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**THE ROLE OF L1 INFLUENCE IN THE ACQUISITION OF
NEGATIVE CONCORD IN ADULT SECOND LANGUAGE
LEARNING**

Committee:

Orlando R. Kelm, Supervisor

Dale A. Koike

Frederick G. Hensey

Nicolas Shumway

Diane Schallert

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LEARNING**

by

Sandra Cidrao Alexandrino, B.A.; M.A.; M.A.

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Dedication

I dedicate this dissertation work to people like Maria Auxiliadora dos Santos, whose life, unfortunately, was entirely imprisoned by illiteracy, and whose world was always shadowed by the fear of never having learned how to read or write. A very special feeling of infinite gratitude to my parents, Célio e Abigail Alexandrino, for having always emphasized the importance of education. My sisters Jackie and Susie for their words of encouragement, and for believing I could do this. My loving children Ana Karine, Renata and Gabriella for having shaped me to be the person I am today. Their love has always been the source of all my strength. My grandchildren Lukas and Matheus, for being the sunshine of our lives. And, finally, to my husband, David Mitchell, for all his abiding support, unlimited patience and constant love.

This work belongs to them as much as it belongs to me.

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Sandra Cidrao Alexandrino, Ph.D.

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Supervisor: Orlando R. Kelm

The present study examines the L1 influence on the adult acquisition of the negative concord parameter (two negative elements that agree to form a sentential negation without canceling each other) between the following groups of learners: (1) two groups of second language learners whose first and target languages are typologically similar (Lusophone and Hispanophone learners of Spanish and Portuguese respectively), and (2) two groups of learners whose first and target languages are typologically different (Anglophone learners of Spanish and Portuguese). The study compares the scores of the groups, and focuses on two goals: (1) to investigate the influence of L1 transfer on the acquisition of the negative concord parameter in adult L2 learners when the first and target languages are typologically similar and different, and (2) to attempt to find a correlation between L2 learners' level of awareness on the similarities and differences of

the negative concord parameter between languages, and its effect on their overall performance of the task. A total of 135 participants responded to a grammaticality judgment task, and independent sample *t* tests were used to determine whether there were differences between the groups. The results indicate that adult L2 learners of languages that are typologically similar to their native languages perform better than those adult L2 learners whose languages are typologically different than their native languages. The results imply that L1 transfer facilitates the acquisition of the negative concord parameter for adult second language learners when languages are typologically similar, which is relevant to current research on the developmental stages of L2 acquisition. As far as their level of awareness during the task, the results could not indicate whether or not there was any correlation between learners' awareness of the grammatical typological similarities and differences of the languages involved and their overall performance on the task. It was also observed that learners responded in unpredictable ways to the specific question of their state of awareness during the task, which left the study inconclusive with regards to the level of these L2 learners' consciousness.

Table of Contents

Chapter 1 The Role of L1 Influence in L2 Acquisition	1
1.0 Introduction	1
1.1 The Negative Concord Parameter	12
1.2 The Case of Emphatic Negation	15
1.3 Research Focus and Research Questions	17
1.4 Overview of Subsequent Chapters	21
Chapter 2 Literature Review	23
2.0 Introduction: The Definition of Transfer	23
2.1 The History of Transfer	26
2.2 The Role of Transfer in IL	31
2.3 Studies on the Influence of L1	33
2.4 SLA and Trilingual Students	35
2.5 Universal Grammar and Transfer	38
2.6 Individual Variables.....	45
2.6.1 Age.....	47
2.6.2 Aptitude.....	48
2.6.3 Motivation.....	49
2.7 Transfer and the Role of Consciousness.....	51
2.8 The Noticing Hypothesis	57
Chapter 3 Methodology	61
3.0 Introduction: Research Methods	61
3.1 The Participants	63
3.2 Data Collection	66
3.2.1 Grammaticality Judgment Task	66
3.2.2 Procedures.....	70
3.3 Data Manipulation and Analysis.....	74

3.3.1 Data Analysis	75
Chapter 4 Results	77
4.0 Introduction.....	77
4.1 Sample Demographics	77
4.2 Descriptive Statistics.....	80
4.3 Research Questions.....	83
Chapter 5 Conclusion and Implications.....	92
5.0 Introduction.....	92
5.1 Answers to Research Questions.....	93
5.2 The Negative Concord Parameter and Language Acquisition.....	101
5.3 Pedagogical Recommendations	102
5.4 Limitations of the Study.....	104
5.5 Implications for Future Research.....	107
5.6 Final Remarks	109
Appendices.....	112
Glossary	130
References.....	131
Vita	141

List of Tables

Table 1:	Samples Demographic Characteristics	78
Table 2:	Descriptive Statistics for Total Score and Emphatic Negation Score on the GJT Across Lear Type	80
Table 3:	Learners' Responses Regarding Whether or Not They Used Their Target Language Only	82
Table 4:	Independent Samples <i>t</i> Test Results for Total GJT Score as a Function of Learner Type: Anglophone vs. Lusophone Learners of Spanish	84
Table 5:	Independent Samples <i>t</i> Test Results for Total GJT Score as a Function of Learner Type: Anglophone vs. Hispanophone Learners of Spanish.....	85
Table 6:	Independent Samples <i>t</i> Test Results for Total Emphatic Negation Score as a Function of Learner Type: Anglophone vs. Hispanophone Learners of Spanish.....	86
Table 7:	Independent Samples <i>t</i> Test Results for Anglophone Learners' Total GJT Scores as a Function of Whether ot Not They Used Only The Target Language Knowledge on the GJT	87
Table 8:	Independent Samples <i>t</i> Test Results for Lusophone and Hispanophone Learners of Spanish and Portuguese Total GJT Scores as a Function of Whether ot Not They Used Only The Target Language Knowledge on the GJT.....	88

Table 9:	Independent Samples <i>t</i> Test Results for Anglophone Learners' Emphatic Negation Items Scores as a Function of Whether or Not They Used Only The Target Language Knowledge on the GJT.....	90
Table 10:	Independent Samples <i>t</i> Test Results for Hispanophone Learners of Portuguese Emphatic Negation Items Scores as a Function of Whether or Not They Used Only The Target Language Knowledge on the GJT.....	91

Chapter 1: The Role of L1 Influence in L2 Acquisition

1.0 Introduction

It is common for foreign language teachers to hear beginning students produce awkward utterances in the target language that were never part of the classroom input. These awkward utterances may vary substantially in syntactic and semantic structures but they often share some similarities with the L1 grammars of the L2 learners. It is not by accident that an English native speaker learning Spanish, for instance, will spontaneously produce an utterance like (1a) or (1b)¹:

(1) a. * no bueno.

‘Not good.’

b. * yo me gusta el español.

‘I like Spanish.’

It is apparent that this is not a normal Spanish sentence. It is also unlikely that L2 learners are reproducing a structure that they heard in Spanish, since Spanish native speakers do not produce such sentences. More likely, such anomalous string of Spanish words reflects their mental representation (or grammar) of the Spanish language, and are most likely a case of direct translation from his already existing grammar of English, i.e., a so-called case of L1 transfer.

Language transfer, also known as cross-linguistic influence (CLI), L1 interference, linguistic interference, and cross meaning, has long been discussed in the

¹ These specific examples were extracted from my Spanish class in the Fall course of 2004 at the University of Texas in Austin.

context of second and foreign language acquisition learning, and more recently, extended to the studies of third language acquisition and children bilingualism. The SLA debate over the role of transfer and the manner in which it affects the L2 learner's interlanguage (IL) usage of form and function of the new language is the central point of the discussion. For some researchers transfer plays a major role throughout the continuous acquisition process while for others transfer influences only the first stages of the acquisition, or at least its influence appears to be more visible in these stages. The two most opposite extremes on this matter range from Lado (1957) who claimed that learners rely entirely on their native language to views such as the one shared by Dulay and Burt (1974), in which transfer has no influence at all in the interlanguage process, at least not for child second-language learners. Attempts at defining the nature of language transfer have only shown how difficult it is to pinpoint the exact relationship between the target and the native language during the acquisition process. One of the causes of such difficulty is attributed to the inability to distinguish all of the factors that interact with transfer and the various ways in which these factors unfolds along with the L1 transfer, which is consequently reflected on the different perspectives commonly given to designate transfer, such as: transfer as a process, transfer as a constraint, transfer as a strategy, transfer as a facilitator, etc.

Most of the first studies done on transfer focused in the syntactic structures seen in the interlanguage of L2 learners, and were initially considered to be the main source of the transfer phenomenon. This initial focus on grammatical aspects did not help much to shed light on defining the process itself. Other factors that interact with transfer were

also either ignored initially or studied separately. For instance, the relationship between aptitude and L2 acquisition success has been largely ignored on studies that measure the success in language learning, when, in practice, aptitude can be an important differentiator factor that combined with the ability to transfer knowledge can give the student an advantageous position in the language development process. Moreover, contradiction in L2 research findings suggests that the difficulty in defining transfer may have its roots on either the inconsistencies of the empirical methodology used or in the lack of a language theory that includes both the inside and outside variables to be controlled in any language processing.

It seems reasonable that transfer studies should include knowledge previously acquired and also the processes on how this knowledge is applied from one situation into new ones (or how it fails to apply). As far as L2 learning, there has been evidence enough that transfer does exist, and that adults have cognitive abilities that a child does not have; facts that one cannot simply ignore.

Ausubel (1968) wrote in epigraph of his book the following comment on how teachers should take into account the student's previous learning experience:

“If I had to reduce all of educational psychology to just one principle, I would say this: The most important single factor influencing learning is what learner already knows. Ascertain this and teach him accordingly.”

Neuner (1992:158) makes the same point:

“It is a general and basic law of any kind of learning that we associate new elements, items and structures with elements, items and structures already stored in our memory.”

Language learning is a cumulative process, and transfer is a central phenomenon to it. Transfer will activate the knowledge and skills one has acquired previously, and make use of it. An adult rarely, if ever, learns anything completely new without associating it to his/her past experiences and making that point in time a point of departure for the next learning experience. Thus, in an L2 context, transfer of L1 to L2 will naturally be part of learning, and the study of transfer should co-exist with the investigation of a learning theory. The results obtained so far, however, have not achieved enough success to put to rest the discussion of transfer. As pointed out by Han and Selinker (1999), and quoted in Alonso (2002:88), maybe what needs to be further investigated in the research of transfer is whether transfer that resembles target-like structures originates from the same mechanisms as the non-target-like ones. While many studies have attempted to investigate transfer and to develop a language theory that explains the processes by which new knowledge is integrated with existing knowledge (Ausubel, 1968), it is beyond the scope of this study to do so. Therefore, the main focus of the present study was to investigate how transfer facilitates the acquisition of a parameter when the languages involved shared typological similarities.

The study also focused on adult acquisition only, and because adults have already developed cognitive skills, it made sense to think that part of the transfer process occurs

when L2 learners consciously identify the similarities between languages in the input provided, especially through the most salient cues. Realizing the similarities allows them to apply their own L1 concepts related to that particular instance in a comparative manner towards the L2. This idea of transfer follows somewhat Andersen's (1983:178) theory "transfer to somewhere" with the exception that Andersen limits the process of transfer to grammatical aspect of the language as he states:

"A grammatical form or structure will occur consistently and to a significant extent in interlanguage as a result of transfer if and only if there already exists within the L2 input the potential for (mis-)generalization from the input to produce the same form or structure."

Ringbom (2007:1) states the same idea in his introduction when the languages in question are similar:

"Learning, including language learning, is based on prior knowledge....How relevant prior cross-linguistic knowledge is primarily depends on the relationships that can be established between the TL and L1. If you learn a language closely related to your L1, prior knowledge will be consistently useful, but if the languages are distant, not much prior knowledge is relevant."

Even though the similarities between languages may speed up the transfer process and, consequently, the acquisition, one should not forget that the L2 learner's native language and the target language are also connected by conceptual representations that adults rely on to map their semantic and pragmatic concepts. Anderson's theory, limited to grammatical forms of the language, does not cover such important aspect in the

learning process, in which adults rely so frequently during the acquisition and that one might take for granted as the significant role of conceptual transfer. The work of Kellerman's (1995) "Transfer to nowhere" makes sure to include such aspect, stating that the L1 way of thinking can predispose the learner to L1 conceptualization transfer.

It is under the assumption that transfer occurs in all the domains regarding language processing and that there are both linguistic and non-linguistic factors involved in the acquisition of a second language that the present work aimed to continue the discussion on transfer by looking at a specific lexical parameter that Spanish and Portuguese (two languages relatively similar in grammatical structures) share: The negative Concord Parameter. The Negative Concord Parameter provides a good starting point for the inquiry of transfer because it includes the same grammatical requisites in order to be instantiated in both languages, but it also manifests specific cases in the Portuguese language in which those instantiations would result in ungrammatical Spanish. The variance within the same parameter might provide us with some insights on how transfer works in facilitating the transition from one language to the other, as seen in the examples below:

(2) a. Eles não falaram nada. (Portuguese)

they not say-past nothing

"They did not say anything"

b. No dijeron nada. (Spanish)

"They did not say anything"

(3) a. Ninguém não falou nada não. (Portuguese)

noone not say-past nothing no

“Noone said anything”

b. *Nadie no dijo nada no. (Spanish)

“Noone said anything”

As seen in examples (2a) and (2b), in Portuguese and Spanish a sentential negation that includes a negative word like ‘nada’ (nothing) in the post-verbal position requires the particle ‘não’ (no) in the pre-verbal position for the sentence to be grammatically correct. On the other hand, examples like (3a) in Portuguese, which includes a third particle ‘não’ (no) at the end to express emphasis, results in ungrammatical Spanish (3b).

In order to investigate how this variance within the same parameter affects L2 learners of Portuguese and Spanish, this dissertation focused primarily on how native speakers and language learners of Spanish and Portuguese performed in a grammaticality judgment task on the parameter of the negative concord when transfer might or might not affect the results of the task, indicating that the use of transfer facilitates the acquisition because the concept of the parameter had been previously acquired in their own L1 and possibly transferred to the TL. Then, this work further investigated what happens in the case of emphatic negation, which is a sub-parameter of the negative concord within the Portuguese language, and in which both languages differ.

The next section expands further the concept of the negative concord parameter. However, in anticipation, negative concord simply refers to the phenomenon in which

some languages require negation sentences to have two negative elements to form one single sentential negation without canceling each other. For instance, in the Spanish language, a sentence such as “No vino nadie” (Nobody came) requires the presence of the two negative elements ‘no’ and ‘nadie’ in order to agree to form one single negative sentence. In French, besides the combination with other negative particles as in “je ne regrette rien” (I don’t regret anything), seen in all Romance languages, the negative concord is also obligatory in the Negative Functional Category (NegP) through the negative particles ‘ne’ and ‘pas’ as in ‘je ne sais pas’ (I don’t know). Italian also shows the same parameter as in ‘non capisco niente’ (I don’t understand anything). As mentioned previously, the two negative elements are obligatory in the formation of a grammatical sentence, without canceling each other. Negative concord is also present in Spanish and Portuguese, but this type of grammatical structure is not present in English.

With respect to SLA, the case of transfer of the negative-concord parameter has at least three aspects (if not more) that justify the importance of the present study. First, negation occupies a central position in the functional category domain (NegP), and elements within the functional category domain are said to be more difficult to be acquired by L2 learners than elements within the lexical category domain. Vainikka and Young-Scholten (1994, 1996) argued that L2 learners transferred only lexical categories (and parameter values associated with them, such as headedness). Functional categories, on the other hand, did not transfer, but were gradually acquired as clausal structure was built in bottom-up stages, first through an underspecified functional projection FP, later replaced by the more specified AgrP, and then CP.

Hence, the influence of L1 transfer can play a key role in the acquisition of a more difficult domain such as that of a functional category in the initial stages of the acquisition, contrary to the idea that functional categories are necessarily acquired after lexical categories. Secondly, negation exhibits a broad array of instances with regards to the way it can be expressed, even in languages that share the same core negation principles, such as Portuguese and Spanish. Although these languages are considered typologically similar, there is a type of negation in Portuguese (viz., “emphatic negation”) that is not observed in Spanish syntax (Furtado da Cunha, 2007). This can further help the researcher investigate the facilitative role of L1 transfer in those instances where negation between these two languages does not behave exactly the same way. In these instances of the emphatic negation, L2 Spanish learners of Portuguese may still perform or may not perform well in the sub-parameter of the negative concord. Despite the fact that there is no parallel in the syntactic structure between the parameter and the sub-parameter, the closeness of the two languages would help L2 learners to notice the variance within the same parameter, fostering transfer to influence the acquisition. In the cases in which the TL is not so close to the NL, such as the case of English versus Portuguese or Spanish, L2 learners have little to transfer and more ‘noticing’ to do in order to ‘reset’ the L1 grammatical structural concept to the new L2 concept.

Finally, because negation is present in every language, the researcher does not have to worry about the semantic concept of negation influencing the results of the task because learners can simply focus on the grammatical, giving the researcher some insights on the learner’s awareness of the syntactic structural difference. In other words,

researchers can be assured that learners are focusing on the syntactic structure of multiple negative elements to form one sentential negation rather than that learners are trying to understand the concept itself. Therefore, negation, and specifically a contrastive analysis between the negative concord parameter and sub-parameter in Spanish and Portuguese, could be an important case study to demonstrate the facilitative role of L1 transfer and consciousness in second language acquisition.

This work used a grammaticality judgment task of negative concord manifestations in two target languages, namely, Spanish and Portuguese, and the emphatic negation manifestations of Portuguese to compare the results of both L2 learners transitioning from one language to the other. In order to ascertain that the transfer occurs more frequently when languages are typologically similar, this study further compared English native speakers studying Spanish to Portuguese native speakers studying Spanish, and it also compared English native speakers studying Portuguese to Spanish native speakers studying Portuguese. Because negative concord is not found in the English language, it was hypothesized that negative concord could not be transferred from English to Spanish or from English to Portuguese. The central idea of this study was to investigate if negative concord is a more difficult grammatical structure to acquire for Anglophone learners of Portuguese and Spanish, attributed mainly to the inability of the L1 transfer. Conversely, this study investigated if negative concord can be more easily transferred between Lusophone learners of Spanish and between Hispanophone learners of Portuguese.

In a second analysis of the same data, this study also investigated if the facilitative

role of L1 extended to the case of emphatic negation in Portuguese, where there is no exact syntactic parallel in the Spanish language. The idea was to test whether transfer played a role or not in the case of the sub-parameter, i.e., if the Hispanophone learners would perform better in recognizing emphatic negation than the Anglophone learners of Portuguese. Furthermore, in the case of Hispanophone learners of Portuguese and Lusophone learners of Spanish, the hope was that results would suggest that these learners would perform better on the GJT (Grammaticality Judgment Task) on the Negative Concord parameter due to the fact that they were aware of the similarities of the two languages. Hence, the goal was to demonstrate that the role of L1 transfer can serve as a facilitator in the study of languages that are typologically similar, namely, Spanish and Portuguese. A third area of analysis focused on whether or not learners were consciously aware of similarities and differences between languages and whether or not they used this knowledge as a strategy to respond to the grammaticality judgment task and how such awareness would affect their scores.

In the remaining sections of this chapter, I present the primary assumptions that are intrinsically related to the specific goal of this dissertation. Section 1 explains the negative concord parameter, and elaborates on the importance of this study with regards to the facilitative role of L1 transfer in second language acquisition. Section 2 covers the phenomenon of emphatic negation, a sub-parameter of the negative concord parameter in Portuguese, which differs from Spanish. In section 3, I present my research focus, including the hypotheses outlined for the present study. Finally, the last section presents an outline of the subsequent chapters of this dissertation.

1.1 The Negative Concord Parameter

The study of negative concord has occupied an important position in formal linguistics for the last 15 years. It has also become one of the core topics in the field of linguistics due to the many peculiarities that negation imposes both at the syntactic and the semantic levels.

Negative concord is the term usually used to refer to the co-occurrence of more than one negative element in the same clause but resulting in the summary interpretation of one single sentential negation (Zeijlstra, 2007). That is to say that the multiple negative expressions do not cancel each other and agree to form a negative statement.

Under Chomsky's (1981) Principles and Parameters Theory, such a phenomenon is referred to as the Negative-Concord parameter, in line with the theory that establishes that all languages share certain universal principles but differ in some parameters.

