexistence of process and product (research question #1) can be seen in his expressions of how he believes that culture shapes language. He first replied “cultures change language and make it adapt. Some Irish culture people add bits of their own culture when speaking English”. Compare that former answer to his latter answer at the end of the course: “culture changes language because it brings different languages and ideas to a country causing the local language to adapt to fit everyone”. These answers are rather similar, however we detect elements of static and dynamic aspects of language in both but there is a bold contrast in democracy. In the first case, the ‘standard’ dominates and minority status languages use process

to adapt to the Product. In the second case, the standard is reduced to ‘local’ and forced to adapt to all the many languages and cultures that impact it. Notice the opposing spirals. We can certainly detect a positive answer to research questions #1, #2, and #3 in Matt’s developing understanding of the power of ideology, the idea that language is a local phenomenon connected to social needs. This product/process tension of critical thinking was part of his online exploration of ambiguous forms of language, all of which coincided with improvements in his overall course grades.

Since agency and emic perspectives are central to the current case study, I should point out that for Matt “everything is a click away and it feels like there is no privacy anymore” (Technology and SLA Survey), a more negative view that may be part of why FB is losing favor with more current users (see 7.3. Limitations of Study and Future Directions). The one thing that Matt disliked most about higher education was, at first, “how expensive it is”, a concern that later expanded to include “how sometimes you learn things that you will never really use in the ‘real’ world”, pointing to Matt’s sense that language use – as any use of any skill or knowledge – is only as valuable as it is applicable. This is potentially a negative aspect of the approach used in this study since many topics deviated from what some participants may really “use in the ‘real’ world”.

In the End of Semester Questionnaire Matt’s responses to questions related to pedagogical uses of FB were very positive, in the sense that he found FB to be personally helpful in his development of language. What stood out about his responses was that the ‘quantum’ perspective of language and identity was embraced even in its paradoxes as a normative way of viewing life (research question #1). This can be seen by contrasting questions 38 and 39 in which Matt answers that “Italy is full of many different types of people and many different cultures”

(dynamic), but also that “*in contemporary Italian culture* [static] I found that I have shared interests with many a times when it comes to popular culture. Such as the books and HBO series *Game of Thrones*. Also I have learned that I have great appreciation of the time music”. In other words, when Matt claims that culture – and Italian culture specifically – is multidimensional, he is not doing so from the perspective of an outsider as much as he is saying his interests as being the interest of Italians as much as Italian interests are his own. It is as if Matt were referring to his interactions and engagements with Italians as he does when talking about his classmates or his friends. The ‘us-them’ dichotomy is notably absent in his feedback.

We finally see clear positive answers to research questions #1, #2, and #3 in the way that Matt seems to achieve his academic goals (static product) while using online resources to spiral outward toward a variety of other possibilities, others semantic fields, within a process of dizzying multiple variables, all of which were influencing each other and pushing Matt into unexpected directions and previously unexplored interests:

“Over the course of this semester I have learned more Italian than I thought was possible in such a short amount of time. The use of Facebook while not my favorite way of learning was an interesting way to learn the language; I found it to be awkward because I didn’t know many of the people in the group. But over the course of the semester I found it very useful when used for project; such as the band project. That project in particular I feel like I learned more than any other time in the class. I learned the vocabulary and grammar from that section much better than all the other sections. The freedom that we had on the topics for our temas was also very useful. It was an eye opener on where you could end up on from the basic topic. The tangents that I went on in my temas especially, the Philip Seymour Hoffman tema; I ended up in places that I would never have even

crossed my mind if I hadn't been instructed to be creative... Overall I think that the freedom we were given to explore and all the topics we discussed in class allowed us to learn more about Italy as a whole, especially how diverse it is over there.”

Matt shows how engaging social issues can benefit the L2 even at the intermediate level. When presented with multiple possibilities of meaning, this did not hinder his semiotic process, but enhanced it, all while helping him meet the static requirements of the institution (research questions #2, #3):

“The amount of vocabulary I learned this semester is amazing. I learned more than I thought I could because of our discussions about social topics in Italy and around the world... I thought the ambiguity of the vocabulary to be challenging for the first month or two but when it finally clicked I began to explore vocabulary more and started learning words and terms that were not necessarily related to the topic exactly but were related in an ‘out there’ sense.”

The fact that Matt found the ambiguity of the course to be “challenging for the first month or two” was to be expected. At the same time he came away from the course with a more open mindset less prone to categorization, unless the dialogic semiosis were to lead to a settled conclusion. When asked at the end of the course if he viewed language as process or product (research question #1), Matt chose to not take sides on this polemic debate. He avoided the exclusive focus on a dynamic view of language as much as he did on exclusive focus related to rules or static structures. Per Matt, language “is always adapting and changing, it is a product of culture and a product of people. But it is a process because it continues to be used from childhood to adulthood. It is continually used throughout our lives and that makes it a process.”

In one FB posts, Matt states, *“Abbiamo anche appreso che la 'ndrangheta ha rilasciato la propria musica. Hanno chiamato il loro album di tre disco La Musica della Mafia. Questa musica è la prima musica mafiosa originale per essere rilasciato. Vi è anche un film sulla 'ndrangheta che è stato girato con i membri reali. Si chiama Uomini D'Onore.”*

[Translation: We also learned that the 'ndrangheta (a major crime organization in Italy) has released its own music. They called their three CD album, The Mafia's Music. This music is the first original Mafia music to ever be released. There is even a film about the 'ndrangheta that was filmed with the real members. It's called Men of Honor.]

Matt studied this in the course while others were looking into the use of language to persuade Italians of the 'safety' of GMO foods or how language is used to sanctify a celebrity with a drug addiction. Matt wanted to see how the language related to crime is connected to noncriminal uses of language – with hints at how movies, politics, music, consumerism, etc., all influence each other and are manipulated by Power (which shows a higher level of critical thinking, incidentally developed via SNSs, and positively answers research question #2).

One of Matt's self-selected examples that he discussed in his feedback is the cover of a music album created by his group. It was one of the tasks throughout the course aimed at exposing participants to a semiotic landscape free of 'us-them' dichotomies. Curiously, the name of the album is “out of my head”, a play on a concept we often explored throughout the course specifically that of intentionally minimizing logic in favor of intuition based on gathered experience and semiosis. It's interesting how his initial resistance to ambiguity eventually gave way to enjoyment and playfulness with the same. When asked to create a genre of music, in order to later explore that genre and its related cultures, ideologies and texts and people, Matt

and his group decided to create an emergent genre of “new metal, country, stomp and holler, and hip-hop”. The reader will notice the ambiguous combination of sounds that lead to a singular sound. This was a fascinating choice considering that these genres, when taken individually, are generally considered to be mutually exclusive categories. It was such a bold metaphor of what he and his group were discovering about the inherent dialogism in all forms of language and identity, and how many emergent systems that are born via bricolage and blending are not always rooted in what seems rational. The next self-selected example provided by Matt was handed in without an explanation. However, what is clear from the interactions between Matt and members of his group is a lot of humor and play with language and comical application of genre to unexpected situations. Matt presents himself as a songwriter who also plays the bagpipes and the electric guitar. At the same time, after Zach provides some existentially-oriented lyrics for the group’s song - which use the metaphor of a chicken with its head chopped off to describe the condition of postmodern humanity - Matt blends lyrics typically found in death metal with a very dramatic manifesto for chickens against insects. The effect gained by this is rather humorous. The reason I mention this here is less related to the research questions and more related to the overarching emphasis of the way data is presented, and that is to reveal the emic perspective of the participants and to perceive the course through their eyes. Matt did, in fact claim that this project, which involved a thorough diachronic and synchronic exploration of Italian music within a global context, was his most enjoyable throughout the course.

6.5.4. Case Study 4 (Christopher)

As we saw in the narrative, Christopher is a multilingual and multicultural speaker. Most of his compelling feedback did not come from the surveys but rather from information and examples that he specifically selected as most relevant. That being said, the first survey

(Language and Identity) did reveal some subtle shifts in perspective. Christopher's view of 'moral' was originally strictly "action", the later changed to "upbringing", which is a way of seeing ethical choices as being sedimentary and performative views related to specific people throughout our lives. When asked if he felt comfortable with uncertainty, he originally replied "not really due to the fact that it leads to doubt and anger", but when asked the same question at the end of the course he replied "no, because I tend to question my morals". Here we see a shift that becomes more personal and is more directly linked to Christopher's worldview. There is, typically, a very difficult period of discomfort related to approaching the world from new perspectives that are in conflict with the 'absolutes' we've known our entire lives. At the beginning of the course, when asked if African American vernacular English were 'real English', Christopher stated that AAVE does not follow 'academic syntax' (a performative positioning of an elusive standard within the hands of assumed experts). Per Christopher, AAVE is English, although it is "broken" (an attribute he did not assign to the "Spanglish" that he grew up with, or to the English spoken in the "deep South"). To understand what Christopher means by "broken", I compared his responses to questions on the second survey (Technology and SLA), specifically the question related to learning in a way that he was not consciously focused on the process: "It happened on Reddit. I had written a question in broken Italian. The folks there displaying to me how to phrase the question correctly". Here we do see a remarkable paradox of identity shifting related to language use, but one that seems to answer research question #1 with a rather clear "no". The positioning of Standard English within academia places Christopher metaphorically with AAVE outside of academia (all while being physically within academia). In other words, Christopher's view of AAVE is similar to his current use of the Italian language, in need of correction by 'correct speakers', lacking in native quality and part of a learning experience

toward an acceptable standard. The survey indicated grammar instruction was very important to Christopher, an issue that he develops in his discussion on blending discourse and SLA on Reddit with native speakers. At the same time – still related to Reddit – his view of ‘dialogue’ shifted from a “conversation between *two* people” (emphasis mine) to “conversation”. This leaves open the possibility of the number of interlocutors. Such dialogic interactions did seem to shape Christopher’s perception on how he uses FB. In the first survey he claimed to use FB to “catch up with friends, entertainment”, but later in the course he added “view content that interests me, and share some of my interests”. We see agency and empowerment in taking the initiative to investigate what is important to Christopher but also his growing awareness of being part of a community in which sharing enhances the experience of discovery. However, it is clear from his overall feedback that, in relation to research question #2, Christopher provides a rather consistent negative answer. His focus was not on critical issues as much as on perfecting a standard Italian.

Christopher’s timescales seemed affected during the course by how his initial focus on what he liked least about higher education was very present-oriented (“the amount of assignments that keep one up past midnight”), as contrasted to his later contextualization of future goals within a problematic, but all too realistic, view of the current US economy and job market: “... one can study whatever interests them at a higher level”, however, “it doesn’t guarantee one gets a job in a career they studied”. Again, related to research question #2, we do see with growing clarity why L2 as ‘product’ would be so important to Christopher, as opposed to the balancing ‘processes. The former is what may lead to self-marketing success.

The End of Semester questionnaire revealed that in spite of Christopher’s resistance and overall dislike of FB, he did often use it as a central hub for videos, articles, links, pictures, exam

reviews, and music and he did find it helpful as a place to practice the L2 and improve his comfort in expanding his language use (a positive partial answer to research question #2). He found himself using more L2 than required “very much” and used online resources to mimic the way Italians write and speak in different genres and registers. Christopher also claims that FB positively affected even his communication skills in English “because in the process of learning Italian, I re-learned grammar and English”. The interactions on Facebook helped Christopher learn about himself, particularly the positive fact that he is “very outspoken and helpful”. Throughout the course Christopher was very aware of Arizona politics related to immigration and border patrol issues but he was very surprised to discover “racial barriers” in other parts of the world due to his interactions on Facebook. This growing awareness of sociopolitical issues coincided with his online exploration of Italian resources and does seem to provide some evidence that answers research question #2 positively, but not for long.

The self-selected work that Christopher decided to share was prefaced by a very clearly stated positioning of himself as a visitor to FB while simultaneously a collaborator and participant of multiple communities, including the class community: “The use of technology in the classroom is an advantageous tool for the professor and the student. On the first day of the semester, Paolo had mentioned that the course was going to integrate Facebook and other social networking sites in order to learn the language and how it is used in the context of technology.” Here we see a very neutral way of speaking about the technology. Christopher avoids the use of first-person pronouns in stating that FB would be “an advantageous tool”. It seems clear that Christopher understood what I was trying to accomplish with FB and takes the time to honor that intent before explaining why he needed to depart from this aspect of the course (agency to transgress the collective, but respectfully so). He soon shows that, for him, the answer to

research question #2 seems to be negative: “As far as Facebook was concerned, I was not much into it. I would only browse it to catch up on my friends and see content that I like on my news feed. In reality, the amount of activity on Facebook was beginning to dwindle and shrink which turned many away to search for another means of social interaction via the Internet. This had a negative effect on the amount of posts that I made.” This idea that FB is losing popularity was mentioned by others (see the case of Karen in 7.3. Limitations of Study and Future Directions).

Although Christopher says that this turning away from FB had a negative effect on the quantity of posts he made throughout the course, he did make a point to elaborate the course requirements in other online resources of his choosing, but, as will be evident, this did not lead to a view of language and identity as process and product (research question #1), it did not focus on content of a critical nature (research question #2), however it did allow for much ambiguity to coexist with his needs to meet the static requirements of the institution (research question #3). Honoring that agency is what really helped Christopher succeed: “As a tech-savvy person, I tend to communicate though Facebook and other forum sites such as Reddit, the GMForum for my mechanics, Facebook and Twitter for family and friends, and Google+ for my personal news and updates from other friends. For example, for my first writing assignment I had branched out from using Facebook and went on Reddit to complete my assignment.”

