CROSS-LINGUISTIC INFLUENCE IN L3 PORTUGUESE ACQUISITION: LANGUAGE LEARNING PERCEPTIONS AND THE KNOWLEDGE AND TRANSFER OF MOOD DISTINCTIONS BY THREE GROUPS OF ENGLISH-SPANISH BILINGUALS

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As members of the Dissertation Committee, we certify that we have read the dissertation prepared by Michael W. Child, titled CROSS-LINGUISTIC INFLUENCE IN L3 PORTUGUESE ACQUISITION: LANGUAGE LEARNING PERCEPTIONS AND THE KNOWLEDGE AND TRANSFER OF MOOD DISTINCTIONS BY THREE GROUPS OF ENGLISH-SPANISH BILINGUALS and recommend that it be accepted as fulfilling the dissertation requirement for the Degree of Doctor of Philosophy.

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This accomplishment is as much yours as it is mine.
I love you more than I can ever express.

For Mom and Dad.
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have helped me to achieve all
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ABSTRACT

Interest in Portuguese has steadily increased over the last decade in universities across both North and South America (Carvalho 2002, 2011), principally among Spanish speakers. Generally speaking, Portuguese for Spanish-speakers courses have been designed around the theory that Spanish-speaking students will benefit from cross-linguistic influence (CLI, or *transfer*) due to the typological similarity that exists between Portuguese and Spanish (see Júdice, 2000). Related to this, the Typological Primacy Model, or TPM (Rothman, 2011), states that CLI in L3 acquisition principally comes from the language that is *perceived* to be typologically similar to the target language (*psycho-typology*, see Kellerman, 1983), resulting in both positive and negative transfer. Although there is a high degree of typological similarity between Spanish and Portuguese, it is unknown whether or not this linguistic proximity is equally salient to all learners and whether or not learners view this linguistic proximity as an advantage or a disadvantage when learning Portuguese. Furthermore, some studies have suggested that the context in which one's Spanish is acquired may play a role in the different types of CLI evident among different Spanish-speaking learners of Portuguese (e.g., Carvalho & da Silva, 2006; Johnson, 2004; Koike & Gualda, 2008). Consequently, Carvalho (2002, 2011) has called for more empirical evidence to shed light on the nature of CLI between Spanish and Portuguese. This dissertation, consisting of three main studies, seeks to answer this call by examining the effects of language background on L3 Portuguese acquisition among three groups of Spanish-speaking bilinguals: L1 Spanish (L1S) bilinguals, L2 Spanish (L2S) bilinguals, and heritage speakers of Spanish (HS bilinguals).

Results from both quantitative and qualitative analyses of questionnaire data from the first study suggest that although all participants view Spanish as the principal source of CLI in L3 Portuguese acquisition, L2S bilinguals and HS bilinguals perceive the role of Spanish as significantly more facilitative when learning Portuguese than do L1S bilinguals. The second and third studies used a sentence completion task and a preference/grammaticality judgment task (see Ayoun, 2000) to measure bilingual students' knowledge of mood distinctions in Spanish in obligatory and non-obligatory contexts, respectively, and how they transfer that knowledge to Portuguese. Results indicate that L2S group scored significantly lower on both measures of mood distinctions in obligatory contexts in Spanish, but transferred over more of their knowledge to Portuguese than either the L1S or HS groups. Similarly, results suggest that the L2S bilinguals do not understand the variable nature of mood distinctions in non-obligatory environments, but show almost identical strategies of mood selection in both Spanish and Portuguese. In contrast, L1S and HS bilinguals display knowledge of the variable nature of mood distinctions in Spanish in these contexts but show marked differences in mood selection between the Spanish and Portuguese tasks.

The results of these studies contribute to L3 acquisition literature by emphasizing the complexity involved in determining the role of the background languages in CLI and by highlighting the importance of the context of acquisition in CLI. In addition, the results provide more empirical evidence regarding the differences between how different groups of Spanish-speaking bilinguals transfer their knowledge when acquiring L3 Portuguese.

CHAPTER 1 - INTRODUCTION

University courses for Portuguese speakers have steadily increased over the last decade in both North and South America (Carvalho 2002, 2011). For many reasons, not the least of which being the typological proximity of the two languages, many Portuguese courses in the United States have seen a large influx of Spanish speakers desiring to learn the language. This unique situation has spurred research specific to the area of Portuguese for Spanish Speakers (PSS) as well as courses specifically designed for Spanish speakers.

Generally these courses have been accelerated courses where two semesters worth of material is covered in the space of one semester. The accelerated nature of these courses, and in fact their very existence, suggests a belief that Spanish-speaking students will benefit from cross-linguistic influence (CLI) (also referred to as *transfer*) due to the typological similarity that exists between Portuguese and Spanish. In other words, because the languages are so similar, it is assumed that much of a speakers' linguistic knowledge of Spanish can be successfully applied, or transferred, to Portuguese. Consequently, teachers should then be able to focus the majority of classroom time on the dissimilar aspects of the language.

The idea that Spanish speakers positively transfer similar structures in the learning[1] of Portuguese is attested by the rapid initial progress that many Spanish speakers tend to make when learning Portuguese (Almeida Filho, 2004; Carvalho, 2008). However, as Rothman (2011) points out, the typological similarity between the two languages leads to both positive and negative transfer. In addition, Carvalho (2002, 2011)

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1 Although there has been much debate about the differences between the concepts of "learning" and "acquisition", this distinction is beyond the scope of the present work. I have decided to employ both terms to represent essentially the same concept.

has continued to point out that more empirical evidence is needed to shed light on the nature of CLI among typologically similar languages, and more particularly between Spanish and Portuguese. One reason is that not all Spanish speakers seem to be able to transfer their knowledge of Spanish successfully to Portuguese, or at the very least, do so in different ways (e.g., Carvalho & da Silva, 2006; Johnson, 2004). Whether this difference is due to a basic underlying difference in these bilinguals' knowledge of Spanish (i.e., proficiency or competence), or to the nature of their linguistic knowledge as a result of the order and context of acquisition, remains to be seen.

That not all Spanish speakers in Portuguese classes are alike with regards to their linguistic ability should not be surprising, given the variability inherent in the proficiency of bilinguals as a whole. However, even among competent users of Spanish (see Cook, 1999), the various conditions of acquisition differentiate at least three main groups of Spanish-speaking students in the United States (see Carvalho 2002, 2011; Johnson, 2004): English-dominant bilinguals born and raised in the United States who subsequently learned Spanish (L2S bilinguals/speakers), heritage speakers of Spanish born and/or raised in the United States who may not have any academic/formal knowledge of Spanish (HS bilinguals/speakers), and Spanish-dominant bilinguals who were born and educated in Spanish-speaking countries and are now studying in the United States (L1S bilinguals/speakers). What is not known is if these three groups transfer their knowledge of comparable structures in Spanish to Portuguese in a similar fashion, and if not, in what ways they differ.