Spanish and Portuguese are languages that show the negative concord parameter, whereas Standard English does not. In Spanish or Portuguese, for instance, sentential negation can be expressed by means of two negative elements, depending on the position they occupy in the sentence or simply by the negative marker "not" if it appears in the pre-verbal position. If the second case occurs, the negative marker alone can negate the whole clause as in (4):

- (4) a. Juan no vino. (Spanish)
b. O João não veio. (Portuguese)
"Juan did not come"

In these contexts, if another negative element appears in the sentence, it cannot occur in the post-verbal position without a negative marker preceding the verb, as seen in (5):

- (5) a. *Vino nadie. (Spanish)
b. *Veio ninguém. (Portuguese)
“Nobody came”

The post verbal position of the negative constituents “nadie” or “ninguém” cannot occur as the only negative elements in the clause. For the clause to be grammatical, the negative constituent has to co-occur with the negative marker “no” or “não” in a position that c-commands the finite verb as in (6), forming the case of negative concord:

- (6) a. No vino nadie. (Spanish)
b. Não veio ninguém. (Portuguese)
“Nobody came.”

In a pre-verbal position, though, it is possible to have the negative constituents “nadie” or “ninguém” to be the only negative elements in the clause, as in (7):

- (7) a. Nadie vino (Spanish)
b. Ninguém veio. (Portuguese)
“Nobody came.”

In this case, the negative constituents are the ones to c-command the finite verb, and it is not necessary to include the particle ‘no’ to fulfill that requirement.

The Portuguese language also exhibits a third strategy for clausal negation in a very colloquial and regional manner, marked or noncanonical form, in which the negative

marker is indeed allowed to come in the postverbal position. This instance of **VP + não**, seen in examples² (8) and (9) below, is much less frequent than the other two types of negation, and it is restricted to denials of propositions that are directly activated in the ongoing discourse (Schwenter, 2005; Furtado da Cunha, 1996, 2001):

(8) A: Você gostou da palestra da Maria?

‘Did you like Maria’s talk?’

B: Gostei não.

‘I didn’t.’

(9) I: e a: a: a namorada dele sabia, todo tempo, e queria ficar com ele?

‘and the girlfriend of.his knew all time and wanted stay with him

S: sabia não. ela veio saber já no último né, bem dizer, nas

know:IMPERF NEG she came know already in.the last DM well say in.the

últimas consequência, que foi, que foi o médico que ligou pra ela, e disse

last consequence that was that was the doctor that called to she and said

que é ele que era o lubisomem.

that is he that was the werewolf (Speech)

‘I: And did his girlfriend know all the time [that he was the werewolf] and

still wanted to stay with him?’

‘S: She **didn’t know**. She only came to know at the end, right, that is, at the

last moment, when the doctor called her and told her that it was he who

was the werewolf.’”

² Example (8) is from Schwenter (2005) and example (9) is from Furtado da Cunha (2007).

Because this type of negation is very restricted in use, the study here focused only on the other two strategies of negation in BP.

In regards to second language acquisition, most pedagogical treatments of how negation is expressed are presented in the classroom to L2 learners in a simplistic and formulaic representation. The Spanish *Puntos de Partida* Textbook, for instance, introduces the topic in a very brief manner by saying that “when a negative word (no one, nobody, nothing) comes after the main verb, Spanish requires that the particle ‘no’ be placed before the verb.” The Portuguese *Falar, Ler e Escrever* Textbook also provides a simple explanation on the double negative words but does not mention the other two strategic variations, found used in the BP discourse.

Although such simplistic views dominate most of the second language classroom settings and instructional textbooks, what students are *not* told is that negative constructions can actually be very complex, depending on the nature of the negative elements that constitute the sentence. These negative elements combined can affect both the syntactic structure and the semantic meaning of the sentence. In terms of acquisition, parametrical differences can shed some light on how students make the transition from one language to another, especially in its early stages, and the case of negative concord can be a special one, considering the case of the emphatic negation in Portuguese, which does not exist in Spanish.

1.2 The Case of Emphatic Negation

The languages that exhibit the negative concord parameter are never homogenous, and a single combination of negative elements cannot be assigned the same negative

concord interpretation for each language. Portuguese and Spanish share almost all the same parameters in regards to negative concord. However, they differ with respect to the possibility of having multiple negative elements. This special instance of negative concord is referred to as the emphatic negation, used in Portuguese to emphasize the negative statement by the insertion of a third negative element. In Portuguese expressions such as (10a) are acceptable, while in Spanish, such a construction is ruled out (10b).

(10) a. Não veio ninguém não. (Portuguese)

Neg came n-body no.

‘Nobody came.’

b. *No vino nadie no. (Spanish)

Neg came n-body no.

‘Nobody came.’

If languages like Portuguese and Spanish that are typologically similar but differ in respect to the emphatic negation within the same parameter, a question to be asked is how Hispanophone learners of Portuguese would acquire this variation within the negative concord parameter, considering that this variation is limited in use and that very little input is offered in the classroom. Portuguese textbooks do not provide either this strategy of negation as a lexicalized item in the language.

It is of particular interest then the manner in which the acquisition of the negative concord parameter in adult second language learners occur, and if L1 influence plays a significant role in the process. Despite the fact that a negation functional category

negation is present in all languages, it was shown that negation also exhibits great variation among them (i.e., the case of emphatic negation in the Portuguese language), and it constitutes an interesting case of transfer study. If transfer plays an important role in the acquisition of this parameter, it is also necessary for the researcher to find out whether adult L2 learners are able to recognize these variations within the same parameter and to see if they transfer only the aspects that are similar in the argument structure of the sentential negation.

Languages that are not considered to be typologically similar such as English and Spanish but that share some characteristics in regards to this parameter can also be of special interest to L2 research because transfer and consciousness are also involved in any language process regardless of parametrical variations (Kellerman, 1995).

1.3 Research Focus and Research Questions

This study examined the acquisition of two target languages: Spanish and Portuguese. Each language had two groups of learners. The first group included native speakers of English studying Spanish and native speakers of English studying Portuguese. The second group included native speakers of Spanish studying Portuguese and native speakers of Portuguese studying Spanish. If learners are using L1 to L2 transfer, then learners, who are acquiring languages that share the same parameters (e.g., L1 Spanish learners of Portuguese and L1 Portuguese learners of Spanish), will have better results in the grammaticality judgment task (GJT) on the Negative Concord parameter than those L2 learners who are acquiring more disparate languages (e.g., L1 English learners of Spanish and Portuguese and L1 English learners of Portuguese).

Furthermore, if these learners are using transfer from L1 to L2 and if transfer has a facilitative role, the same L1 Spanish learners of Portuguese will not perform as well in the task in regards to sentences that contain instances of emphatic negation, when attempting to use transfer on that specific type of negative concord used in Portuguese that differs from Spanish. Besides the role of transfer, a further analysis will focus on whether or not learners are consciously aware of similarities and differences between languages and whether or not they use this knowledge as a strategy to respond to the grammatical task and how such awareness affects their scores. The effect of conscious awareness in L2 acquisition follows Schmidt's (1995) "Noticing Hypothesis," which claims that there is evidence that consciousness plays a significant role in the acquisition process, in accordance with Anderson's (1983) principle Transfer to Somewhere and Kellerman's (1983) principle Transfer to Nowhere.

A review of previous studies on transfer (Anderson, 1983; Kellerman, 1983; Schmidt, 1990), discussed in Chapter 2 with more details, shows that transferability and consciousness play an essential role in the developmental stages of the language. Schmidt (1990) suggests that the L2 learner needs to notice first the differences in the syntactic structures to be able to start using them in their production. Along the same lines, Kellerman (1983) suggests that even after noticing such differences (if they do), they might still unconsciously avoid them in their production. Therefore, it is also hypothesized that Hispanophone learners of Portuguese will not notice that there is a sub-parameter in these different structures, and that it will affect the results of their grammaticality judgment task.

The following questions were addressed in this dissertation:

1. How will Anglophone learners of Spanish perform in their grammaticality judgment task on the negative concord parameter, compared to Lusophone learners of Spanish, considering that there is a parametrical difference between English and the two other Romance languages in regards to the same negative concord parameter?

H1: It is hypothesized that, when tested on their grammaticality judgment on the negative concord parameter, the group of Anglophone learners of Spanish will not perform as well as the group of Lusophone learners of Spanish.

2. How will Anglophone learners of Portuguese perform in their grammaticality judgment task on the negative concord parameter, compared to Hispanophone learners of Portuguese, considering that there is a parametrical difference between English and the two other Romance languages in regards to the same negative concord parameter?

H2: It is hypothesized that, when tested on their grammaticality judgment on the negative concord parameter, the group of Anglophone learners of Portuguese will not perform as well as the group of Hispanophone learners of Portuguese.

3. How will Hispanophone learners of Portuguese perform in their grammaticality judgment task in regards to the sentences that address specifically the emphatic

negation, considering that there is a sub-parametrical difference between Spanish and Portuguese?

H3: It is hypothesized that there will be no difference between Hispanophone learners of Portuguese and Anglophone learners of Portuguese in terms of their performance on the emphatic negation items on the GJT.

4. What do all learners say about their awareness of the meta-cognitive process when answering the GJT? What knowledge do they use? Do they use their first language or the target language knowledge? Do the learners who say that they only used their knowledge of the target language get a better result? How about the learners who say that they are aware of the similarities and that they used their knowledge of both the L1 and TL? What are their results?

H4a. It is hypothesized that, for Anglophone learners of Spanish and Portuguese, those who indicate that they use only the knowledge of the target language to answer the GJT will have higher scores on the GJT than will those who indicate that they do not use only the knowledge of the target language.

H4b. It is hypothesized that, for Lusophone and Hispanophone learners of Spanish and Portuguese (respectively), those who indicate that they use only the knowledge of the target language to answer the GJT will have lower scores on the GJT than will those who indicate that they do not use only the knowledge of their native language.

5. How about the case of emphatic negation sub-parameter? What happens to the Hispanophone learners of Portuguese? Do the results change?

H5a. It is hypothesized that, for Anglophone learners of Spanish and Portuguese, those who indicate that they use only their knowledge of the target language to answer the GJT will have higher scores on the emphatic negation items of the GJT than will those who indicate that they do not use only the knowledge of the target language on these items.

H5b. It is hypothesized that, for Hispanophone learners of Portuguese, those who indicate that they use only their knowledge of the target language to answer the GJT will have higher scores on the emphatic negation items of the GJT than will those who indicate that they do not use the knowledge of the target language on these items.

1.4 Overview of Subsequent Chapters

This dissertation has five chapters. Chapter Two reviews the literature relevant to the study of transfer in the acquisition of a second language. Because the study of transfer involves the consideration of the L2 learner's consciousness, the chapter will also review three hypotheses that are directly related to the role of consciousness and transferability. Additionally, the chapter will explain in detail the issues related to the negative concord parameter in the three languages used in the study. Chapter Three explains the research methods used to collect the data, how the data were manipulated and describes the subjects that participated in the three studies. Chapter Four presents the results of the data collected for the study, the descriptive statistics, the types of tests used to analyze the data, and the answers to the research hypotheses along with the inferential

analysis. Chapter Five presents a conclusion of the present work, based on the results of the research hypotheses, and also provides pedagogical recommendations for the teaching of the negative concord in a second language classroom setting. The chapter ends with the limitations of the study, implications for future research, and final comments.

Chapter 2: Literature Review

2.0 Introduction: The Definition of Transfer

Language transfer is typically referred to as the learner's attempt to apply rules and forms of the first language into the second language. The term “transfer,” however, has not always been easily defined, and has become a controversial issue in the SLA field. The divergent views on what gets transferred and how it exactly happens have inherited different interpretations throughout the decades, as new insights have been found, causing difficulties among researchers to come to a consensus on the definition of the term and the process itself. Weinreich (1953:1) was the first one in the linguistics field to use the term *interference* to define transfer as “*instances of language deviation from the norms of either language, which occur in the speech of bilinguals as a result of their familiarity with more than one language.*” This definition put a lot of emphasis on the production of errors (commonly seen in the speech of L2 learners), and suggested that L1 causes an impediment in the process of acquiring the right target language forms, since it considers the influence of L1 language as a negative one. Later, this idea of transfer being negative or associated with interference in the L2 acquisition would be even more emphasized with the work of Corder’s (1967) “The Significance of Learners’ Errors”. While Corder’s (1967) main objective was to find evidence of an underlying rule-governed system through the regularity of errors presented in the interlanguage of the L2 learners, transfer inevitably got associated with the production of errors. The systematic way in which learners make errors was viewed as an indication of the L2

learner's attempt to figure out the new language system, and transfer acquired two roles: positive or negative, depending on the influence it had on the target language.

Odlin's (1989:27) definition of transfer is the one most often cited among researchers because he tries to cover all different aspects of transfer, whether positive or negative:

“Transfer is the influence resulting from similarities and differences between the target language and any other language that has been obviously, and (perhaps imperfectly) acquired.”

Not only does Odlin include the facilitative role of transfer but he also makes sure to include the negative consequences of it, such as overproduction or underproduction of a particular structure, possible calques and misinterpretations on comprehension as well as the difference in the amount of time required for the acquisition when learners come from different backgrounds, a more comprehensive approach to the role of transfer.

Kellerman & Sharwood-Smith's (1986) analysis of the accuracy of the term 'transfer' resulted in a proposal to make a clear distinction between two terms: *transfer* and *crosslinguistic influence (CLI)*. The first would serve to characterize the linguistic behaviors incorporated from L1 into the learners' interlanguage without capturing other interlingual effects (influence from languages other than the L1) while crosslinguistic influence (CLI) would refer to a broader range of influences, caused by the L1 or any other language that the learner may have acquired previously. Under this view, CLI can be seen both through the L1 constraints on L2 learning, or through a different

directionality of interlingual effects (L2 influencing L1), also including performance and even avoidance of certain structures that have not yet been mastered.

Thomason and Kaufman's (1988) distinctions of the transfer process tried to account for the effects of CLI under different social contexts of the language contact situation. They referred "substratum transfer" to the type of influence in which the speaker's language has the dominant influence on the target language while in the case of "borrowing transfer," the dominant language is the one being influenced by others. This difference cannot always be neatly classified though, and, in some cases, both kinds of transfer are likely to occur, as it is in the case of young children learning two languages simultaneously.

In a more recent perspective, Prieto (2005) goes beyond the traditional studies on L1 transfer that focused solely on linguistic aspects of the language, and proposes a global view of the phenomenon in which transfer encompasses the cultural aspects of the language as well. According to Prieto (2005:122), each culture specifies both pragmatic and conceptual aspects, which are learned unconsciously and therefore "*must be regarded by the L2 learner as intrinsically transferable.*" Under the cultural transfer domain, he further suggests the idea of both "conceptual transfer" and "pragmatic transfer", the later being in the domain areas of speech acts, discourse and language use.

Another development on the definition of transfer has come from studies of adult multilingual language contexts, in which CLI operates in a different way, showing significant evidence for the case of lexical transfer, especially when the languages are similar like L2 Spanish to L3 Italian. The increasing number of variables in this case also

presents a more complex process because the L3 learner's linguistic competence is considered to be particularly different from the L2 experience. For the lexical transfer, Paradis (1985) proposes that multilinguals have language-specific storage domains within an overall language-independent and conceptually organized lexical system.

Despite several definitions proposed as seen above, the term "transfer" still poses a difficult challenge for SLA researchers to define, especially in our current global mode, as we move rapidly towards a multi-language learning context. Odlin (1989) proposes that maybe the plausible way to fully define transfer requires first a fully adequate definition of how languages other than the first one are acquired, which takes us to another discussion that still remains to be resumed. On a practical level, it is known that L2 learners whose target language shares some grammatical similarities with their L1 seem to advance more quickly in the first stages of the acquisition than those L2 whose L1 do not. The same applies to the L3 learners with languages similar to their L1s and L2s. These concrete examples serve to support Odlin's (1989) idea that the discussion on the definition of transfer goes hand in hand with the discussion on language processing during adulthood, and that it should be approached in a manner that would define both simultaneously, and also include the linguistic and non-linguistic factors involved in it the process.

2.1 The History of Transfer

The history of transfer in the SLA field dates back to the early period of Renaissance when language contact was associated with the "contamination" of languages (Silvestri, 1977). In the nineteenth century, the debate intensified, especially

in the 1950s and 60s due to the rise of behaviorism in psychology and the structuralism in the linguistic field, whose main interests for linguists were focused on language classification and language change. Two names associated with that period were Charles Fries (1945) and Robert Lado (1957), whose ideas played a major contribution to the field, culminating in the first studies on the role of transfer. The first one attempted to rationalize teaching materials for language teaching, which resulted in the idea that the most effective ones were those “*based upon a scientific description of the language to be learned (1945:9).*” According to Fries (1945) his approach would provide the L2 learner with a parallel description between the two languages and avoid the influence of old habits in the acquisition of new ones. Fries (1945) also believed that learning a second language was a completely different task from learning the first one, and that the basic problems would come not from the different features of the new language but from the old habits established during the L1 acquisition process. Lado’s (1957) proposal of the Contrastive Analysis Hypothesis (CAH) became a popular model for language teaching, and reflected the behaviorist model of language learning in the psychology field, in which learning was a process of *habit formation* that involved imitation, practice and reinforcement. The CAH concept on language processing was based on the mapping of one system onto another through the identification of clear similarities and differences that led to a better understanding of the possible problems the L2 learner would encounter during the learning process. Lado’s (1957) CAH also pointed out the important role of L1 linguistic influence in the language learning process although he was sometimes accused of being concerned only with the structural analyses of languages. Lado’s

(1957:2) words convey otherwise:

Individuals tend to transfer the forms and meanings, and the distribution of forms and meanings of their native language and culture to the foreign language and culture – both productively when attempting to speak the language and to act in the culture, and receptively when attempting to grasp and understand the language and the culture as practiced by natives.

It was also clear under Lado's (1957) perspective at the time, that culture was as important in L2 acquisition as linguistic factors, and he wrote a chapter of his book on how to compare cultures. Despite the fact that the majority of studies on transfer during the 50s and 60s concentrated heavily on grammatical structures and pronunciation, Lado's (1957) ideas would prove later on to be also influential in subsequent research on second language discourse.

The close relation between transfer and the behaviorist concept of language learning caused transfer research to face serious challenges during the 70s. First because behaviorism and structuralism became unattractive after Chomsky's (1957) transformational grammar gained popularity among linguists, language universals seemed to offer a better solution to explain the innate human predisposition to languages than all the different patterns found in the structuralist analyses of grammar. Secondly, the empirical studies of second language acquisition based on contrastive analysis showed that some errors were frequent in the development of a second language no matter what background the L2 learner had. For instance, Huang and Hatch (1978) showed that the omission of the copula "be" in sentences like "That very simple" can be

made by Spanish speakers as well as Chinese. Brown's (1973) study of children speech in their first acquisition of the English language found the same omission of the copula form (*That a kitchen*), implying that the role of transfer was not significant in the acquisition of grammar. Dulay and Burt's (1974) cross-sectional studies on the accuracy of developmental sequences in SLA also suggested that transfer played minimal or no influence in the acquisition process, and that the process would depend largely on these developmental patterns, showing similarities between first and second language acquisition.

Selinker (1972), on the other hand, considered L1 transfer to be one of the five processes central to language learning³ while Gass (1984) reiterated that L1 transfer was a necessary part of the language process, which she defined as the superposition of both form and function patterns of the native language onto the patterns of target language.

Even though the studies on interlanguage (Selinker, 1972) stressed the importance of L1 interference in the transition between languages, major emphasis was placed on the generative-nativist view of language acquisition and its applicability to adult L2 acquisition. The Principles and Parameters Theory (Chomsky and Lasnik, 1993) and its rationale to accommodate syntactic differences across languages would become the central model for both generative linguistics and language research for the next 30 years. During this period the theory has been revised many times, and its original version has shifted chronologically from the notion of parameters (head initial or head final) to the

³ The other four are: transfer-of-training, strategies of L2 learning, strategies of L2 communication and overgeneralization.

most recent notion of features (interpretable and uninterpretable) under the Minimalist Program (Chomsky, 1995). However, the role of transfer in relation to the theory development and its place within the acquisition process has not been one of a complementary distribution. In fact, transfer was considered, for a long time, as a secondary aspect with the main emphasis given to the human capability to hypothesize over parameters and to reset them according to the input received. In recent years, though, the role of transfer has been again returned to the discussion in the generative grammar proposals of the L2 acquisition, but still not totally supported by all researchers who believe in a UG approach.