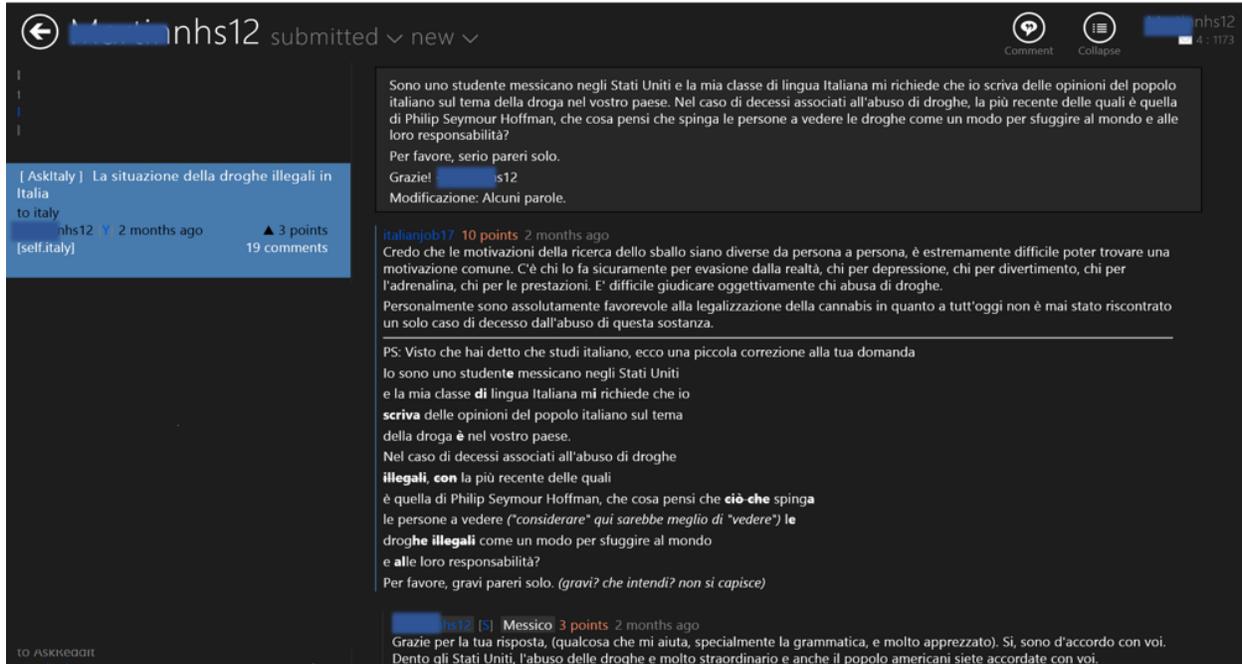


Figure 46: Case Study FB Image #8

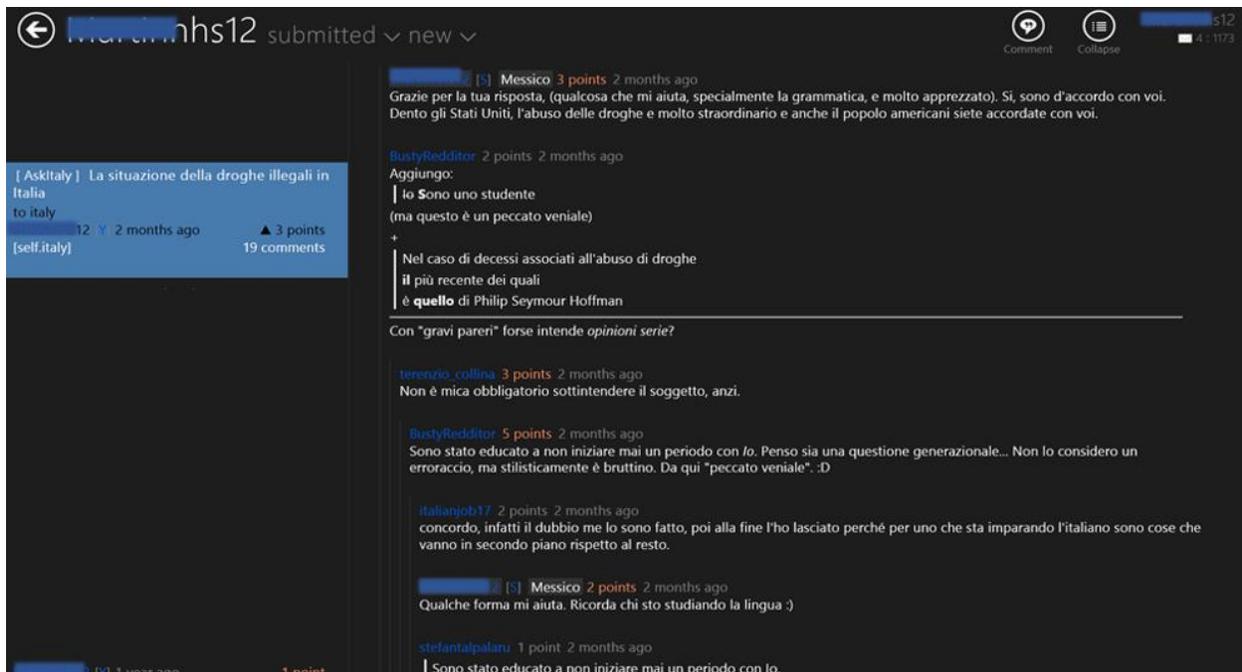


Figure 47: Case Study FB Image #9

On this self-selected sample of Christopher's interaction with Italians (in Italy) on Reddit, he introduces himself as a Mexican student in the United States taking part in an Italian class. He informs potential Italian interlocutors that this part of the course requires him to write about the opinions of Italians regarding the use of drugs in Italy. He then mentions that in the United States there had been news regarding the overdose and death of the famous celebrity (Philip Seymour Hoffman), and he asks what others think would push someone to see drugs as a way of escaping the world and responsibilities. He sets boundaries on the type of dialogue he is requesting: "only serious opinions, please". Almost immediately there is a response from an Italian who provides a very eloquent reply on why people use drugs. He then personalizes this by saying that he would support the legalization of marijuana since, to date, it is not been linked to any deaths. The same interlocutor then posts a PS: "Since you said that you study Italian, here is a small correction to your question". He then goes on to correct gender and number agreement, the use of prepositions, object pronouns, the subjunctive, and so forth. The way this dialogue was developing, I had assumed that it could positively answer research questions #2 and #3, since L2 use appeared to lead to higher levels of critical thinking and the ambiguous nature of language use also seemed to be balanced by a meta-analysis of language that would accommodate Christopher's passion for grammatical correctness and good grades. In fact, there is here a mini debate between Italian interlocutors regarding punctuation and grammar. It is the type of banter that forces Christopher to interrupt with "remember that I'm studying the language :)" (the smiley face lets the interlocutors know that he appreciates the banter but needs them to slow down). The Reddit thread resulted in a form of mimicry of conversational Italian, in which content and correction are blended with ease and mistakes are not seen as hindrances to the broader interaction. As Christopher states, "I learned more about how to phrase my question in

Italian than that of the actual content that I received afterwards. By ‘butchering’ and making mistakes, the native speakers helped me understand how the language is used correctly and makes sense.” It is here that we clearly see a preference for a standard product but an overall relegation of the critical topics discussed to another ‘product’ that is unnecessary for his academic success (negative answers to research questions #1, #2).

The constant exploration of contemporary Italy within a globalized context rather ‘normalizes’ comments that would often be taboo (such as code switching) in foreign language courses, such as Christopher’s statement: “In another assignment, Paolo had asked us to come up with a band name and album artwork in the language. I had suggested a band *with an English name as in the photo*” (emphasis mine):



Figure 48: Case Study FB Image #10

Paolo's 201 Spring 2014
 April 14 at 11:41pm · 📷

ho creato la copertina per il nostro CD
 del nostro gruppo
 "Malvagio Dentro"



Figure 49: Case Study FB Image #11

The cover for the album that was created by the students demonstrates an understanding of subversive uses of semiotics, a phenomenon that was often encountered by exploring Italian advertisements, commercials, images in magazines and online news sources, etc. In the case of this album cover, the 'Evil Inside' title (with the inversion of the letter 't') is complemented by a reference to a religious text from the Judeo-Christian Bible. I had to look up the passage to grasp that this was a veiled reference to the iconic satanic character often mentioned in sacred writings. However, the combination of image, intertextual dialogism and code switching all achieve the intended effect of disturbance and alarm. The reason Christopher felt that it was appropriate to

use English on a project related to the Italian language and culture is because he has been exposed, time and time again, to how much English is now part of Italian pop culture, music, cinema and trends. In this sense, I believe that this is, in itself, a form of critical analysis of the language that sees it as somewhat porous and adaptable to the influence of other languages (research questions #1, #2). His blending of Spanish, English, and Italian was, in fact, related to his identity and sense of agency. Another ‘taboo’ for many language classes would be the allowance for posts that are unrelated to the topics of discussion. However, by allowing participants to feel that there was always a place where the only thing not allowed was censorship, even temporary breaks from the course objectives had the positive effect of strengthening a sense of community, or as the two examples below show, bypassing the student/teacher dichotomy via sharing general humor or very specific humor.

For strong resisters such as Christopher, the resistance should not be interpreted as antagonism. Language facilitators can learn from the ‘Christophers’ in their classes that there may be other ways – maybe even better ways – of delivering tasks and engaging students. In fact, much like the theoretical frameworks guiding this study, Christopher does not reject the past but rather sees former resources as useful but always open to improvements. He certainly sees the futility of a causative approach related to any specific technology since all technologies are nested and interconnected: “I think the Facebook integration for the class is a step in the right direction. I think that by adding social networking sites to the classroom, one can learn the various ways a certain language is spoken and written. The Internet is still a vast and fascinating place where certain information can’t be disclosed and some people are not as helpful as one would think”. It should be clear by now that this participant’s feedback provides paradoxical

answers to research question #2, particularly because he contextualizes its use in very nuanced and overlapping ways. Such is the complexity of humanity.

It is, however, absolutely necessary for there to be a facilitator in a course to carefully monitor the supposed limitations that participants may ‘find’. For example, Christopher writes, “I’d like to mention that Facebook is useful, but there aren’t many native Italian speakers to talk to”. This is an unfortunate perceived limitation, since, as should be obvious, there are Italians all over the world that use FB. Had I been more attentive to this need, I could have better connected Christopher to more native speakers, especially since, from the very beginning of the course, as he expressed in his narrative, engagement with native speakers is one of his highest priorities when learning a language. This lack on my part may even have contributed to the participant’s negative views of the technology suggested throughout the course.

During the final interview, conducted after the course was over and all final grades had been entered into the University of Arizona’s online grading system (UAccess), Christopher was able to take his time in answering and elaborating ideas that, in retrospect, seemed much clearer than when he was attending the course. He was initially somewhat surprised by the direction the course would take. In his own words, “I guess my intuition was trying to prepare me for the change in course learning. Normally, when I take language courses I normally expect a lot of writing and speaking from my part, yet this course focused on cementing what I already knew and introducing new material *without it actually feeling like it*” (emphasis mine). As the sense of ‘acquisition’ so often associated with burdensome work, gives way to ‘development’, which then turns back into acquisition (cementing) the sedimentation of ideas becomes solid and clear, all while still being paradoxically open to further change. In this sense, research questions #1 and #3 receive a positive answer. Such a dynamic and complex view of language and identity defies

chaos and speaks of the ecological nature of both that, while being in constant flux, nevertheless resist being reduced to absolute fiction. Christopher explains: “As far as my experience during this past spring semester, my views on language have changed. There is interconnectivity with reality when it comes to the conversation. For a project, I reached out to real Italians on the Internet about their current illegal drug situation and they had some really strong views both positive and negative, and added quite a bit of slang and swearing. In another class period, we had also talked about how English is spoken and written in various ways and how it confuses people who are learning it. This showed me that language can be a complex thing to study simply because of the many shapes and forms that it takes.” This is a remarkable contrast to his desire to acquire a standard product, which gives way to the possibility that the perception of language and identity as simultaneous process and product (research question #1) is not a fixed experience and is, in itself, more a matter of when the question is asked and on which timescales the various influencing factors are at the moment the question is asked. This certainly seems to indicate that a single variable model really has no place in such research due to the complex and dynamic nature of being human.

By his own admission, Christopher recognizes that such an approach, by virtue of its connectivity to the ‘real world’, invariably touches on social matters, thus taking language ecology toward ecolinguistic boundaries, such as when he stated,

“in Italian we covered the Monsanto GMO scandal in Europe and its impact on Italian society. Well, the Italians did not like the fact that Monsanto was violating EU bans on Genetically Modified Organisms or GMOs. Of the few videos we watched in class, I saw that the Italian Internet community was poised to boycott and rally against Monsanto in order to stop the vending of foods that were suspected of containing GMOs. So far, the

EU has tackled the issue and they are currently filing litigation on those responsible for these violations” (this is a positive answer to research question #2, since this is a critical analysis of the situation in Italy influenced by the exploration of online resources).

After the course ended, Christopher seemed to better grasp that, to a great extent, the multimodal ways in which we communicate are still subject to agency through dialogism. As he states:

“... for one to understand and make sense of the world, one must first digest the words that were said and produce some sort of context based on it. The stories shared at the end of the semester, really cemented the static and dynamics of language. Even though I am a Catholic, the stories from Islam had a significant impact on how I learned about Italian culture and identity.”

In other words, by viewing Italy through the lens of Italian Muslims amplified his understanding of a previously-perceived monolithic society and contextualized even children’s narratives within a broader socio-political-historical Conversation. Does Christopher, by the end of the course, seem to finally become comfortable with the fluidity and dynamism of language and identity (research question #1)? Yes. Did his online interactions in the L2 foment higher levels of critical thinking (research question #2)? Yes. Did the ambiguity of semiosis enhance, and not hinder, his academic success in the course (research question #3)? Yes. On this last point, Christopher took his time in his academic success but did well. On all these points, his transformation took place largely at the end of the course, much later than other participants, thus pointing to his tendency to resist change but also his adaptability due to social engagement. Notice the clear difference in perspective toward the end of the course where he democratizes online technologies with a glimmer of new appreciation:

“I think that the use of social networks is a rather effective way to learn a language. At least in my experience I can say that using Facebook, Twitter, and Reddit to learn the Italian language has a significantly positive effect on my contextual analysis of the language itself. It gave me the freedom to make mistakes and not be penalized for it. Yes, while on the Italian version of Reddit the native speakers really made it a challenge to get my grammar and syntax correct for asking a question, and while on Facebook, my classmates would correct me or ask me for corrections on their own work.”

Therefore, his appreciation for the tool is mainly due to his need for a standard L2 product.

However, what I found particularly blissful was learning of the personal changes that took place because of this approach. What emerged was a communal experience that reinforced the individual’s sense of worth. As Christopher tells it,

“I think for the most part, I wasn’t very talkative at the beginning of the semester, but as time passed I learned the meaning that Rome wasn’t conquered in a day. At least online, I felt the interactions with my classmates were a bit heightened because I was already comfortable speaking to others from behind my laptop screen, established friendships with almost half of the students enrolled and enhanced others. What emerged from all this was that I became more outgoing as an individual all while explaining to my other classmates how to correctly say something in Italian without having to go through what I went through earlier.”

We see his sense of competence in the L2 (product), much like the cases analyzed by Miller (2011), in which students began to see themselves as experts. From my perspective, this was huge progress that carries the potential of success in other areas of life. He clarifies: “I think it’s true that everyone becomes comfortable with each other as time progresses. At least I know that

I can now share some personal experiences with certain members of the class unlike at the beginning. It ties a lot to my introvertedness and my ability to trust other people besides my closest friends and family.”

Christopher’s case, up to this point, points more to the validity of an ecological approach than to a consistently positive answer to the research questions. All that was about to change. One of the last questions he was asked was a question that had been posed at the beginning of the course. He was asked again to define the difference between *caffè macchiato* (coffee with a small amount of milk) and *caffè corretto* (coffee with liquor). We have seen this previously answered rather realistically. Christopher takes a rather different approach and focuses on a very different possible interpretation:

“The underlying message between the two questions asked at the beginning of the semester is basically the implication of racism, discrimination and stereotypes between various cultures. In the context of religion and race, I believed that Italy was still an all-Catholic country with Caucasian people dominating the population, but as the semester progressed, I saw that Italy was a melting pot just like the United States. The country is comprised of many peoples, races, and cultures that make it unique. Yes, there are still racists and blatant discrimination in Italian society, which refers to ‘stained coffee’ all while the reference to ‘corrected coffee’ says that many of these issues are somewhat resolved. Italians still struggle with terms based on the LGBTQ community and Middle Eastern influences in the southern front.”

This is an example of the type of ambiguity exercises that were conducted regularly throughout the course, which sought to find connections where the superficial glance perceived none, even when, from an ‘objective’ perspective there was no connection between concepts. Is this

enhanced critical thinking? Absolutely. Is it highly ambiguous, fluid and complex in its vision of common objects as metaphors for sociopolitical issues? Yes. Christopher disregarded what he originally learned about the colloquial usages of these two popular Italian words related to beverages and went straight for a critical analysis of an ongoing sociopolitical dilemma that is not restricted to Italy. The fact that the development of these ideas took place largely online seems to answer a clear “yes” to research question #2. Did this positively impact his grades in the course? I cannot say. There is no evidence to confirm a positive answer to research question #3, at least not from this data.

Finally, one goal of this course was to demonstrate to participants their own potential beyond the classroom environment and reveal the power of agency to go and be and do what cannot be achieved merely in an academic setting. Part of Christopher’s ecology is that of being a polyglot, so it became clear that – in order to honor his very humanity and agency – that could become part of his own SLA/SLD experience that does seem to invoke, in his case, images of language as three products that morph into process in order to produce an emergent new product: semiosis. Christopher describes that experience as such and, indirectly, answers “yes” to research question #1 and #3 (the communicative requirements of the course):

“The interactions between other classmates outside class that had nothing to do with the course are also very important. I think that having any sort of social connection with any classmate outside the classroom environment can help with understanding the material discussed in class. Simply put, when I would have conversations with other classmates, I would try to keep some conversations all in Italian, although it would fall apart in the end. Being able to balance three languages is a bit hard for me, so a lot of my

conversations had bits of English, Spanish, and Italian mixed together. I was surprised that my classmates were able to understand what I was trying to say at times.”

6.5.5. Case Study 5 (Liz)

From Liz’s narrative, it becomes apparent that her personal life journey – as opposed to her academic journey – is a story in the making, a narrative itself, in which she is an active protagonist who is empowered to choose her destiny. For the sake of understanding her agency, apart from the research questions, we need to simply ‘see’ Liz for how she wants to be perceived. Liz demonstrated both forward and backward development of ‘quantum’ approaches to language and identity. Her responses to the initial and later versions of the first survey (Language and Identity) were fairly similar. However, it became apparent that there were elements of paradox when the two versions were contrasted. For example, when asked if she felt comfortable with uncertainty, her first response was an unambiguous “No uncertainty requires risk” (I purposefully left the punctuation as she wrote it, which leaves the interpretation open to the reader). When asked the same question at the end of the course, she answered “Yes, I like to know what is happening”. Upon first reading her first response, I had assumed that she was not comfortable with uncertainty, but when I contrasted this former answer with the latter one, I realized that what she may be indicating is that ‘certainty’ is highly problematic in that uncertainty leads to a deeper understanding of “what is happening”. This kind of ambiguity was largely absent in her responses to how she feels about ‘yes’ or ‘no’ local answers to her questions.

Liz originally claimed that she “sometimes” prefers clear answers “because an ambiguous answer can lead me confused”, and later she backtracks (expected backsliding) in her comfortableness with ambiguity by claiming that “there is an exact answer”. If we contrast this to her original answer (“technically yes”) and later answer (“yes”) to the question “Is African

American Vernacular English ‘real’ English?”, we find a highly paradoxical and complex shift in thinking that shows how Liz’s development of her ideas on language and identity (a “yes” to research question #1). Although Liz seems to have moved to more dogmatic beliefs regarding ‘truth’, she also applies such dogmatism to language in order to legitimize ‘nonstandard’ forms of language, which is very subversive of the concept of ‘Standard’. Of a more personal nature, from the beginning to the end of the course Liz showed a notable shift in what motivated her appreciation of higher education. At first she was most excited about the opportunity to “learn about different things and earn a degree for a better future”, but this gave way to “I enjoyed being around people that are like me”. That is, beyond the benefits of a paper degree that leads to paper money, Liz found value in discovering herself through her peers. This speaks to the ecological approach of the course more than to the research questions, but is, nevertheless, central to this study.