Rationale for the Present Study

As discussed above, the similarities that exist between Portuguese and Spanish are abundant, including many features of the language, including the lexicon, phonology,

morphology, and syntax (c.f. Azevedo, 1978; Jensen, 1989, Simões, 2007; among others). In fact, many syntactic structures that can be very difficult for the English-speaker to acquire in Spanish are identical or very similar in Portuguese (e.g., general verbal morphology, preterit/imperfect distinctions, subjunctive/indicative distinctions, grammatical gender, etc.), thus greatly benefitting the Spanish-speaking learner of Portuguese who recognizes this (either implicitly or explicitly) and is able to take advantage of these similarities.

Although the similarities between Spanish and Portuguese are many, it is unknown whether this linguistic proximity is equally salient to all learners, and if not, if this affects learners' abilities or tendencies to transfer similar structures. Kellerman (1983) has suggested that learners' perceptions of the linguistic relatedness of two languages (or *psychotypology*) are important when trying to understand CLI among languages. In addition, it may be the case that all learners perceive the similarities, but they may perceive the usefulness of these similarities in different ways (i.e., they may be seen as either facilitative or confounding). Finally, it is an open question as to whether or not other factors, such as language status (L1 vs. L2) and proficiency, affect L3 acquisition as much as linguistic proximity. Thus, it becomes important to assess students' sensitivity to similarities and differences and whether or not this affects their transfer of similar structures, as well as whether other factors are just as (or more) important than linguistic proximity.

Therefore, to begin to answer the question of whether or not these three groups of Spanish-speaking bilinguals similarly transfer their knowledge of Spanish to Portuguese, the following study will investigate: (a) learners' perceptions concerning the role of

Spanish and English in L3 Portuguese acquisition; (b) learners' knowledge of indicative/subjunctive distinctions in the present tense in Spanish in obligatory and variable contexts; and (c) if they are able to transfer this knowledge of mood distinctions in both of these contexts from Spanish to Portuguese.

In the following section, I will briefly discuss the main theories in third language acquisition, specifically as they relate to the role of the background languages in CLI and to the PSS sub-field. Then, I will discuss the research on the acquisition of mood distinctions in Spanish by native Spanish speakers, L2S learners, and HS learners. I will then conclude the review of the literature with a brief discussion of some of the affective issues concerning HS learners and how this may play into their L3 acquisition of Portuguese. Finally, I will explain the present study, including the theoretical framework on which it is based, its design, the participants, the research questions and related hypotheses, and a brief description of the expected contributions.

Literature Review

This review of the literature will be divided into three main sections. In the first section I will briefly address what research has indicated about L3 acquisition in general, with particular emphasis on the metalinguistic awareness/explicit knowledge of multilinguals[2] and on the role that background languages have in CLI, especially with typologically similar languages. In addition I will review what the PSS field has contributed relative to the importance of CLI among typologically similar languages. In the second section, I will briefly review the literature regarding the acquisition of mood

[2] I am using the term 'multilingual' here (see Cook, 1999) since much L3 research is actually concerned with foreign language acquisition/learning by those who speak more than two languages. In addition, I use the term 'bilingual' throughout the dissertation to refer to proficient L2 users (see again Cook, 1999), regardless of when the L2 was acquired.

distinctions in Spanish, focusing principally on the knowledge that L2S and HS bilinguals have of subjunctive/indicative distinctions. In the third and final section, I will review the literature regarding the affective characteristics that many HS speakers have in common that could potentially affect the L3 acquisition of Portuguese.

Third Language Acquisition

L3 acquisition studies have increasingly shown how L3 acquisition differs from L2 acquisition. First, bilinguals acquiring a third language tend to acquire the target language better than monolinguals (e.g., Cenoz, 2001, 2003; Cenoz & Valencia, 1994; Klein, 1995; Sanz, 2000). Cenoz (2003, 2011) argues that this is because bilinguals are not akin to two monolinguals in one individual; on the contrary, they learn, process, and use language in qualitatively different ways than do monolinguals (see also Valdés, 2005). More specifically, bilinguals have much more linguistic and cultural knowledge from which to draw when acquiring a third language. Furthermore, they most likely have gained certain language-learning skills while acquiring their second language that they can then employ in L3 acquisition.

Falk and Bardel (2010), adapting Hufeisen's model (1998), describe a simplified view of how L3 acquisition is different from L1 and L2 acquisition in terms of resources and input available to language learners. They show that L1 acquisition relies principally upon target language (TL) input whereas, in addition to TL input, L2 acquisition relies on learner's encyclopedic knowledge of the world, and L1 influence. In comparison, L3 acquisition relies on TL input, learner's encyclopedic knowledge of the world, L1 influence, L2 influence, and experiences and learning strategies acquired during L2

acquisition. They conclude that these strategies and experiences can be very important in L3 acquisition and differentiate it from L2 acquisition.

The role of background languages in CLI. It is generally thought that the strategies and experiences that bilingual learners bring with them when acquiring a third language positively contribute to bilinguals' achievement in their L3, regardless of the typological similarity of the L3 to either the L2 or L1 (see, e.g., Cenoz & Valencia, 1994; Falk & Bardel, 2010). However, one characteristic that has received a lot of attention in L3 acquisition is CLI or transfer. Much research has been conducted to try to understand how CLI works in L3 acquisition and what role the background languages play in CLI. García Mayo and Rothman (2012) summarize the four possible theories concerning the role of the background languages in L3 acquisition:

> (1) Absolute L1 transfer, which García Mayo and Rothman admit has never been formally proposed for L3 acquisition, would imply that the initial states of both L2 and L3 acquisition are the same. However, many studies seem to contradict this absolute position (see below) and it does not appear that it is taken seriously in L3 acquisition.
>
> (2) The L2 status factor, set forth by Bardel and Falk (2007, 2012; see also Falk & Bardel, 2010), advances the idea that the L2, by virtue of its status as a non-native language, will be pre-eminent in CLI and "may hinder L1 transfer in both a positive and negative manner" (Falk & Bardel, 2010, p. 206).
>
> (3) The Cumulative Enhancement Model (CEM), advanced by Flynn, Foley, and Vinnitskaya (2004), posits that each new language acquired can then influence the process of acquisition of subsequent languages. "However, transfer is not

predicted to be random, but to be maximally facilitative" (García Mayo & Rothman, 2012, p. 18).

(4) The Typological Primacy Model (TPM), proposed by Rothman (Rothman, 2010, 2011; Rothman & Cabrelli Amaro, 2010), posits that typological distance, principally psycho-typological distance (see Kellerman, 1983), can override the CEM to determine CLI. This, in effect, addresses the issue of negative transfer that the CEM may fail to fully account for.