In a most recent article on the stage of “The contrastive analysis of features in SLA,” Lardiere (2009) criticizes the course that generative research has taken, and uses Lado’s words to propose SLA research to “*Locate the best structural description of the languages involved*” (p. 67). In her view, this would be a better way to investigate how learners acquire and re-assemble grammatical features in particular lexical items through a ‘contrastive analysis’ with L1 (p. 219). She concludes her article by stating that the current notion of UG parameters, in which parameters now equal features⁴ (her study involves plural marking in English, Mandarin Chinese and Korean), makes it too difficult to explain the complexity in which these features are realized across languages or how such features are acquired in a second language. She argues that the proliferation of parameters in the number and types proposed so far defeats the early promise of the theory to provide an adequate explanation of crosslinguistic variation.

⁴ See section 4 of the same chapter for an explanation of features opposed to parameters.

2.2 The Role of Transfer in IL

The term “interlanguage” (IL) was introduced by Selinker (1972), but it was Nemser (1971) who first began talking about ‘deviant’ language after having worked with phonological and phonetic data in the early 60s. Most of Nemser’s ideas differed from the essential concepts of IL, but some points were connected, as he stated:

“Learner speech at a given time is the patterned product of a linguistic system, La [approximative language], distinct from Ls [source language] and Lt [target language] and internally structured.” (Nemser 1971:116)

In his study of the production and perception of interdental fricatives and stops, Nemser (1961) pointed out that productive and perceptive mechanisms were not isomorphic, and this characteristic had not been taken fully into account under CAH. He argued that learners sometimes made the L1 or L2 categories equivalent and sometimes they did not, based on his data that contained multiple examples, which did not have any resemblance from either language system.

The birth of interlanguage generated studies that focused primarily on how L2 learners construct their hypotheses and how much the developmental course of L2 depends on language universals, their capacity to deduct grammar rules from the input provided, their cognitive abilities, and the L1 interference. The role of transfer was initially limited to errors, and these errors were interpreted as a negative influence in the construction process of a new system. Error production that could not be attributed to the L1 influence was regarded as part of the continuous process of hypothesis formation and reformulation, believed to be generally the case in this “interlanguage” phase between the

L1 and the L2. Selinker (1972) claimed that these transitional languages were systematic in the sense of a “natural language” while also constrained by language universals.

Adjemian (1976) provided the best definition of a ‘natural language’ because he also included the notion of a language in process and, therefore, subjected to change, which would justify the inconsistencies found in the learners’ IL, no matter how odd these errors were. He wrote:

“...any human language shared by a community of speakers and developed over time by a general process of evolution. (p. 298)”

The proposal of a language device (LAD) and language universals Chomsky’s (1959) was favorable to the context of IL studies whose assumption was that the same language mechanisms for L1 acquisition would also be responsible for the L2 developmental process. The reason is that there seems to be certain evidence that both L1 and ILs are consistent in the sense that they do not violate constraints of UG universal principles. However, there were findings in IL studies that did not provide enough evidence to claim that L1 and L2 processes occur under the same mechanisms. One of the main criticisms of the theory for L2 development lies on the final attainment of the L2 learners whose discrepancy with the L1 acquisition jeopardizes the viability of having the same system for both languages. Evidence from studies on language accent and grammatical intuition showed that older L2 learners do not reach a native-like level, favoring strong arguments for the Critical Period Hypothesis (CPH), a period in the early stages of life during which it displays a heightened sensitivity to certain environmental stimuli. The "critical period" was developed in studies with animals, but it was

Lenneberg (1967) who extended the concept and applied it to human language development. Pinker (1994), in a more modern version of a language theory proposed a more up to date hypothesis in which he tried to account for a language theory from two perspectives: one that human language develops from innate instincts in the sense that humans are biologically programmed for language, and another view in which language is derived from social interaction.

The creation of IL was eventually perceived mostly as a process, which is internally consistent, has many qualities of a natural language but that also makes a selective use of the L1 development. Because the first predictions of UG are in doubt (at least in SLA), the process of L1 selection has taken a more important and formal role. Kellerman (1984), after reviewing several IL studies, cautiously suggested that transfer operates on IL at smaller and larger levels than just the sentence level. The only difference is that beginners tend to show L1 transfer more overtly in their syntax whereas advanced learners tend to show it in less obvious, more discrete ways, for instance, through subtle semantic errors or the use of avoidance strategies. There has also been evidence from IL studies that the L1 selection can be either conscious or unconscious. Although such processes are not totally clear, the non-linear development under which transfer occurs leads research to also investigate the individual differences (both linguistic and non-linguistic factors) that affect the acquisition in ways yet unknown.

2.3 Studies on the Influence of L1

The first studies on the influence of L1 transfer concerned primarily the acquisition of grammatical structures. Ravem (1968) documented that a learner's NL played a

certain role in the formation of his or her second language syntax. Hakuta (1974a) also demonstrated that there is a clear relationship between L1 transfer and the emergence of structure in second language acquisition. In addition, Larsen-Freeman (1975) evidenced such a relationship through the learner's learning of English grammatical morphemes. To Gass (1979b), transfer helped us to see the grammatical element universal in human languages while some blamed CLI for error occurrences in cross-cultural studies (Stockwell, Bowen & Martin, 1965a, 1965b; Corder, 1971). In general, though, most of the studies have shown clear evidence to support the role of L1, either a positive or a negative one. Odlin's (1989:4) statement clearly acknowledges the positive aspect of transfer:

“Despite the counterarguments...there is a large and growing body of research that indicates that transfer is indeed a very important factor in second language acquisition.”

Such evidence expanded IL studies to show CLI evidence in other areas of language acquisition, for instance, phonology, lexical, semantics, and pragmatics. In discussing the phonological features of the learner's interlanguage, for instance, Tarone (1976; 1978) claimed that NL-based phonology transfers are partially responsible for the features of an interlingual phonology. In studies of transfer with a pragmatics focus, interests have been related to the finding out of the differences or deviations between divergent forms from the TL and the NL and whether these deviant forms are appropriate, from the angle of native speakers (Beebe, Takahashi & Uliss-Weltz, 1990). On the lexical level, Ringbom's (1978) study of Swedish and Finnish learners of English suggested that there was clear and unambiguous evidence of transfer. In a study of

English native speakers learning Dutch, Bongaerts (1983) found that few L2 learners had problems with the semantic distinction between the expressions “easy to see” and “eager to see” due to a similar distinction in their NL, facilitating transfer in a positive way. He also found that understanding and acquiring the same semantic distinction was more difficult for L1 learners of French, Hebrew and Arabic.

Schachter’s (1974) study on relative clauses involving four groups of students with different L1 backgrounds – Arabs, Persians, Japanese and Chinese – introduced the concept of “avoidance strategy”, which occurs when a learner avoids using a structure that is unfamiliar or difficult. Her study brings attention to the fact that what learners chooses to show in their production may not necessarily reflect their individual competence. Gabriele and Martohardjono (2005) also focus on the role of transfer in the L2 acquisition of aspectual differences between Japanese and English, investigating to what extent a property of the L1 “aids or impedes acquisition.”

Recent studies on the role of transfer have started to focus on the influence of L1 and some additional language(s) in the construction of new ones, such as from a second to a third or fourth language. Transfer plays a more intricate role, since the linguistic factors that might influence the competence of these learners are even more ample and complex. The next section will cover some of the recent studies done in that field.

2.4 SLA and Trilingual Students

The learning of multiple foreign languages in today’s global world has increased significantly in popularity over the recent decades. This has generated a new array of studies and debates within SLA for language transfer in L3 acquisition. Whether or not

bilinguals organize their previous knowledge of the L2 to help aid the acquisition of a third language is a question many researchers now investigate. Recent studies have suggested that both the L1 and the L2 are possible sources for transfer. And transfer, of course, becomes the leading question of the relatively new SLA field. The whole issue of L3 acquisition and transfer only adds more questions to the already ones related to L2 acquisition, still to be defined, as discussed in the previous sections.

As far as L3 acquisition and transfer are concerned, according to Montrul et al. (2011: in press), researchers investigate the main questions: 1) whether transfer comes exclusively from the L1 as in L2 acquisition (Leung, 2006), 2) whether it comes from the L2 (Bardel and Falk, 2007) or 3) whether it comes from both L1 and L2 (Flynn, Vinnitskaya and Foley, 2004). Hufeisen (2000:211) also brings up many questions related to L3 whose answers need to be sought as well. These include:

- *What is specific about L3 learning?*
- *What makes L3 learning different from L2 learning?*
- *If learning L3 is fundamentally different from learning L2, then how does it differ from learning L4 or Lx ($Lx = L3 + n$)?*
- *Is L3 learning just based on a somewhat more complex interlanguage?*
- *What should we do, and how should we do it, in order to find answers to these questions?*

Studies on the L3 acquisition, however, have multiplied rapidly over the last five years and continue to increase at a fast pace from perspectives that include linguistics, psycholinguistics, sociolinguistics and second language education.

Salaberry (2005), for instance, presented evidence of transfer of knowledge of aspectual contrasts among English-Spanish bilinguals learning Portuguese as an L3. Although Spanish and Portuguese are closely related, Bardel and Falk (2007) also showed the same evidence from two groups of learners with different L1s and L2s acquiring Swedish or Dutch as L3; this time, with regards to the placement of negation in the initial state of L3 Swedish and Dutch.

Under a pragmatic analysis, Koike and Flanzer (2004) investigated the pragmatic transfer of speech acts in L3 Portuguese. On another study, Koike and Gualda (2008) focused on the role of noticing and transfer and their correlation with the effect of explicit or implicit teaching and the acquisition of Portuguese possessive adjectives in L3 acquisition.

In the field of psycholinguistics, one area of study is the lexical transfer in L3 production. Ringbom (2001), for instance, concluded that meaning-based errors were always L1 derived, while form-based errors could come from either L1 or L2, and that these errors were constrained by psychotypology⁵ (learners' perception of language similarity).

It might very well be that the present study also involves a case of L3 acquisition, since the Hispanophone group of learners might have been exposed to Spanish prior to taking the task. This will be discussed further in the Results Chapter. The next section gives an overview of the relation transfer has had within the field of linguistics, and the consequences for transfer studies after the appearance of the Universal Grammar Theory.

⁵ See Kellerman (1979; 1983).

2.5 Universal Grammar and Transfer

The theory of Universal Grammar (UG), especially in its Principles and Parameters (PPT) version, has exerted a very significant influence on SLA research for the past 15 years. A fairly large amount of studies has shown that the principles of UG are indeed still available to adult second language learners (Flynn, 1994; Flynn & Martohardjono, 1995; Hodgson, 2006; Montrul, 2007; Lardiere, 2007). In contrast, there is also evidence that there are substantial differences between first language and second language acquisition (Bley-Vroman, 1989; Clahsen and Muysken, 1996). The controversial point between the extreme views lies on the so-called “UG paradox”; that is, sometimes, the input overdetermines the grammar in the sense that some particular structures are very frequent, and therefore obvious for the learner to make inferences and deduct the grammatical structures of the language. On the other hand, there are many other grammatical structures in which the input underdetermines the complexity of the system (since many abstract properties are not so obvious and frequent), making it impossible for the L2 learner to acquire the grammar inductively through the input. Bley-Vroman (1989), for instance, has argued in his Fundamental Difference Hypothesis (FDH) that L2 acquisition is completely different from L1 because L2A processes involve problem-solving strategies as well as other learning skills acquired during L1A, suggesting that L2 adult learners do not use the same processes that children do to acquire their L1.

As far as the L1 role relates to UG in SLA studies, three possibilities for the degree of transfer in L2 learning have been entertained: no transfer, partial transfer, or full transfer. The no transfer position assumes that there are no effects from the L1 on the L2

(Epstein et al.'s, 1996). Under this view UG is a “cognitive module” responsible for the acquisition of a language at any stage of our lives, whether it is the first one or a subsequent one. Epstein et al.'s (1996) main argument for such proposal is based on bilingual child language acquisition⁶. In this particular context, the child may be exposed to languages that have different parameters. If that is the case, Epstein et al. (1996) argue that if UG shuts off after the parameters of the first language are set, then, it would be impossible for the child to acquire the parameters of the second language. Epstein et al. (1996) illustrates their argument with English and Japanese, which are languages that differ in the head-direction parameter. The head-direction parameter indicates the direction of all head phrases, whether it is to the beginning of the phrase or to the end of it. For instance, in a prepositional phrase, the head is the preposition; in a verb phrase, the head is the verb and so forth. English is a head-first language, which is to say that in the case of a prepositional phrase, the preposition comes first, while in Japanese the head of a prepositional phrase comes at the end of the phrase, as seen in the examples below:

- (11) a. in Japan
b. nihon-ni
Japan-in
'In Japan'

According to Epstein et al. (1996), to maintain that UG changes after the first parameter is set does not explain how the bilingual child constructs two grammars with different parameters at the same time. Clahsen and Muysken (1996), who also favor

⁶ For further discussion on bilingual child language acquisition, see Flynn & Martohardjono (1994)

cognitive procedures over the UG linguistic approach, and who probably share the most radical position against UG for adult L2 learning, maintain that while UG is involved in monolingual and bilingual L1 development, it is not available for adult second language acquisition.

The partial transfer view refers to the idea that at least in the initial state of learning the L2, some L1 properties are carried over into the L2 grammar. In this case the L1 and L2 acquisition processes are not completely different (since UG is still available for L2) but the L2 acquisition depends in part on the already built L1 grammar (Eubank, 1994a, 1994b; Vainikka & Young-Scholten, 1994, 1996a, 1996b). Although the proponents of this view all agree that the first stage of acquisition starts with the L1, the exact definition of “partial transfer” differs from one researcher to another. Vainikka & Young-Scholten, for instance, propose the ‘minimal trees’ account for the L2 syntactic development, making a clear distinction between lexical categories (those like nouns, verbs, adjectives and prepositions) and functional categories (those like IP, i.e., verb agreement, auxiliaries, modals or DP, i.e., articles, etc). According to their hypothesis, L2 learners start out by transferring the lexical categories from the L1 and the VP (verb + complement) and, later, depending on the amount of positive evidence (correct examples from L2) they encounter, they will gradually develop other functional categories. So, for example, a Japanese L2 learner of English would produce something like (3a) below, since Japanese is a head-final language for all the lexical phrases. In this case, the head of a verbal phrase (i.e., the verb) would follow its complement even though in English the complement follows the verb because English is a head-first language. However, the L2

learner would not use the inflection on the verb because functional categories are not transferred initially. The learner would eventually and gradually develop the verb agreement after receiving lots of input in the target language:

(12) a. * She ball play.

‘She plays ball’

Eubank’s (1994a, 1994b) proposal for the L2 syntactic development, called “valueless features,” is very similar to Vainikka and Young-Scholten’s “minimal trees” in the sense that Eubank also makes a clear distinction between lexical and functional categories. The difference is that Eubank expects both categories to be transferred from the L1, but the functional categories would have no values (e.g., the absence of the –s for the third person singular in English but the verb before the complement). In common with Vainikka & Young-Scholten, Eubank also believes that feature values are acquired gradually when the L2 learner masters the inflectional morphology of the language associated with the inflectional category, also through positive evidence in the target language. Under their hypothesis, the same Japanese L2 learner of English in the example above would produce a sentence like (10):

(13) a. * She play ball.

‘She plays ball’

The full transfer position is more global and assumes that all properties of the L1 determine the entire L2 grammar at the initial state, and, therefore, the learner uses the whole L1 grammar as a basis for the L2 acquisition (Schwartz, 1998; Schwartz and Sprouse, 1994, 1996, 2000). In this case, if the L2 learner encounters some parametric

differences, he or she will be able to reset the new properties because UG is also fully accessible to the L2 acquisition. The following parameters are just a few examples of the ones L2 learners would have to reset among different languages: the Head initial/Head final parameter (Stowell, 1981), the Pro-drop/Null Subject one (Perlmutter, 1971), the V2 parameter (Platzack, 1983) and the Word-order one (Travis, 1984).

Given the possibilities presented (full transfer/partial transfer), the L2 learner's task is basically reduced to one of the two following scenarios. If a parameter exists in L1 but does not in L2 (or vice-versa), the learner needs to reset the parameter into the L2, which involves adding that particular feature, associated with the parameter into its appropriate functional category. One example would be the case of genericity between English and Spanish (Ionin and Montrul, 2008). While English allows only specific reference for definite plurals, Spanish allows both generic and specific reference of nouns marked with the definite plural article as seen bellow:

(14) a. The hungry dogs are dangerous. [+ Generic]

b. Hungry dogs are dangerous. [- Generic]

(15) a. Los perros hambrientos son peligrosos. [+/- Generic]

So, the L2 Spanish learner of English would have to reset the genericity parameter with both + and – features in the DP functional category.

The second hypothesis would be the scenario in which the same parameter exists in both L1 and L2 but it is represented in different ways in both languages, then, resetting means that the L2 learner will have to figure out how to assemble that new feature differently than it is assembled in his L1. One example would be the perfective and

imperfective distinction between English and Spanish, as shown in the following example⁷:

- (16) a. Robert is silly.
b. Robert is being silly.

- (17) a. Juan es tonto.
b. Juan está tonto.

According to Montrul (2009) sentence (16a) describes the state of being silly as a quality of Robert. The state has no delimited time period, and the sentence is interpreted with the feature [-Perfective]. In order to obtain the same [+Perfective] reading, English uses the progressive *-ing*, as in sentence (16b). Spanish, on the other hand, describes the [+Perfective] with the verb ‘*ser*’ (to be), while the [-Perfective] reading is obtained with the copula ‘*estar*’ (to be).

As seen above, these parameters all relate to functional categories and are usually described as abstract features. With the updated version of the theory, the Minimalist Program (Chomsky, 1995), the lexicon plays the ultimate role in language acquisition, as the difference between languages (parametrization) is now located in the words where all the features –interpretable and uninterpretable—are assembled and packaged. Under the Minimalist Program, features are divided into phonetic, semantic, and grammatical. The grammatical features are the ones that play a role in the grammatical (morphological or syntactic) processes, and they can be interpretable or uninterpretable. The interpretable

⁷ Examples from Montrul (2009).

ones have semantic content and contribute to determining the meaning, for example, the plural inflection on the noun 'dogs'. The word dogs can only be used to refer to several dogs, not a single dog, and so this plural feature contributes to meaning, making it interpretable. Uninterpretable features are those with no semantic content and, therefore, no contribution to meaning, i.e., verb inflection. For instance, English verbs are inflected according to the grammatical number of their subject (e.g. "Dogs bite" vs "A dog bites"), but in most sentences this inflection just duplicates the information about number that the subject noun already has, and it is therefore uninterpretable.

Even though the Minimalist Program tries to outline the parametric differences among languages via features, and to account for the complexity of the human language capability in a manner that still maintains the core value of its theory, i.e., the principle of universality, what remains under discussion in SLA studies is how the L2 learners will figure out these new features and re-assemble them in the L2. What seems to be universal about the L1 does not necessarily seem to work in the L2, or at least not at the same pace and through the same processes. Also, a lot of criticism has been placed on the fact that these features are not sufficient enough to characterize the differences between the languages and that we have now ended up with too many of these features (Lardiere, 2009). The addition of new features (or micro-parameters) to justify the variations within parameters would only make language acquisition a very complicated task for a second learner to process. One alternative model to L2 acquisition inquiry has been to analyze individual differences associated with the acquisition process, and whose prominent role directly affects L2 development in ways that are yet to be defined as well.

2.6 Individual Variables

Apart from the influence of L1, there are also non-linguistic factors that contribute to the development of a second language, which vary substantially from individual to individual. If one were to compare L1 acquisition to L2, it is widely recognized that all L1 learners achieve their “native competence.” Following Chomsky’s (1965) differentiation between competence and performance, he described competence as the knowledge one subconsciously possesses about how to speak a language while performance is one’s real world linguistic output. Performance may accurately reflect competence, but it also may include speech errors due to slips of the tongue or, as Chomsky points out, external factors such as memory problems, etc. However, the most impressive aspect of L1 acquisition is that L1 learners reach such level of competence effortlessly, rapidly, and creatively. Yet, a comparable level of performance in L2 is usually considered hard to achieve, and it takes a lot more time and effort. The individuals that are more successful in acquiring an L2 in a similar fashion as L1 learners are usually highly influenced by one or more of these non-linguistic factors, such as: age, aptitude, motivation, attitude, societal background, and socio-psychological influences. Some of these factors might interact directly with the phenomenon of transfer while others may not. For instance, someone who has traveled more will have a richer societal background whereas someone who has only studied the L2 as a foreign language and has never left his own country will have less to transfer in that area.