When asked at the beginning of the course if her online persona differed from what others would experience face-to-face, she replied “In a sense yes. But for the most part I am the same. I do not include every detail of myself online”; thus indicating that a lack of full disclosure does not necessarily translate to inauthenticity. What is striking about the shift in Liz’s perception of herself is that by the end of the course she was very comfortable with the idea of having a more nuanced identity that is still ‘her’: “... my social media person is more refined than my real self”. Here we see a clearly positive answer to research question #1, in that there is a synthesis of process and product with which she is comfortable. The End of Semester questionnaire showed that Liz was highly uncomfortable with the use of Facebook and that such technology was, in some ways, antithetical to her identity as a three-dimensional person but not completely contrary to her sense of being an Italian student. Overall, she did not make much use

of online resources and preferred more conservative forms of pedagogy, thus answering research question #2 with a “no”.

Her interactions on Facebook were almost exclusively limited to academic uses of resources, and not people. Liz would access the Power Points, Word documents, PDFs and exam reviews that I would post or the other students would create and post; but when asked how FB helped her academic development, she did not reply. At the same time she did feel that FB increased the amount of Italian exposure on a daily basis and that her classmates’ feedback on vocabulary and grammar proved helpful. However, FB did not accommodate her shy personality, particularly because, as Liz states, “I do not like to post on Facebook unless I am certain I am correct”. This will be discussed further under the limitations of this study. Liz’s feedback related to why she felt uncomfortable with FB as a pedagogical tool is a reminder to language facilitators on why agency and emic perspectives are so important to consider:

“For Italian 201 we were asked to integrate Facebook into our routines. Many people use Facebook, including myself. Facebook became more than just a place for me to catch up on my friends but a central hub for Italian. Facebook to me has its positive and negatives. It at times can be annoying to use. I found that I received a lot of notification from using Facebook for Italian. Although many people enjoyed connecting with each other through Facebook, I did not feel comfortable to share things on the page. I feel more comfortable interacting in the classroom rather than on a social networking site. I feel that there is less pressure to be perfect in class than on the page. The positive thing that I enjoyed about Facebook is the file share option. I felt like this was a convenient place to access files and other supplementary materials.”



Figure 50: Case Study FB Image #12

Question	Answer	Score(+)	Score(-)
✓ l'abbonamento	subscription	4	0
✓ il canale	channel	0	0
✓ il conduttore/la conduttrice	anchorman/anchorwoman	0	0
✓ la cronaca	news	3	0
✓ la cronaca nera	crime news	4	0
✓ la cronaca rosa	celebrity news	0	0
✓ il/la cronista	reporter	0	0
✓ l'edicola	newsstand	0	0
✓ l'edizione straordinaria	special edition	0	0
✓ l'emittente	tv station	0	0
✓ il/la fotoreporter	news photographer	2	0
✓ il fumetto	comic	0	0
✓ il/la giornalista	journalist	0	0
✓ intervistare	to interview	3	0
✓ l'inviato/a	correspondent	0	0
✓ il mensile	monthly publication	0	0
✓ il notiziario	newscast	0	0
✓ le notizie	news	0	0
✓ il periodico	magazine/newspaper	0	0
✓ il programma/la trasmissione	program	0	0
✓ il quotidiano	daily newspaper	3	0
✓ il redattore/la redattrice	editorial staff person	0	0
✓ la redazione	editorial office, editing	0	3
✓ la rete	channel/network	0	0
✓ la rivista	magazine	0	0
✓ lo sciopero	strike	4	0
✓ il settimanale	weekly magazine or newspaper	0	0
✓ il telegiornale	newscast	0	2
✓ tenersi aggiornato/a	to keep up to date	0	0

1 of 29 selected 16%

Figure 51: Case Study FB Image #13

What does a participant like Liz – so resistant to FB – do? Well, much like Christopher, she forges her own path, does what works best for her and even teaches us by pursuing other technologies. In her own words:

“To learn vocabulary I used a program on my computer called Genius. Genius is a program that is essentially flashcards. The program tests the user by making the user type out the word. This is an effective program for me because I am a kinesthetic learner. I

highly recommend this program to anyone who hates writing flashcards or likes to turn studying into a game. Overall this semester was an interesting one. I thought the use of technology in our classroom was innovative and I am curious to see the different roles it plays in the future of education.”

Notice how in this last sentence, she claims that her use of technology was innovative, all while using a rather traditional pedagogy (flashcards). Although one could see Liz’s self-description as a ‘kinesthetic learner’ as a potentially limiting and static view of self, one of the purposes of this study was to fully embrace the participants in the perspectives and, as the course progress, pause to do retrospective analysis in order to adapt the direction and implementation of tasks, technologies and methodologies most suitable for the participants. As can be seen in Liz’s last statement, such an approach does not leave her closed off to FB but rather wide open to future possibilities. However, it is also clear from nearly all of her feedback that, for Liz, the answers to research questions #1, #2, and #3, are largely “no”. The ‘process/product’ paradox was not very useful to her. The suggested technology was not as useful as more traditional technologies and neither led to evidence of higher levels of critical thinking. Finally, Liz struggled significantly with her grades during the course. There is no evidence that the more post-postmodern approach impacted her grades for the better, although there is also no clear evidence that it hindered her grades since she was given the freedom to tailor her own approach to SLA/SLD and I consistently did my best to accommodate that genuine need.

6.5.6. Case Study 6 (Santina)

Overall, Santina shows a spiraling outward in perspective that is constantly conflicting with a socially-driven inward strong resistor. This results in some seemingly-irreconcilable extremes. Of all the participants, she is the one that I had most difficulty determining if the

course really made a significant difference, and this for a very clear reason that will become soon obvious to the reader: Santina is already highly advanced in her understanding of language and identity as product and process (research question #1). She is already aware of how online resources stimulate higher levels of critical thinking skills (research question #2). Furthermore, she excelled academically, always, from the beginning to the end of the course and had little difficulty adjusting to the ambiguous nature of the course (research question #3). Therefore, one initial comment that I will make now that all the data has been carefully analyzed is that, even if the course and the approach did not ‘improve’ Santina’s academic performance, her critical thinking skills or her sense of self-empowerment, I still believe that this approach does accommodate L2 learners like Santina who would otherwise be held back in a more traditional setting. That having been said, let’s let her own words justify what the reader concludes about this matter.

Her case stands out for several reasons, but first and foremost because of how – though initially holding on to very strong views – regardless of backtracking and complex trajectories often in conflict, when one looks at the whole of her feedback, there is a rather impressive personal and academic journey that reveals itself in what she talks about and also how she talks about the topics. Her very presence in the course tended to impact others in very positive ways. Her excellent grades and predisposition for higher levels of discourse seemed, in ecological terms, to link her to Simona as two ‘sources’ that supplemented the facilitator, when necessary.

For Santina, there seemed to be two main conflicting views that she sought to reconcile, in spite of the tendency of one to overpower the other. For example, in the language and identity survey, when confronted with the word ‘Muslim’, she went from saying “covered women” to “Middle East”. The reason this is surprising is because much emphasis was given in some tasks

to demystify the idea that Italy is a religiously monolithic country. In fact, part of the task involved looking at Italy through the lens of Italian Muslims. The strong resistor is demonstrated also in a shift toward more black and white views such as the transition from seeing ‘moral’ as “lesson” to “right and wrong”. The broadening of consideration is seen in the shift from ‘perspective’ as “my thought” to “opportunities”. Does Santina think in terms of ‘product’ or ‘process’? Already, from earlier in the course, I started to detect that there was a bit of a paradox in the way Santina discussed language and identity that suggested a comfortable “yes” to research question #1. However, it was not easy to assess.

When asked if she feels comfortable with uncertainty and to explain why or why not, the first response (early in the semester) focused on her inability to know, but the second response (end of semester) focused on the nature of life itself from birth to death. This more dogmatic shift was evident even in the way she answered the question about whether African-American vernacular English were “real English”. Her first response emphasized the fact that, although she does not consider AAVE to be traditional, she did see it as commonly used and accepted by people who use it. Contrast this to the end of course reply that emphasizes that it is not proper English “like what should be taught in school”. Is this backsliding? In other words, exposure to a variety of L2s did not, initially, in the case of this particular strong resistor, result in a ‘quantum’ perspective (multiple probabilities and processes coexisting with static and collapsed products) of socially-creative categories, such as ‘nonstandard’ or ‘standard’ forms of language use. This appears to be in direct contrast to her views on the way that “Language and Culture are both fluid and feeding one another”, until one considers that even a strong resistor’s definition of language is contextualized within the framework of what he/she defines as authentic. Either way, I again point to the highly intellectually nuanced way in which Santina explores language and identity,

which will come to a partial ‘quantum’ positive answer to all three research questions by the end of the course. The use of the word ‘partial’ is simply because, as previously mentioned, I think this course accommodated Santina’s way of thinking more than it impacted her in the sense of change.

The Technology and SLA Survey reflected a more positive and broader outlook. ‘Education’ was extended beyond “classroom” to “college”; and ‘homework’ went from being “too much” to the acceptance of “duty”. However, the inner shift between static and dynamic, with the expected backsliding that is mentioned in the setup of the study, is evidenced consistently in Santina’s dogmatic stances on either side of the spectrum. For example, a very fluid perspective of language and identity on her part could, in other moments, be ‘collapsed’ into a concrete object or product, such as the shift from ‘culture’ as “subjective” to “American”. Again, is this backsliding? Is it resistance to a perceived imposition on the part of the facilitator? Was I ‘pushing an agenda’ too visibly without recognizing it? Perhaps. I will let the reader be the judge of that possible scenario.

When asked what she liked most about higher education, her first response was “learning something I didn’t know”; but this eventually grew into “allowing my mind expand and learn”, which places Santina in control of her own thoughts and her ability to develop knowledge. She is the agent. She chooses. She is empowered. In the first survey what she liked least about higher education was “the rapid pace I am expected to absorb the new information”. The distancing of herself from her classmates – due to the perceived disconnect due to age differences – led to quite a different answer towards the end of the course: “the age and social gap between myself and other students”. That concern was repeated even verbally on more than one occasion. What will soon be surprising is how this apparent hindrance to interconnectivity, age, is one of the key

aspects of her identity that later flourishes into one of the most eloquent descriptions of what I can only call the metaphorical ‘quantum’ paradox. Let’s see how that unfolds.

The End of Semester questionnaire shows some ambivalence regarding the use of Facebook for L2 pedagogical purposes. Although Facebook affords many coexisting technologies and software of academic, personal and entertainment value, Santana choose to use it largely for academic purposes – at first – particularly the of videos, articles, links and power points. As will be discussed, personal circumstances altered what and why she posted on FB, a reminder to educators that L2 learners/users are, first and foremost, complex human beings with profound reasons for behaviors that cannot be deciphered without getting to know the person. One of the most positive uses of Facebook for her was the connection with native speakers. This issue of ‘native’ was of recurring importance for Santana who believes that her interactions on Facebook affected her communication skills in English in a negative way due to the perceived ‘fact’ that “so many users practice poor English on Facebook”. Per Santana, ‘native’ speaker is only as valuable to a language user as the native speaker’s ability to communicate ‘correctly’. What she was pointing out was that it is possible to ‘fossilize’ bad habits of speaking and writing via improper use of the L1 and L2. This should not be interpreted as a negative answer to research question #2, since Santana will show us that she found FB to be valuable when communicating with L2 native speakers.

Although Santana speaks of language and identity in dynamic and complex terms, it is clear that there is, in her mental framework of these, a respected ‘standard’, to which some have access. This elusive standard will, however, be challenged and deconstructed in her last statement of the final interview. One native expert that was mentioned several times during the course was her husband. Per her feedback, “he would explain to me that what was written didn’t

really make sense in Italian, that we were writing in English using Italian words”. That is, there would have to be a native ability in both codes (L1 and L2) as static products for there to be such an insight into how these codes were being abused. This native speaker in her life – already important because of his ability and availability to provide Santina with native language instruction – would grow in academic importance as the distance between Santina and her classmates increased. In fact, it became evident that the online collaborative exploration of topics related to the course – something encouraged of all participants – was not, originally, as comfortable to Santina (and others) as I had originally anticipated. However, unlike some who were shy, Santina’s resistance was due to personal experience, specifically the fact of having lived in Italy and how this provides the necessary knowledge one needs to navigate sociopolitical, theological, philosophical, historical, ethical, and highly abstract concepts:

“... given that I have lived in Italy for several months at a time over several years, I didn’t really learn anything new that I was unaware of prior to this course. I thought that the class didn’t really get specific regarding the Italian culture and painted pictures with a broad brush. There was no discussion regarding the high unemployment rates, or how many young adults in Italy are unable to live on their own and are forced to remain with their parents. And this requires them to also accept their parents’ rules. Completely different from here, where many young adults leave home seeking freedom from their parents’ oversight and rules”.

Although high unemployment rates were discussed in the course as well as how common it is to notice intergenerational living situations, and although participants were specifically encouraged to look up online topics and resources that they could teach us as a class regarding cultural issues that were considered important for all of us to learn, the strong resistor stance positioned Santina

to not fully embrace the expert course facilitator that she also is due to sheer experience and, like all other participants, a co-teacher of a course in which we are all developing our understanding of language and identity. In other words, if what ‘should’ be explored in class is not being explored, a strong resister could take positive advantage of the lack of information and take the initiative to help facilitate. Up to this point, then, the answer to research question #2 is largely “no” in the case of Santina. I could add that her excellent grades also did not seem largely impacted by the ambiguous nature of the course, at least not at the beginning.

As will become evident, much of this ‘strong resistor’ perspective of language and identity was, from an ecological perspective, unrelated to the course itself and largely due to very serious personal situations in the participant’s life. For example, contrast this previous analysis with the answers from the final interview, which was conducted after the course had ended. In a sense, this final interview was an opportunity for Santina to slow down, reflect calmly, and revisit her work and interactions throughout the course. The power of hindsight is seen in how retrospection altered some of her recollections regarding her experiences in the course. What follows are her answers and my comments that demonstrate a much deeper analysis and understanding of the very purpose of the course.

At the end of the course, Santina touches on one of the greatest challenges and dilemmas for educators and L2 students who are more aware than ever of the paradox of needing to assess a moving target and provides potentially positive answers to research questions #1 and #3:

“... It was made clear that there was neither a right nor a wrong way to speak, but rather our speech patterns change with our environment. I am in agreement with this theme, because one cannot expect to learn a fluid and changing idea, like language, from a book and expect it to be acceptable in all circumstances. It was certainly odd every time there

was a quiz or exam and it was explained that while there was no right way to speak Italian there must be a means to measure our learning for the department.”

She expresses an experiential knowledge of language as product and process, as static and dynamic, as authentic and performative. The tension that such an irreconcilable view of language and identity creates is, in fact, part of the ‘quantum’ approach of the study. By allowing for dialogism to give way to actual meaning between interlocutors (‘collapsing of the wave function’), this approach allows for an intended meaning that is communicated, to first travel through non meaning in itself and potentially infinite meanings in various contexts, all simultaneously. Rather than argue for complexity leading to chaos, it sees the appearance of chaos as opportunities for negotiation toward complexity that eventually leads to an agreed-upon singularity of purpose and intention in the communicative experience.

Now I present the challenge to the reader that I introduced at the beginning of Santina’s case study. Do her comments about her views not having changed convince the reader? In the following rather lengthy paragraph, notice the depth of analysis of topics discussed blended with a profound meta-analysis of her own static and dynamic processing of the same:

“My views about language have not really changed. I do see a connection between language and non-linguistic aspects such as visual art. When people live in a community, they tend to speak similarly, have similar values, and similar ideas about what is acceptable. Therefore language influences moods, values, and art. I believe that positive speech leads to a positive outlook. In the course I was introduced to Monsanto, I had never heard of the company or the protest against it. When researching during the semester about Monsanto I did recognize an ‘us-versus-them’ language present in many of the anti-GMO websites. They are biotechs, bioengineers, and biotech firms with

enough money to lobby the government to have their foods approved by the government without a vote by the public. They are rich subversives looking to turn a profit without regard to the possible negative effects their products could have on the public. They create foods with pesticides, proteins, and antibodies built into their DNA that do not appear naturally in nature. Rosanne Barr recently referred to the largest of these firms, Monsanto, as Monsatan. This language, without question, creates a very clear image about how she wants the general public to view this company. There is not a lot of response from this large firm to the public regarding their product and the concerns for public safety as well as the possibility of their genetically altered foods growing wild and becoming invasive plants in areas in which they are not planted. It is my opinion that Monsanto is large enough that they only care about the politicians continuing to respond favorably to their lobbying efforts, they don't care about the public's opinion. I can also recognize that with climate change and a growing global population, growing enough food for all the people is a major concern. For me there is the temptation to suggest that the GMO's be reserved for the populations living in harsher environments, allowing the rest of the world to see the long term success of GM crops. Unfortunately this is probably a first world response to the problem; I can recognize the egocentricity of my response. Test the product on the poor and uneducated populations, who will be happy to receive food without questions attached. While I acknowledge this is my solution to the question, while I don't recall an exact solution created by the class it was clear that a majority of the students completely opposed all GM food."

As the facilitator who encouraged this 'CDA' type analysis to take place in the L2 and regarding L2 online resources, I can only claim that, while her views on language may not have changed,

she certainly did have an opportunity to explore critical topics of sociopolitical (even global) relevance in the language that she is striving to develop. I must, therefore, at this point, refrain from assuming a connection to her comments and the three research questions and will, rather, leave it up to the reader to study the case of Santina to see if there is a connection between the approach and the data she provides.