These theories, while not completely mutually exclusive, seek to identify the principal source of cross-linguistic transfer in L3 acquisition. However, there is no consensus yet on which theory may be most correct. Many have suggested (e.g., Bardel & Falk, 2007, 2012; Murphy, 2003; Rast, 2010) that L2 transfer is dominant, especially in the beginning stages of L3 acquisition (i.e. the L2 status factor). In fact, Murphy has called L2 transfer a "superficial process" (p. 8) since as L3 proficiency increases, L2 transfer diminishes much faster than does L1 transfer in L2 acquisition. This "foreign language effect" (Meisel, 1983) has been shown to outweigh other factors in many studies (e.g., see reviews in Ecke, 2014; Falk & Bardel, 2010; García-Mayo & Rothman, 2012).

However, not all studies show strong L2 status factor effects. Although not the first to mention the effect of language distance on L3 acquisition (e.g., Cenoz, 2001; Kellerman, 1983; Ringbom, 1985), Rothman (2011) has suggested, that the CEM may hold for all cases except for (psycho) typological similarity between either the L1 or L2 and the L3. In studying how English/Spanish and Spanish/English bilinguals acquire Portuguese, Rothman (2010) found that typological similarity overrode L1/L2 status in

CLI, even when in one case English transfer would have been preferred (according to the CEM model), and in another case Spanish transfer would have been preferred. In another study, Rothman (2011) found that Italian/English bilinguals learning Spanish and Spanish/English bilinguals learning Portuguese transferred from Italian and Spanish respectively, rather than from English, regardless of which language would have provided "positive transfer". Additionally, Montrul, Dias and Santos (2011) found similar results in their study of Spanish/English and English/Spanish bilinguals learning clitic and object expression in Brazilian Portuguese as an L3. All subjects, regardless of L1/L2 status, transferred from Spanish instead of English (see also Carvalho & da Silva, 2006, who provide additional supporting evidence). In light of these studies, Rothman (2011) proposed the TPM stating that the CEM will hold in all cases except when the background language is typologically similar to the L3 (or is perceived to be so by the user), in which case the typologically similar background language will serve as the source of linguistic influence.

If either the TMP or the CEM were correct, one would expect Spanish/English bilinguals, regardless of order of acquisition, to principally transfer from Spanish when learning Portuguese. This should especially be true when acquiring mood distinctions in the present tense, since these distinctions are very similar in Spanish and Portuguese. If the L2 status factor is the dominant force in CLI, then it could be expected that English/Spanish bilinguals would transfer principally from Spanish whereas Spanish/English bilinguals would transfer principally from Spanish.

What is clear is that some Spanish speakers seem to be able to transfer linguistic structures and features to Portuguese better than others. Beyond the CEM, TPM, and the

L2 status factor, it may be that, as mentioned above, an explicit knowledge of such syntactic structures (which many HS speakers do not have) facilitates transfer. Or conversely, it may be that each speaker is successfully transferring over similar structures, but that the nature of each speaker's knowledge of those structures in Spanish is different, resulting in different outcomes in Portuguese (see review below for justification for assuming significant differences in bilinguals' syntactic knowledge, especially with regards to mood distinctions).

Regardless, however important typological distance and the unique status of the L2 may be in CLI, the issue seems to be complex. In recent reviews of L3 acquisition, all mention the difficulty of determining the source of CLI in L3 acquisition and the likely interactions between factors (e.g. Cabrelli Amaro, 2012; Ecke, 2014; Falk & Bardel, 2010; García-Mayo & Rothman, 2012). Murphy (2003) has suggested that both personal and linguistic factors interact with each other in CLI. She cites personal factors such as L3 proficiency, amount of target language exposure and use, language mode of the speaker (whether users are speaking in a monolingual or multilingual context, see Grosjean, 2001), (meta)-linguistic awareness, age, and speech context (formal or informal). In addition, Murphy emphasizes that linguistic factors such as word frequency, word class, and morphology all play a role. The complexity in identifying sources of CLI arises when one considers that both personal and language factors interact with each other. For example, Murphy shows how L2 influence diminishes with L3 proficiency and how CLI diminishes in monolingual, as opposed to multilingual, communicative contexts. In addition, with reference to vocabulary transfer, content words seem to be transferred more from the L1 while function words transfer principally from the L2. However, both

of these transfers interact with typology and proficiency—i.e., closer typology/lower proficiency equals more potential for transfer (see also Hall et al. 2009, p. 181, for evidence of a "summative L2/foreign language and typology effect" on non-cognate words).

In summary, L3 acquisition research has found that bilinguals tend to have more resources to employ in learning their third language than do monolinguals. In addition, their L1 and L2 can both contribute to cross-linguistic interference, with the L2 usually playing a stronger role, except in the case where the L1 is typologically similar to the L3. Furthermore, there are a multitude of interacting factors that contribute to bilinguals' CLI in, and ultimate attainment of, the L3, not the least of which is each speaker's L2 proficiency. Thus it is important, when studying the nature of CLI (i.e., transfer), to take into account not only the typological similarity of each language, but other factors as well, such as each speaker's proficiency in the background languages, their language use patterns, and their perceptions of the background languages (i.e., both affective and, perhaps, metalinguistic).

As suggested by Falk and Bardel (2010), further evidence is needed to differentiate between the CEM, the L2 status factor and typology in CLI. The present study seeks to shed additional light on the *source* of transfer in the L3 acquisition of Portuguese by Spanish speakers, *if* particular structures are present in the Spanish speakers' personal varieties to begin with, and learners' perceptions regarding the role of the background languages in L3 Portuguese acquisition.

Importance of CLI in the teaching of Portuguese to Spanish speakers. Studies on the acquisition of Portuguese by Spanish-speakers (PSS) have been particularly

influenced by the idea of CLI. Carvalho (2002) mentions how a weak form of contrastive analysis (CA) has influenced the PSS field from the beginning (e.g., Azevedo, 1978; Takeuchi, 1984; Van de Wiel, 1995). She suggests that the greatest virtue of contrastive analysis is in helping teachers and materials developers know where they can simplify their teaching to more effectively spend time on those things that demand the most attention. Júdice (2000) recommends beginning courses in PSS start by emphasizing "transparencies", or those areas that are so similar that students can use their knowledge of Spanish with little or no modification. This helps students see the advantages of knowing Spanish when learning Portuguese and can add extra motivation to continue. She then stresses explicitly talking about "opacities", or those areas that are different, and at times, completely opposite. Incidentally, this applies to not only the linguistic system, but to cultural and pragmatic issues as well (c.f. Júdice, 1995; Koike & Flanzer, 2004; Silva, 2008).