Just like the phenomenon of transfer, there has not been a unified SLA perspective to deal with the influence of these individual differences. Perhaps one of the

reasons for this is the fact that every field of study (linguistic, psychology, and psycholinguistic) has made its own assumptions about how these variables affect the acquisition. Another reason may be the fact that the studies regarding these variables (as well as transfer) always depended on whichever field dominated the SLA field and on the respective assumptions at the time.

The tradition in linguistic research has been to emphasize the human language component, which allows language to flourish as any other physical necessity. This view has tended to minimize the search for individual differences in L2 learning, both in the L1 and L2 development. What remains to be explained under this view is why these individual differences did not affect L1 but they do in the L2, considering that they are closely related to the individual's inherent language ability. In the history of the psychology field, cognition and motivation were considered to be very important factors but, at the same time, they were connected with the rise of behaviorism. When behaviorism was banished, so was cognition, at least initially, just like the role of transfer. The field of psycholinguistics, whose influence and roots come from the other two, also had the tendency to downplay the role of aptitude and motivation, changing, more recently to the study of psychological and neurobiological factors that enable humans to acquire, use, and understand language. Ellis (1994) identified seven categories of individual learner differences. Three of these categories have been studied quite systematically, age, aptitude, and motivation, while the other four have gotten considerably less attention, learning styles, beliefs, and affective states. The following three have received a lot of attention.

2.6.1 Age

Age plays one of the basic phenomena of individual differences among L2 learners, especially in the attainment of the language, which younger learners appear to be more successful than the older ones. Many reasons lead us to think that age plays a significant effect on the L2 acquisition. First, the ability to distinguish and perceive segment sounds become progressively harder as one gets older. Secondly, older learners rely more on the use of explicit knowledge whereas younger ones may learn through implicit learning processes (according to the views that hold with the Language Acquisition device). Older learners already have a developed grammar system but might also have had some loss of neurological plasticity after having passed the 'critical period'. This requires them to make use of explicit learning processes, which may be a more costly process.

The Critical Period Hypothesis (CPH) was originally formulated by Penfield and Roberts (1959) who claimed that the brain of a child is more plastic compared to the brain of an adult, which allows children to learn two to three languages as easily as their first language. Penfield hypothesized that this brain plasticity makes for superior ability especially in acquiring units of language, and recommended the teaching of a second language at an early age in school. Penfield and Roberts also hypothesized that this period of plasticity of brain function for language lateralization begins to end at the age of 9, as they stated that "*for the purpose of learning languages, the brain progressively becomes stiff and rigid*" during the age span of 9-12. According to them, language acquisition becomes much more difficult and ultimately less successful after that period.

2.6.2 Aptitude

Language learning aptitude is one of the non-linguistic factors often characterized as one that could be used to explain the difference in language development among learners. Skehan (1991) pointed out that the aptitude factor implies the idea of a talent for language learning that is different from intelligence, that does not come from any language learning experience, which varies from individual to individual. If aptitude or ‘natural talent for languages’ really exists, what needs to be explained is how and why it is disconnected from intelligence. In an attempt to investigate this question, Skehan (1991) administered foreign language aptitude tests to the same children (13 yrs old) that Wally (1995) had investigated a decade earlier at the ages 3 to 5 years old on their first language development. He found a significant correlation between the results of the tests, implying that there is a connection between aptitude and intelligence. However, because second language aptitude tests reflect abilities developed in the L1 acquisition as well, and because the children in the study had not yet developed some of their communication abilities, Skehan’s results were criticized by Cummins (1983), who saw interpersonal communication skills as the basic principle for Skehan’s language aptitude test.

It is true that language aptitude tests can somewhat be used as a good predictor of L2 learning success but much more research needs to be done to investigate the mechanisms involved in it.

2.6.3 Motivation

While aptitude is the strongest predictor of success, the second one most considered as a differential factor in learning success is motivation, which has also been extensively investigated in second language studies (R. Gardner, 1985; Gardner & Lambert, 1972; R. Gardner & MacIntyre, 1991; Ball, Giles & Hewstone, 1984; Gatbonton, 1975; Hermann, 1980). Gardner (1985:50), in particular, has become the central figure in the field of motivation, initially claiming that:

“Motivation involves four aspects , a goal, effortful behaviour, a desire to attain the goal and favourable attitudes toward the activity in question.”

After 45 years of considerable amount of data Gardner (2007) proposes a model for language acquisition that links attitudes and motivation to learning success and achievement, establishing, at the same time, a parallel between first and second language acquisition. While it seems logical to think that the more motivated the L2 learner is, the more successful he or she will be in the acquisition of the TL, motivation has not been fully integrated in any language theory because it has been difficult to determine its exact nature. For instance, the factors that distinguish between the motivation to accomplish small goals (learning some vocabulary words for a quiz) opposed to the ones involved in accomplishing bigger goals (speaking like a native speaker).

Gardner’s (2007) most recent model is interesting because it attempts to take into account the multi-faceted characteristics that relate to language learning and retention, such as the ones that are cognitive in nature, affective, and the behavioral ones. One of the cognitive characteristics of motivation emphasized in his model relates directly to

consciousness, which serves to emphasize its important role in the acquisition process. Gardner (2007) does not provide a definition of motivation per se due to its complexity but lists many characteristics of the motivated individual, for instance, goal oriented, persistent, attentive, self-confident, and motivated. His SLA model consists of four developmental stages, which he claims to be comparable to those involved in L1 acquisition: Elemental, Consolidation, Conscious Expression, Automaticity and Thought. The Elemental stage is the one in which the individual learns the basics of the language (vocabulary, grammar, pronunciations). During this stage, the process involves lots of simple declarative sentences and memorization. The Consolidation stage deals with a higher level of familiarity with the language, in which the L2 learner begins to recognize similarities and differences of some of the structures and elements between their native language and target language (as in developing awareness). The next stage, Conscious Expression, the L2 learner is able to use the language but with a great deal of conscious effort about what is being expressed. The fourth stage, Automaticity and Thought, indicates the stage in which language and thought merge and language becomes automatic in most contexts. According to Gardner (2007), in this stage the L2 learner 'no longer thinks about the language, but thinks in the language'.

Gardner (2007) himself recognizes that such analysis cannot be taken to be definitive as to the stages of language acquisition, but his study serves to emphasize the correlation between motivation and all conscious aspect of language learning. In this case, if the learner perceives that what he is learning is relevant and transferable to other situations, learning will be meaningful, and, consequently, his motivation will increase.

Similarly, for transfer to take place, the learner must be motivated to do two things: 1) to recognize opportunities for transfer (Prawat, 1989), and 2) to possess the motivation to take advantage of these opportunities (Pea, 1988).

Gardner (2007) summarizes the same aspects by saying that the individual is ‘integratively motivated’ when:

a. the individual is motivated to learn the other language

b. the individual is learning the language because of a genuine interest in communicating with members of the other language (either because of positive feelings toward that community or members of that community, or because of a general interest in other groups)

c. the individual has a favourable attitude toward the language learning situation.

The challenge for language teachers becomes how to enhance motivation so that the factors that interact with it help raise the L2 learner’s awareness on specific aspects of the TL that help facilitate the acquisition. While this question is beyond the scope of the present work, the relevant aspect of the model is the relation that Gardner (2007) makes between motivation and the learner’s conscious effort, which serves to illustrate, from a different perspective, the importance on the role of consciousness in second language acquisition.

2.7 Transfer and the Role of Consciousness

As seen in the previous sections, there are more questions than answers in the issues that involve second language learning and acquisition. The role of consciousness represents though the major challenge in establishing an overall theory of L2 acquisition

that is global (in the sense of encompassing all aspects) to the way people learn second languages. Such inability has been mainly attributed to two factors: first, it has been difficult to define unambiguously the relationship between all such aspects involved in the process, and, secondly, it has been even more difficult to explain the variability of the L2 learners' interlanguage, mainly characterized by the relationship between the input and the output. The fact that a learner knows a form does not necessarily ensure that the form will be used correctly in every appropriate situation when the circumstances change (Bialystok 1979, 1982, 1991). Interlanguage studies have shown that the L2 learners' output shows as much variability (Tarone, 1988) as it shows systematicity (Corder 1967; Nemser 1971; Selinker, 1972), and in order to reconcile such variability, different theories have proposed several alternative explanations.

Under the UG theory, for instance, researchers resort to the distinction proposed by Chomsky between "competence" and "performance" (Adjemian 1976, 1982; Liceras 1981, 1987). The systematic ways of language production would come from the underlying system of universal rules (competence) while performance would lie on the learner's effort, and therefore, would not always be systematic. Chomsky goes further to say that performance does not necessarily provide a measure for competence, as sometimes a speaker can be affected by irrelevant conditions as memory limitations, distractions, shifts of attention and interest, and errors (random or characteristic) in applying his knowledge in actual performance (Chomsky, 1965:3). Under this view, in which learning is predominantly unconscious, errors in the IL are the result of overgeneralization of target language forms.

The cognitive approach (learning being predominantly conscious), on the other hand, sees such errors as a product of conscious processes in an attempt to establish a connection from the L1 and the target language. Such dichotomy in language learning lasted for a while, only to make it difficult to define how conscious or unconscious processes interact with transfer, especially because language learning has never been really well defined (still up to this date).

In the midst of two opposite views, Anderson's (1983) principle *Transfer to Somewhere* was crucial to bring back to the SLA discussion the importance of the L1 transfer, along the role of consciousness. Anderson's (1983) principle focuses on the conceptual organization that L2 learners bring into the process, based on their own experience of the world and the cognitive abilities developed before reaching adulthood. The principle essentially states that language structures are indeed susceptible to transfer but only under two requirements, i.e., the structures have to be compatible to principles of natural acquisition (the idea that acquisition of grammatical structures proceeds in a predicted progression) or if they are perceived by the learner to have a similar counterpart in their L1 (a place to transfer to, therefore, transfer to somewhere).

Anderson's (1983) principle refers to transfer as language specific ways of dealing with past knowledge and experiences to deal with a new situation, highlighting the notion of transfer as a rather conscious process, used as a learning strategy. The principle fails to account for the variability seen in the learners' IL in the same way other language theory proposals do, and received some criticism by Kellerman's (1995) who complemented it with another principle called *Transfer to Nowhere* (Kellerman, 1995).

Besides the IL variability factor, Kellerman (1995:125) also criticizes the fact that the principle had been primarily founded on analyses of data from languages that are typologically similar, which facilitates the prediction of errors:

“But the ascription of errors to a particular source does not take us very far, since it is well-known that structural comparisons of two languages are uncertain correlates of learner behavior.”

Kellerman (1995) was more concerned with the different aspects between L1 and L2 than L1 and L2 being particularly similar, which, in his view, these major differences among the two languages will be more likely the ones to interfere with the acquisition, and suggested further that transfer could also happen even if not licensed by similarity to the L2. He also suggested that SLA research should pay careful attention to the ways in which the L1 influences the L2, including the other ways in which cognition and language intersect, causing transfer to lead to nowhere. He was referring specifically to transfer at the unconscious level, in which the L2 learner is not aware of transfer. To make his point, Kellerman (1995) added to the notion of transfer two general constraints that govern the occurrence of language transfer: psychotypology and transferability.

The essence of the psychotypology constraint is that transfer is more likely to happen when the L2 learner perceives the similarities between the L1 and the L2, whereas transferability constraint relates to those structures perceived by the L2 learner as marked (or language-specific), being less likely to be transferred. In making such distinction, Kellerman refuses the term transfer and introduces the term cross-linguistic influence (CLI), as he argues that transfer can also happen from the TL to the L1 as well,

and that transfer can operate at smaller and larger levels of the sentence, affecting equally beginners and advanced learners. The only difference is that learners tend to show transfer influence more obviously in the way they use their syntactic structures during the first stages of acquisition, opposed to advanced ones that tend to show it in more discreet ways, i.e, through semantic errors or by the use of avoidance strategies.

On the level of the conceptual transfer, Kellerman (1983) also believes that crosslinguistic differences might cause even more interference in the acquisition process than the syntactic differences between the two language systems. He believes that L2 learners could be able to consciously identify conceptual differences between the L1 and the TL, but still rely heavily on their own L1 conceptual perspective and, unconsciously, express ideas in the TL in ways that are grammatically acceptable but not target-like. The following example is an excerpt of Africanized English that illustrates his view at the discourse level, from Achebe⁸, cited in Han (2004). According to Han (2004:71), when this kind of transfer occurs at the discourse level, it may result in a distinct discourse accent when compared to the ‘Englishized’ version of it, seen in examples (18a) and (18b) below:

(18) a. I want one of my sons to join these people and be my eyes there. If there is nothing in it you will come back. But if there is something then you will bring back my share. The world is like a mask, dancing. If you want to see it well, you do not stand in one place. My spirit tells me that those who do not befriend the white man today

⁸ The Nigerian writer Chinua Achebe, famous for using his native African language within passages in his English novels to force the reader to “look outside of their constraints and identify more with the African culture” by using the African language structure to convey a message in the English language.

will be saying 'had we known', tomorrow.

b. I am sending you as my representative among these people – just to be on the safe side in case the new religion develops. One has to move with times or else one is left behind. I have a hunch that those who fail to come to terms with the white man may well regret their lack of foresight. (1990:162)

The principles *Transfer to Somewhere* and *Transfer to Nowhere* differ basically on how certain aspects of language get transferred, but they complement each other in conveying the idea that L2 learners rely on transfer to process the TL either through conscious or unconscious means.

The significance of both principles as it relates to transfer was that substantial research on the role of consciousness was generated in the SLA field to explain the cognitive processes which tie together many interacting concepts in language learning (Seliger, 1979; Bialystok, 1979; Stevick, 1980; Odlin, 1986; and McLaughlin, 1990). The work of Schmidt (1995) was crucial to help define the degrees of consciousness, without denying the importance of unconsciousness processes in language comprehension and production. One of the consequences of the theory was the increased appreciation of the role of consciousness in L2 learning for L2 instruction, according to which explicit knowledge can be instrumental in the acquisition of implicit knowledge. The facilitative role of consciousness in L2 instruction also increased the relationship with other cognitive processes and learning factors⁹.

⁹ Pavlenko and Jarvis (2008) divide such factors that affect CLI in five categories: 1) linguistic and psycholinguistic factors, 2) cognitive, attentional, and developmental ones, 3) factors related to cumulative

The next section presents Schmidt's (1995) *Noticing Hypothesis* in detail, which serves as the main supporting idea for the rationale of the present study. Following VanPatten's (1994) observation on the notion of consciousness in SLA, it should be pointed out here as well that it is not the intention of the present work to advocate for the 'return of the most traditional language teaching methods in L2 instruction'.

2.8 The Noticing Hypothesis

The notion of consciousness is crucial to understand the processes of adult second language learning and teaching because it constitutes a domain that ties together many interacting concepts and therefore multidisciplinary. A substantial body of research that deals with its role in cognition and learning have attracted theorists (both in the fields of linguistics and cognitive psychology), second language teachers who search for better language pedagogy and also empirical researchers investigating L2 acquisition in the classroom, in laboratories or in natural settings (McLaughlin, 1990; Long 1983, 1988; Bialystok 1978; Ellis 1990; Ruthford and Sharwood Smith, 1985; Krashen, 1981; Schmidt & Frota, 1986; Skehan, 1998). Much of its importance is attributed to Schmidt (1990), who proposed the Noticing Hypothesis, which identifies three aspects of consciousness involved in language learning: awareness, intention and knowledge.

According to Schmidt (1995:20), "*what learners notice in input is what becomes intake for learning*", i.e., whether a learner notices a linguistic form in the input deliberately or purely unintentionally it becomes intake. For this reason Schmidt believes that noticing

language experiences and knowledge, 4) factors related to the learning environment and 5) factors related to language use.

is a necessary condition for L2 acquisition, serving as a facilitator for other aspects of learning. His hypothesis provides a detailed explanation of consciousness as he breaks it down into three degrees: perception, noticing, and understanding, each aspect being associated with specific processes of learning. The hypothesis does not disregard the unconscious processes involved in learning but emphasizes that learners must consciously notice the grammatical form of their input in order to acquire grammar. The idea that learning requires awareness has since been adopted by a large number of researchers (Brewer, 1974; Dawson and Schell, 1987; Lewis and Anderson 1985; Ellis, 1994a; 1994b; Fotos, 1993; 1994; Fotos and Ellis, 1991; Harley, 1993; Larsen-Freeman and Long, 1991; Robinson, 1995).

According to Schmidt (1993:209), L2 learners need to not only comprehend the input but also to perceive "*whatever features of the input are relevant for the target system.*" There are two versions of the hypothesis, a strong and a weak one. Both versions emphasize the learner's conscious awareness (noticing) in the process but differ a bit on the importance of consciousness. In the strong version of the hypothesis noticing is necessary and sufficient for second language acquisition, while in the weak version of it noticing is a necessary but not sufficient condition for second language acquisition. Schmidt further suggested that the noticing requirement is meant to apply equally to all aspects of the language and could be incorporated into many different theories of L2 acquisition. He also added that theories of parameter setting in L2 learning would easily be able to incorporate the suggestion that whenever (and whatever) 'triggers' are required to reset parameters in the target language, these 'triggers' should be consciously noticed.

That is to say that the emergence of new forms should be preceded by their being noticed in the input, in the sense that the conscious noticing of a mismatch between the L1 and the TL is a necessary condition for second language acquisition. Schmidt (2001:26) also argued that "*noticing requires of the learner a conscious apprehension and awareness of input,*" and "*while there is subliminal perception, there is no subliminal learning.*"

The concept of subliminal perception comes from the earliest psychological studies conducted during the late 1800s and early 1900s, which suggests that people's thoughts, feelings and actions are influenced by stimuli that are perceived without any awareness of perceiving. This aspect covers mainly the rationale for the weak version in which unconscious processes play a major role, since in this version learners only need to be aware of the input in a holistic sense but they do not have to notice any details of the syntactic form.

Noticing has also been associated with other terms such as the influential notion of consciousness raising (Rutherford, 1987; Sharwood-Smith, 1981) or input enhancement (Sharwood-Smith, 1991). But despite the fact that some of the definitions of noticing differ in the degrees or levels of awareness, all the proposals converge in nearly all discussions on the importance of consciousness and the close relationship between its role and learning in some particular view. Schmidt has also given much attention to 'noticing the gap', i.e., learners' awareness of a mismatch between the input and their current interlanguage (see especially Schmidt and Frota, 1986), since, in his view, awareness of rules is a prototypical case of understanding while for others rules are a standard target of noticing (Ellis, 1993; Fotos, 1994; Fotos and Ellis, 1991). Robinson

(1995:297) gave the strictest definition of noticing, conceiving it as "*what is both detected and then further activated following the allocation of attentional resources.*" In Gass and Selinker's (2001:298) view, noticing or selective attention is "*at the heart of the interaction hypothesis,*" and is one of the crucial mechanisms in the negotiation process.

Schmidt's (1990) hypothesis offers useful insights into language acquisition that serve as basis for theoretical assertions but that can only be validated through empirical research. Unfortunately, there is only a limited amount of empirical research that deals with the role of noticing in L2 acquisition. The hypothesis was based on earliest data in a study by Schmidt and Frota (1986), in which Schmidt analyzed his own acquisition of the Portuguese language during a period of five months when he stayed in Brazil. Schmidt kept a diary of what he had noticed through instruction and also recorded his interactions with native speakers. By comparing the two sources of data, Schmidt and Frota found a significant correlation between recorded 'noticing' in the diary entries and Schmidt's use of linguistic Portuguese syntactic forms. Schmidt (1990:141) concluded that there is "*strong evidence for a close connection between noticing and emergence in production.*"

The next chapter will present the empirical research of the current study and the methodology used to obtain the data presented here.