However, in the above data, we can notice how Santina does not assume a unidirectional impact between language, moods, values and art. We see references to an understanding of discourses in her statement that language is not necessarily a reflection of the other categories and may, conversely, influence the creation of emotional and social realities. In this same segment of the interview, Santina engages a form of CDA/CDS in her deconstruction of the ‘us-versus-them’ language present in anti-GMO websites. The ‘them’ are described as oppressive subversives with the financial clout to manipulate political votes that bypass public votes. She expands the discourse to include debates related to global climate change but then, much like a CDS approach, she questions her own objectivity and how her ‘first world response’ may be rooted in a similar egocentrism that she previously attributed to the large ‘evil’ corporations.

Santina applies this same level of intellectual depth and critical thinking to the topics discussed in chapter three of the textbook, where gender, feminism and sexuality take central stage in Italy:

“There was a connection between gender/sexual identity and language. There is a connection between language and individuals, in that language is fluid and evolving and so am I. I am not the same person I was even 5 years ago, nor is English the same language it was 5 years ago. In the class there were a lot of questions about equality, gender equality between men and women as well as sexual orientation equality between

heterosexuals and homosexuals. Language is manipulated to endorse the user's beliefs, if a person believes that men are superior to women they could refer to themselves as traditionalists whereas a person who disagrees with 'traditional' as the appropriate term would instead use chauvinist. Similarly there is also the notion that women raise children and that while most single parent households are led by the woman there are a growing number of fathers taking on the role as single parent. I enjoyed the use of *casalingo* as well as *casalinga*.”

She references 'casalingo as well as casalinga' regarding the discovery of a changed social landscape in Italy where men are assuming roles, such as housekeepers – or *casalingos* – that have long been the assumed domain of the woman. This was a fascinating phase of deconstruction of expectations of Italian society. The reader may agree that this is an uncommonly clear analysis of language and identity within both fluid and static states (research question #1). Santina sees herself as in constant flux of change, much like her language. However, from a CDA-like approach, she immediately deconstructs the supposed innocence of language, tying it back to the identity of the user and her/his intentions. Beyond the 'manipulation' that she sees inherent in language use, she settles with what she enjoyed: the gender inclusive forms of vocabulary with a long history of gender-assignment. As distinct from Simona, this is a more indirect way of pursuing social justice by means of gravitating toward unexpected and 'transgressive' uses of language for the purpose of raising awareness on issues such as equality.

Finally, we arrive to one of the most crucial aspects of Santina's case study. What follows is a rather powerful and insightful analysis of language and identity. It is her language and identity in relation to her ecology. I would remind the reader, who – beyond my limited

vantage point – is encouraged to pursue her/his own interpretation of this data that this comment on Santina’s part was provided after the course had ended as part of the final interview. She had been encouraged to think deeply about language and identity, about the course itself, and to go deeper than before in her meta-analysis. To contextualize what she is about to say, she is referencing a quote by De Rosnay (2011), which reads:

“There are two abysses, one on either side of the edge of chaos. On one side is total disorder, an anarchic turbulence that does not generate organization. On the other side is structured, inflexible, static rigidity. Between the two, as in a phase of transition, on the boundary between perfect order and total anarchy, there is fluidity, adaptability, self-organization of forms, structures, and functions that are born and die in perpetual self-regulated renewal – the emergence of organization and complexity. It is in this narrow margin, at this precise boundary, in this state of unstable yet stabilized transition, temporary and yet permanent, that the mechanisms that build life, society, and the ecosystem are found. How can we understand and channel them? How can we use them to build symbioses that are beneficial at all levels of partnership between nature and human beings and their machines?” (pp. 311-312).

Considering that Santina’s quote comes after the course ended, compare her views below to her earlier feedback. Did the course make a difference? Does this show comfortableness with language and identity as process and product (research question #1)? In her own words:

“Language falls in the middle of the two abysses, it is evolving and fluid. The language we use today is not the same as was used even 30 years ago; words come into and fall out of fashion. Dialects come and go, and as we become a more mobile society these subtle changes are growing less subtle. Also, I as an individual am in constant flux. I was a girl,

I was a student, I am a mom, I am a woman, I am a student again, I am defined not only by my past, but by my present, and how I see my future. However, I don't see myself as everyone's mom; I don't try to mother my fellow students even if I am a mom. Hats are constantly being put on and taken off, depending upon where I am, who I am with, and what my intentions are. My language changes as well during these circumstances, I cannot speak with a client in the same manner I speak to my youngest son. I believe the best way to understand these differences would be through role play in class. How would a person behave badly? How would a person be respectful? How would a parent talk? Would the parent speak the same to a younger child as they would to a teenage child? I think that putting on these different hats, and allowing the language to flow from the role, it would create a greater understanding not only of Italian, but of how we relate to one another as well. I think that rather than a fixed point between 2 abysses, there is more of a fog between them. This fog allows for infinite points between the total chaos and total order. Realizing that there must be a variance between the 2 aspects ebbing and flowing, depending upon circumstances, is completely necessary before one can attempt to harness or channel anything.”

We see how she places herself and her language within multiple dynamic and complex ecologies. However, unlike the dogmatic view of performativity that sees language as creating social realities, Santina recognizes that, once ‘collapsed’, such identities (roles) foment what is ‘say-able’ and how it is said. In her paradigm, there is a social ‘role’ from which language flows. The further ‘quantum’ view is expressed in her statement that there are not really two extremes between static and dynamic as much as there are “infinite points between the total chaos and total order”. This could be metaphorically interpreted as the way a launched photon may exist in

thousands of possible states. However, she ends this portion of the interview by pointing to the need to collapse the wave function when she states that such an ambiguous understanding “is completely necessary before one can attempt to harness or channel *anything*” [emphasis mine]. That ‘anything’ is what SLA is about since, ultimately, we do wish for L2 students to acquire and develop *something* worth using in real life. In all the fluidity and ambiguity of what it means to be a communicative human, there is, after all, substance to both language and identity, at least in Santina’s worldview.

Returning, then, to the humanity of Santina and, by default, to her ecology, her later considerations take a more intimate turn that paradoxically answers ‘yes’ and ‘no’ to research question #2:

“Personally, I have my husband’s family in Sicily as friends on FB. I must use Italian if I want them to understand me and I must read in Italian to understand their posts. I enjoy this interaction with them, especially when they post something that I know should be funny, but I must study it to understand it. I don’t use other social networks, so FB is my only means of communication with my extended family. I also believe that they enjoy seeing me progress in my development of Italian. Speaking in a more general fashion, in my biology class we used a website (not FB) to discuss course materials, ask questions of the professor, and view supplemental material from the professor. This free movement of information allowed for a non-structured and in my opinion more fun method of information absorption. I must admit though that I also prefer a traditional classroom setting for the majority of my education and I would consider the FB or other social media websites as supplemental.”

In this segment of the interview, I was struck by how enjoyment of humor, an experience often thought of as spontaneous, is seen by Santina as also fruit of analysis. She wants to laugh with others who are laughing about humorous L2 posts. Santina does not consider the analysis-until-it-is-funny to be any less valuable than traditional views of humor. She seems motivated by how much her extended family enjoys experiencing her developmental progress in the L2.

The reason why ecology and agency were so crucial to this study becomes most evident when Santina expresses a distinct, yet very important, perspective than most participants:

“I was inundated with personal problems this semester, so I was a wall to my peers. I told them a day that I cannot talk, because if I did I would cry. It was better for me to focus on Italian and stop. I posted onto FB what made me smile or laugh, because I needed to lighten my mood. I had no real preference as to whom I worked with on projects or on quizzes. I did however enjoy working with Rob the day we were answering online questions with our personal devices in class. Through listening to my fellow students talk amongst themselves, I learned that I had very little in common with them. I found myself disconnected on a multitude of levels. This is why during class when we were encouraged to work together, I would prefer to work alone. I believed that the other students found me difficult to work alongside. Perhaps I am intimidating especially considering that I closed myself off.”

The use of humor in the L2 was also, for Santina, a saving activity. Although we have seen that it was a means of drawing close to her family, we also see that it was a way of protecting and distancing herself from other classmates for personal and necessary reasons. Her awareness of her own internal ecology took precedence over her external ecology, causing a focus on timescales that made Santina feel “disconnected on a multitude of levels”.

Considering that the city of Tucson does not offer many opportunities for learners of Italian to interact with native speakers, it is helpful to know that Facebook affords the potential of meeting that lack. The benefit of such engagement is expressed well in Santina's statement that connects humor to political concerns and does provide a positive answer to research question #2 and, perhaps, to #3 if we consider that she is aiming for a standard within a very fluid, ambiguous and dynamic online resource:

“While I prefer structured lectures for learning in a classroom, I have found that FB provided an enjoyable non-pressured exposure to native speakers of Italian. Reading and translating their posts or comics exposed me to the natural flow of the Italian language, what is funny to them, and has also informed me about their political concerns. I am extraordinarily fortunate to live with a native speaker from Italy, who can explain to me many of the facets of the Italian life that don't understand. Through exposure, I have come to find that the Italian sense of humor is not the same as the American, the priorities of life are also not the same between the Italians and Americans. While FB and other social networks only offer a sneak peek to this fact, it is enough to entice the user to ask questions and look for answers not only about the language, but the culture as well. I find the use of these tools to be beneficial to the learning experience.”

Although the course did have a social justice component that sought to eliminate the 'us-versus-them' dichotomy, as a strong resistor, Santina came into the classroom with what seems like an even greater sense of alienation from Italians, all while sharing a home with a native Italian speaker. This could be due to her husband's analysis and critique of the other students work, making persistent distinctions between the way 'they' use language versus how 'we Italians' actually speak and write. At the same time Santina indicates that social networks do

have the potential for offering a “sneak peek” to cultural differences, enough to entice language users to take the initiative in their development of cultural and linguistic understanding.

To visually illustrate some of what Santina says, she provided some self-selected screen shots of her work with her own explanations, as follows: “I chose these not only because they are specific examples of my posts but also because some are representative of me.” This is a very ecological way of opening a section on visual illustrations that blends her identity with her multimodal work. As opposed to Simona, Santina preferred to explain what she was about to show you prior to displaying it. Also worthy of mention is how Santina came to view mistakes as helpful dialogic tools. In her own words: “it (the example) not only used Italian but also because there was a miscommunication. I didn’t intend for my question asking for the verb to be difficult, but it allowed the conversation to continue a little more and for some thought to develop.”

In light of Santina’s profound analysis of language and identity, I will now display her self-selected samples, which contrast significantly with the depth of her work as I witnessed on a weekly basis. Why would Santina choose these as representative of her work when she has so much more ‘critical’ work that she could showcase? In light of her previous analysis of the complexity of her identity (and language), there seems to be reason to think that she is using this as contrastive work and not as showcasing her previously-discussed critical thinking skills and meta-analysis. These self-selected samples take on a very ‘down-to-earth’ and human feel to them to which we can all relate. In her own words:

Santina: “I chose this post because it became not just a question of what do you prefer but why and then grew into a broader discussion.”



Figure 52: Case Study FB Image #14

[TRANSLATION: My answer to the question on page 42 of the book:

#2: I read neither newspapers nor magazines but I want to read the New York Times. I don't read celebrity news, but I prefer to read crime news. This is the most important news of the section.

Yes, I agree that crime news is important.

Yes, particularly if you compare it to celebrity news!

It's right for crime news to be important but I prefer to read celebrity news. I relax when I can laugh.

I don't think we can compare crime news and celebrity news. They are different and have a different purpose.

Yes, but they are two types of news. So we could compare the number of people most moved by an argument. But even this wouldn't suffice since they both focus on different media.

Every part of the newspaper is different. There are articles that you prefer and articles that I prefer. It's dangerous to judge with certainty (dialogue continues)]

Santina: "I chose this post to be representative of my humor. It is in Italian and forces the reader to use Italian. I think that it also is interesting enough that the reader will spend a few minutes translating the comic."



Figure 53: Case Study FB Image #15

[TRANSLATION: hahahaha I like this cartoon.

I told you to not hook up with an ostrich!

Give me an epidural!

Of course I like mistakes (wrong things)... this cartoon

Beautiful. hahaha]

Santina: “I chose this because of la *cagna*, a classmate apparently thought I meant bitch in Italian and was referencing a woman rather than a female dog. This miscommunication took me a few minutes to understand and caused a lot of laughter on my part.”



Figure 54: Case Study FB Image #16

Santina: “I chose this post only because it was the most difficult one I made all the semester. As I am sure that speaking is normally the weakest point for students, I assure you it is my weakest point. It really took a lot of courage to post this with all my errors and sloooooow speech. I

actually posted this to my personal wall accidentally prior to posting it to the group web page. I decided to leave it up for my husband's family to listen to me. That was actually a difficult decision to make.”



Figure 55: Case Study FB Image #17

Since I chose to only include self-selected work chosen by the participants, these examples from Santina will have to suffice. However, as the facilitator, I'm aware of the fact that she could have selected much larger texts that she had written as well as much longer interactions between her and others in the course. I would, however, invite the reader to share her/his analysis of Santina's unique data. She certainly does, after all, give us a brilliant vision of the dynamic, complex, ecological and paradoxical experience of being human.

6.6. Common Ground

As should be clear by now, the individuality of each participant remained intact, not once being absorbed by the collective while, simultaneously, learning the value, disadvantages, advantages and challenges of collective work. The participants seem somewhat initially surprised by the high level of ambiguity that was embraced and promoted during the course. They also agree on the impossibility of a purely essentialist notion of an authentic language and identity related to what is commonly called 'Italy', although this was a perspective that began on very different timescales for the participants, some even arriving to the course with highly elaborate concepts that harmonize with performativity theory, language ecology, ecolinguistics, critical discourse analysis, dynamic systems and complexity/chaos theories.

The participants seem to embrace the paradoxes of language and identity that guard it against the appropriation by postmodern relativism as well as the static rigidity of modernist ideals. They then appear rather comfortable exploring this 'quantum' view of the world through the lens of their own experiences and interests. More than anything, the participants seem to agree that learning about 'Italy' or 'Italians' carries with it a 'nuclear' potential to lead the discussions nearly anywhere due to the positioning of all countries within global contexts and the fact that technology is reshaping all previous boundaries, even to the point of reducing them to meaninglessness.

6.7. Additional Differences in Emic Perspective

One curious difference was between Matt and Christopher, specifically how their appreciation for the use of Facebook (Matt) and dislike of Facebook (Christopher) seemed to impact the timescales related to their use of the technology. When contrasting the Technology

and SLA survey, it was telling how Matt eventually perceived that he had been using social networking for two years longer than he had originally indicated, and Christopher eventually perceived that he had been using social networking for two years shorter than he had originally indicated. It's as if the enjoyment or lack thereof of a particular tool transformed the memory of comfortableness with such technology.

Some participants found FB to be a useful pedagogical tool and others disagreed, preferring to use other technologies or rely on more traditional uses of the classroom.

Collaborative or solo work was also a point of contention. However, as was explored, this was not so much due to the setup of the course as to personality and demographic perceptions of 'difference' that were somewhat stigmatized and resistant to change. Another difference was the choice of topics of interest, although, as should be clear from the feedback, the pedagogical results were similar due to the necessity to discuss such difficult topics in the L2 and in multimodal ways.

All participants grew increasingly comfortable with *not* being 'spoon-fed' answers and being allowed to 'make mistakes' in the myriad of potential meanings and contexts that helped collapse such meanings. They indicate that the element of judgment was removed, allowing for a level of language play that promoted exploration while also not fictionalizing a mythical 'standard', if such standard happened to be the goal of the participant.

CHAPTER 7: DISCUSSION AND IMPLICATIONS

7.1. Overview: Did the Study Make a Difference?

Before seeking to answer that question, it would be helpful to briefly review the research questions, which are as follows:

1. Do metaphors from quantum physics balance ecological SLA theories and afford agents the paradoxical experience of language and identity as simultaneous process and product, while reducing neither to fiction?
2. Are higher levels of critical thinking achievable at an intermediate level via L2 discursive analysis enhanced by human-machine interactions beyond the classroom?
3. Is it possible for participants to navigate dynamic levels of ambiguity and possibilities of meaning while facing the static requirement by the academic institution to pass quizzes and exams, and complete homework assignments on the basis of a 'correct' answer?