The idea that the "opacities" should take up the majority of in-class time and attention assumes that Spanish speakers will naturally transfer these "transparent" areas over to Portuguese. In practice, this definitely occurs, which is undoubtedly the principal reason for Spanish speakers' rapid gains in learning Portuguese. However, this process of transfer is not universal for all students, especially in the United States where the term "Spanish speaker" does not necessarily mean "L1 Spanish speaker"[3]. Some students seem to be much more skilled at transferring over these similarities than others. Is this because they have a better grasp of these concepts, either intuitively or consciously (i.e., they have

[3] Incidentally, some of the articles focusing on the "transparencies" inherent between Spanish and Portuguese were written in Brazil and assume a monolingual Spanish speaker norm.

greater metalinguistic knowledge)? Or is it the case that not all Spanish speakers share a similar understanding or proficiency in these so-called areas of transparency? Thus it becomes important to determine not only learners' ability to transfer similar forms into Portuguese, but also to know if each Spanish speaker has sufficient knowledge of these areas of transparency to be able to transfer them.

It is in this area that the PSS field has highlighted the importance of how the background languages, particularly Spanish, are acquired. As has been mentioned, there are at least three types of "Spanish speakers": L2S bilinguals, L1S bilinguals, and HS bilinguals. As many in the field of Spanish as a heritage language point out, there is huge variation in the proficiencies and characteristics in this last group alone (see, for example, Alarcón, 2010; Beaudrie, 2009; Beaudrie & Ducar, 2005; Potowski, 2005; Valdés 1995, 2005). Johnson (2004), in a pilot study to determine the differences between these three groups when learning Portuguese, compared the errors of 21 subjects in two compositions in a beginning PSS course. Although the numbers were insufficient for statistical analysis, preliminary results indicated that the L1S speakers and the HS speakers made some errors that the L2S speakers did not, including orthographic errors (such as adding a spurious "h" in words like *achar* and confusing final *am* and *ão*) and errors with the possessive distinction between *seu* and *dele/dela* (see pp. 58-60).

Similarly, Koike and Gualda (2008), in looking at how these three groups of Spanish speakers acquire the Portuguese possessive form *dele/dela*, used both implicit and explicit methods to teach this form. They found that there were indeed differences in how the three groups performed with respect to these forms depending on the type of instruction and concluded that L2S speakers tended to do best with explicit

instruction/correction compared with the other two groups. In addition, Carvalho and da Silva (2006) found that although both L2S and L1S bilinguals (including two HS speakers) transferred knowledge from Spanish in subjunctive exercises, they did so differently. They conclude that L1S speakers may benefit less from a contrastive analysis approach to grammar than do L2S speakers, presumably because of the former group's lesser metalinguistic knowledge or familiarity with explicit/formal language learning.

In light of the above-mentioned studies, the present study aims to provide more empirical data on the similarities/differences of these three groups concerning their knowledge of mood distinctions in Spanish and their ability to learn/transfer these similar linguistic concepts and forms from Spanish to Portuguese. Accordingly, the following sections will review the literature concerning the acquisition and knowledge of mood distinctions by (a) native speakers of Spanish, (b) L2S learners, and (c) HS speakers in the United States. This review will highlight why it cannot be assumed that all "advanced" speakers of Spanish have similar knowledge of mood distinctions.

The Acquisition of Mood in Spanish

Acquisition of mood distinctions by native speakers of Spanish. Studies have shown that the subjunctive begins to be attested in native Spanish-speaking children as early as 2 years of age, first in volitional contexts, commands, and in some connective-governed (i.e., lexically triggered) adverbial and purpose clauses (Blake, 1983; García & Terrell; 1977, as summarized in Blake, 1983; Montrul, 2004; and Studerus, 1995). However, the full range of mood distinctions, including variable contexts that are semantically triggered (such as temporal clauses, clauses containing verbs of doubt and

uncertainty, and adjective/relative clauses) seems to develop gradually up until the early teenage years (Blake, 1983; Montrul, 2009).

L2S speakers' acquisition of mood. Many studies have sought to determine L2 learners' ability to acquire mood distinctions in an L2. Gudmestad (2006) used a variationist approach with data obtained from a written preference task to determine what syntactic features predicted L2 users' subjunctive usage. Looking at intermediate and advanced groups, he found that irregular verbs strongly predicted both intermediate and advanced groups' subjunctive usage on a written preference test. In addition, advanced learners seemed to specifically recognize that expressions of desire involved the use of the subjunctive. Due to the observed increase in ability of the advanced students when compared with the intermediate students in using the subjunctive, the author concluded that subjunctive acquisition was taking place among the L2 learners in the study.

Collentine (2010) reviewed studies done between 2003 and 2010 on the acquisition of the Spanish subjunctive by L2 learners. He observes that the subjunctive, although relatively infrequent and "in spite of its low communicative value" (p. 49) is still given much attention in L2 classrooms and learning environments. The research is clear that it continues to be difficult for students; however, like Gudmestad (2006) he concedes that some gains are seen, especially with certain tasks. He posits that the challenge for the L2 educator is to design activities that use the subjunctive in real-world situations that highlight the subtle pragmatic/semantic differences between the subjunctive and the indicative (i.e., in variable contexts). He suggested that future research concentrate on the role of transfer, how general pragmatic knowledge affects

mood acquisition, the role of study abroad vs. traditional classrooms in mood acquisition, and the relationship among phonological acquisition and mood acquisition.

Correa (2011) sought to understand the role of metalinguistic knowledge (MK), in the acquisition of the subjunctive. She distinguished between participants' use of the subjunctive in three different types of subordinate clauses (nominal, adjectival and adverbial), citing the fact that subjunctive usage in these three clauses is "decided by very different decision making processes" (p. 53). She used a terminology test and a grammaticality judgment task to determine the metalinguistic knowledge in Spanish and English of students at three different proficiency levels. She then tested these groups on their grammatical competence using a multi-task test. Then, she looked at the correlations between students' MK and their grammatical competence scores. The correlations were at their highest at level 2 and decrease slightly at level 3, which she interprets as giving evidence of a need for MK at the intermediate stages before these forms are automatized. Interestingly, none of the rules and terminology tested was associated with mood, suggesting that *general* MK contributes to higher proficiency (however MK in *English* did not correlate strongly with competence in Spanish). She admits that some focus on form seems to be necessary due to the subtle, complex nature of the subjunctive in Spanish. Finally, she suggests that a more positive attitude on the part of instructors with respect to students' ability to acquire MK may help in their acquiring mood.

Finally, with regard to L3 acquisition, Carvalho and da Silva (2006) used think-aloud exercises to study the acquisition of the Portuguese subjunctive by English/Spanish (ES) and Spanish/English (SE) bilinguals. In their study, the ES bilinguals did better than the SE bilinguals. SE bilinguals' non-target like production was generally concerned with

verbal morphology, however there was an example of hypercorrection. Their data showed that these learners were on the path to acquiring the subjunctive in Portuguese, and that typological distance played a stronger role in transfer than order of acquisition. In addition, they suggest that L1S speakers benefit less from a contrastive analysis approach than do L2S speakers. In contrast, Potowski, Jegerski and Morgan-Short (2009) suggest that HS learners may benefit from seeing the subjunctive and indicative side-by-side (i.e., in a contrastive way) to help make the differences salient. However this suggestion was given as an aside in their discussion of why HS learners did not progress as much as the L2S learners did after pedagogical intervention. Clearly, more research is needed to ascertain the effectiveness of a contrastive approach with regards to the subjunctive, especially with learners who have acquired their language in naturalistic settings.