Chapter 3: Methodology

3.0 Introduction: Research Methods

The purpose of this dissertation was to investigate whether the knowledge of the first (L1) or native language (NL) facilitates language acquisition, especially when the languages involved are typologically similar and when the L2 learner is aware of such similarities. The hypotheses that guided the study were:

H1: When tested on their grammaticality judgment on the negative concord parameter, the group of Anglophone learners of Spanish would not perform as well as the group of Lusophone learners of Spanish.

H2: When tested on their grammaticality judgment on the negative concord parameter, the group of Anglophone learners of Portuguese would not perform as well as the group of Hispanophone learners of Portuguese.

H3: There would be no difference between Hispanophone learners of Portuguese and Anglophone learners of Portuguese in terms of their performance on the emphatic negation items on the GJT.

H4a. For Anglophone learners of Spanish and Portuguese, those who indicated that they used only the knowledge of the target language to answer the GJT would have higher scores on the GJT than would those who indicated that they did not use only the knowledge of the target language.

H4b. For Lusophone and Hispanophone learners of Spanish and Portuguese (respectively), those who indicated that they used only the knowledge of the target

language to answer the GJT would have lower scores on the GJT than would those who indicated that they did not use only the knowledge of the target language.

H5a. For Anglophone learners of Spanish and Portuguese, those who indicated that they used only their knowledge of the target language to answer the GJT would have higher scores on the emphatic negation items of the GJT than would those who indicated that they did not use only the knowledge of the target language on these items.

H5b. For Hispanophone learners of Portuguese, those who indicated that they used only their knowledge of the target language to answer the GJT would have higher scores on the emphatic negation items of the GJT than would those who indicated that they did not use only the knowledge of the target language on these items.

The first section (3.1) describes the participants of the present study. The second section (3.2) outlines the steps that were used to collect the data for the study, and it is divided into two sub-sections. The first sub-section (3.2.1) describes a grammaticality judgment task (GJT) used in the study. The definition is followed by a discussion on the advantages and disadvantages of the use of a GJT in a research study, and why it was considered the most appropriate for the specific type of research presented here. The second sub-section (3.2.2) includes a step-by-step explanation of the procedures used to collect the data, including a description in detail of the tasks undertaken by the participants. The third section (3.3) presents the manner in which the data were constructed and analyzed.

3.1 The Participants

A total of 135 subjects participated in the study. The subjects were divided into four subgroups according to their native language and the target language they were studying at the time. The four subgroups were:

1) A group of 43 Anglophone learners of Spanish, i.e., native speakers of English studying Spanish;

2) A group of 24 Anglophone learners of Portuguese, i.e., native speakers of English studying Portuguese;

3) A group of 20 Hispanophone learners of Portuguese, i.e., native speakers of Spanish studying Brazilian Portuguese.

4) A group of 48 Lusophone learners of Spanish, i.e., native speakers of Brazilian Portuguese studying Spanish.

All the participants of the first three groups were enrolled in the language program at the University of Texas at Austin at the time the survey was taken. In the first group, 4 out of the 43 participants had never studied Spanish before they came to UT. As far as their academic background, 15 were in their Freshman year, 15 were in their Sophomore year, 9 were in their Junior year, and 4 were in their Senior year.

In the second group, only 1 out of the 24 participants had studied Portuguese before she came to UT. As far as their academic background, 2 were in their Freshman year, 7 were in their Sophomore year, 3 were in their Junior year, 9 were in their Senior year, 2 were graduate students, and 1 was in the Continuing Education Program.

In the third group, 4 out of the 20 participants had studied Portuguese before they came to UT. As far as their academic background, 3 were in their Freshman year, 6 were in their Sophomore year, 3 were in their Junior year, 2 were in their Senior year, 5 were graduate students and 1 was in the Continuing Education Program. This group was also the most complex one out of the four for they shared characteristics that no other group did. For instance, this group differs from the others as they are encountering Portuguese as a third language rather than a second one because they are enrolled in an American university, and one can assume that they obviously speak English as well. In this case, it is possible that some of the participants of this group would be better placed in a fifth group, and considered to be “Heritage Speakers”. This is discussed further in Chapter 5.

The researcher did not ask the participants if they had knowledge of any other language besides English, Spanish, or Portuguese prior to taking the task.

The participants of the fourth group were Brazilians living in Brazil and enrolled in the Spanish program of The Language Center at IMPARH (Municipal Institute of Research, Administration and Human Resources), located in Fortaleza, Ceará, Brazil. All the participants had received at least six months of instruction at the time of the study, and they had never studied Spanish outside Brazil. The data were collected in Brazil due to the difficulty of finding in Austin, Texas, native speakers of Brazilian Portuguese who were currently studying Spanish at the time of the study. In terms of their academic background, their profile was more heterogeneous than the other three groups. Twenty-

three out of the 48 participants either had finished college or were still in college, 20 were in high school, 1 was in middle school, 1 was in graduate school, and 3 were taking Spanish for professional development purposes but were not affiliated with any particular program.

To understand how the role of L1 transfer affects acquisition during the interlanguage stages, a longitudinal study may have been most desirable. However, a cross-sectional study was undertaken instead and can be well appreciated if we consider the size of sample. It would be impossible to follow all the participants, especially the group of Lusophone learners of Spanish, whose data were collected in Brazil. Furthermore the purpose of the study was to investigate the L1 transfer influence in the acquisition process of a second language rather than to measure the L2 learner's progress in the acquisition of the negative concord parameter after a certain period of instruction. In this case, a cross-sectional study would better reflect the influence of the L1, regardless the amount of instruction provided previously, because the L2 learners with less instruction would solely rely on their L1, which would strengthen the hypothesis that L1 does facilitate the acquisition when the languages are typologically similar. Transfer is also known to be present at any given point of acquisition but mostly recognized at initial stages, which covers the case of L1 transfer for the population of L2 learners who had more instruction on the negative concord than others. Besides, both populations had an equally heterogeneous educational background in terms of their academic level, which was reflected in the scores of the GJT. Therefore, the cross-sectional study was appropriate for the purpose of the study.

The study was regulated by the Institutional Review Board (IRB) Commission for Human Subjects Research of the University of Texas at Austin, and participation was totally voluntarily because the researcher did not offer any financial support or any other kind of incentive or reward.

3.2 Data Collection

This section explains the steps taken in the data collection process. It defines the task used, i.e., a grammaticality judgment task, and outlines the advantages of using such task for the present study. It concludes with a section on the procedures of data collection, which presents a step-by-step explanation of the tasks undertaken by the participants.

3.2.1 Grammaticality Judgment Task

Tremblay (2005) defines a grammaticality judgment task (GJT) as a method of data collection frequently used in SLA research to test theoretical claims. In these tasks, learners or speakers of a particular language are presented with some kind of linguistic stimuli (usually sentences), to which they must react. The elicited responses are usually in the form of assessments, and those learners or speakers have to determine whether a specific sentence (the stimulus) is “correct” in a given language. Intuitions about the grammaticality or ungrammaticality of a specific sentence is part of the native speaker’s grammatical competence, discussed previously in Chapter 2, section 5. Part of the second language learning process is to gain this ability to determine whether sentences are grammatical or not. For this reason, GJTs have been widely used in SLA research (White 1985, Liceras 1989, Pérez-Leroux and Glass 1997, 1999).

The centerpiece study of this dissertation is a cross-sectional grammaticality judgment task intended to provide insight into the state of learners' performance on the negative concord parameter at different stages of their linguistic development. This insight might shed light on how much the L1 can influence their grammatical competence, and, consequently, their performance, based on the similarities of their first and target languages. Although GJTs have been commonly used to test theoretical claims in SLA research, the validity of GJTs has been challenged in different ways. First, some have questioned the concept of competence in defining the nature of grammaticality. Schutze (1996), for example, points out that the learner's or speaker's own interpretation of what he/she is asked to do on the GJT might compromise the interpretation of the results because the learner or the speaker might judge the sentences according to his/her own competence. And, sometimes, this judgment translates into their level of acceptability, which might relate more closely to his/her performance rather than to his/her competence. Following the same argument of the debate over the concept of competence, Culicover (1997) mentions that the concept itself involves a double idealization on the part of researchers because they tend to treat all native speakers as if they would all make the same judgment when, in fact, it is quite common to see native speakers disagree over the grammaticality of a sentence. Culicover (1997) also affirms that researchers assume an idealistic position in thinking that there is a well-defined store of knowledge of language in the mind of the native speaker, and that by ignoring the differences between individuals and imprecision in the knowledge of individuals, they may nevertheless "discover something substantive and correct about natural language."

Another methodological issue with GJTs has been pointed out by Bley-Vroman (1983) and Cook (1999), defined as “comparative fallacy,” which involves comparing the judgment of an L2 learner with the judgment of a native speaker. According to them, the researcher should interpret the L2 learners’ judgment on the basis of their own logic or thinking, rather than to compare L2 learner’s results with the results of the native speakers’ judgment. Despite the claims from the authors above that “comparative fallacy” might compromise results in some studies, the probability of such fallacy to happen depends on the type of study. Bley-Vroman’s (1983) argument is more likely to apply in studies that concern the L2 learners’ interlanguage than in studies related to grammatical aspects of the language that need to be compared to the native speaker’s judgment. And even though the criticism GJTs have received, the advantages of using this type of task far outweigh the disadvantages, especially if the researcher is careful in its design to prevent misleading results. One of the advantages is that although underlying competence cannot be directly accessed, whatever access we do obtain through performance systems may potentially reveal information about the grammatical system of the learner. In other words, the fact that there will always be some variability on the performance of speakers, whatever grammatical judgment they come up with does not invalidate the task because that is what they use as “acceptable,” which reveals what they assume to be correct at that point of the acquisition; in the case of the native speaker, what he or she takes as grammatical, according to his/her rate of acceptability.

Tremblay (2005) also states that the use of GJTs in linguistic research is a necessary tool because it provides a means to assess the learners' or speakers' reactions to a specific sentence structure, which occur in the language.

Murphy (1997) also supports the use of GJTs, and suggests that the task should require participants to judge both grammatical and ungrammatical sentences in order for the results of their performance to be less biased.

In the case of the present work the use of a GJT as a method of data collection was the most appropriate one, since the study concerns a very specific grammatical aspect of the romance languages under investigation, i.e., the negative concord. The use of this task also allowed the researcher to construct the sentences in such a way that such specific linguistic phenomenon was completely included in every sentence of the task, something difficult to accomplish in a spontaneous setting. In general, when a researcher relies on spontaneous production data, for example, participants sometimes might never produce the structure of interest. This advantage permitted the researcher to have some degree of control over the experiment. Finally, following Murphy's (1997) suggestion then, the task of the present work also included ungrammatical sentences as well as grammatical ones in the task in order to avoid biased results.

Based on these factors, the researcher determined that it would be appropriate to use the GJT as the method of data collection for the present study to inquire about L2 learners' competence on the negative concord parameter.

3.2.2 Procedures

A Grammaticality Judgment Task involving the negative concord parameter was necessary to be used for the purpose of the present study, since the goal was to investigate whether L1 facilitates the acquisition of L2 learners, when both the native and target languages are typologically similar. The researcher applied the following steps in the design of the task.

First, the researcher selected two languages typologically similar with regards to the negative concord parameter: Portuguese and Spanish and a third language that was typologically different to the previous ones on the same parameter: English.

Then the researcher selected 20 sentences in Portuguese and 24 sentences in Spanish, which presented the negative concord grammatical structure in each one to be included in the design of the GJT. Also, in order to guarantee the validity of all sentences as grammatically correct, the researcher surveyed native speakers of both Portuguese and Spanish to make a grammatical judgment on the sentences chosen. The researcher surveyed 50 native speakers of each language, and asked them to judge if the sentences were correct or incorrect. The participants included students from the Spanish and Portuguese Department of the University of Texas at Austin as well as native speakers from other departments from the same university. The survey was done electronically via e-mail through the website www.surveymonkey.com, whose software program also allowed the researcher to collect the data and the results electronically. Participation was voluntary, as the researcher did not offer any reward for the completion of the survey. Since the results obtained from the native speakers showed some disagreement over the

grammaticality correctness of the sentences, the researcher only selected the sentences that had a rate of acceptance of at least 70% consensus or above to be included in the GJT for the L2 learners (see appendix). Even though the percentage of acceptance was very low, it is important to point out that such low number only represents the overall average of the 20 sentences and that the vast majority of the sentences used in the GJT had a much higher acceptance among the numerous raters.

Once the sentences were selected, the next step was to design the GJT for the study. The GJT was divided into 5 parts (see appendix). The first part asked the participants about their profile as L2 learners, and included information such as: sex, age, education, place of birth, and native language. The profile of the participants was an important step of the study because the researcher wanted to be sure that Hispanophone learners of Portuguese meant learners whose first language was Spanish. The researcher eliminated the participants who responded they were Hispanics, born in Texas, but whose first language was English. The same procedure applied to the other four groups. The Lusophone learners of Spanish were all Brazilians, born in Brazil, whose first language was Portuguese. The Anglophone learners of either Spanish or Portuguese were all participants who were born in the USA, whose first language was English.

The second part of the GJT included questions on the L2 learners' background knowledge on the target language or any other language, and also the time they spend weekly, studying the target language. The participants answered questions such as: previous time spent on the TL learning, previous time studied abroad (if any), the amount of hours per week spent on the language, daily usage of the language (if any), and

knowledge of any other language besides the native and the target language. The researcher eliminated those participants who had studied abroad for over a year. Only two L2 learners out of the 135 participants included in the study had studied abroad for less than 6 months when they took the GJT.

The third part of the GJT was a vocabulary control measure that the researcher used to ensure that the participants would not struggle with the semantic content of the GJT but to focus on the grammatical aspect of the sentences. The negative concord parameter requires the use of negative words in the sentence, and there are different ways in which these words can be translated to English, depending on the position they occupy in the sentence. So, adding this part to the GJT was necessary to make sure that all the L2 learners had a minimum level of knowledge on the negative words, and that they would focus only on the grammatical aspect of the negative concord parameter. The researcher eliminated participants who scored less than 70% on the accuracy translation of these negative words in this part of the GJT. The final number of participants was 135.

The fourth part of the GJT was the grammaticality judgment task. The participants reacted to 20 sentences, judging if they were grammatically correct or not. The instructions were clear as to whether they thought the sentences were correct or not correct. The instructions attempted to be clear as to whether they thought the sentences were correct or not correct. The researcher did not make any reference to the phenomenon of negative concord to avoid that participants would get overwhelmed or

distracted with the linguistic terminology. The sentences, though, were very controlled on the content of the parameter being investigated.

The researcher named the fifth part of the GJT as “cognitive aspect” of the L2 learner. In this part participants answered questions concerned their thinking and attitude when they judged the sentences as correct or not correct. The researcher also inquired about the strategies used (if any), and the participants’ attitude when they first started acquiring the language, especially with regards to the acquisition process of the negative concord parameter. The goal was to find out if they were aware of the typological similarities, and if they had approached both languages in a comparative way. Therefore, the final questionnaire had a total number of 5 parts, and included 2 tasks: the pre-task on the semantic content of the negative words (part 3), and the GJT per se (part 4). The researcher will refer to the set of all parts as “the questionnaire.”

The participants were approached in the classroom, during their target language class period, with the instructor’s permission. The researcher explained to the participants that she was doing a research on language acquisition and that she needed volunteers to participate. Once the participants agreed to help, the researcher handed them the IRB form to be signed, and then the questionnaire. The participants were told they had between 30 and 40 minutes to answer all five parts of the questionnaire. They were also instructed to respond the parts in the sequence in which they appeared in the questionnaire.

3.3 Data Manipulation and Analysis

After the data were collected, the results were recorded on an Excel spreadsheet for the analysis of the data. In all the parts of the questionnaire, with the exception of the GJT, the numbers of each part reflected exactly the participants' responses. For instance, if the participant marked number 3, the researcher entered the number 3 on the spreadsheet. For the 20 sentences that formed the GJT, the researcher recorded the number 1 if the participant's judgment coincided with the native language speaker's response for that sentence (i.e., was correct) and the number 0 if the participant's judgment did not coincide with the native language speaker's response for that sentence (i.e., was incorrect). After the researcher scored each item as described above, the results were tallied to obtain an overall score on the GJT, with a maximum score of 20. The researcher also tallied the specific sentences within the GJT that had to do with emphatic negation, yielding a maximum score of 7.

Finally, for the questions in Part 5 of the questionnaire, the researcher combined participants' responses of *strongly agree* and *agree* into one category (*Yes*) and participants' responses *strongly disagree* and *disagree* into another category (*No*). These questions reflected whether or not participants compared the target language to their native language to aid the learning process and whether participants used only their knowledge of the target language when responding to the GJT.

Four levels of the independent variable were used to classify the four different types of learners: Anglophone learners of Portuguese, Anglophone learners of Spanish, Lusophone learners of Spanish, and Hispanophone learners of Portuguese. Two

dependent variables were created to address the first three hypotheses: one for the Total GJT Score (max = 20) for all learners, and one for the Emphatic Negation Score (max = 7) for the Portuguese learners. Finally, two more dependent variables were created to address the last two hypotheses, one for whether or not L2 learners compared the new language to their native language, and one for whether or not L2 learners used only the knowledge of the target language.

3.3.1 Data Analysis

Descriptive statistics (i.e., means and standard deviations for continuous variables, frequencies and percentages for categorical variables) were planned to describe the sample and to summarize the scores on the GJT and the meta-cognitive questions of the cognitive part of the questionnaire. For the first two hypotheses, the independent variable was the learner type (Anglophone learners of Portuguese, Anglophone learners of Spanish, Lusophone learners of Spanish, and Hispanophone learners of Portuguese), and the dependent variable was the total score on the GJT (max = 20). For Hypothesis 3, the independent variable was the learner type and the dependent variable was the score on the emphatic negation items on the GJT (max = 7). For Hypothesis 4, the independent variable was whether or not participants used only their knowledge of the target language when completing the GJT, and the dependent variable was the total score on the GJT (max = 20). And finally, for hypothesis 5, the independent variable was whether or not participants used only their knowledge of the target language, and the dependent variable was the total score on the emphatic negation items on the GJT (max = 7).

Independent samples t tests were used to determine whether there were differences between groups in the scores of the GJT.

Chapter 4: Results

4.0 Introduction

This chapter will present the data analysis and the results of tests of the hypotheses obtained from the L2 learners' Grammaticality Judgment Task used to assess the knowledge of four groups of L2 learners on the negative concord parameter. Specific discussion and interpretation of these results will be presented in Chapter 5. The participants were divided into four groups, according to their native and target languages. Five hypotheses were entertained for the study, and the results will be shown in section 3. The main assumption for the study was that L2 learners whose native language was typologically similar to the target language would obtain better results on the Grammaticality Judgment Task due to the facilitative role of L1 transfer. Section 1 will present the sample demographics of the study. Section 2 will present the descriptive statistics. Section 3 will present the research questions and the result of the hypotheses, and section 4 will present the inferential analysis.

4.1 Sample Demographics

Table 1 presents the sample demographics characteristics of the participants of the study.

Table 1

Sample Demographic Characteristics

Demographic	<i>n</i> (%)
Gender	
Male	55 (43.3%)
Female	72 (56.7%)
No responses	8
Age	
15-22	100 (74.1%)
23-30	26 (19.3%)
31-40	4 (3.0%)
50+	2 (1.5%)
No responses	3
Education^a	
Freshman	20 (23.0%)
Sophomore	28 (32.2%)
Junior	15 (17.2%)
Senior	15 (17.2%)
Graduate school	7 (8.0%)
Continuing education program	2 (2.3%)
No responses	48
Learner Type	
Anglophone → Spanish	43 (31.9%)
Anglophone → Portuguese	24 (17.8%)
Hispanophone → Portuguese	20 (14.8%)
Lusophone → Spanish	48 (35.6%)

^a For all but Lusophone learners of Spanish, whose educational background was: 1 (2.1%) middle school student; 20 (41.7%) high school students; 23 (47.9%) college students / college graduates; 1 (2.1%) graduate student; 3 (6.3%) non-student professionals.