What, then, did the study and its data make clear that were not already convictions at the study's outset? Did this study make a difference in the lives of the participants? At the beginning of this study, I was not certain that focusing on the interconnectivity of all things ("It's all connected") would have a significant impact on the participants. I was not certain that shifting from a purely ecological view of language (specifically, "Language is dynamic - even when it's frozen") to a paradoxical view of both language and identity would truly broaden the participants' understanding of larger critical issues. Furthermore, I had no clear evidence that "Co-adaptation is a key dynamic" and that "Teaching is managing the dynamics of learning". I did not expect the use of FB to be less important than the topics explored. The pilot study participants showed a narrower focus and appreciation for FB but, at the same time, did not reach

some of the levels of critical discursive analysis that are found in the current study. In the pilot study, although I was exploring QP models, as discussed, it turned out to be a study more on the benefits of pedagogical uses of social networking but largely failed to be a dynamic course in the DST theory sense of the word. However, the current study would often leave me positively stunned by the emergence of systems of thought, systems of participant interactions and systems of global and local equilibrium. For example, as the reader looks at a final comment from Simona, s/he will see how Simona's words embody the heart of this dissertation and summarize why this approach did make a difference that really mattered to her and others:

“By being allowed to digress from a specific assignment or topic, I was able to create a more comprehensive meaning of the subject matter for myself. Exploring topics that had personal weight made them more engaging and it was considerably easier to give more effort when I was personally involved with the topic I chose. When I knew that I had the personal freedom to explore the language in my own way, I was much more willing to bend the rules to suit my interests: this didn't come from some learned process but through the organic learning I've had up to this point. The uniqueness of the class; its structure, made transgressing that very permeable barrier telling students what is 'allowed' and 'expected' much easier, and more importantly, much less stressful. By being allowed to explore the language at my own pace, in my own way, I learned more than even I ever expected to. Learning not confined by the classroom is intimidating because of its lack of structure, hard guidelines, and no one to tell you when you're 'doing it wrong', but the combination I was able to experience, of having the agency to learn in my own way along with Paolo's non-authoritarian hand, but rather his more general guidance, facilitated my personal process and allowed me not just to go beyond

the written course material, but grow personally as I realized my power to learn as an individual.”

This manifesto on the part of one participant, among others, tells me, as the facilitator, that there is something unique about this approach that really speaks to the holistic language learners. Does Simona relax into a view of language and identity as process and product, while reducing neither to fiction? Yes. She also finds value in how the online activities improved her critical thinking in the L2 and her excellent grades in the course show that she became comfortable with high levels of semiotic ambiguity while also being able to perform well on static exams and quizzes. Beyond Simona, the overall work of the participants’ shows how, in this digital age, the L2 classroom expands beyond the physical limitations of the institution to online collaborative communities, making research question #2 particularly relevant. Regardless of the SNSs chosen, the participants’ self-selected work shows an eagerness to continue the SLA process even beyond the time limitations of the course, which met four times a week in only minute increments. Although not unanimous, the larger amount of data of the participants (with the exception of Liz) shows a shuttling (progressing and backsliding) between the acceptance of language ‘as is’ (product) and language play with multiple probabilities (process), thus indicating that the acceptance of both may not always be as simultaneous as assumed in research question #1, but rather circumstantial and layered on numerous timescales of multiple and competing variables (grammar, vocabulary, culture, sociopolitical issues, technology choice, personal needs and life circumstances, etc.). Remembering that these participants were all part of an intermediate level language course, their engagement with L2 discourses and their own analysis of the same demonstrates that, while posing – at times – a monumental challenge, this level of language learners is capable of far more L2 critical analysis, from bottom up approaches to top down

approaches. Two participants that challenged this were Liz and Christopher, although Christopher does eventually show an engagement with higher levels of critical thinking and analysis, while always preferring language as product. However, unlike my initial hypothesis, this type of CDA may be too difficult for some of the participants, particularly those who have never engaged highly polemic topics and debates in the L1. Due to the kind of study that this is, there needs to be further study on this approach, perhaps done quite differently, by others in diverse contexts. For example, it may be helpful to better equip the participants via some actual training in some of the fundamentals of CDA, PDA and CDS. I believe that the raising of awareness regarding what we should be looking for and analyzing would go a long way in helping L2 learners gain familiarity with discursive analysis in the L2.

Equally important, the participants' work shows that, after a turbulent period of adjustment, they become comfortable navigating dynamic levels of ambiguity and possibilities of meaning while simultaneously facing the static requirement by the academic institutions, reflected in Simona's statement that "there were parts of the class that I felt were chaotic, without direction, and it took time for the connections to become clearer as the section continued". We will recall this experience and shift in perspective in Matt's analysis of this approach: "I thought the ambiguity of the vocabulary to be challenging for the first month or two but when it finally clicked I began to explore vocabulary more and started learning words and terms that were not necessarily related to the topic exactly but were related in an 'out there' sense." That is, chaos gave way to complexity and then, 'it clicked'. Few experiences better exemplify the 'quantum' aspect of this study. This helps us understand why, in no uncertain terms, Matt would eventually argue that language is both product and process. His argument has a great sense of ease and comfortableness about it. However, we cannot claim the same for

Santina, not because she doesn't see language and identity as paradoxical and doesn't analyze discourses, language and identity critically. She certainly does all the above and more. However, the study does not seem to me, as the researcher, to provide sufficient evidence that the course made much of a difference since Santina seemed to join the course with already highly developed awareness of the 'quantum' approach while not using the label. There is evidence in some of her later feedback that there was a shift in perspective due to the course. However, as I mentioned before, I will leave it to the reader to determine if there is evidence regarding those possibilities that has not been considered in this dissertation.

For Simona, the static requirements of the course, far from being a hindrance to the extremely ambiguous approach and language play allowed on FB (and vice versa), proved to be a rather balancing experience (research question #3), as she would point out: "Once we began integrating our learning objectives with our online activities, I definitely noticed that the language seemed to flow more easily via posts on the Facebook page.", which also positively answers research question #2. It is important to remember that Simona was not sure about the use of SNSs for the language course but, in her own words, "my opinions on using social media to learn a language completely changed". Experience won her over. However, we must also recall participants like Susan, Liz and Christopher, for whom FB was not as effective at integrating the course requirements with the additional topics discussed. In Liz's case, this seems to be related to her preference for more traditional forms of pedagogy. Her preference for digital flashcards indicates a predisposition to favor clear answers regarding language, although the reader will also recall that her description of personal identity was highly complex in its performative personas. Could such differences in perspective have more to do with the individual motivation to go beyond clearly-delineated boundaries? Could the approach taken in this course

not be as effective for certain participants simply based on personality or personal goals? It seems obvious that this approach, while overall worth exploring, is not acceptable to everyone. However, overall, there was progress that was notable and insightful, even for participants like Susan. We will recall how Christopher's objections to the use of FB, far from being a hindrance, led him to a completely different SNS where he discovered the blending of meta-analysis, critical analysis and pedagogy. The data analysis in the previous section shows numerous examples of this and confirms the claim that, "What was curious about their discussions and research conducted on FB was how the participants – because of L2 use – began to blur the lines between language ecology (the interconnectedness and dialogism of language, identity, society, history, politics, etc.) and ecolinguistics (language used for ecological purposes). In short, the participants – without knowing what to call this new approach on FB – began to conduct their own version of Critical Discourse Analysis in the L2".

Such a fluid approach to L2 pedagogy required a constant monitoring and shifting on my part as the facilitator. It allowed me to quickly adapt to Christopher's needs and, in the process, allow him to flourish where he felt most comfortable. Had I been inflexible in my determination to exclusively use only one SNS, I doubt – based on Christopher's feedback – that he would have achieved the discoveries that were uniquely his. So, as one of our course skeptics, it was helpful to see the impact that such adaptation can have on one participant. In his own words, "this course focused on cementing what I already knew and introducing new material without it actually feeling like it." And how did the course impact his understanding of language and identity as product and process (research question #1)? As he states, "for one to understand and make sense of the world, one must first digest the words that were said and produce some sort of context based on it." More importantly, the reader will remember that Christopher pointed out that the

course's approach even improved his ability to be more outgoing and free to share his opinions. It wasn't one technique or technology that led to this, but, by his own admission, a blending of several interrelated factors and variables.

To focus momentarily on the ecology of Simona, we could consider how she broadens many topics to include what is not assumed, such as how she connected Islam to Italian culture and then issues on immigration, or how she finds interconnectivity between education, entertainment and pop culture. While excelling on the exams that require a L2 product, she similarly looks at culture as a discovery product, but then, she is also able to say that culture involves “the thousands of ways we build our world and interact” (research questions #1, #3). Her ability to embrace the static and the dynamic is echoed in her defining a particular family as Muslim, while later describing the family as “the blending of cultures, they all live together”, an awareness achieved through online critical analysis (research questions #1, #2). This latter statement does not negate the first, particularly when we consider that she shuttles between the two, a form of ‘backsliding’. Sometimes the two ‘states’ of static and dynamic coexist in her statements such as “‘language’ encompasses dialects and dialects are part of language. Dialects ARE language just as real” (research questions #1, #2). This is a curious sentence that, while democratizing language variants to equal status, nevertheless embraces the essentialist notions of language as real. She does not seek to reconcile the paradox. The same could be said of Matt, who defined Italy as being “full of many different types of people and many different cultures” (plural) while simultaneously arguing that there is such a thing as “contemporary Italian culture” (research questions #1, #2). Like other participants, Matt does not seek to reconcile the paradox but seems to assume that the reader will understand this experience of the performative and the essential, the dynamic and the static, all coexisting in our engagement with people and ‘their/our’

language. Therefore, I previously claimed that the participants demonstrate that “the framework of performativity is not necessarily ‘the way’ or the absolute standard by which they *must* see language and identity [...] In fact, the participants’ feedback points to the breakdown of many artificially-imposed dichotomies in SLA”, which is best demonstrated via their own analysis of their work and the feedback they provided via the interviews and questionnaires.

Finally, Santina adopts such paradoxes in her descriptions of ever-moving ‘standards’ related to language (research questions #1, #2) and simultaneously succeeds academically (research question #3). However, we cannot be certain of the level of impact of the course on such achievements and perspectives, difficult to assess also due to the non-causative nature of the study itself. Her shifting positions on language, while difficult to reconcile in a quantitative way, nevertheless point to the highly complex nature of the human mind in a constant semiotic dance between seemingly irreconcilable tensions. This is important because of Santina’s claim that her views on language did not change in the course, which could indicate that she was already very attuned to the mind’s comfortableness with ambiguity. We will recall that she does a very detailed analysis of the discourses related to Monsanto’s appropriation of the L2 to persuade the public, and she also clearly analyzes the related debates within the ‘us versus them’ paradigm (research question #2). Being a participant who is older than the others, Santina brings with her much wisdom, insight and experience that would be expected of anyone with a curious mind who is consistently exposed to multiple cultures and languages as she is. Her keen observations on gender roles in Italy and how language may either reinforce traditional values or subvert them (she points to the use of the masculine ‘casalingo’) show a participant already eager and ready to analyze beyond the sentential level.

Although the reader may notice a shift in her views on language that take place much later, even if there were no substantial change due to the course itself, I would reiterate that, in cases like Santina – such a course would at least accommodate an already-existing preference for autonomy, agency and deeper levels of analysis. That is, although she expected a simplistic language course below her level of critical thinking skills, she discovered a course that engaged her where she wanted to be engaged and where she was treated as a whole person, the ecology that she describes so richly in her feedback that points to language and identity as process and product and ambiguous and subversive aspects of language (research questions #1, #2). Notice, in fact, the blatant paradox that requires nuanced intellectual analysis to deconstruct:

“Not being led in one direction allowed me to explore many. *While it is true that there are proper and improper ways to speak a language, there is no right way to speak any language*” (emphasis mine). She further connects this ambiguous “yes” answer to research question #1 to a potential “yes” answer to research question #2, due to the way these types of analysis were largely developed via online resources, such as SNSs: “Cultural, socio-economic, and geographic influences play a part in the way a specific population will speak a language. Being free to explore my own use of language allowed me to personally parallel my own use of English with my understanding of Italian.” Ambiguous freedom of exploration did not, ultimately, derail her SLA goals. Such freedom coincided, though we cannot conclude that it impacted, her ability to balance academic goals with other SLA and non-academic interests (an ambiguous “yes” to research question #3).

There was, however, an overall positive impact of the complexity of this study’s approach on most participants. The reader has already noticed the impact of the study by comparing – diachronically – the earlier feedback from the participants to the later feedback. The

‘shuttling’ effect is seen, for example, in Simona’s navigating between specific details of oppressive “patriarchy” and the more general “politics”. The narratives contrast with the multiple performative stances adopted by the participants to reveal that, while there is a staged sense of who the participants are in relation to the course, there is, nevertheless an essential sense of the true self that is not as dynamic as the other personas. One part of that ‘true self’ is seen in Simona’s performative presentation of herself as a researcher who goes after the discourses of corrupt corporations to then bring those topics to the way in which she and her classmates prepared for the exams. As seen in the previous chapter, the fact that participants could perceive themselves as peers, and include me in that peer group, shows a readiness on the part of language learners to move beyond artificial dichotomies, such as – in this case – the teacher/student barriers.

We have witnessed the lines being blurred between pedagogy and social justice, as well as between essentialist and performative assumptions in instances when the participants categorize certain people groups or linguistic features but then point to these as being socially constructed. In one example, essentialist traits and socially-constructed traits were described as being part of the same person, thus offering a more nuanced understanding of the human predicament (recall Simona’s comments about children having an inherent sense of equality but hate being taught). This answers research questions #1 and #2. The blending of other dichotomies, such as the difference between ecolinguistics and language ecology stood out clearly in the L2 discussions related to Monsanto and GMO foods. The participants’ own analyses of this highly controversial topic – specifically Monsanto’s appropriation of Italian resources to propagate their Capitalist agenda, confirmed the earlier claim that the participants had considered that “the symbolically dominated conspire and commit isolated treasons against

themselves” (Everett, 2002, pp. 66–67, cited by McKenna, 2004, p. 13), which shows a powerful impact of collaborative online work to expand critical thinking (research question #2). Simona was very clear about the ways in which L2 social networking allowed her to analyze discourses and blend the requirements of the course with her own social justice interests. She is also clear about how this improved her SLA experience, but also how it improved her own life by exposing her to “multiple definitions (past those in the text)”, an experience that “opened our minds to using the word not in a ‘lock-and-key’ situation”, all while progressing in her academic goals (research questions #1, #3). Simona’s performative stances, such as that of being a leader, while authentic to her, nevertheless was open to being renegotiated in pragmatic ways: “My weakness in some areas matched the strengths of others in that same area, and vice versa. By working together, we pooled our strengths, using multiple cultural spheres to think about the process at hand.”

This study turned out to be one of those ‘transformative experienced’ that we (the participants and I) still discuss. Having returned this semester to a more traditional way of teaching, and this due to the requirements of the institution when not conducting a study, a couple of the participants, and even students who have heard of the case study, have asked if we could return to it. Beyond what is reiterated here regarding the data, what is evident is that there was an overall increase in the participants understanding and use of the L2 (and L1, L3...), discourses related to the same, and how this all connects to greater sociopolitical issues that affect all of us.

Returning full circle to the opening chapter regarding the fable and metaphors, I see in the data how many of the participants seemed to develop a comfortable distinction between awareness and consciousness as related to language and identity. I use this analogy of a dream

versus an awakened state to illustrate how the participants began to perceive the value of both fictional and authentic (even static and dynamic, simple and complex) aspects of language and identity. It could be seen as the simultaneous appreciation for discoveries regarding aspects of language and identity as well as the playfulness with such ‘products’ turned ‘processes’. In a dream state, we are sometimes aware of all that is happening in the dream. Sometimes we are even aware of ourselves in the dream. Every action and act of communication seems utterly real and is ‘real enough’ to be retold. The languages and identities assumed in the dream, although fluid and changing, allow us to develop our sense of both and we ‘acquire’ an understanding of our world that is often brilliant, frightening, beautiful, elaborate, insightful, and so forth. In all of this experience we are fully aware, and yet, due to the fact that we are asleep, we are not conscious or connected to the outside world. However, when we awaken and retell our dream, we are then fully conscious and connected to the outside world. Our ‘acquisition’ of the dream can then be contextualized within broader frameworks that allow us to then take action, make adjustments to our life, write that paper that was hindered by writer’s block, end or start that relationship that had left us puzzled. In this conscious state, we continue to use the concepts of language and identity, yet these appear to be far more sedimented and solid than the ‘awareness’ state. At the same time, both awareness and consciousness have value and are useful to our lives as human beings. The discovery that language and identity also inhabit both dynamic and static states within the same person and, sometimes, within the same experience, is one of the ways that the participants developed increasing comfortableness with the paradoxes inherent in a ‘quantum’ approach to TELD.

7.2. Implications of Findings

For this reason, I propose a *post*-postmodern approach to what is typically seen as SLA and suggest that we question the assumptions of beliefs related to postmodernism that have become rather dogmatic, such as the pervasive poststructuralism that, in replacing previous approaches to textual analysis, is, nevertheless a Western imposition that does not give space for the ‘collapse’ of meaning. I also argue that Semiotics could benefit from the allowance of simultaneously static and dynamic, linear and non-linear views of meaning-making. Equally our previous emphasis on dialogism, while noble in its deconstruction of the assumed interlocutors, could be made more elegant by embracing the paradoxical possibility of ‘substance’ unique to the writer/speaker as much as the suggestion that no word stands in isolation. The rejection of any inherent meaning or identity (the latter being the heart of performativity) does not ultimately foster an environment of authenticity in relation to identity, which is central to the possibility of social justice and the critical analysis of discourses related to the same. Similarly, just because language demonstrates itself to be highly performative and unstable, we are no longer required – via logical fallacy – to assume that there is never a fixed point at a given time and context. It is the facilitator’s bold and contradictory answer of “Yes and no!” to the questions, “Is she a ‘real’ woman?” and “Is that ‘real’ Italian?” that best match the experience that we have in the world ‘out there’ and ‘in dreams’, both of which are valuable and important. To facilitate a language course with this level of ambiguity does not lead to chaos, but rather reflects the complexity of the mystery of what it means to be alive in a world where larger laws do not always match the laws that seem to govern the quantum world, and yet, an experience that is present in every human being who – rather effortlessly – blends the physical and the mental as if they were in harmony. Although the implications for various disciplines are similar, there are a few specific aspects that deserve special attention.