In conclusion, L2 learners have been shown to acquire the indicative/subjunctive distinctions in Spanish, especially in obligatory contexts, although they do not converge on monolingual speakers' more subtle usages of mood. Thus, we would expect L2S speakers who are learning Portuguese as an L3 to successfully transfer over the knowledge that they have of mood distinctions due to the explicit knowledge that they are assumed to possess. However, what is not known is how much knowledge of mood distinctions the majority of the L2S speakers who are enrolled in PSS courses have.

Importantly, studies have shown how low and intermediate HS learners share many linguistic characteristics with L2S learners (Lynch 2003, 2008; Montrul & Perpiñán, 2011). However, as will be shown, heritage learners (especially advanced heritage learners), differ from L2 learners in important ways. Consequently, in the

following section I will review studies regarding advanced HS speakers and their knowledge and use of mood distinctions as well as briefly contrast this with L2 learners' knowledge of mood distinctions in Spanish. Because HS speakers' knowledge of Spanish morphosyntax has been shown to differ from monolingual Spanish speakers, it is important to review what is known about their knowledge of mood distinctions, as this presumably will be of importance when considering the CLI that takes place when these learners acquire Portuguese, as well as serve as a basis for comparison with the CLI patterns seen in L2S and L1S speakers.

HS speakers and their use and knowledge of mood distinctions. A Spanish heritage (HS) language speaker/learner has been defined in a number of ways, including a person with membership in a specific community (with no proficiency "requirement", per se, in the heritage language) to someone with a personal or affective connection to a heritage culture or language (see, e.g., Byrnes, 2005; Carreira, 2004; Potowski, 2005; Valdés, 1995, 2005). Thus, HS speakers/learners of Spanish are an extremely heterogeneous group ranging from those who have only basic receptive skills (see Beaudrie, 2009; Beaudrie & Ducar, 2005) to extremely proficient users who principally desire instruction in advanced writing and literature (Alarcón, 2010).

Consequently, the linguistic characteristics of HS learners' speech vary according to region, generation (with respect to immigration to the U.S.), local dialect, and each speaker's unique, personal history with the language. Despite the diversity among HS learners, many researchers have documented some salient features that distinguish varieties of bilingual Spanish in the United States from monolingual varieties outside of the U.S. One of these features is a simplified use of the verbal system (as compared to

monolingual, standard varieties), especially of mood and aspect—features typically learned and perfected in the first years of formal schooling (see, for example, Merino, 1983; Montrul, 2002; Montrul, 2009; Potowski, 2005, among others).

In one of the early studies, Merino (1983) administered a Spanish test twice over a two-year period to bilingual Chicano children in Kindergarten through 4th grade and found that many showed language attrition in their use of the preterit/imperfect, subjunctive, relatives, and conditionals as they progressed through school. Specifically, she found that many in the 4th grade performed no better (and sometimes worse) as those in Kindergarten. In short, she found evidence of erosion of the home language as these children's knowledge of English increased.

Additionally, data from Montrul (2002) and Silva-Corvalán (1994) have shown that the differences documented between HS learners and monolinguals are large with regards to their use and knowledge of the subjunctive. This reduced use of the subjunctive by HS speakers has been amply documented (Merino, 1983; Montrul, 2007; Potowski, 2005; Silva-Corvalán, 1994a, 1994b, 2000), and has been ascribed to incomplete acquisition, language attrition, or a combination of both.

Silva-Corvalán (1994a, 1994b) found that Spanish speakers in Los Angeles simplified and overgeneralized with regards to the indicative/subjunctive distinction. Specifically, she found that many speakers at the low end of the bilingual continuum did not productively use the subjunctive outside of fixed expressions, whereas among more proficient bilinguals, the loss of the subjunctive was more extensive in non-obligatory contexts than in obligatory contexts. She noted how this tendency towards simplification

is inherent in Romance languages, but that language contact situations seem to speed up this process, with English having an indirect effect on this attrition of mood distinctions.

In a later study, Montrul (2007) used two tasks (a morphology recognition task and a sentence conjunction judgment task) to test 20 2nd generation HS speakers' receptive ability concerning the subjunctive. She also compared their results with 15 monolingual speakers of Spanish. Results showed that although 2nd generation HS speakers may have the ability to distinguish between the indicative and the subjunctive in obligatory contexts, they do not distinguish between the subtle meaning differences of mood in variable contexts, suggesting incomplete acquisition.

In a subsequent study, Montrul (2009) looked at oral production, written interpretation and written elicitation to test aspectual and mood usage among different proficiency levels of HS speakers. She concluded that they generally had a good understanding of aspect (preterit/imperfect), with the advanced speakers behaving mostly like monolinguals. In contrast, most HS speakers have some difficulty with mood (specifically subjunctive/indicative distinctions), with the lowest level speakers not distinguishing well between the two in both elicitation/production tasks (in writing and speaking) as well as on acceptability judgments. Incidentally, this same imbalance with regard to tense-aspect and mood was also found among the low/intermediate HS learners in Lynch's (2008) study.

As mentioned before, Potowski *et al*. (2009) sought to determine the effects of two different types of instruction (processing instruction and traditional/output-based instruction) on HS learners and L2S learners. Using a pretest/posttest design with interpretation, production, and grammaticality judgment tasks, they found that both L2S

and HLS groups showed improvement on the interpretation and production tests; however, only the L2S group showed improvement on the grammaticality judgment tasks. In addition, L2S participants showed more improvement on each measure than their HS counterparts. They mention that there may be two possible explanations for this apart from the explanation that HS learners just plain learn differently: (1) L2S learners had been in more language courses and had most likely encountered similar items/questions before, whereas many of the HS participants were in their 1st, 2nd or 3rd language course; (2) Many of the HS participants may have been exposed to a different form (i.e., the imperfect) in similar contexts. That is, their home varieties may actually use the imperfect in places where the subjunctive is used in standard varieties. HS participants may have been only choosing a form that they had been exposed to and productively used in the past. If this were the case, further studies need to expose whether or not different instruction methods would be more helpful in "replacing" a form rather than teaching a totally new form.