As shown in Table 1, the study included a total of 135 participants. Seventy-two participants (56.7%) were female, and 55 (43.3%) were male. Eight participants (6%) did not answer the question about their gender. Out of the 135 participants, the vast majority, i.e., 100 participants (74.1%) were between the ages of 15 and 22. Twenty-six (19.3%) participants were between the ages of 23 and 30. Four participants (3.0%) were between the ages of 31 and 40, two (1.5%) were between the ages of 41 and 50, and two participants (1.5%) were over 50. The participants had different educational backgrounds, varying in levels of schooling that ranged between the middle school level and the graduate level. For all learner types except for the Lusophone learners of Spanish, 23 participants (23.0%) were in their Freshman Year; 28 (32.2%) were in their Sophomore Year; 15 (17.2%) were in their Junior Year; 15 (17.2%) were in their Senior Year; 7 (8.0%) were in Graduate School, and 2 (2.3%) were in the Continuing Education Program. For the Lusophone learners of Spanish, 1 participant (2.1%) was a middle school student; 20 (41.7%) were high school students; 23 (47.9%) were college students and/or college graduates; 1 (2.1%) was a graduate student, and 3 (6.3%) were non-student professionals.

All participants were divided into four groups according to their native language and the target language they were studying at the time they performed the GJT. The four groups were:

- 1) A group of 43 Anglophone learners of Spanish, i.e., native speakers of English studying Spanish;

2) A group of 24 Anglophone learners of Portuguese, i.e., native speakers of English studying Portuguese;

3) A group of 20 Hispanophone learners of Portuguese, i.e., native speakers of Spanish studying Brazilian Portuguese.

4) A group of 48 Lusophone learners of Spanish, i.e., native speakers of Brazilian Portuguese studying Spanish;

4.2 Descriptive Statistics

Table 2 presents the descriptive statistics for the total scores and the emphatic negation scores obtained on the GJT by each L2 learner group.

Table 2

Descriptive Statistics for Total Score and Emphatic Negation Score on the GJT Across Learner Type

<i>Score / Learner Type</i>	<i>N</i>	<i>Min</i>	<i>Max</i>	<i>M</i>	<i>SD</i>
<i>Total GJT Score</i>					
All learners	135	5.00	16.00	10.65	2.51
Anglophone → Portuguese	24	6.00	14.00	9.42	2.57
Anglophone → Spanish	43	5.00	16.00	10.23	2.14
Lusophone → Spanish	48	7.00	16.00	11.48	2.27
Hispanophone → Portuguese	20	7.00	16.00	11.05	3.05
<i>Emphatic Negation Score</i>					
Portuguese learners	44	0.00	6.00	3.30	1.49
Anglophone → Portuguese	24	1.00	6.00	3.25	1.48
Hispanophone → Portuguese	20	0.00	6.00	3.35	1.53

As shown in Table 2, the total number of L2 learners who completed the GJT was 135, and the mean score was 10.65, with a standard deviation of 2.51. The highest score on the GJT (out of a possible maximum of 20) was 16, and the lowest score was a 5.

The total number of Anglophone learners of Portuguese was 24. In this group the mean score was 9.42, with a standard deviation of 2.57. The highest score on the GJT was 14, and the lowest score was a 6.

The total number of Anglophone learners of Spanish was 43. In this group the mean score was 10.23, with a standard deviation of 2.27. The highest score on the GJT was 16, and the lowest score was a 7.

The total number of Hispanophone learners of Portuguese was 20. In this group the mean score was 11.05, with a standard deviation of 3.05. The highest score on the GJT was 16, and the lowest score was a 7.

Table 2 also shows that the total number of the L2 learners of Portuguese who completed the emphatic negation items on the GJT was 44, and the mean score was 3.30, with a standard deviation of 1.49. The highest score on the GJT (out of a possible maximum of 7) was 6, and the lowest score was a 0.

The total number of Anglophone learners of Portuguese who answered the emphatic negation items was 24. In this group the mean score was 3.25, with a standard deviation of 1.48. The highest score on the emphatic negation items was 6, and the lowest score was a 0.

The total number of Hispanophone learners of Portuguese who answered the emphatic negation items was 20. In this group the mean score was 3.35, with a standard

deviation of 1.53. The highest score on the emphatic negation items was 6, and the lowest score was a .00.

Table 3 presents the descriptive statistics on the frequency and percentage of all L2 learners who indicated that they did or did not use only their knowledge of the target language when completing the GJT.

Table 3

Learners' Responses Regarding Whether or Not They Used Their New Language Only

	Frequency	%
All learners		
Yes	72	53.3
No	63	46.7
Anglophone → Portuguese		
Yes	7	29.2
No	17	70.8
Anglophone → Spanish		
Yes	20	46.5
No	23	53.5
Hispanophone → Portuguese		
Yes	8	40.0
No	12	60.0
Lusophone → Spanish		
Yes	37	77.1
No	11	22.9

As shown in Table 3, the frequency of L2 learners who indicated that they used only the knowledge that they had of the target language when completing the GJT was 72 (53.3%), whereas 63 learners (46.7%) indicated that they did not use only the knowledge that they had on the target language when completing the GJT. The percent L2 Anglophone learners of Portuguese who responded thusly was 29.2%, of Anglophone learners of Spanish, 46.5%, of L2 Lusophone learners of Spanish, 77.1%, and of L2 Hispanophone learners of Portuguese, 40%.

4.3 Research Questions

Hypothesis 1 stated: It is hypothesized that, when tested on their grammaticality judgment on the negative concord parameter, the group of Anglophone learners of Spanish will not perform as well as the group of Lusophone learners of Spanish. For this hypothesis, an independent samples *t* test was performed to compare the GJT scores across the two groups, in order to determine if there was a significant difference between the two groups of learners in terms of their scores on the GJT. Results indicated that Lusophone learners of Spanish ($M = 11.48$, $SD = 2.27$) performed better on their grammaticality judgment task than did Anglophone learners of Spanish, ($M = 10.23$, $SD = 2.14$), $t(89) = 2.69$, $p = .01$. Therefore Hypothesis 1 was supported (see Table 4).

Table 4

Independent Samples t Test Results for Total GJT Score as a Function of Learner Type: Anglophone vs. Lusophone Learners of Spanish

Learner Type	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>
Anglophone	10.23	2.14	2.69	.01*
Lusophone	11.48	2.27		

* Denotes significant *t* value

Hypothesis 2 stated: It is hypothesized that, when tested on their grammaticality judgment on the negative concord parameter, the group of Anglophone learners of Portuguese will not perform as well as the group of Hispanophone learners of Portuguese. For this hypothesis, an independent samples *t* test was performed to compare the GJT scores across the two groups, in order to determine if there was a significant difference between the two groups of learners in terms of their scores on the GJT. Results indicated that Hispanophone learners of Portuguese ($M = 11.05$, $SD = 2.57$) performed a point and a half better on their grammaticality judgment task than did Anglophone learners of Portuguese ($M = 9.42$, $SD = 2.57$), $t(89) = 1.93$, $p = .06$. The results only approached significance at $p = .06$. Given the small sample of participants ($n = 44$), the results show that there is a consistent trend with the predictions of Hypothesis 2 but with not enough power to detect a significant difference. Therefore Hypothesis 2 was consistent with predictions but not fully supported (see Table 5).

Table 5

Independent Samples t Test Results for Total GJT Score as a Function of Learner Type: Anglophone vs. Hispanophone Learners of Portuguese

Learner Type	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>
Anglophone	9.42	2.57	1.93	.06
Hispanophone	11.05	3.05		

* Denotes significant *t* value

Hypothesis 3 stated: It is hypothesized that there will be no difference between Hispanophone learners of Portuguese and Anglophone learners of Portuguese in terms of their performance on the emphatic negation items on the GJT. For this hypothesis, an independent samples *t* test was performed to compare the scores on the emphatic negation items across the two groups, in order to determine if there was a significant difference between the two groups of learners in their scores on the emphatic negation items of the GJT. Results indicated that, with regards to their performance on the emphatic negation items of the GJT, there was no significant difference in the performance of Hispanophone learners of Portuguese ($M = 3.35$, $SD = 1.53$) and the performance of Anglophone learners of Portuguese Hispanophone learners of Portuguese ($M = 3.25$, $SD = 1.48$), $t(42) = 0.22$, $p = .83$. Therefore Hypothesis 3 was supported (see Table 6).

Table 6

Independent Samples t Test Results for Total Emphatic Negation Score as a Function of Learner Type: Anglophone vs. Hispanophone Learners of Portuguese

Learner Type	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>
Anglophone	3.25	1.48	0.22	.83*
Hispanophone	3.35	1.53		

* Denotes significant *t* value

Hypothesis 4a stated: It is hypothesized that, for Anglophone learners of Spanish and Portuguese, those who indicate that they use only the knowledge of the target language to answer the GJT will have higher scores on the GJT than will those who indicate that they do not use only the knowledge of the target language. For this hypothesis, an independent samples *t* test was performed to compare the Total GJT scores of the Anglophone learners who indicated that they used only their knowledge of the target language when completing the GJT task with the scores of the Anglophone learners who indicated that they did not use only their knowledge of the target language, in order to determine if there was a significant difference between groups in the Total GJT scores. Levene's Test for Equality of Variances was not significant, indicating that this assumption was not violated; thus, equal variances were assumed. Results of the *t* test indicated that, for Anglophone learners of both Spanish and Portuguese, there was no significant difference in the total scores of the GJT between those Anglophone learners

who indicated that they used only their knowledge of the target language ($M = 10.22$, $SD = 2.47$) and those who indicated that they did not use only their knowledge of the target language ($M = 9.75$, $SD = 2.22$), $t(65) = 0.82$, $p = .42$, when completing the GJT.

Therefore Hypothesis 4a was not supported (see Table 7).

Table 7

Independent Samples t Test Results for Anglophone Learners' Total GJT Scores as a Function of Whether or Not They Used Only The Target Language Knowledge on the GJT

Learner Tactic	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>
Used only TL knowledge	10.22	2.47	0.82	.42*
Did not use only TL knowledge	9.75	2.22		

* Denotes significant *t* value

Hypothesis 4b stated: It is hypothesized that, for Lusophone and Hispanophone learners of Spanish and Portuguese (respectively), those who indicate that they use only the knowledge of the target language to answer the GJT will have lower scores on the GJT than will those who indicate that they do not use only the knowledge of the target language. For this hypothesis, the Lusophone and Hispanophone learners of Spanish and Portuguese were isolated (respectively), and an independent samples *t* test was performed for each group of learners to compare the mean scores of the two groups on the Total GJT scores of both groups of learners, i.e., the mean score of those learners who indicated they only used their knowledge of the target language, with the mean score of those learners who indicated they did not use only their knowledge of the target language,

in order to determine if there was a significant difference between the Total GJT scores of these learners. Levene's Test for Equality of Variances was not significant, indicating that this assumption was not violated; thus, equal variances were assumed. Results indicated that there was no significant difference in the total scores of the GJT between Lusophone and Hispanophone learners of Spanish and Portuguese respectively who indicated they only used the knowledge of their respective target language ($M = 10.22$, $SD = 2.47$) and the Lusophone and Hispanophone learners of Spanish and Portuguese respectively who indicated they did not use only the knowledge of their target language ($M = 9.75$, $SD = 2.21$), $t(66) = 1.03$, $p = .31$, when completing the GJT. Levene's Test for Equality of Variances was not significant (i.e., $p > .05$), and, in this case, equal variances were assumed for the t test results. Therefore Hypothesis 4b was not supported (see Table 8).

Table 8

Independent Samples t Test Results for Lusophone and Hispanophone Learners of Spanish and Portuguese Total GJT Scores as a Function of Whether or Not They Used Only The Knowledge of Target Language Knowledge on the GJT

	<i>Used Only TL Knowledge</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>
<i>Total GJT Score</i>	<i>Yes</i>	<i>10.22</i>	<i>2.47</i>	<i>1.03</i>	<i>0.31</i>
	<i>No</i>	<i>9.75</i>	<i>2.21</i>		

Hypothesis 5a stated: It is hypothesized that, for Anglophone learners of Spanish and Portuguese, those who indicate that they use only their knowledge of the target language to answer the GJT will have higher scores on the emphatic negation items of the GJT than will those who indicate that they do not use their knowledge of their native language on these items. For this hypothesis, an independent samples *t* test was performed to compare the scores of the emphatic negation items on the GJT of the Anglophone learners of Spanish and Portuguese who indicated that they used only their knowledge of the target language to answer those items on the GJT task with the scores of the Anglophone learners of Spanish and Portuguese who indicated that they did not use only their knowledge of the target language to answer those items on the GJT, in order to determine if there was a significant difference between groups in the scores of the emphatic negation items of the GJT. Levene's Test for Equality of Variances was not significant, indicating that this assumption was not violated; thus, equal variances were assumed. Results indicated that, for Anglophone learners of both Spanish and Portuguese, there was no significant difference in the total scores of the emphatic negation items on the GJT between those Anglophone learners who indicated that they used only their knowledge of the target language ($M = 10.22$, $SD = 2.47$) and those who indicated that they did not use only their knowledge of the target language ($M = 9.75$, $SD = 2.22$), $t(22) = 0.67$, $p = .51$ when completing the GJT. Therefore Hypothesis 5a was not supported (see Table 9).

Table 9

Independent Samples t Test Results for Anglophone Learners' Emphatic Negation Items Scores as a Function of Whether or Not They Used Only The Target Language Knowledge on the GJT

	<i>Used Only TL Knowledge</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>
<i>Total GJT Score</i>	<i>Yes</i>	<i>3.57</i>	<i>1.81</i>	<i>0.67</i>	<i>.51</i>
	<i>No</i>	<i>3.11</i>	<i>1.36</i>		

Hypothesis 5b stated: It is hypothesized that, for Hispanophone learners of Portuguese, those who indicate that they use only their knowledge of the target language to answer the GJT will have higher scores on the emphatic negation items of the GJT than will those who indicate that they do not use their knowledge of their native language on these items. For this hypothesis, an independent samples *t* test was performed to compare the scores of the emphatic negation items on the GJT of the Hispanophone learners of Portuguese who indicated that they used only their knowledge of the target language to answer those items on the GJT task with the scores of the Hispanophone learners of Portuguese who indicated that they did not use only their knowledge of the target language to answer those items on the GJT, in order to determine if there was a significant difference between groups in the scores of the emphatic negation items of the GJT. Levene's Test for Equality of Variances was not significant, indicating that this assumption was not violated; thus, equal variances were assumed. Results indicated that, for Hispanophone learners of Portuguese, there was no significant difference in the total

scores of the emphatic negation items on the GJT between those Hispanophone learners who indicated that they used only their knowledge of the target language (M = 3.62, SD = 1.92) and those who indicated that they did not use only their knowledge of the target language (M = 3.16, SD = 1.26), $t(18) = .065$, $p = .53$, when completing the GJT.

Therefore Hypothesis 5b was not supported (see Table 10).

Table 10

Independent Samples t Test Results for Hispanophone Learners of Portuguese Emphatic Negation Items Scores as a Function of Whether or Not They Used Only The Target Language Knowledge on the GJT

	<i>Used Only TL Knowledge</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>
<i>Emphatic Negation Score</i>	<i>Yes</i>	<i>3.62</i>	<i>1.92</i>	<i>0.65</i>	<i>.53</i>
	<i>No</i>	<i>3.16</i>	<i>1.26</i>		

Chapter 5: Conclusion and Implications

5.0 Introduction

The purpose of the study has been to examine the influence of the native language in the adult acquisition process of the negative concord parameter among four groups of L2 learners (Hispanophone learners of Portuguese, Anglophone learners of Portuguese and Spanish, and Lusophone learners of Spanish), depending on the typological similarity or difference between the native language and the target language. Portuguese and Spanish languages share most of the grammatical similarities with respect to the negative concord parameter, as opposed to English, which does not share any similarity with Portuguese and Spanish with respect to that parameter. This chapter draws the conclusions of the study, and highlights the study's most important aspects in the next five sections. Following the introduction, the first section presents the answers to the research questions posed in chapter 1, section 1.4. Section two focuses on the negative concord parameter and the Spanish and Portuguese acquisition processes. Section three emphasizes the importance of the L1 transfer on the acquisition of the negative concord parameter process, and offers some recommendations for the classroom practice. Section four explains the limitations of the study. Section five presents some implications of the study, based on the results of the hypotheses, and poses some questions to be addressed in future research. Section six concludes the chapter with concluding statements and final remarks.

5.1 Answers to Research Questions

The following research questions were intended to provide some insight on the influence of L1 in the adult language acquisition of the Negative Concord Parameter of Spanish and Portuguese by L2 learners, whose first language is Spanish or Portuguese or English. The first two questions addressed directly the influence of L1 in the L2 learners' performance on the GJT about the negative concord parameter when L2 learners' language shares aspects of that parameter with the target language. The third question is based on a sub-parameter of the negative concord parameter, i.e., the emphatic negation, and compares the performance of the Hispanophone learners of Portuguese with the performance of the Anglophone learners of Portuguese. Since this sub-parameter only exists in Portuguese and not in Spanish, either group cannot transfer this specific grammatical aspect from their first language syntax. So, the third question addressed how the learner will answer the GJT when the learner does not share the aspect of the sub-parameter with his/her native language. The first three questions are discussed under two transfer principles: "Transfer to Somewhere" (Anderson, 1983) and "Transfer to Nowhere" (Kellerman, 1983), and under the "Noticing Hypothesis" (Schmidt, 1995). The fourth and fifth questions focused on the way L2 learners thought about the possibility of relying on the first language to answer the GJT or if they only used the knowledge of the target language. Knowing one's level of consciousness on a particular grammatical aspect during a GJT is indeed very complex. The initial idea was to investigate any correlation between learners saying that they used one type of knowledge over the other and the results obtained in the GJT. By comparing the two, the researcher

assumed the results would have provided some insight on the importance of being consciously aware of similarities and differences between languages to acquire the negative concord parameter. These questions are further discussed in this chapter.

1. How will Anglophone learners of Spanish perform in their grammaticality judgment task on the negative concord parameter, compared to Lusophone learners of Spanish, considering that there is a parametrical difference between English and the two other Romance languages in regards to the same negative concord parameter?

The results of the GJT show that Lusophone learners of Spanish perform better on the grammatical task than the performance of Anglophone learners of Spanish in regards to the negative concord parameter. These results are not surprising, since other studies have also given evidence that adult L2 learners are able to transition much faster from Spanish to Portuguese, or vice-versa, because these are two romance languages that are typologically similar. Transfer will automatically activate the knowledge and skills these L2 learners have in the same parameter of their native language. For Lusophone and Hispanophone learners of either Spanish or Portuguese, the negative concord parameter may be easily reset, facilitating its acquisition for both groups of learners. L1 transfer is, in general, what adult L2 learners do more frequently when they come from languages that are typologically similar, i.e., they rely heavily on L1 transfer to construct the target language by using their prior conceptual knowledge of their L1, and the case here of the negative concord parameter is one good example. L2 Anglophone learners, on the other

hand, take a bit longer to reset this parameter, since English does not share much similarity with Romance languages. In regards to this particular parameter, it may be the case that Anglophone learners will need to use other cognitive skills to process this parameter and reset it. The results indicate that the parameter re-setting must occur in a different fashion other than the influence of their L1. The results also confirm Anderson's principle "Transfer to Somewhere," in which he states that language structures are indeed susceptible to transfer when the grammatical structures are compatible to principles of natural acquisition, and when these structures can be perceived by the learner to have a similar counterpart in their L1, i.e., a place to transfer to in the target language. And this is exactly the case of these L2 learners, who see transfer as language specific ways of dealing with past knowledge and experiences to accomplish the GJT, and to use it as a learning strategy. So, this study shows that Lusophone learners of Spanish score better in their responses to the negative concord GJT, than do Anglophone learners of Spanish. This is due to the fact that Portuguese is typologically similar to Spanish in terms of the negative concord parameter, and the Lusophone learners of Spanish are able to use transfer to construct the target language.

2. How will Anglophone learners of Portuguese perform in their grammaticality judgment task on the negative concord parameter, compared to Hispanophone learners of Portuguese, considering that there is a parametrical difference between English and the two other Romance languages in regards to the same negative concord parameter?

The results of Hispanophone learners of Portuguese on the GJT shows a significant trend that they still perform better than the Anglophone learners of Portuguese in regards to the negative concord parameter. However, these scores are only obtained at the probability of .06, which is surprising, to a certain extent. A plausible way to understand these results, especially in comparison to the results obtained in the first question, is to think that there is probability that those Anglophone learners of Portuguese have studied Spanish at a certain point in their student life. In fact, all the 24 Anglophone learners (100%) indicated that they had studied another language besides Portuguese prior to that semester in which the GJT was performed. While they did not indicate that they had studied Spanish specifically, it would be probable to think of Spanish, considering that the vast majority of high schools in the United States offer Spanish in their foreign language program as a requirement for graduation. It is true that some schools also offer French as a foreign language for their high school graduates. However, if we consider French as the language the participants studied besides Portuguese, French is also a Romance language, and typologically similar to Portuguese, which also shares the negative concord parameter in its syntactic structure.