7.2.1. For CALL and SLA Researchers

Language learners are really language developers. SLA, by definition, tends to reinforce a static metaphor via metonymies that are constantly used in literature by virtue of the fact that we have not yet found a way to fully escape the dominant views. Equally, the evolution of human-machine interactions challenges the static metonymies and metaphors implicit in CALL. For this reason, I propose TELD as an ‘update’ to CALL and balance this dynamic and agent-centered approach with metaphors drawn from quantum physics as a way of reclaiming paradox as central to language and identity, reducing neither to fiction. TELD and SLA researchers who may want to explore this ‘quantum’ approach to a language course will need to resist the urge to impose an ultimately postmodern view of language that persistently – and almost exclusively – favors linguistic variance and minority status by allowing the elusive ‘standards’ to coexist side-by-side, with equal respect, as much as comfortableness with a variety of dialectical and register variations. When a student insists that s/he wants to learn the ‘standard’, instead of arguing against the existence of such an illusion, we could value what the student values and do our best to prepare language developers to feel as comfortable with the ‘standard’ as they do with versions of the L2 that they had not previously considered, and this, via authentic social interactions.

If a student is studying issues of gender and sexuality or ethnicity in the L2, we could equally show the performative side of these as much as how crucial it is, for example, for transsexuals to appeal to something absolutely authentic or ‘real’ in their identity in order to fight for social justice and equality. There is little need to use the language classroom as a propaganda machine for right-wing or left-wing agendas. The media suffices to fulfill that role. The TELD facilitator exposes the students to a bigger world that transcends such dichotomies so that what

was once called 'left' is now 'right' and vice versa, and what is called 'Italian' is now called by a different name. The guided exposure to global consciousness is enough.

7.2.2. For Language Program Directors and Administrators

Language Program Directors and Administrators who desire to include aspects of TELD could emphasize the need for funding to provide classrooms with the most current tools available. Also, although the tendency is to relegate literature to upper level courses and grammar and vocabulary to lower-intermediate level courses, as this study demonstrates, students of all levels are ready for all the above at all levels of language instruction. Furthermore, the easy access that many of today's students have to almost unlimited online resources should be considered when planning a course. Why rely on static and 'boring' texts of little relevance or interest to the students when those same texts could be incorporated as part of a broader journey through a multitude of topics that are truly valued by all involved?

Finally, although discretion needs to be maintained when it comes to self-disclosure on the part of the instructor, there is no reason why at least a portion of the dichotomy of teacher/student can't be demolished in order to emphasize agency and the ecological whole person. As mentioned earlier, this study was rooted in a pilot study, in which the observation and interaction with participants led the researcher to certain hypotheses and questions that needed to be answered by taking the work further and in bolder directions. Thus, the current study, which stands as a manifesto about theories, models, and approaches, but also goes further to show, via the feedback of the participants, that it is more than a manifesto. Today's language learners seem ready to embrace a self-empowering, agency-focused, paradoxically ambiguous and clear, approach to SLD. Their feedback shows that we do not need to relegate grammar and vocabulary to lower levels and literature or authentic materials to higher levels. Students are ready to engage

the many variants of the L2, and its related cultures, right where they are, in their own way, and – if coached and encouraged – will overcome their fears of exploring beyond the boundaries of the course and making ‘mistakes’ in the L2. Today’s language learners are already aware of the sociopolitical and philosophical dilemmas created by postmodern thought. Being citizens in a globalized world, particularly connected via technology, they understand that we are facing unprecedented complexities of ideologies in conflict and that we may, together, find better ways to give multiculturalism a voice that has been largely silenced in order for it to survive. This study also demonstrates that even a language course can inspire students to become activists and take steps toward social justice.

7.2.3. For Classroom and Online L2 Facilitators

If this approach is of interest to L2 facilitators, there are a few changes to the traditional approach that should be considered. First, it is crucial to emphasize flexibility and adaptability. We must remain open to the possibility of constant change of plans, sometimes even a change in lesson plans. The ecological vision of students and facilitators implies that there are – at times – necessary deviations from the specific intentions of a lesson or even of the broader institutional goals. That does not mean that these are disregarded as much as they are placed on hold until a more pertinent need or purpose can be adequately addressed.

The human element, as well as agency, means that the facilitator must be ready to let the students take over, when possible, and take initiative in connecting an exploration of their interests and concerns – all within the L2 contexts – to the purpose of the course itself. Do not worry extensively about fully understanding how interconnected all topics may be. That is not the purpose of the facilitator, but rather of the students in dialogue with the facilitator and, we might add, of the reader in dialogue with the writer of the dissertation. However, keep a close

eye on the direction that discussions take to ensure that, to some degree, ‘all roads do lead to Rome’, that is, that apparent chaos does, eventually, give way to complexity and that dynamism does not remain perpetually in suspension. This is crucial since even development implies progression along a series of stages. Although it is a dynamic concept, it is rooted in the idea of static moments, snapshots of progress. Make sure that the students notice both as related to their understanding of language, identity, culture, philosophy, politics, history, etc.

Also, expect chaos for some time. As can be seen from the participants’ feedback, there is a period of chaos that should be expected for at least the first third – or perhaps the first half – of the first semester that participants engage in this approach to TELD. This was a prediction made explicitly by Dr. Wildner-Bassett (of this very Committee) during the Oral Defense of the Dissertation Proposal. For that insight, I’m particularly grateful, especially for how it reminded me to ‘Keep calm and carry on’ when I sensed mutual frustration growing.

Patience and persistence paid off as the participants learned that they have the power to alter their academic future as much as they do their own vision of the world and personal/professional aspirations.

As L2 facilitators, expect confidence to grow in the students, who sometimes come across as aggressive or arrogant. They are most likely neither, but rather, are beginning to explore their potential and feel the excitement of developing a broader vision for their academic future and life goals.

7.2.4. For Government Agencies, Consulting Firms and the Private Sector

Language facilitators in the private sector related to international affairs could benefit from the implementation of this type of L2 education since it bypasses essentialist and

mechanical notions of language learning in favor of a more nuanced, culturally and philosophically rich approach to developing a variety of registers in a ‘target’ language by allowing for both the static target as much as it does the moving target. This prepares employees to grow comfortable and confident in their ‘acquisition’ of what is most required for the job (such as formal business meetings abroad) while also feeling at ease in informal social environments that may help ‘seal the deal’. It is, in fact, a well-known fact that, in many parts of the world, social courtesies and informal conversation often precedes business transactions.

Furthermore, by training employees or operatives to develop their own initiative for learning inter/transcultural skills, the L2 development will not be restricted to the classroom or online resources at home and can, successfully, continue within the community abroad where the subtleties of language and culture are best sedimented and appropriated in ways that are perceived as authentic.

Consulting Firms could consider advisors with such a vision of foreign and domestic affairs related to language and identity to provide the Firm with highly contextualized investigations into the interests of the business. We cannot assume that the way ‘we’ practice business here is how ‘they’ practice business abroad.

Although the goal of the ‘quantum’ facilitator is to deconstruct such dichotomies, s/he also resists the urge to ignore them and even uses such pre-established paradigms for the benefit of creating a greater understanding of local and global contexts. Given the controversial opinions that the global population holds on some actions on the part of US agencies abroad, such a consultant may do her/his part to better prepare individuals, agencies, employees and operatives in the most effective, peace-keeping and ethical approach to foreign and domestic business and military/government affairs.

7.2.5. For the Cinematic Entertainment Industry

The ‘quantum’ approach to culture, identity and language development suggested in this study could have a profound impact on the popular Method of the Screen Actors Guild. The movie industry in the United States carries the potential of sedimenting or destabilizing essentialist notions of the ‘Other’ and, consequently, can be a powerful tool in the collective working toward global peace and understanding of diversity. However, even a brief survey of recent movies reveals an ever-present level of misinformation and essentializing of poorly understood peoples.

From the type of feedback provided by the students, I firmly believe that the movie industry could benefit from the incorporation (in SAG or SAG-like courses) of the cultural – maybe even linguistic – aspects of this ‘quantum’ approach. It would provide screenwriters, directors, set designers, actors, songwriters, etc., with a far more paradoxical and nuanced vision of language, identity ‘construction’, culture and social/political/ideological context that avoids easy categorization and better reflects the contemporary world and circumstances that humans inhabit. In other words, this type of training/facilitating could be easily adapted outside of the SLA/TELD disciplines to accommodate the entertainment industry.

7.2.6. For Facebook and Other Social Media Platforms

Finally, the theories and methods of this study point to one final implication that applies directly to Facebook as a Company. There are certain limitations on the use of FB for pedagogical purposes that were brought forward by the participants of the pilot study and the current study. As was clear from the examples provided, the participants worked around such limitations. However, my suggestion to Facebook (the Company) is the creation of an Academic

Facebook that implements some of the TELD discoveries and insights of this study. One example is the need for easily-retrievable information, something that FB threads over a period of a semester make rather cumbersome.

The Academic Facebook would compete with other popular SNSs by making articles and journals easily accessible and retrievable and, more importantly, sharable with others online. All technologies that are typically used for presentations could be consolidated on a student's page or a class page in ways that are highly organized, easily visible to all who visit the page and open or closed to editing, as required by the individual or the course.

Since so many students are already on FB for social reasons and, per this study and the related literature review, striving to use FB for academic purposes, the Academic Facebook could be linked to the Personal Facebook (the Original) or made available without the need for a personal page.

The details of what I imagine as an ideal Academic Facebook are rather extensive and deserving of a separate publication. However, the bottom line is that Facebook does already work, to a large degree, as an academic tool, but since it was never designed as such, it requires some major modifications. These changes would be extensive enough to suggest the creation of a distinct – and professional – SNS, the introduction of which may, incidentally, revitalize the popularity of FB as a whole.

7.3. Limitations of Study and Future Directions

As mentioned at the beginning, this is a story, a complex, dynamic and multivariate story of six participants. These individuals demonstrate the richness of each contributor, the multidimensionality of each human being, the value of agency and ambiguity, of static and

dynamic views of language and identity. They teach us that they are far more capable of their own success than many language instructors would assume. At the same time, this is one study at one university within a very limited timeframe. I do not doubt that there are areas of myopia in this work that need to be expanded upon, idealism that needs to be contrasted with social realities elsewhere, such as the fact that in many countries only the wealthy have computers and, consequently, access to SNSs.

Unlike the pilot study, the current study suggests that FB no longer holds the centrality of importance in a growing number of options for SNSs. What we will now see is how, for some, the answers to the three research questions are negative, such as Susan's overall evaluation of FB as a hindrance to her academic needs. We can recall that one of the strongest supporters of FB for pedagogical purposes, Simona, was originally a skeptic and certainly not sold on the idea of dialogic compositions or Wiki-like approaches to collaborative work. While we read her many positive comments that would answer the research questions with a resounding "yes", her views were not entirely in favor of the approach and technology, and this for very common human reasons. What we find in her comment is a paradox that is only resolved with development over time and achievable acquisition: "By working with others on assignments instead of always being encouraged to work alone, we began to pool our knowledge and become better, together. The aspects of the class I struggled with were the strengths of another student, and our working together helped us both do very well in the class. At the beginning, I doubted whether working with others could really make my learning experience better, because past experiences have reconfirmed that idea. However, in our Italian class, everyone's individual strengths became a collective strength, and whether we were working in groups to identify and discuss a picture or

using FB to study for a test, we relied on each other—needed each other—more as we began to understand more in the class.”

We can see that per many of the current study participants, FB is not the ‘magical tool’ that the pilot study participants encountered. For Christopher FB was not appropriate for use outside of his circle of family and friends. Only as he developed relationships with other L2 learners in the course did he feel somewhat better in using FB, although it was mainly to connect socially. His choice of technology for L2 pedagogy was never FB. We will also recall how Liz even points to the possibility of hiding identity through SNSs when she admits, “... my social media person is more refined than my real self”. She didn’t find FB to be very useful and preferred more traditional pedagogy. She mainly used FB for resources and not to connect to others. In fact, this tool that was intended, by the facilitator, as a means of developing and acquiring language in a fluid and dynamic way that allowed for mistakes and play did not accommodate Liz’s identity: “I do not like to post on Facebook unless I am certain I am correct”. In other words, she did not enjoy seeing language as ‘process’. It was largely a product for performance (a negative answer to research question #1). Her preference for traditional pedagogy was not restricted to the issue of approach or method, but also the physical spaces where learning occurs. FB, was not one of those places: “Although many people enjoyed connecting with each other through Facebook, I did not feel comfortable to share things on the page. I feel more comfortable interacting in the classroom rather than on a social networking site. I feel that there is less pressure to be perfect in class than on the page.” Because of this aspect of Liz’s agency, she did not use FB for critical thinking, thus this also answers “no” to research question #2).

Beyond Christopher and Liz's resistance to using FB, there were other negative reactions to using FB in the current study even from non-participants who were students in the course and agreed by the Consent Form to have their answers included in this dissertation. For example, Karen is very clear about why she was so resistant to the use of FB for pedagogical purposes. All three of her comments are a clearly negative answer to research question #2. She starts off by arguing that FB is losing popularity, perhaps because of competing technologies:

"I didn't get a Facebook until the popularity of the site was dwindling down. April of 2012. By that point people no longer posted every day, it was closer to once, maybe twice a week each. As time has passed I see more and more people deactivating their accounts, not posting or sharing and Facebook as a whole going away. Facebook claims their demographic is still young kids, but from what I've seen Facebook among high school students is dead. It's all about twitter and Instagram now."

She then connects her discontent with the technology to serious concerns that have been expressed even by experts in the field (see the literature review on SNSs):

"I don't like to post on Facebook because there's a lot of pressure when it comes to Facebook sharing. Am I using this site too much? Is what I post relevant? Will people even care? It's easier for me to take to twitter to post what's on my mind than to share on Facebook. I use Facebook now more as a way to plan and RSVP to events and have a profile that assures employers and other people that yes, I am a human being and yes, I am not completely insane. Joining this Facebook group, and feeling pressured to post for a grade, was nothing but super stressful for me."

Then she explains how FB may not be the best place to discuss topics that get too personal, particularly if you are learning a L2:

“I participated because I had to for a grade. I’m just not a huge fan of posting and online interactions, especially since a lot of what was posted on the page was very controversial to me. People posted things questioning my religious beliefs and political affiliations, which is great for the learning process, but I will not argue with someone unless I can properly articulate my point. If I’m struggling with the language, I’ll only come off as an idiot and therefore will not even touch the argument. This is just one of the lines I draw for myself, especially when the interaction is online and will stay there forever.”

This is a clear limitation of this study, specifically on the choice of technology. However, the concerns expressed by the students and participants could take an even more serious turn. In some parts of the world SNSs are appropriated by Power and used against minorities. In other parts of the world, SNSs have caused violence and revolution. For this reason, in this study and moving forward, I resist placing central emphasis on cause-and-effect results based on SNSs. As mentioned earlier, this kind of study could benefit by other studies that are perhaps done differently and by people in other contexts.

Furthermore, this study is limited by the fact that, while touching on issues such as social justice and the performativity of language and identity, it recognizes that these deserve studies of their own, particularly where participants can demonstrate the type of activism that truly produces positive social results. In this sense, this is an introduction of a concept, a ‘What if?’ way of looking at SLA. The proposal of TELD within the theoretical concepts discussed is in need of much further development and implementation.

Lastly, I sense that this study could have benefitted from a greater diachronic timescale, perhaps of two years. One suggestion is that I keep in touch with the participants and check in now and then to see how their views and life stories are developing, culminating in a future ‘revisiting the participants’ study, in which, much like in this study, they share their emic perspectives and guide the direction that the study takes. For this reason I see some of these limitations as reasons for the future direction that this study should take. From what I know of the participants, I have every reason to expect amazing success in their academic, personal and professional pursuits. If I contributed a small part to that, and especially if they find ways of passing on to the current and next generation the worldview of social and linguistic curiosity, then this small study, a brief moment in time, will have more than have accomplished its ‘beyond-academia’ goal of making a positive difference in the world.

7.4. Conclusion

This dissertation is the product of several years of investigations and pedagogical engagement with SNSs and alternative theoretical frameworks. Extant research into pedagogical uses of social media combined with the current study’s metaphorical applications of quantum physics models provide postmodern L2 pedagogies an elegant and balancing way of perceiving and interpreting the broader human experience. The dissertation chronicles the organization of a case study conducted during the spring 2014 semester of intermediate Italian that focuses on the impact of “glocal” (i.e., global and local) language practices of multilingual identities (Lam, 2004; 2009). A key finding is that L2 developers feel rather comfortable engaging language and identity as simultaneous *process* and *product*, while reducing neither to fiction. Weaknesses and strengths of a previous pilot study (Renigar, 2013), which incorporated pedagogical uses of social networking sites (SNSs) as part of a larger ecological view of language learning and

consciousness, helped establish the current post-postmodern approach to technology enhanced language development (TELD, Renigar, 2014). The case study broadly adapted a socio-cognitive-ecological approach (Larsen-Freeman, 2012) to shift the focus from differences in technology or method (a simplistic use-or-non-use approach) to the participants' perception of human possibilities through technology, or 'affordances' (Darhower, 2008; Berglund, 2009; Zheng, Young, Wagner, and Brewer, 2009).