In another study, Montrul and Perpiñán (2011) sought to test claims by Au, Knightly, Jun and Oh (2002) and Au, Oh, Knightly, Jun and Romo (2008) that heritage learners have advantages over L2 learners with respect to phonology but not morphosyntax. They tested 60 HS learners and 60 L2S learners in three different proficiency levels to see if their understanding of the tense-aspect (TA) and mood differences in Spanish were statistically different. They used a morphology recognition task that was designed to tap into learners' metalinguistic knowledge of the morphology and a sentence conjunction judgment task between two minimal pair sentences to tap into learners' implicit, more automatic knowledge of TA and mood. They found that both the

advanced experimental groups performed significantly better statistically than the intermediate and beginning groups, showing that there was acquisition of both TA and mood among both groups. Furthermore, they found that HS learners were more accurate with TA (which is an early acquired aspect of morphosyntax) than were the L2S learners. However, for mood, they were only more accurate than the L2S learners on the sentence conjunction judgment task while the L2S learners produced more target-like forms on the morphology recognition task (which they believed reflected metalinguistic knowledge). The researchers concluded that HS learners have some advantages with regards to morphosyntax, specifically with earlier acquired structures (i.e., their knowledge of TA distinctions was greater than mood distinctions). However, they say that the context of acquisition, the input modality, literacy, and maybe explicit instruction all play a role.

Finally, in contrast to Montrul's studies, which focused on variable uses of the subjunctive in Spanish, Mikulski (2010) looked at L2S learners (Spanish as a foreign language, or "SFL" learners in her study) and HS learners' ability to distinguish between native-like and non-native-like usages of the subjunctive in volitional (which are generally assumed to be obligatory) conditions. Whereas Montrul & Perpiñán (2011) found mixed results concerning whether HS learners performed better than L2S learners, Mikulski found that as a group, HS learners did indeed show an advantage over L2S learners in recognizing native-like usage of the subjunctive in obligatory contexts. Interestingly, HS learners also showed more intra-group variability than did the L2S learner group.

In conclusion, it is clear that most HS speakers exhibit reduced knowledge of mood in Spanish (as compared to monolingual speakers of Spanish), with a possible

exception being HS learners' ability to recognize native-like usage of the subjunctive in volitional (obligatory) contexts. In addition, it appears that HS learners perform better on tasks that tap into implicit/automatic knowledge, as opposed to L2S learners who perform better on more explicit tasks. These differences may be due to the context of acquisition, input modality, and explicit instruction.

It is important to realize that although a reduced usage of the verbal system has been shown to apply to many HS learners of Spanish, Potowski (2005) has reiterated that many features common to HS learners' Spanish (and U.S. dialects of Spanish in general) are common to contact varieties of language everywhere. Thus, although standard monolingual uses of tense, aspect and mood (TAM) in Spanish are fairly uniform, actual usage is variable, especially among bilinguals (see, for example, Butt & Benjamin, 2013; Merino, 1983; Mikulski, 2010; Montrul & Perpiñán, 2011; Potowski et al., 2009; Silva-Corvalán, 1994a, 1994b). Thus, it is necessary to consider the heterogeneity inherent in the Spanish verbal system and how that variety may lead to different outcomes when a Spanish speaker is expected to transfer TAM knowledge in Spanish into a typologically similar language, such as Portuguese, during the acquisition process. Put differently, although it is important to know if L3 learners are transferring over similar features from their Spanish into Portuguese, it is also crucial to know what those features are in each speaker's particular variety. For example, even if transfer is happening, if the particular feature is not salient in the speakers' variety of Spanish, then neither should it be in their Portuguese. Thus, if it can be shown that some speakers have a reduced form of the subjunctive, then those particular areas of the language may need to be explicitly taught in the L3 classroom. Consequently, the present study aims at quantifying participants'

knowledge of mood distinctions in Spanish and investigate whether or not they can transfer this knowledge to Portuguese.

Affective Concerns of HS learners

Finally, many researchers have noted the complex social/affective issues facing many HS learners of Spanish with regard to identity and the Spanish language. A common theme in HS research is the negative association HS learners of Spanish have towards their own variety of Spanish (see Parodi, 2008). Beaudrie (2009) and Beaudrie & Ducar (2005) note that the HS students in their respective studies reported having positive feelings about the Spanish language in general, but much less positive feelings about the particular varieties that they themselves spoke. Many remarked that they did not speak "real" or "proper" Spanish. In addition, although these same HS learners were comfortable listening to Spanish, most were extremely hesitant to speak it. Rodríguez (2007) even found Spanish teachers who spoke U.S. varieties of Spanish harboring similar negative feelings towards their own dialects.

Many times, these feelings of language shame originate from the derision these heritage speakers sense towards their own dialects; many HS speakers grew up in an environment where a variety of Spanish in contact with English was spoken. Although the stigmatization of Spanish in the United States (specifically U.S. varieties of Spanish) by those external to the Spanish speaking community (i.e., monolingual English speakers) may be the largest factor contributing to the language shame that many HS learners feel (see for example, Krashen, 1996; Pomerantz 2002; Valdés 1995, 2005; Wright, 2007), Pomerantz (2002) and Bills (2005) show that many times the internal stigmatization can be extremely damaging as well. Pomerantz details the stigma that can

come from Spanish educators (both native and non-native) who hold monolingual, academic varieties of Spanish as exemplars of the Spanish language (particularly peninsular varieties), while Bills laments the fact that within the Spanish-speaking communities in the United States there exists "internal racism" and stigmatization of specific varieties. He even notes that many native Spanish speakers criticize HS learners who are trying to learn to speak Spanish. Felix (2009) also documents how HS learners may feel judged by their non-native Spanish-speaking counterparts (i.e., L2S speakers) for not speaking "correct" Spanish. Unfortunately, these internal and external factors often lead to "language panic" (Martínez, 2006), which, if left unchecked, contributes greatly to language loss (see Bills, 2005).

Importantly, in PSS courses, learners are expected to positively transfer over similar structures from Spanish to Portuguese. In light of the affective concerns that many HS learners have, one could assume that strong feelings towards Spanish and its effect on Portuguese, whether positive or negative, will correlate with students' abilities to transfer similar structures. This fact, in addition to knowing students' perceptions of the linguistic proximity of the two languages (i.e., Kellerman's psychotypology), suggests that students' perceptions may be an important aspect of linguistic transfer. Thus, part of the present study seeks to determine students' views on the role that Spanish has in their learning of Portuguese.

The Study

Overview

As mentioned above, the purpose of this study is to investigate whether or not L1S bilinguals, HS bilinguals, and L2S bilinguals similarly transfer their knowledge of Spanish to Portuguese by investigating: (a) learners' perceptions concerning the role of

Spanish and English in L3 Portuguese learning; (b) their knowledge of subjunctive/indicative distinctions in the present tense in Spanish in obligatory and variable contexts; and (c) if they are able to transfer this knowledge of mood distinctions from Spanish to Portuguese.