If it is the case that these learners had indeed studied either Spanish or French prior to taking the study task, a further question to investigate would be their level of proficiency in the language. Considering the significant trend that the results show, one could argue that if there were a correlation between the results and some prior knowledge in either French or Spanish, their level of proficiency could have said not to be very high in that particular language acquired previously. Besides, one could still argue that these

learners could be heritage speakers with either low or high proficiency or that all learners of the group were not divided correctly based on some previous language acquisition or heritage background or level of proficiency. It is included in the limitations section of this chapter that the researcher should have treated this group differently.

A second possible interpretation of the results comes from the way these learners see themselves as L2 learners, and their understanding of what an acquired language means to them. For the participants of the study, the researcher only included participants who claimed that Portuguese was their second language. It is probable, though, that these Anglophone learners studied Spanish in the past, but do not recognize their Spanish as a fully acquired language, and, therefore, omit the fact that they have learned it. In fact, most college students when entering language programs prefer to start their language program from the lower level Spanish classes than to take higher levels of Spanish classes because they do not feel very confident enough about their previous Spanish knowledge. For that reason, they might have responded to the questionnaire as if Portuguese were their true second language.

In a third interpretation it is possible that these Anglophone learners had studied Spanish prior to coming to UT, but they had failed at learning the language, and decided to study Portuguese instead. If that were the case, transferring knowledge from one language to the other would not result in facilitation of the acquisition.

The University of Texas at Austin receives a lot of influence of the Hispanic culture due to the proximity with Mexico. The Texas population includes a high concentration of Hispanics, in which Spanish is often heard in public venues and used in

public signs as a means of communication. Even though participants got a lot of Spanish influence from the environment, results do not provide enough evidence that they were unconsciously getting some knowledge of Spanish, and, therefore, that they were able to transfer from their native language to Portuguese through Spanish. So, even though Anglophone learners of Portuguese performed slightly lower (a point and a half) on the negative concord GJT than their Hispanophone counterparts, the results were not conclusive enough to say that L1 transfer could be the only factor to explain the results.

3. How will Hispanophone learners of Portuguese perform in their grammaticality judgment task in regards to the sentences that address specifically the emphatic negation, considering that there is a sub-parametrical difference between Spanish and Portuguese?

This question relates directly to the other two above, and it was created specifically to corroborate the hypotheses elaborated for the two previous questions. By using the emphatic negation as a sub-parameter of the negative concord, both Anglophone learners of Portuguese and Hispanophone learners of Portuguese were put under the same circumstances, i.e., they were forced to perform the GJT without being able to rely on L1 to transfer any direct knowledge.

The results confirm the idea that a slight variation of a parameter between languages that are typologically similar can influence the results of learners' performance because a grammatical structure that does not have a counterpart between the two languages will interfere with the results of the GJT. The emphatic negation, as mentioned before, is

only a sub-parameter of the negative concord. However, Hispanophone learners showed a discrepancy between their performance on the negative concord parameter, which is something familiar to them, and the sub-parameter, which is unfamiliar. These results, though, cannot fully support Kellerman's (1995) principle Transfer to Nowhere. It is tempting to think that emphatic negation parameter was more likely the one to have interfered with the acquisition, and, therefore, with the results, and that transfer could also have been happening unconsciously, lead the knowledge to "nowhere." However, based on the results of the Hispanophone learners on the GJT, which were not significant compared to the results of the Anglophone learners, one cannot say it confirms Kellerman's principle due to the complexity in which transfer occurs. One can only conclude that, as far as the emphatic negation, Hispanophone learners behaved like the Anglophone learners with regards to the Emphatic Negation, indicating that the proximity between languages can influence learners' performance.

4. What do all four groups of learners say about their meta-cognitive process when answering the GJT? Do they use on their first language or the target language knowledge? What are the results for those learners who say they relied on their first language? What are the results for those learners who say they relied on the target language knowledge?

5. How about the case of emphatic negation sub-parameter? What do Hispanophone learners of Portuguese say about their awareness of the meta-cognitive process when answering the GJT? Do they use their first language or the target language

knowledge? What are the results for those learners who say they relied on their first language? What are the results for those learners who say they relied on the target language knowledge?

Questions 4 and 5 both address the level of consciousness of the L2 learners when completing the GJT. After they had finished completing the GJT, they were asked to report whether they used only the knowledge that they had of the target language or if they used only the knowledge that they had of their own language. Later, their answers were compared to the results they obtained to see if this particular strategy would affect their results in a significant way. The results indicated that there was no significance between the choice of strategy made on either the negative parameter sentences or the emphatic negation sub-parameter sentences and the scores of the task. Another interesting aspect the results show is that the choice that the L2 learners make to use their native language knowledge over their knowledge of the target language varies substantially among them in unpredictable ways. There is not a pattern that indicates that Hispanophone learners of Portuguese rely more heavily on their knowledge of Spanish to answer the GJT than Lusophone learners of Spanish do. The same lack of pattern holds true for the Anglophone learners of either Spanish or Portuguese. Regardless of the group of L2 learners or the parameter in question to be investigated, it is hard to say if the same group of learners used the same strategies for any particular aspect of the task (either the parameter or sub-parameter).

It can very well be the case that L2 learners do not relate exclusively to L1 transfer, constituting another domain of language acquisition that ties together many

interacting concepts and previous learning experiences. As Schmidt (1995) mentioned previously in his noticing hypothesis, there is "*strong evidence for a close connection between noticing and emergence in production*" (p.20). Since the results are inconclusive here in regards to the notion of consciousness that these L2 learners have, it is still crucial to understand the processes of adult second language learning that deal with the role of noticing and that facilitate acquisition. Even though Schmidt's own research comes in a detailed explanation of consciousness, there is still more to be investigated on specific processes of adult second language acquisition.

5.2 The Negative Concord Parameter and the Language Acquisition

The results of the study support the idea that acquisition of the negative concord parameter is more likely to be influenced by the first language when the target language is typologically similar to it. The different variables that interact in the acquisition process, along with the case of L1 transfer are complex, and may very well work concomitantly. Some of the variables involved in L2 acquisition have not yet been explored sufficiently to determine how much transfer affects language development or how much transfer gets to nowhere, as Kellerman (1995) claimed in his principle. This study suggests that in the case of the negative concord parameter the learner will use his/her knowledge of the L1 to influence his/her understanding of the L2, especially in the case when there is a typology similarity between the L1 and L2. This is especially apparent when the L1 influence on the negative concord parameter is compared and contrasted with the emphatic negation sub-parameter. In the first case, the acquisition of the negative concord parameter might take longer for L2 learners who come from

languages that are typologically different, for instance, English to Spanish or English to Portuguese, especially because this particular parameter requires negative words that are complex in both their syntactic and semantic structures. Under the current linguistic view of the Minimalist Program, the acquisition of grammatical structures like the negative concord parameter derives from the acquisition of the lexical entries associated with it, i.e., the negative words that are part of this particular parameter setting. If that is really the case for acquisition, Lusophone and Hispanophone learners have an advantage over learners who have English as their first language. While L2 learners like the Anglophones in this study would have to acquire the lexical entries and pragmatic functions of negation words to acquire the negative concord parameter, all that Lusophone and Hispanophone learners do is to transfer that knowledge. As for the sub-parameter of emphatic negation, the acquisition might take more than L1 transfer, and might require other learning strategies than a comparative analysis to develop the same knowledge.

5.3 Pedagogical Recommendations

The communicative approach to language teaching with its basis solely on the nativist view of language acquisition, and its assumption that adult language acquisition occurs in the same fashion as the first language acquisition may stand on a misconception about the nature of adult learning. First, because adult acquisition is not genetically triggered, and, secondly, the syntax of L2 is not acquired unconsciously. One instance of the difference between first and second language acquisition is that adults already have cognitive abilities that are developed whereas children are still developing them as they

learn the language at the same time. Adults are also linguistically mature and very selective; especially when it comes to choosing the input they will intake to use in their own second language repertoire. They bring an enormous amount of knowledge to the task of learning a second language, and teachers should expect them to draw on this knowledge to help them with the process. This happens to language learning or any type of learning because students, in general, make associations to what sounds more familiar to their own world and experiences. In the case of the negative concord parameter, the study has shown that adult learners can benefit from using their knowledge of their L1, when the L1 and L2 are typologically similar. So, at least in this aspect of L2 acquisition, second language teachers should encourage adult learners to take advantage of the typological similarities and encourage learners to use transfer to influence their understanding of the L2.

Moreover, second language teachers can then help learners monitor this knowledge, and even evaluate their own progress in the acquisition process. However, it is recommended for the teacher to share some common knowledge between the L2 learner's native language and the target language. Since this calls for an ideal setting, which might sound impossible at times, an effective way to do this would be through the teaching of meta-cognitive strategies as well. As pointed out previously, transfer occurs as either an unconscious or conscious process, and by teaching students to become aware of who they are as learners, they can better make use of transfer and apply their skills into the right process. In order for this to happen, it is necessary that a fairly substantial amount of explicit instruction take place in the classroom, and that teachers learn about

other languages to better provide their students the awareness they need in order to benefit from the transfer processes.

5.4 Limitations of the Study

The study presented here attempted to contribute to second language research in several ways: by asking subjects to make grammaticality judgments in the context of the negative concord parameter, by asking the subjects to tell us about the his/her thinking process during the task, intended to analyze how L2 learners approach a GJT in the target language (especially when languages are typologically similar and/or different), and by comparing the findings of the negative concord parameter with the emphatic negation sub-parameter, which would provide an additional measure of L2 learner competence and additional insight for the role of L1 transfer. Careful measures were taken in designing the study in order to achieve the main goal but several limitations still remain.

First, a method for determining the best type of task that would lead to the specifics of L1 influence in L2 acquisition would require the researcher to define transfer and to include all the variables that go along with it. Such task is almost impossible.

Secondly, using inter-raters (native speakers) to judge the grammatical accuracy of the sentences in order to increase the reliability of the task generally requires a percentage rate to be in the high 80s, when the rate used here was only 70%. Such choice might have interfered with the ending results. However, it is worth pointing out that not all sentences had such a low percentage rate. In fact, the majority of the GJT chosen for this study had a very high rate of acceptability, but since no statistical analysis on the average percentage acceptability rate was done across all items, it is taken here as a limitation to

be considered in future analysis. In future studies, a more precise percentage rate recommended.

Another limitation of the study could be the fact that the group of Anglophone learners of Portuguese might have been exposed to Spanish prior to studying Portuguese. Although the researcher was careful to include only those participants that stated English as their first language and Portuguese as their second language, it is likely certain that these learners studied a second language during their junior-high or high-school years. As much as it can be seen as a limitation and not a study of a second language viewpoint but rather a third language acquisition (if that is the case), it is worth to point out that the results still indicate that Anglophone learners did not perform better than the Hispanophone learners, which serves to corroborate the fact that transfer influences more positively the results when languages are typologically similar. In a similar fashion, the Hispanophone learners of Portuguese who participated in the study and who currently live in the US were obviously exposed to English prior to coming to an American university, which could be seen as a case of third language learning rather than second as well. However, and again, even though they all responded on the questionnaire that Spanish was their native language, in both cases, one could argue that some previous learning experience within a language that is close to the target language would potentially affect their assessment of the data and produce different results than what was expected in the hypotheses. Because Hispanophone learners of Portuguese only did a point and a half better than the Anglophone ones (Hypothesis 2 was not fully confirmed), the researcher remains uncertain whether to call it a case of L1 influence. It would be

better called a case of L2 influence on an L3, which constitutes another limitation of the study. For future research, future researchers are advised to keep this possibility in mind and to ask participants more detailed questions about their language backgrounds and also to examine the issue of previous language experience in a more controlled fashion.

A third limitation concerns the relationship between the learners' level of proficiency in the target language and the performance achieved on the GJT. Since the purpose of the study was to investigate L1 transfer and the researcher believes that the effects of transfer remain into play even after the first stages of the acquisition, the researcher preferred not to focus on the level of language acquired at a point in time but to let their performance speak for themselves in terms of their acquisition. It is also the belief of the researcher that levels of proficiency do not always translate into the achievement expected for that particular level, but it may be informative for future researchers to do some co-relations between the levels of proficiency of the participants and the results obtained in order to find out specific results for specific levels, if that is the focus.

A fourth limitation regards the grammaticality judgment task itself in two different aspects. First, from the syntactic viewpoint, some of the sentences used in the GJT are ungrammatical because of the adverb position in the sentence, and not necessarily because of the negative elements that form the sentential negation. It was not clear then why the learners of this study chose to mark those sentences as ungrammatical. The only way to have been certain would be if the researcher had asked the participants to correct the sentences, rather than choosing "grammatical" or "ungrammatical".

5.5 Implications for Future Research

This dissertation initially presented considerations for Schmidt's (1995) "Noticing Hypothesis" for two principles: Anderson's (1983) principle Transfer to Somewhere and Kellerman's (1983) principle Transfer to Nowhere. The results obtained confirmed the considerations made and their claims that consciousness plays a significant role in the acquisition process. The importance of being aware of the similarities and differences between the native language and the target language is also in accordance with Anderson's principle, which presents evidence that L1 influence does help L2 learners acquire grammatical structures that are typologically similar to their native language faster during early stages of the acquisition. Kellerman's (1995) principle goes beyond the effects of the awareness of grammatical structures that are typologically similar or different and presents evidence that L2 learners' ability to transfer their previous knowledge also applies to factors that are not strictly related to grammar but that also includes other linguistic aspects.

The current study also supports previous research on transfer, especially the idea that typological similarities and consciousness play an important role in L2 acquisition. The group of Spanish and Portuguese learners whose native languages share most of the grammatical similarities with respect to the negative concord parameter showed better understanding of a complex syntactic structure than the other learners whose native language was not typologically similar from the target language.

The study also suggests that the nature of L2 adult language in early stages of the acquisition is very complex, and usually accompanied by incomplete grammar structures.

The other interesting aspect of L2 acquisition that has been observed is the L2 learners' sensitivity to the type of input they have received, both in terms of quality and quantity. This variability plays an important role in the acquisition process, and it is one of the external causes for the divergence in the process of transfer. Explanations may be found in a deeper understanding of the structural complexity of the human language faculty and how it behaves during the normal processes of development and how it changes in different learning contexts. Current theoretical approaches to SLA/Bilingualism that emphasize a contrastive analysis approach to the acquisition of grammatical structures are a good starting point to develop the learners' consciousness on the specific functions that words carry. Although it is impossible to always predict what strengths the L2 learner brings to the classroom, starting by explaining the patterns between languages and making connections early on between the target language and native language. Even though the current study focused on one single grammatical aspect, these connections can be established at all levels of the acquisition process for more fruitful results. This makes it possible for the language learner to relate immediately to the target language, to his/her background knowledge and previous learning experiences, especially when they are experienced learners, which was definitely the case here.

There is evidence enough that typological similarities do help students and recent perspectives on second language acquisition have also extended the same concept to studies of socio-cultural aspects of the learning process, focusing on the importance of societal attitudes and group values that come along with the transference of the L1 knowledge. What remains still unknown is how noticing differs in regards to the degrees

of awareness that are considered to be necessary for language acquisition along with variables that are known to be always present. Most of SLA researchers would agree on the importance of further research on noticing whether some prefer to advocate for the strong version of the hypothesis (noticing is necessary and sufficient) or others prefer the weak version of it (noticing is necessary but not a sufficient condition). In Gass and Selinker's (2001) view, for instance, noticing or selective attention is "at the heart of the interaction hypothesis," (p. 298) and is one of the most crucial mechanisms in the negotiation process. So far, many studies have already addressed the role of consciousness, but more systematic research still needs to be done, including especially the consideration of how other variables interact with the role of transfer and consciousness.

5.6 Final Remarks

The intent of this work was to contribute to second language research, and, consequently, the hope is that the insights stated here would help language instructors deliver better language lessons. One of the most common classroom practices in language learning setting is to believe that the native language should be kept to a minimal use in the classroom as a way to expose the L2 learner to as much positive input as possible in the target language. We owe such ideas to one of the greatest linguists of the 20th century: Noam Chomsky. For all learners who have attempted to acquire a foreign language (like myself), we know better that L1 transfer involves processes that go beyond the so-frequently native view, discussed under the Chomskian theories. Following the idea that Universal Grammar will take care of the necessary adjustments in

providing the transition between languages, especially with regards to parameter setting or re-setting, many language instructors overemphasize the communicative approach, and minimize the importance of the learner's background knowledge and his or her cognitive skills, maybe because the word *cognition* belongs to a different science than *linguistics*. It is my view that, in dealing with languages, and language acquisition, there are as many experiences of language learning in acquiring an L2 as there are during the process of the first language construction. Some language instructors, however, prefer to use previous knowledge only to activate general concepts and help students connect what they already know to what is being said in a different language. The richest language experience that L2 learners bring to the classroom, i.e., the connection between words itself, is not emphasized due to the fear of focusing on grammar rather than on being loyal to a language approach that focuses on providing lots of positive evidence in the target language. Although it is not my intent here to advocate for the return of a contrastive analysis in the strict sense of Lado's (1957) proposal, I feel that it is time to pay more attention to a more balanced approach between grammatical consciousness, communication, and background knowledge. When I say grammatical consciousness, I do not mean, by any means, to advocate the use of drills or to go back to a less interactive classroom, but to help students build skills in the second language that are consciously based on the logical principles of language universals and their own experiences as first language speakers. In order to do so, some comparative analysis should be done. After all, language grammatical structures differ among languages, but the relation among their words remains pretty much true in every single one, i.e., a verb translates an action, an

adjective qualifies a noun, and so forth. It is my hope, then, that those who consider the data and the conclusion presented here will agree that, with regards to language acquisition and second language methods, what our students need is to develop consciousness on the differences and similarities between the target and the native languages, while we, teachers find ways to explain those without going back to traditional methods of exclusive grammar teaching.

Appendix A: Results on the Grammatical Judgment of Sentences from Hispanic Raters

Grammatically acceptable according to Hispanic raters:

No me dijo nada tampoco.
(He/she has not said anything to me either)

No cantaron ni una canción juntos.
(They have not sung a single song together)

No cantaron juntos ni una canción.
(They have not sung together a single song)

No recibió nada últimamente.
(He/she has not received anything lately)

No aceptó jamás ninguna ayuda.
(He/she never accepted any help)

Nunca le digas nada a nadie.
(Never say anything to anyone)

No comió carne nunca más.
(He/she never ate meat again)

No puedo convencerlo de ningún modo.
(He/she could not convince him of any manner)

No puedo de ningún modo convencerlo. (# meanings)
(He/she could not in any way convince him)

No estudiaron nada los estudiantes.
(Nothing have the students studied)

No estudiaron los estudiantes nada.
(The students have not studied anything)

No vino nadie a la fiesta.
(Noone came to the party)

No vino a la fiesta nadie.
(Noone to the party came)

No escucharon ningún ruido los vecinos.
(*The neighbors have not heard any noise*)

No escucharon los vecinos ningún ruido.
(*No noise have the neighbors heard*)

Con ninguno de estos carnets puedes entrar.
(*With none of these tickets can you enter*)

Grammatically unacceptable according to Hispanic raters:

No puso todavía nada en orden.
(**He/she has not put yet anything in order*)

No gastó ni un centavo de su sueldo por fin.
(**He/she has not spent a single cent of his/her salary at last*)

Nunca le digas a nadie nada.
(*Never say to anyone anything*)

Está siempre encerrado en su cuarto. No hace nada nunca afuera.
(*He/she is always locked in his/her room. *He/she does nothing never outside*)

No recibió últimamente nada.
(**He/she has not received lately anything*)

No me dijo tampoco nada.
(**He/she has not said either anything*)

Ninguna de las disculpas que me des no me van a hacer cambiar de opinión.
(**None of the excuses you give me will not make me change my opinión*)

Con ninguno de estos carnets no puedes entrar.
(**With none of these tickets can't you enter*)

Appendix B: Results on the Grammatical Judgment of Sentences from Brazilian Raters

Grammatically acceptable according to Brazilian raters:

E por que nada disseram?
(*And why did they not say anything?*)

Ainda não chegou nenhum convidado
(*No guest has yet arrived*)

E você nada falou?
(*And you have not said anything?*)

E por que nunca nada disseram?
(*And why have they never said anything?*)

Ninguém nunca sabe o dia de amanhã.
(*Noone ever knows what the future brings*)

Não foi ninguém não senhora.
(*It was noone madam*)

Faz isso não!
(*Do not do it!*)

Tem nada não. Um dia eu desconto.
(*No problem. One day I revenge*)

A: Que é isso? B: Nada não!
(*A: What's that? B: Nothing!*)

Sei não mas pode ser um bom sinal!
(*I don't know but it could be a good sign!*)

Isso é que não!
(*That cannot be!*)

Sei não!
(*I don't know!*)

Grammatically unacceptable according to Brazilian raters:

Nunca diga a ninguém nada.
(never say to anyone anything)

Ninguém não fez nunca nenhum comentário.
(Noone has ever made any comments)

Ninguém não fez nunca comentário nenhum a respeito do assunto.
(Noone has never made any comment with respect to that matter)

Nem um centavo não ganhou no jogo!
(Not even one cent has he gotten in the game!)