The post-performative approach promoted second language development as a journey to be experienced in community; utilized metaphors drawn from quantum physics to complement and enrich static and dynamic uses of language; relied on interdisciplinary approaches to inform research both within and among the disciplines; transcended the current social-cognitive dichotomy and the simplistic cause-and-effects paradigms that tend to ignore the emergence of complex social worlds. Recent studies in quantum physics and consciousness seem to provide a solution to this dilemma since they propose the coexistence of the dynamic and the systematic; the wave and the particle; potentiality and the collapse of the wave function (Hameroff and Penrose, 2013).

Nearly every aspect of the intermediate language course was delivered in such a way as to promote language and identity as simultaneously performative and authentic. Participants were trained to navigate unprecedented (for them) levels of ambiguity and possibilities of meaning related to vocabulary, grammar and culture, with the avoidance of the dichotomy of 'right' and 'wrong' answers. At the same time, participants were faced with the paradoxical requirement by the academic institution to pass certain quizzes and exams, and complete certain homework assignments, on the basis of a 'correct' answer.

Therefore, this study stands as a *post*-postmodern metaphorical application of quantum physics to balance two deeply embedded ideas - on the one hand the assumption that the brain is a machine/computer with linear and chronological ‘processing’ (input, uptake, output); and on the other hand, the assumption that the brain is merely part of an ecological system (ecology, interaction, complexity, dynamic system). The choice of a broader case study was due to its ability to reclaim the issues of agency and self-empowerment that have been largely erased in modernist and postmodernist paradigms of second language acquisition and identity.

Data collection and analysis adapted de Rosnay’s (2011) ‘system analysis’, so that interpretation was within a more contextualized framework of symbionomics, specifically, the emergence of complex systems resulting from self-organization, self-selection and co-evolutionary symbiosis (p. 312). One underlying assumption of this research was that both progress and backsliding are an integral part of an ecological approach to language and identity development. Data analysis considered what we can do to focus research on meaningful areas of the social world by means of adaptive teaching, which – based on the participant feedback – begins with outcomes and then works backward to explore why certain approaches, tools and tasks were, or were not, effective.

I hope that the voices and perspectives of the participants may take precedence in shaping the future direction and focus from CALL to TELD. The insights gleaned from the study demonstrate that higher levels of critical L2 discursive analysis enhanced by human-machine interactions do not require relegation to upper level division SLA courses. The participants’ self-selected samples of their work reveal a story that is complex, dynamic and very human, told through the voices of those most often ignored in the processes of language planning, assessment and curriculum development. May the dialogue continue.

APPENDIX A: Consent Form for Current Study

Project title: L2 Social Networking for the Quantum Mind

Course and Semester of Study: Italian 201, Spring 2014

Course: Subject of Proposed Study: An observational and interaction-based study of Facebook as a dialogic meaning-making tool outside of the traditional teacher/learner paradigm:

You are being asked to participate in a unique study about the potential of using social networking sites as effective, multimodal, multi-literary, multicultural, and genre-diverse extensions of the classroom where language informs culture as much as culture informs language. Technology Enhanced Language Development (TELD) is moving beyond the boundaries of mere computers, in the sense that we usually think of hardware and well beyond the academic expectations of textbook publishers' software. The influence that Facebook (FB) holds in our lives - being no less relevant than iPhones, Facetime, Skype, and the Internet - breaks down the barriers that see TELD as an addendum to education, and place its existence at the very center of meaningful discourse, no different than actual human speech, gesture, or any other form of meaning construction. FB tolerates ambiguity without the 'messiness' that occurs if such freedom of expression were consistently part of the classroom. You have an opportunity to be part of this educational paradigm shift. As a participant, you will enjoy the implementation of task-based instruction that is mediated through the technology of FB in order to negotiate meaning in a way that leads to authentic comprehension. FB lends itself to deep processing by virtue of its inherent unpredictability and diversity, both mimicking the encounters that language learners experience outside of technology enhanced language development (TELD) and within the very same world of technology. The study will detail these points, focusing on dialogism and semiotics, while including any new insights that arise during the observation and analysis process. Central to the study is the adaptation of principles from Quantum Physics, Complexity/Chaos Theory, Dynamic Systems Theory, and Language Ecology.

By signing below, I state that I have understood and agree to be an active participant in this ongoing research based on the following understanding:

1. I agree to allow my interactions on FB to be part of this research to improve the language learning experience of students at the University of Arizona and in other institutions.
2. I agree to allow the screen shots of our class interactions to be part of future publications and professional presentations.
3. I have been informed that participation in the research study is voluntary and a decision to not participate in the research will not affect my grade or standing with the course.
4. I understand that, per the syllabus, the use of FB for class activities is mandatory, and that participation in FB activities is not the same as participation in the research.
5. I understand that for the sake of anonymity, the names of the students will either remain unmentioned in the printed versions of the study, or will be replaced with pseudonyms.

6. I have also been informed that, if I should agree to participate in the research, I may opt to have my image or name blurred on each screenshot.
7. I have been informed that there are no direct benefits to me as a subject beyond the enhanced acquisition of language and culture in an enjoyable environment.
8. I have been informed that, should I choose to participate in the research, I will not disclose that detail to the class. This is to protect privacy while all students of the intermediate Italian course participate freely in all the activities on FB.
9. I have been directed to keep the FB page accessible only to participants during the duration of the spring and fall semesters 2014 that is, to the students, graduate assistants and faculty involved in the course.
10. I have been informed that I will not be required to ‘friend’ any of the participants.
11. I have been informed that our course FB page will be an environment free of any discrimination based on “race, color, religion, sex, national origin, age, disability, veteran status, sexual orientation, or gender identity and is committed to maintaining an environment free from sexual harassment and retaliation”, in accordance with the University of Arizona’s Non-Discrimination and Affirmative Action Statements.
12. I have been informed that there will be no financial cost to me as a subject. If I should not possess some form of media to access FB, I have been advised to use the computers available on campus or at another location more convenient to me.
13. As a subject of the research, I may withdraw at any time and still complete the course without any effect on course grade. I also understand that withdrawing as a subject does not imply withdrawal from class-based activities on FB. If I should withdraw from the research, my materials will no longer be included in the data collection, though I will continue to engage the participants regularly for FB tasks and language learning interactions.
14. I have been informed that the results of the data analyses will be available to me, and other participants, after the researcher has completed the study and submitted the results for publication. However, I have also been informed that there will be a debriefing on the penultimate day of class of each semester to open a dialogue about what we, as participants, found most beneficial and what we would have changed about the online tasks and activities.

Contact information for the researcher:

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Second Language Acquisition and Teaching (SLAT) PhD program
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Tucson, AZ 85721
Email: renigar@email.arizona.edu
<http://slat.arizona.edu/paul-renigar>

Contact information for the IRB:

For questions about your rights as a participant in this study or to discuss other study-related concerns or complaints with someone who is not part of the research team, you may contact the Human Subjects Protection Program at 520-626-6721 or online at <http://ocr.vpr.arizona.edu/irb>.

Participant information:

PRINT FULL NAME:

SIGN FULL NAME:

FB NAME(S) USED JANUARY-DECEMBER 2014:

TODAY'S DATE:

APPENDIX B: Technology and SLA Survey

1. What is the first thing that comes to mind when you hear the following words?

- Technology

- Education

- Language learning

- Fun

- Homework

- Dialogue

- Meaning

- Culture

2. How long have you been using social networking sites? _____

3. Do you use FB? No ___ Yes _____

(If you answered 'Yes' please specify how you use it the most)

(If you answered 'No' please specify why not)

4. What do you like most about the experience of social networking?

5. What do you dislike most about the experience of social networking?

6. What do you like most about higher education?

7. What do you like least about higher education?

8. Are you a 'different person' online? If so, how?

-
-
9. Can you recall an experience in which you learned something typically 'academic' in such a fun way that you were not consciously focused on the learning process itself? If so, could you briefly describe the experience?

PRINT FULL NAME:

SIGN FULL NAME:

FB NAME(S) USED JANUARY-DECEMBER 2014:

TODAY'S DATE:

APPENDIX C: Language and Identity Survey

10. What is the first thing that comes to mind when you hear the following words?

- Catholic

- Muslim

- Story

- Fable

- Logic

- Moral

- Culture

- Perspective

11. Look at the photo given in class. How does this relate to religion?

12. Look at this photo. This family is from a. Italy ___ b. Turkey___ c. Iran ____

Justify your answer

13. Look at this sentence? What language is it? What does it mean? Justify your answer.

14. Do you feel comfortable with uncertainty? Why? Why not?

15. Do you prefer a 'yes' or 'no' answer to your questions? Why?

16. What do you consider to be three essential traits that define a belief?

17. What is the difference between a language and a dialect?

18. Is African American Vernacular English 'real' English?

19. How does culture shape language? Give one example.

PRINT FULL NAME:

SIGN FULL NAME:

FB NAME(S) USED JANUARY-DECEMBER 2014:

TODAY'S DATE:

APPENDIX D: End of Semester Questionnaire

Highlight or underline the most accurate response:

1. Ciao! My name is _____. On FB I go by _____.
2. Beforehand I was - resistant - skeptical - neutral - hopeful - excited - that FB would provide a useful learning tool.
3. I would welcome further use of FB in my learning experience
Not at all Somewhat Maybe Yes Very much
4. I would rate the usefulness of FB as a pedagogical tool as
Useless Rarely helpful Helpful Very Helpful Excellent
5. I would rate the usefulness of FB in respect to collaborative *peer to peer* enhancement as
Useless Rarely helpful Helpful Very Helpful Excellent
6. I would rate the usefulness of FB in respect to collaborative *teacher to student* enhancement as
Useless Rarely helpful Helpful Very Helpful Excellent
7. FB hindered my ability to feel more comfortable to experiment with language
Not at all Somewhat Maybe Yes Very much
8. FB allowed me to learn by reducing my fear of failure or making mistakes
Not at all Somewhat Maybe Yes Very much
9. FB enhanced a sense of classroom community
Not at all Somewhat Maybe Yes Very much
10. FB increased my learning discomfort
Not at all Somewhat Maybe Yes Very much
11. The use of FB while in class made the learning process (**Highlight** or underline all that apply)
Tedious Repetitive Engaging Informative Other _____
12. The use of FB while in class was
Boring Rarely fun Somewhat fun Fun Very fun
13. FB raised my critical awareness of second-language learning and use
Not at all Somewhat Maybe Yes Very much
14. FB enhanced my overall awareness of foreign and domestic issues
Not at all Somewhat Maybe Yes Very much

15. The use of FB failed to integrate with our existing coursework
 Not at all Somewhat Maybe Yes Very much
16. FB facilitated learning by allowing me to engage according to my natural attention span
 Not at all Somewhat Maybe Yes Very much
17. The integration of FB was disrespectful of my unique learning style
 Not at all Somewhat Maybe Yes Very much
18. FB created a sense that learning is a more human experience
 Not at all Somewhat Maybe Yes Very much
19. FB failed to connect language and culture
 Not at all Somewhat Maybe Yes Very much

20. What is the most difficult aspect of using social networking as an extension of the language classroom?

21. I enjoyed having classroom activities that were just one click away from my profile page
 Not at all Somewhat Maybe Yes Very much

22. FB allowed me to centralize the following (**Highlight** or underline all that apply):

- a. Videos
- b. Articles
- c. Links
- d. Pictures
- e. PowerPoints
- f. Word documents
- g. PDF documents
- h. Exam reviews
- i. Skype
- j. Blogs
- k. music
- l. Other (please list)

23. FB helped me in the *academic* development of (be specific)

-
-
24. Sometimes I found myself using more foreign language than actually required
Not at all Somewhat Maybe Yes Very much
25. FB helped me see Italy in more diverse terms
Not at all Somewhat Maybe Yes Very much
26. Sometimes I found myself using less foreign language than actually required
Not at all Somewhat Maybe Yes Very much
27. Mimicking the way Italians write in different genres and registers improved my *writing*
Not at all Somewhat Maybe Yes Very much
28. Mimicking the way Italians write in different genres and registers improved my *speaking*
Not at all Somewhat Maybe Yes Very much
29. FB failed as a tool for really using the language
Not at all Somewhat Maybe Yes Very much
30. Coffee is a liquid
True _____ False _____
31. FB affected (positively or negatively) my communication skills in *Italian* by (be specific)

32. FB affected (positively or negatively) my communication skills in *English* by (be specific)

33. Some specific examples of vocabulary and grammar structures that I learned to master through my interactions on FB with classmates and the instructor are:

34. On a scale of 1 to 5, with one being introvert and 5 being extrovert, I consider myself
1 – 2 – 3 – 4 – 5

APPENDIX E: Final Interview Questions

1. Did you sense aspects of this set up of the course from the beginning? If so, how did it differ from what you have come to expect in a course?
2. How have your views on language changed? Do you see it as interconnected to even non-linguistic aspects of reality? Can you give examples from the course? In Ecolinguistics, language is used to fight for the ecological health of the planet? Can you think of a portion of the course in which we used Italian to expose ecological problems and seek solutions? Give examples!
3. Did we connect language and gender/sexuality in this course? Can you think of examples of how gender and identity may be socially constructed? Can you think of examples of how there may also be something very static about language and identity? Try to use examples from the course to discuss what you learned about language and identity as product and process.
4. Consider the following quote and try to find connections to the course, to something you learned about language and identity and to potential changes in your own perspective on these issues:
“There are two abysses, one on either side of the edge of chaos. On one side is total disorder, an anarchic turbulence that does not generate organization. On the other side is structured, inflexible, static rigidity. Between the two, as in a phase of transition, on the boundary between perfect order and total anarchy, there is fluidity, adaptability, self-organization of forms, structures, and functions that are born and die in perpetual self-regulated renewal – the emergence of organization and complexity. It is in this narrow margin, at this precise boundary, in this state of unstable yet stabilized transition, temporary and yet permanent, that the mechanisms that build life, society, and the ecosystem are found. How can we understand and channel them? How can we use them to build symbioses that are beneficial at all levels of partnership between nature and human beings and their machines?” (de Rosnay, 2011, pp. 311-312).
5. What do you think about the above controversy related to the incorporation of social media and emergent technologies in language education? Try to prove your points by citing real examples from the course. This may take some time and deep thought, so take your time!
6. This is where it gets tougher, doesn't it? However, think about your interactions throughout the course, how you changed toward others in the course. Maybe it was physical, as in, you changed where you sat every day. Or maybe it was online. Perhaps you altered with whom you preferred to do projects. Consider the ways in which interacting with others brought about changes in the way you are and in the work you produce. Did something 'new', distinct from you and 'them' emerge because of these interactions? There are no right answers. Go with what you feel or believe to be accurate.
7. Is there anything that you would like to add about yourself now that the course is over? Does knowing each other better make you feel more comfortable in what you share?

8. Based on what you now know about the dynamic nature of language, culture, identity, etc., let's return to the original two questions that were asked on the first day of class and, by considering larger sociopolitical discourses, answer these questions with a broader and more critical understanding. The questions are: "What is corrected coffee?" and "What is stained coffee?" The richness of all that has come before to lead up to this point should encourage a dialogue that bypasses the textbook's simple definition of these terms to include larger socio-cultural discourses related to metaphor, metonymy, new contexts, politics, and marketing. Qualitative analysis will be selected based on what the participants claim to be most important about this process.
9. How did these Wiki-Like Tasks affect you? Did collaborative work feel more 'natural' to you or did you prefer 'solo' work? Either way, why? Try to think back on the specific tasks that I described above and these particular moments in the course and tell me about you in relation to others and in relation to language and identity. Remember that there are no correct answers but only your perception of the experience.
10. Is there anything that you would like to add to this topic?

APPENDIX F: Qualitative Sampling of Pilot Study Questionnaire

Question #20

Example #1

20. What are the nicest things about using social networking as an extension of the language classroom?
It was another medium for learning, it was refreshing to get away from textbooks and lectures. It allowed me to see how other students interpreted material as well helpful ways in which they mastered materials.]

Example #2

Facebook is something that I use everyday. Using it in a classroom setting gave a more relaxed atmosphere and rather than stressing over getting everything right, I feel like it gave me an opportunity to expand my knowledge of Italian without feeling like a mistake could be detrimental to my final grade.

Example #3

Using Facebook has helped me to practice my Italian with other classmates. Even if we don't directly chat on Facebook, being able to identify grammatical mistakes from others make me realize that I am learning something. It feels more natural when you chat or talk to someone instead of reading tons of rules and specific examples from the text.

Example #4

Facebook is something that I use everyday. Using it in a classroom setting gave a more relaxed atmosphere and rather than stressing over getting everything right, I feel like it gave me an opportunity to expand my knowledge of Italian without feeling like a mistake could be detrimental to my final grade.

Example #5

It was a welcome change of pace. I would say that the best aspect was that I could converse and interact with my peers in Italian (the language we are learning). Also, some of the activities would involve critical thinking and it forced one to transition into using more advanced Italian, rather than simple declarative statements.