Research Questions

The present study seeks to answer the following research questions:

(1) What are the perceptions of Spanish-speaking bilinguals regarding the role of Spanish in relation to learning Portuguese as a 3rd language?

a. What types of bilingual students enroll in Portuguese for Spanish-speakers courses with regard to their language background (i.e., the "context" of their acquisition of Spanish and English)?

b. What are their proficiency levels in Spanish as measured by a Spanish proficiency pretest used by Montrul and Perpiñán (2011)?

c. What are participants' language learning perceptions concerning the role of Spanish in learning Portuguese?

(2) How do Spanish-speaking bilinguals differ regarding their knowledge and transfer of mood distinctions in obligatory contexts?

a. Do L1S, L2S, and HS bilinguals significantly differ in their knowledge of mood distinctions in obligatory contexts in Spanish?

b. Are there significant differences between participants' success at transferring their knowledge of mood distinctions in Spanish to Portuguese as measured by two sentence completion tasks and two preference/grammaticality judgment tasks in Spanish and Portuguese and

if so, are these differences correlated with context of acquisition (Language Background Group)?

(3) How do Spanish-speaking bilinguals differ regarding their knowledge and transfer of mood distinctions in non-obligatory (variable) contexts?

a. Do the L1S, L2S, and HS bilinguals show similar patterns of subjunctive usage in non-obligatory (variable) contexts in Spanish as measured by a P/GJ task in Spanish?

b. Do the different groups transfer over their patterns of subjunctive usage in Spanish to Portuguese in a similar manner when comparing their selection of *Subjunctive*, *Indicative*, or *Both* in each semantic category on the P/GJ task in Spanish and an identical P/GJ task in Portuguese?

The hypotheses for the above questions were, respectively, that:

(1) a. There would be a mix of Spanish speaking bilinguals enrolled in beginning PSS courses, but L2S bilinguals and HS bilinguals would outnumber L1S bilinguals.

b. L1S bilinguals would score significantly higher on the Spanish proficiency pretest than would HS bilinguals, who would in turn score significantly higher than L2S bilinguals.

c. Perceptions regarding the role of Spanish in L3 Portuguese learning would be correlated with Language Background Group, but not necessarily with scores on the Spanish proficiency test. More specifically, L2S bilinguals would perceive Spanish to be more beneficial and facilitative in learning Portuguese than would the other two groups.

(2) a. There will be a significant difference in the knowledge of mood distinctions between the three groups with the L2S bilinguals scoring significantly lower on the tasks than the other two groups.

b. There will be a significant difference in participants' success at transferring over their knowledge of mood distinctions in Spanish to Portuguese as measured by the difference between their scores on the Spanish tasks and the Portuguese tasks. Specifically, with regards to the success of the groups at transferring their knowledge from Spanish to Portuguese: *L2S bilinguals* > *L1S bilinguals* > *HS bilinguals*. In other words, the difference between the L2S bilinguals' scores in Spanish and Portuguese would be smaller than the difference between the scores of the other two language groups

(3) a. There will be a significant difference in the knowledge of mood distinctions between L1S, L2S and HS bilinguals

i. For verbs of Comment/Emotion and Doubt/Uncertainty/Denial (where there are strong tendencies toward subjunctive usage by native speakers), L2S and SH bilinguals will choose the subjunctive significantly less than the L1S bilinguals.

ii. For Adjective/Relative Clauses (which, theoretically, allow both indicative and subjunctive, depending on context), the L2S bilinguals and HS bilinguals will not accept both sentences as much as the L1S bilinguals (showing a lack of knowledge of the

semantic distinctions between the subjunctive and indicative in these contexts).

b. There will be a significant difference in the way participants transfer knowledge of mood distinctions in these variable contexts in Spanish to Portuguese as measured by the difference between their percentage of subjunctive usage on the Spanish tasks and the Portuguese tasks. Specifically, L2S bilinguals' will show less difference on the tasks in Spanish and Portuguese than the other two groups (i.e., they will view the two tasks as essentially testing the same conceptual knowledge of mood distinctions regardless of the language).

Participants

Participants were selected among students enrolled in a beginning PSS course at a university in the southwestern United States during the Spring 2013 semester. All participants were Spanish-English bilingual speakers and learning Portuguese as an L3/Ln. All participants completed the tests, questionnaires, and tasks related to the study as part of their regular coursework. Additional information on participants can be found in Chapters 2, 3, and 4.

In addition to the above participants, a small group of native-speaking Portuguese and Spanish participants was recruited to complete some of the above-mentioned tasks for simple comparison purposes, but since the focus of the study was on the difference between the experimental group participants' responses in Spanish and Portuguese, these native speaking participants were not used as a true control group. However, their responses have been included in Chapters 2 and 3 for comparison purposes to both

standard norms found in grammar and foreign language textbooks, and to the participants in the experimental group. 12 native Portuguese speakers from Brazil and nine native Spanish-speakers from Mexico completed the sentence completion tasks in their respective languages. In addition, the same 12 Portuguese speakers completed the P/GJ task in Portuguese and seven of the above-mentioned native Spanish speakers completed the P/GJ task in Spanish. All of these participants completed these tasks online between March and October of 2013.

Study Design and Schedule

The present study was carried out from January to October of 2013. As part of the study, participants in the experimental group of the study completed multiple questionnaires, tests, and tasks that included: (1) a Spanish proficiency pretest used in Montrul & Perpiñán (2011); (2) a Language Background Questionnaire that asked questions about learners linguistic history and use of English and Spanish; (3) a brief English proficiency pretest; (4) a Language Learning Perceptions questionnaire; (4) two sentence completion tasks in Spanish and Portuguese; (5) two P/GJ tasks (see Ayoun, 2000) in Spanish and Portuguese (See Appendices B-H).

Participants completed the Language Background Questionnaire and the Spanish proficiency pretest on the third day of class (early January 2013). Approximately two months later (late February 2013) they completed the English proficiency pretest, the Language Learning Perceptions questionnaire, and the sentence completion, and P/GJ tasks in Spanish. Finally, one month later (March 2013), and after roughly one month of instruction on the use of the subjunctive in Portuguese, participants completed the sentence completion and P/GJ tasks in Portuguese.

Theoretical Framework

The theoretical framework chosen to guide this study is Jason Rothman's Typological Primacy Model (TPM), which comes from the field of third language acquisition. As mentioned before, the TPM is a modification of Flynn, Foley, & Vinnitskaya's (2004) Cumulative Enhancement Model (CEM) that states that all languages known to an individual can affect, or enhance, all subsequent language learning. However, the TPM modifies the CEM by saying that in cases where the target language is *perceived* to be typologically similar to one of the previously acquired languages, CLI will principally come from the (psycho)-typologically similar language, resulting in both positive and negative transfer (see also Kellerman, 1983). This, in effect, deals with one of the main criticisms of the CEM, namely that it does not adequately account for cases of negative transfer (García-Mayo and Rothman, 2012).