Ninguém não viu nada.
(Noone has seen anything)

Ninguém nunca está satisfeito com nada não.
(Noone is never satisfied with anything)

Ninguém não veio trabalhar hoje.
(Noone has come to work today)

Hoje num fiz nada.
(Today I have not done anything)

Appendix C: Survey and Grammaticality Judgment Task for Spanish Speakers

I would like to ask you to help me by answering the following questions concerning your foreign language experience. This survey is being conducted for doctoral research in the Department of Spanish and Portuguese at the University of Texas at Austin. This is not a test. So there is no “right” or “wrong” answer and you do not have to write your name on it. Please give your answers sincerely as only this will guarantee the success of the investigation. The responses that you give in this questionnaire will be kept confidential. Thank you for your cooperation!

Parte 1: Perfil del estudiante

Q1- 1- Male 2- Female

Q2- Age _____

Q3- 1- Freshman 2- Sophomore 3- Junior 4- Senior

5- Graduate student 6- Other

Q4- Birth place

1- USA 2- Other

Q5- First language

1- English 2- Spanish 3- Other

Parte 2: Background

Q6- Have you studied Spanish before you came to UT?

1- Yes 2- No

Q7- If your answer to Q6 was “yes”, for how long have you studied Spanish?

1- Less than 6 months 2- From 6 months to 1 year 3- More than a year

Q8- Have you ever studied Spanish abroad?

1- Yes 2- No

Q9- If your answer to Q8 was “yes”, for how long?

1- Less than 6 months 2- From 6 months to 1 year 3- More than a year

Q10- How many hours per week, besides your UT Spanish class hour, do you study, Spanish?

1- Less than 1 hour 2- From 1 to 3 hours 3- More than 3 hours

Q11- Do you try to use your Spanish in a daily basis?

1- Never 2- Sometimes 3- Always

Q12- Besides Spanish, Do you study or have you studied any other language?

1- Yes 2- No

Parte 3- Conocimiento del vocabulario

Please mark the option that best translates the following words:

Q13- “Paco nunca baila en las fiestas por que no sabe bailar.”

1-noone 2-nothing 3-never

Q14- “No puedo comprar nada por que no tengo dinero hoy.”

1-noone 2-nothing 3-never

Q15- “No puedo hablar con nadie ahora. Estoy estudiando.”

1-noone 2-nothing 3-anyone

Q16- “A Juan no le gusta estudiar y a mí tampoco.”

1-either 2-not 3-neither

Q17- “Ninguno de los estudiantes habla francés.”

1-never 2-not of 3-none of

Q18- “Mi padre no habla ni español ni francés.”

1-no...no 2-not...nor 3-neither...nor

Q19- “Jamás bebo vino blanco porque prefiero el tinto.”

1-never 2-ever 3-no more

Q20- “Nadie quiere ir a la biblioteca.”

1-noone 2-someone 3-anyone

Q21- “No quiero agua ni cerveza.”

1-no...no 2-not...nor 3-neither...nor

Parte 4 – Conocimiento del estudiante

Please answer the questionnaire below to the best of your ability in the Spanish language. Thank you for your cooperation!

Please indicate if the following sentences are correct or not:

Q22- No me dijo nada tampoco.

1-correct 2- not correct

Q23- Está siempre encerrado en su cuarto. No hace nada nunca afuera.

1-correct 2- not correct

Q24- Con ninguno de estos carnets puedes entrar.

1-correct 2- not correct

Q25- No puso todavía nada en orden.

1-correct 2- not correct

Q26- No comió carne nunca más.

1-correct 2- not correct

Q27- Nunca le digas nada a nadie.

1-correct 2- not correct

Q28- No puedo convencerlo de ningún modo.

1-correct 2- not correct

Q29- No vino a la fiesta nadie.

1-correct 2- not correct

Q30- No cantaron ni una canción juntos.

1-correct 2- not correct

Q31- No recibió últimamente nada.

1-correct 2- not correct

Q32- No aceptó jamás ninguna ayuda.

1-correct 2- not correct

Q33- No recibió nada últimamente.

1-correct 2- not correct

Q34- Con ninguno de estos carnets no puedes entrar.

1-correct 2- not correct

Q35- No escucharon los vecinos ningún ruido.

1-correct 2- not correct

Q36- No vino nadie a la fiesta.

1-correct 2- not correct

Q37- Nunca le digas a nadie nada.

1-correct 2- not correct

Q38- No estudiaron nada los estudiantes.

1-correct 2- not correct

Q39- No cantaron juntos ni una canción.

1-correct 2- not correct

Q40- No estudiaron los estudiantes nada.

1-correct 2- not correct

Q41- No escucharon ningún ruido los vecinos.

1-correct 2- not correct

Parte 5: Aspecto Cognitivo

Please choose the most appropriate answer to each of the following questions.

Q42- When I first started learning Spanish I would compare it to my native language because it helped me understand the concepts.

1- Strongly agree

2- Agree

3- Disagree

4- Strongly Disagree

Q43- To answer the questions in the questionnaire I used only my knowledge of Spanish.

1- Strongly agree

2- Agree

3- Disagree

4- Strongly Disagree

Q44- I used both my knowledge of Spanish and knowledge that I have in other languages (including my native language) to answer the questions.

1- Strongly agree

2- Agree

3- Disagree

4- Strongly Disagree

Q45- I used _____ (something else not mentioned above) to answer the questions.

1- Strongly agree

2- Agree

3- Disagree

4- Strongly Disagree

Q46- I felt very confident about my knowledge of Spanish while I was answering the questionnaire.

1- Strongly agree

2- Agree

3- Disagree

4- Strongly Disagree

Q47- I did not feel very confident about my knowledge of Spanish, and I was unsure in some of the questions.

1- Strongly agree

2- Agree

3- Disagree

4- Strongly Disagree

Q48- I think that if I were younger (like _____ years old), it would be easier to learn a foreign language.

1- Strongly agree 2- Agree 3- Disagree 4- Strongly Disagree

Q49- It is easier for me to understand the double negation than it is to use it in Spanish.

1- Strongly agree 2- Agree 3- Disagree 4- Strongly Disagree

Q50- I really never understood the double negation in Spanish very well.

1- Strongly agree 2- Agree 3- Disagree 4- Strongly Disagree

Q51- I think I need to learn more about negation in Spanish.

1- Strongly agree 2- Agree 3- Disagree 4- Strongly Disagree

Q52- It is hard for me to use the double negation in Spanish because there is no such thing in the English grammar.

1- Strongly agree 2- Agree 3- Disagree 4- Strongly Disagree

Appendix D: Survey and Grammaticality Judgment Task for Brazilian Portuguese Speakers (English version)

I would like to ask you to help me by answering the following questions concerning your foreign language experience. This survey is being conducted for doctoral research in the Department of Spanish and Portuguese at the University of Texas at Austin. This is not a test. So there is no “right” or “wrong” answer and you do not have to write your name on it. Please give your answers sincerely as only this will guarantee the success of the investigation. The responses that you give in this questionnaire will be kept confidential. Thank you for your cooperation!

Parte 1: Perfil do estudante

Q1- 1- Male 2- Female

Q2- Age _____

Q3- 1- Freshman 2- Sophomore 3- Junior 4- Senior
5- Graduate student 6- Other

Q4- Birth place

1- USA 2- Other

Q5- First language

1- English 2- Spanish 3- Other

Parte 2: Background

Q6- Have you studied Portuguese before you came to UT?

1- Yes 2- No

Q7- If your answer to Q6 was “yes”, for how long have you studied Portuguese?

1- Less than 6 months 2- From 6 months to 1 year 3- More than a year

Q8- Have you ever studied Portuguese abroad?

1- Yes 2- No

Q9- If your answer to Q8 was “yes”, for how long?

1- Less than 6 months 2- From 6 months to 1 year 3- More than a year

Q10- How many hours per week, besides your UT Portuguese class hour, do you study, Spanish?

1- Less than 1 hour 2- From 1 to 3 hours 3- More than 3 hours

Q11- Do you try to use your Portuguese in a daily basis?

1- Never 2- Sometimes 3- Always

Q12- Besides Portuguese, Do you study or have you studied any other language?

1- Yes 2- No

Parte 3- Conhecimento do vocabulário

Please mark the option that best translates the underlined word in each sentence:

Q13- “Pedro nunca estuda na biblioteca.”

1-noone 2-nothing 3-never

Q14- “Não vou comprar nada hoje por que não tenho dinheiro.”

1-noone 2-nothing 3-never

Q15- “Não posso falar com ninguém agora. Estou estudando.”

1-noone 2-nothing 3-never

Q16- “Nenhum dos estudantes fala francês.”

1-never 2-not of 3-none of

Q17- “Meu pai não fala nem espanhol nem francês.”

1-no...no 2-not...nor 3-neither...nor

Q18- “Jamais bebo vinho por que prefiro cerveja.”

1-never 2-ever 3-no more

Q19- “Ninguém pode comer na biblioteca.”

1-noone 2-someone 3-anyone

Q20- “Não quero água nem cerveja.”

1-no...no 2-not...nor 3-neither...nor

Parte 4 – Conhecimento do estudante

Please answer the questionnaire below to the best of your ability in the Portuguese language.
Thank you for your cooperation!

Please indicate if the following sentences are correct or not:

Q21- E por que nada disseram?

1-correct 2- not correct

Q22- Nunca diga a ninguém nada.

1-correct 2- not correct

Q23- Ainda não chegou nenhum convidado.

1-correct 2- not correct

Q24- Ninguém não veio trabalhar hoje.

1-correct 2- not correct

Q25- Sei não!

1-correct 2- not correct

Q26- Nem um centavo não ganhou no jogo!

1-correct 2- not correct

Q27- Tem nada não. Um dia eu desconto.

1-correct 2- not correct

Q28- Hoje num fiz nada.

1-correct 2- not correct

Q29- E você nada falou?

1-correct 2- not correct

Q30- Ninguém não viu nada.

1-correct 2- not correct

Q31- E por que nunca nada disseram?

1-correct 2- not correct

Q32- Ninguém não fez nunca nenhum comentário.

1-correct 2- not correct

Q33- Ninguém nunca sabe o dia de amanhã.

1-correct 2- not correct

Q34- Ninguém nunca está satisfeito com nada não.

1-correct 2- not correct

Q35- Não foi ninguém não senhora.

1-correct 2- not correct

Q36- Faz isso não!

1-correct 2- not correct

Q37- Ninguém não fez nunca nenhum comentário a respeito do assunto.

1-correct 2- not correct

Q38- A: Que é isso? B: Nada não!

1-correct 2- not correct

Q39- Sei não mas pode ser um bom sinal!

1-correct 2- not correct

Q40- Isso é que não!

1-correct 2- not correct

Parte 5: Aspecto Cognitivo

Please choose the most appropriate answer to each of the following questions.

Q41- When I first started learning Portuguese I would compare it to my native language because it helped me understand the concepts.

1- Strongly agree 2- Agree 3- Disagree 4- Strongly Disagree

Q42- To answer the questions in the questionnaire I used only my knowledge of Portuguese.

1- Strongly agree 2- Agree 3- Disagree 4- Strongly Disagree

Q43- I used both my knowledge of Portuguese and knowledge that I have in other languages (including my native language) to answer the questions.

1- Strongly agree 2- Agree 3- Disagree 4- Strongly Disagree

Q44- I used _____ (something else not mentioned above) to answer the questions.

1- Strongly agree 2- Agree 3- Disagree 4- Strongly Disagree

Q45- I felt very confident about my knowledge of Portuguese while I was answering the questionnaire.

1- Strongly agree 2- Agree 3- Disagree 4- Strongly Disagree

Q46- I did not feel very confident about my knowledge of Portuguese, and I was unsure in some of the questions.

1- Strongly agree 2- Agree 3- Disagree 4- Strongly Disagree

Q47- I think that if I were younger (like _____ years old), it would be easier to learn a foreign language.

1- Strongly agree 2- Agree 3- Disagree 4- Strongly Disagree

Q48- It is easier for me to understand the double negation than it is to use it in Portuguese.

1- Strongly agree 2- Agree 3- Disagree 4- Strongly Disagree
Q49- I really never understood the double negation in Portuguese very well.

1- Strongly agree 2- Agree 3- Disagree 4- Strongly Disagree

Q50- I think I need to learn more about negation in Portuguese.

1- Strongly agree 2- Agree 3- Disagree 4- Strongly Disagree

Q51- It is hard for me to use the double negation in Portuguese because there is no such thing in the English grammar.

1- Strongly agree 2- Agree 3- Disagree 4- Strongly Disagree

Appendix E: Survey and Grammaticality Judgment Task for Brazilian Portuguese Speakers (Portuguese version)

Eu gostaria que você me ajudasse, respondendo as seguintes perguntas sobre seu aprendizado de lingual estrangeira. Esse questionário está sendo conduzido pelo departamento de lingual espanhola da Universidade do Texas nos Estados Unidos. Como não se trata de um exame, não se preocupe com notas. Basta responder sinceramente as perguntas abaixo da melhor maneira possível. O sucesso do estudo dependerá das suas respostas. Tudo sera mantido em sigilo. Obrigada pela sua colaboração.

Part 1: Perfil do aluno

Q1- Sexo

1- Masculino 2-Feminino

Q2- Idade _____

Q3- Grau de instrução

1- Superior 2- Segundo grau 3-ginasial 4- primário
5-Pós-graduação 6- Outro

Q4- Lugar de nascimento

1- Brasil 2- Outro

Q5- Língua nativa

1- Português 2- Outra

Parte 2: História

Q-6 Há quanto tempo você estuda espanhol?

1- menos de 6 meses 2- De 6 meses a 1 ano 3- Mais de um ano

Q-8 Você já estudou espanhol fora do Brasil?

1- Sim 2- Não

Q-9 Caso sim, por quanto tempo?

1- menos de 6 meses 2- De 6 meses a 1 ano 3- Mais de um ano

Q-10 Quantas horas por semana, além da sua aula, você se dedica ao estudo do espanhol?

1- Menos de 1 hora 2- De 1 a 3 horas 3- Mais de 3 horas

Q11- Você tenta usar o espanhol que sabe na sua vida diária?

1- Nunca 2- Às vezes 3- Sempre

Q12- Além do espanhol, você já estudou outra língua estrangeira?

1- Sim 2- Não

Parte 3 – Conhecimento do estudante

Por favor indique se as seguintes frases estão corretas ou incorretas:

Q13- No me dijo nada tampoco.

1-correto 2- incorreto

Q14- Está siempre encerrado en su cuarto. No hace nada nunca afuera.

1-correto 2- incorreto

Q15- Con ninguno de estos carnets puedes entrar.

1-correto 2- incorreto

Q16- No puso todavía nada en orden.

1-correto 2- incorreto

Q17- No comió carne nunca más.

1-correto 2- incorreto

Q18- Nunca le digas nada a nadie.

1-correto 2- incorreto

Q19- No puedo convencerlo de ningún modo.

1-correto 2- incorreto

Q20- No vino a la fiesta nadie.

1-correto 2- incorreto

Q21- No cantaron ni una canción juntos.

1-correto 2- incorreto

Q22- No recibió últimamente nada.

1-correto 2- incorreto

Q23- No aceptó jamás ninguna ayuda.

1-correto 2- incorreto

Q24- No recibió nada últimamente.

1-correto 2- incorreto

Q25- Con ninguno de estos carnets no puedes entrar.

1-correto 2- incorreto

Q26- No escucharon los vecinos ningún ruido.

1-correto 2- incorreto

Q27- No vino nadie a la fiesta.

1-correto 2- incorreto

Q28- Nunca le digas a nadie nada.

1-correto 2- incorreto

Q29- No estudiaron nada los estudiantes.

1-correto 2- incorreto

Q30- No cantaron juntos ni una canción.

1-correto 2- incorreto

Q31- No estudiaron los estudiantes nada.

1-correto 2- incorreto

Q32- No escucharon ningún ruido los vecinos.

1-correto 2- incorreto

Parte 4: Aspecto Cognitivo

Por favor escolha a opção que for mais apropriada a sua experiência do aprendizado da lingual espanhola.

Q33- Quando eu comecei a estudar o espanhol, eu comparava tudo com o português por que isso me ajudava a entender melhor a lingual.

1-Concordo 100% 2-Concordo 3-Discordo 4- Discordo 100%

Q34- Para responder o questionário acima, eu usei somente o conhecimento que tenho no espanhol.

1-Concordo 100% 2-Concordo 3-Discordo 4- Discordo 100%

Q35- Eu usei meus conhecimentos em espanhol e também meus conhecimentos de português para responder o questionário.

1-Concordo 100% 2-Concordo 3-Discordo 4- Discordo 100%

Q36- Eu me senti muito seguro no meu espanhol enquanto respondia o questionário.

1-Concordo 100% 2-Concordo 3-Discordo 4- Discordo 100%

Q37- Eu não me senti muito seguro e acho que necessito aprender mais sobre a negação dupla em espanhol.

1-Concordo 100% 2-Concordo 3-Discordo 4- Discordo 100%

Q38- Eu acho que se eu fosse mais jovem (tivesse _____ anos) seria sido mais fácil aprender uma lingual estrangeira como o espanhol.

1-Concordo 100% 2-Concordo 3-Discordo 4- Discordo 100%

Q39- Para mim, é mais fácil entender a negação dupla do espanhol do que usá-la quando eu falo ou escrevo.

1-Concordo 100% 2-Concordo 3-Discordo 4- Discordo 100%

Q40- Na verdade, eu nunca entendi muito bem a negação dupla do espanhol.

1-Concordo 100% 2-Concordo 3-Discordo 4- Discordo 100%

Q41- É difícil para mim usar a negação dupla do espanhol por que não existe no português.

1-Concordo 100% 2-Concordo 3-Discordo 4- Discordo 100%

Glossary

CAH	Contrastive Analysis Hypothesis
CLI	Cross-linguistic Influence
GJT	Grammaticality Judgment Task
IL	Interlanguage
IRB	Institutional Review Board
L1	First Language
L1A	First Language Acquisition
L2	Second Language
L2A	Second Language Acquisition
NegP	Functional Negation Category
NL	Native Language
PSA	Poverty of Stimulus Argument
SLA	Second Language Acquisition
TL	Target Language
UG	Universal Grammar

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Vita

Sandra Cidrao Alexandrino attended Cearense High School, Fortaleza, Ceará, Brazil. In 1981 she entered The State University of Ceará in Fortaleza, Ceará, Brazil, where she received the degree of Bachelor of Languages and Literature in May, 1987. In 1995 she entered the Graduate School at The University of New Hampshire in Durham, New Hampshire, where she received her first Master's Degree in Education in 1998. In 2001 she moved to Texas to enter the Graduate School at University of Texas at Austin to complete her second Master's Degree in Spanish Linguistics, which she received her degree in 2003. At the same year she continued her studies in the same department in the PhD program of Second Language Acquisition. During all these years, she taught various languages courses as a second and foreign language teacher at different schools and universities in Brazil and in the USA.

e-mail: Sandra.c.alexandrino@gmail.com

This dissertation was typed by the author.