Example #6

it allows us to post additional information that is relevant to the topic(s) that we are studying at the time, allows us to ask questions that we have after class, have fun and learn from our mistakes

Example #7

Using a social network such as Facebook in the learning process was, at first, annoying but as the semester wore on, I found that as a classroom we were a sort of team and we all felt a need to help each other and support each other, even if it was in a Facebook "war" with the other classes. On the surface we are students, messing around and having fun and not really aware that we are learning and honing our Italian skills at the same time.

Example #8

I think that Social Networking is very useful in the learning experience of a language because it allows students to interact in said language on a more personal yet casual atmosphere. Many times students are nervous and struggle in interacting with the language within the classroom because they want time to articulate their thoughts. Using social media allows students to fully interact while having the time to think through responses, comments, and posts. It also allows the professor to assist students and correct them without physically hovering or having an obvious presence that would most likely make students nervous in a physical situation.

Example #9

I enjoyed being able to talk to students at anytime of the day/week, and the fact that it wasn't just one peer, but many peers from other classes. It was cool on Facebook to see the Italian apps, and integrating articles and current events into learning about the Italian world and its language.

Example #10

I think that social networking gives us a more age-relatable approach to second language. On Facebook, we can search Italian websites online and provide examples of the work that we understand or relate to in each chapter. For example, earlier this semester my 202 class was learning about social problems in Italy and we were told to post an article or paste a link to a website pertaining to that subject which gave us a more updated and recent view of what is really going on in Italy. This also showed me what each student in my class was interested in which in turn interested me. I think this method is more effective versus reading a possibly outdated textbook written by professors not columnists or journalists.

Example #11

In my opinion it helped me feel more comfortable using social networking as an extension of class. I was able to bring up subjects I've struggled with on Facebook and received very helpful feedback from my classmates. I feel that it allows for more participation other than participation in the classroom. Some students are shy when it comes to speaking in class, especially in a new language, but Facebook makes it easier and more comfortable for them to try

Question #23

Example #1

23. Facebook helped me in the *academic* development of (be specific)

Instead of focusing on strict grammar structures learned in a strict classroom setting I was able to write more freely. As a result, I was able to write in Italian in ways I was previously nervous to do in class because I did not want to be wrong or not make sense. I like that I am able to be more risky on Facebook with what I say and if I do say something that does not make sense in Italian I can be corrected by the professor and learn more. One problem I have had in the past (learning French) was that I would sound like a book when speaking to native speakers. My goal is to sound more natural when speaking a foreign language and to me that means not necessarily learning and following all the standard rules.

Example #2

Socializing-I never before had to develop my socializing skills in the academic respect. That is, this class involved much more group work, conversing, interaction, and all around collaboration than any other class I have taken thus far. Facebook, was used to only further these aspects of the class.

Example #3

I am not entirely sure if I noticed any academic developments that occurred for me from using Facebook. I think it was useful to see what I was capable of writing in another language after I had posted and responded to an article; however I am not sure if the medium of Facebook was unique in this way.

Example #4

It allowed for faster communication without having to break our train of thought whenever we discussed anything because of the limitations of only learning vocabulary from the book and being able to use outside sources to incorporate and practice new grammar rules and understand how that functions in a live conversation without the pauses that tend to occur in class.

Example #5

I believe that Facebook helped me develop real language skills. I learned how to have a conversation in Italian rather than rigidly answering questions in the formal sense. On a non-classroom related note, I think that Facebook helped me develop real relationships with my classmates. I think that typically, once students are no longer living in dorms, they stop making friends and connections with the other students in their classes. I am a senior and I have witnessed classrooms full of students not talking to each other all semester. I think that using Facebook might seem odd at first but in the long run, and under the silliness of it, students really are benefitting from it.

Example #6

It helped me to feel like I could speak more fluidly than I would have during most classroom activities. The Facebook activities allowed me to see how much I actually knew.

Example #7

It really helped engaging and interacting in class. Facebook encouraged me to get more involved in class and at home, which is a greater start to becoming more academically active, so that it can become a second nature rather than a burden.

Example #8

Facebook helped me in learning conversational Italian. I learned how to discuss current issues in Italian and state my opinion while responding to others in an actual conversation without structural constraints.

Example #9

Facebook allowed me to communicate with my peers and get almost immediate responses when I was having trouble understanding an assignment or concept

Example #10

I think that using Facebook really helped me in time management which is usually counter-productive but by using an Italian group on Facebook I am more prone to check and see the class schedule information, exam information, homework, class work or just friendly classmates banter in Italian. I think that having an Italian 202 group on my Facebook home page helps me to remember to do my work for Italian class which is especially helpful considering the amount of work I do for my other classes.

Question #31**Example #1**

31. Facebook affected my communication skills in *Italian* by (be specific)

I do feel that Facebook greatly improved my writing skills in Italian because I was able to experiment with different grammar structures that I had not necessarily used before. Being able to use these unfamiliar sentence formations and receive prompt feedback helped me create more complex constructions over the semester, which I was then able to utilize in writing assignments that would impact my grade.

Example #2

Facebook affected my communication skills in Italian by giving me the opportunity to slow down and formulate my answers before responding to a previous comment. In class, it often takes me a bit to process the question in Italian before I can think of a thoughtful answer and then translate that into Italian before responding. Communicating on Facebook allowed me time for this process. However, it was often the case that other students did not participate on Facebook until the very last minute, making the practice of discussion via social media difficult to have completed before class.

Example #3

By writing more in Italian, improving my comprehension of the Italian language and not being concern if I make a mistake because that is the part of learning from them.

Example #4

Making me put my actual knowledge to the test to complete phrases in response to peer-made questions, rather than just responding to the textbook.

Example #5

Being more active and more aware of my own sentence structure and progress. I realized I wasn't just "jotting down" a sentence I was broadcasting a sentence for all to see! Facebook made me really think about what and how I was saying something in Italian.

Example #6

Providing more opportunity to participate and communicate with my fellow classmates and the teacher. Using Facebook pushed me to speak Italian. I found myself amused by how easy it's becoming to communicate with others in Italian and I believe Facebook has had a big part in it.

Example #7

Facebook affected the speed in which I understood and communicated in Italian. On Facebook when someone is talking to you or asking a question I feel that I need to read what is being said and think of an answer quickly. I also feel that the ability to SEE visually what is being said helps me understand the grammar usage much more than simply speaking in class. I often feel overwhelmed when speaking in class and cannot speak the correct grammar as easily as I can read or write it.

Question #35

Example #1

35. Related to question #34 (introvert & extrovert) I found Facebook to be (be specific)

I found Facebook to be a place where I could interact with my classmates and the professor openly and without fear. I usually do not like to talk in classes because I am very self-conscious, but I knew that when I posted on Facebook I would not be judged by the classroom, because we were all learning. There is no doubt that I found it easier to interact with others on Facebook rather than in the actual classroom.

Example #2

The more comfortable I am the more extroverted I am. In a classroom setting I am more of an observer whereas on Facebook I felt like I could be more liberal in my speech. In addition, I was able to discuss more complex topics because I was able to look up vocabulary that I was not previously exposed to in class. Not only was I able to learn more advanced grammatical structures but I also expanded my Italian vocabulary because I was encouraged to look up new words to use when discussing more intricate topics with my classmates.

Example #3

... a means to help me socialize and communicate with my fellow classmates. Facebook proved to be an efficient tool and opportunity for further learning and interactions outside of the classroom. I realized that were it not for Facebook, I would have been a bit more hesitant to interact with my peers.

Question #36

Example #1

36. What did you accomplish beyond the task? Can you think of an example or two where you participated more on Facebook in Italian than was required. How did it feel to be spontaneous in the foreign language? Did you find yourself more creative when off task? Please explain.

I participated beyond the task when I told one of my classmates what we were supposed to do for homework. I explained with detail what the professor asked for in Italian. I did feel more creative when off task because it was like doing a favor and not following certain guidelines or grammatical structure.

Example #2

In the photos above I was able to discuss a controversial topic that got people fired up and talking. It was such a hot topic that there was little time to worry about grammar or vocabulary and so I just went with it. I was able to “feel” the language and just go with what sounded right to me. In the pictures below I was able to interact with another student in a similar way I would if we were speaking English. It made me feel more confident in my Italian and therefore I continued the conversation even though we got off the topic we were assigned.

Example #3

I recall one assignment where we had to look up an Italian album cover and critically analyze it. The minimum words we could use was 80 and I went quite over this lower limit. It felt very good to exceed the bare minimum and I found myself conversing with some classmates on the cover that I found. In this sense, I found myself more creative when off task, because after completing the assignment I went ahead and considered how my peers analyzed the same cover.

I recall another assignment where we had to create a mini-dialogue or debate on a topic of our choosing. I especially enjoyed this assignment because I was able to write about something relevant/interesting to me.

Example #4

The way that we interact with one another is so much more beneficial than just doing exercises online and sometimes we can have a little fun with our learning as well.

Example #5

I think that I have been able to freely interact, post comments, and sometimes when we do become off task, we are able to use the language more naturally. Whenever my classmate Leah and I worked together, we usually ended up spending some time laughing because we would be silly when completing the task and think of funny ways of saying things in Italian. We would also laugh through silly mistakes we would make, and this made the language enjoyable and fun.

Example #6

It was fun and easy to Like peoples' comments to easily acknowledge and agree with a student.

Facebook made it One Thousand times easier to share or talk about a video/ article in class some one posts it on the wall and you are one click away from a discussion. Instead of getting off tasks and going onto Facebook, I found myself "What seemed to be getting off task" and surfing Italian websites, Pintrest or Twitter for cultural trends and political events occurring.

Example #7

There were times where there were questions among the class regarding how a certain tense was constructed as well as various different questions I may have had regarding different concepts we were discussing and learning during class, it was very helpful to be able to get a basically instant answer from either Paolo or classmates.

Example #8

There were moments when I found myself looking up Italian musicians and usually posted what I found on Facebook to expose my classmates to Italian music. It felt good and satisfactory being spontaneous in the foreign language. It reflects how much I'm learning and how eager I am to continue learning

Question #37

Example #1

37. What has this semester's interactions on Facebook taught you most about yourself?

That I can speak in Italian without worrying too much about correctness, because I would work in an environment where it was encouraged to learn together and correct each other. I thought that was pretty neat, and I haven't encountered another language class where there was something like this.

Example #2

I have learned that I am able to interact and utilize the Italian language more than I knew I could.

Example #3

This Facebook experience reassures that I am not the only student that has questions and concerns about what is going on in class. I didn't realize how much I missed social interactions in class and how much I actually learn and retain when doing so. In college the classes are so huge and it's impossible for students to be heard, but with Facebook every student has a voice.

Example #4

I found myself interacting more than I usually do. In other classes I usually feel just like an "occupied seat" to some professors because I hardly participate. I'm usually there to learn then leave. I'm never the one to raise up my hand and ask questions. In this class I found myself participating more than usual, and I believe it's due to the help of the interactions we've had on Facebook. What this has taught me is that it's better to be acknowledged than being just another "occupied seat".

Question #38

Example #1

38. Do you remember an 'aha' moment where something about the culture, grammar or vocabulary really clicked because of your interaction on Facebook?
 Not really no. I've had too many concussions to have a solid memory.

Example #2

At times my peers and I would be doing an assignment and being serious, but then one of us would make a joke or be sarcastic in Italian. It taught us a whole new level of communication that wasn't being taught in the textbook.

Example #3

My biggest "Aha" moment came when I was able to read what was being typed in a one on one conversation with my classmate. I was able to read and reply just as fast as I would normally in English which surprised me even while using more advanced vocabulary.

Question #39

Example #1

39. What did you learn about politics, foreign and domestic, that you did not know before interacting on Facebook with classmates in Italian?
 Previous to my interactions on Facebook, I knew absolutely nothing about foreign or domestic politics, because I simply never had an interest in politics. However, each time we were assigned an essay on something related to the chapter, at least one of the students wrote about politics (often in Italy, but they incorporated information on American politics as well). After reading the essays, I would be inspired to check Italian news sites for more information on these topics. One specific topic was the drug Krokodil, which the Russian government did not seem to care about until it had spread there. This showed me that politics is a dirty business; politicians do not often care about those struggling beneath them, unless it is personally affecting themselves negatively. Having read enough American news on the subject, I began to see that politics appear to be the same no matter what country you are in.

Example #2

As a student there is never any time for us to watch TV, with that we never watch the news! Integrating our studies with the current events was a real eye opening experience, not just learning new “indirect and direct objects” but also learning about our world as it is operating and its struggles.

Example #3

Facebook ativities challenged me to stay updated with current events. Because we had to constantly find articles relevant to or class discussions, I was updated on world events, current controversial topics, etc. Before this class I was never pushed to stay updated on current events.

Example #4

I learned that racism is a huge issue in Italy. I didn't realize that this could still be a huge issue in other first world countries. We talked a lot about Italian news, and it's very similar to American news.

Example #5

I learned more about domestic politics when we studied social problems. I learned about immigration problems on the border of the United States and Mexico that I never would have learned if I never interacted with my classmates about social problems in Italian.

APPENDIX G: Author's Notes

Regarding Language Ecology/Ecolinguistics:

The study of language ecology has, by inherent topic, taken on a wide range of issues that interconnect. A brief sampling of titles included under studies of language and ecology should suffice to demonstrate the broadness of the field. For example, forms of languages connect to each other and the environment to include talk of Agency and control (Gerbig, 1993), Animal erasure (Stibbe, 2012), Animals and humans (Stibbe, 2005a; Mitchell, 2006), Biodiversity (Stibbe and Zunino, 2009; Bastardas-Boada, 2003; 2002a, b; Harmond, 1996), CDA and vegetarianism (Marko, 2000), Climate change (Nerlich, et al., 2010; Nerlich and Koteyko, 2009a, b), Communication challenges (Penman, 2001), Deep ecology (Suchostawska, 2012; Stibbe, 2006), Discourse and the environment (Alexander, 2009; Fill and Mühlhäusler, 2001; Fill, et al., 2002; Smith, 1999), Discursive competitors (Coupland and Coupland, 1997), Disease (Doering and Nerlich, 2009; Nerlich, 2009), Ecocomposition and ecopoetics (Killingsworth, 2005), Ecocriticism (Garrard, 2004), Ecofeminism (Kheel, 1995), Ecolinguistics (Ramos and Ramos, 2011; Mühlhäusler, 2003; 1993; Myerson and Rydin, 1996), Economy (Stibbe, 2005b), Ecotourism (Stamou and Paraskevopoulos, 2004; Mühlhäusler, 2000), Environmental Discourse (Mühlhäusler and Peace, 2006), Environmental pedagogy (Owens, 2001; Stibbe, 2005c; Haig, 2001), Environmental policy (Sharp and Richardson, 2001), Environmentalism (Harris, 2001), Ethics and morality (Koteyko, et al. 2010), Global models of language ecology (Bastardas-Boada, 2010), Grammaticalization of ecology (Martin, 1986), Green grammar (Schleppergrell, 2001), Green mythology (Nerlich and Koteyko, 2010), Ideology (Heuberger, 2007), Industry (Gössling and Peeters, 2007), Invasion biology (Larson, 2005), Language and society (Bang and Døør, 2007), Language diversity (Bastardas-Boada, 2009; 2003), Language extinction (Nettle

and Romaine, 2000), Language policy (Pennycook, 2004a; Bastardas-Boada, 2002), Latin American ecolinguistics (Zunino, 2010; 2008), Linguistic sustainability (Bastardas-Boada, 2005), Metaphors (Pickett and Cadenasso, 2002; Larson, 2011; Alexander, 2003; Väliverronen and Hellsten, 2002; Carolan, 2006; Koteyko, et al. 2008; Meisner, 1995), Modern politics of environmental discourse (Hajer, 1995; Harré, et al., 1999), Narrative nature (Sumares and Fidélis, 2011), Native Americans (Carbaugh and Rudnick, 2006), Natural Discourse (Dobrin and Weisser, 2002), News and the environment (Boykoff, 2007; Goatly, 2002), Oil companies and rhetoric (Livesey, 2002), Oil Company commercials (Porter, 1992), Paradigm shifts (Makkai, 1993), Perfume (Gargan, 2007), Philosophy (Chalwa, 1991), Politics (Carvalho, 2005), Postcolonial culture and ethics (Pennycook, 1999), Public trust (Smart, 2012), Relative pronouns with nonhumans (Gilquin and Jacobs, 2006), Rhetoric (Herndl and Brown, 1996), Rhetoric and technology (Coppola and Karis, 2000), Science as Rhetoric (Ramos and Carvalho, 2008), Semiotics (Halliday, 2001), Sexuality and consumerism (Slater, 2007), Signs and nature (Döring, et al., 2008), Spatial relations (Carbaugh and Cerulli, 2012; Milstein, et al., 2011; Couto, 2007), and Web-Based Organizational Discourses (Smart, 2011).

Regarding Performativity:

As related to language and identity, the performative is also considered through the lens of Ethnomethodology (Garfinkel, 1984); Symbolic Interactionism (Goffman, 1990); Actor Network Theory (Law and Urry, 2003; Law, 2007); Social Science (Callon, 2006; MacKenzie et al. (2007); and Literary Theory (Miller, 2001; Parker and Sedgwick, 1995; Sedgwick, 2003), these last two (Social Science and Literary Theory) both having many subcategories that deserve further discussion in a published book form of this dissertation.

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