The Typological Primacy Model is presumably rooted in the minimalist paradigm of Universal Grammar (UG). Montrul (2002) effectively summarizes UG from a minimalist perspective as follows:

> In the Minimalist Program (Chomsky, 1995), language consists of an invariant computational system and a lexicon, which is seen as the source of linguistic variation. Within the lexicon, a principled distinction is made between lexical categories (nouns, verbs, adjectives, etc.) and functional categories, such as complementizer, determiner, tense, agreement, negation. The role of functional categories is to check formal features of lexical items that drive syntactic operations. Features that make an essential contribution to meaning, such as categorical features and the phi-features of nominals (plural, human, gender), are [+interpretable], while those that are only relevant to morpho-syntax, including case and agreement, are [-interpretable]. Non-interpretable features can be strong or weak, leading to different syntactic consequences. (p. 40)

If one adopts a UG framework, then it is assumed that the grammatical category Mood is "encoded in a functional category MoodP (higher than TP, or tense) where the

formal feature [+MOOD]…is checked through subjunctive morphology" (Montrul, 2007, p. 25). If one assumes that adult language learners (i.e., L2 learners) are constrained by, but have full access to, UG in learning an L2 (i.e., the Full Access hypothesis, see Schwartz & Sprouse, 1996) then "the initial state of L2 acquisition is the final state of L1 acquisition" (*ibid*, p. 40-41). Accordingly, adult learners are theoretically capable of not only resetting parameters in UG that may be set differently in their native language, but also of activating parameters that may not be relevant to their native language (see Iverson, 2009, for a discussion of Full Access theories).

In the case of the present study, both explicit and implicit knowledge of mood distinctions in Spanish (specifically the knowledge of indicative/subjunctive distinctions in the present tense) should enable learners of Portuguese to successfully transfer their knowledge of mood distinctions over to Portuguese. In other words, Spanish-speakers already have acquired the functional category MoodP and the formal features that go along with it. The only task for the Spanish-speaking learner of Portuguese is to map the formal feature [+MOOD] onto the Portuguese morphology. Many studies in the generative framework suggest that adult learners are indeed able to acquire tense/aspect/mood distinctions in an L2 (see, e.g., reviews in Ayoun, 2013; Ayoun & Rothman, 2013). However, according to the TPM, the transfer of this knowledge to an L3 may be promoted or inhibited based on the learner's perception of the typological distance between the languages. This ability to transfer may also be affected by a learner's explicit knowledge of the language.

Although the TPM proceeds from a UG framework, the theory does not necessarily preclude other views of language acquisition, such as usage-based approaches

(e.g., Tomasello, 2009). If a usage-based theory of language acquisition were assumed, the model's predictions would still hold, as the task of the learner would be to recognize that the paradigmatic categories that they had formed in Spanish (e.g., mood distinctions in the present tense) on the basis of input frequency, distributional analysis, and communicative function (see Tomasello, 2009, p. 86) could be transferred over to Portuguese with minimal changes in the verbal morphology. Thus, although the theoretical framework adopted here is the Typological Primacy Model, there is no assumption concerning macro language acquisition theory (i.e., innatist vs. usage-based).

Potential Significance of the Study

This present study seeks to contribute to the field of L3 acquisition research by showing how linguistic transfer plays out among typologically similar languages, as well as between languages where there is incomplete acquisition (in the case of the Spanish L2 speakers' and HS speakers' knowledge of mood distinctions). More specifically, it contributes to the growing PSS field by providing empirical evidence of the knowledge of mood distinctions in Spanish that these three groups of Spanish-speaking bilinguals possess and whether or not these learners are transferring over these similar structures from Spanish (L1 or L2) to Portuguese (L3). Finally, this research sheds light on the perceptions that these learners have of the role of a typologically similar L1 or L2 in the acquisition of an L3 and how these perceptions may correlate with learners' success in transferring similar structures from Spanish to Portuguese.

Dissertation Layout

The body of the dissertation consists of three semi-autonomous, but related chapters[4]: Chapter 2 analyzes participants' perceptions regarding the role of Spanish in L3 Portuguese acquisition; Chapter 3 examines students' knowledge, use and transfer of the indicative/subjunctive distinctions in obligatory contexts in Spanish and Portuguese; and Chapter 4 investigates students' knowledge and transfer patterns of indicative/subjunctive distinctions in variable contexts in Spanish and Portuguese. The material in Chapter 2 has already been published in volume 7 of the Portuguese Language Journal (Child, 2013) and the editors of the PLJ have graciously allowed the original article to be reprinted in Appendix A. However, in this dissertation I have made some minor changes to the original article (for example, the designations for each bilingual group and in formatting) to allow the chapter to flow better in the context of this dissertation. Finally, in the concluding chapter (Chapter 5) I review and synthesize the results and conclusions reported in Chapters 2-4 and relate them back to the research questions posed in this introduction. In addition, I suggest some conclusions and implications for L3 acquisition research in general and PSS in particular, in addition to offering some recommendations for future research.

[4] Because these chapters are intended to be stand-alone articles and are organized as such, each contains elements that would not normally appear in the content chapters of a traditional dissertation (e.g., an introduction, literature review, explanation of the study, discussion, etc.). Because of this, some of the material in the introductions, literature reviews, and discussions of each chapter overlap.

CHAPTER 2 - LANGUAGE LEARNING PERCEPTIONS

Introduction

Studies on L3 acquisition have increasingly shown how acquiring an L3 differs from L2 acquisition. Perhaps most noticeable is the fact that bilinguals tend to acquire the target language better than monolinguals do (Cenoz, 2003; Cenoz & Valencia, 1994; Klein, 1995; Sanz, 2000). Cenoz (2003, 2011) argues that this is because bilinguals learn, process, and use language in a qualitatively different way than do monolinguals (see also Valdés, 2005). More particularly, when acquiring a third language, bilinguals have much more linguistic and cultural knowledge from which to draw. In addition, they most likely have gained certain language-learning skills while acquiring their second language that they can then employ in L3 acquisition (Falk & Bardel, 2010)

Although L3 acquisition studies, and L3 acquisition in general, are not as common in the United States as in Europe, a specific case of L3 acquisition has shown an increase in interest both in terms of students enrolled as well as in research published: the burgeoning PSS field. Students' interest in learning Portuguese has steadily increased over the last decade in universities across the United States (Carvalho 2002, 2011; Carvalho, Freire & da Silva, 2011), principally among Spanish speakers. Generally Portuguese for Spanish-speakers courses have been designed around the idea that Spanish-speaking students benefit from CLI due to the typological similarity that exists between Portuguese and Spanish. This CLI, in theory, effectively allows teachers to lightly touch upon those aspects of the language that are similar while spending more time and attention on dissimilar aspects (see Carvalho, 2002; Júdice, 2000). However, Carvalho (2002, 2011) has pointed out that more empirical evidence is needed to better understand the nature of CLI between Spanish and Portuguese, implying that this strategy

of focusing principally on dissimilar aspects of the language may not always be appropriate.

Many studies have been conducted to understand how CLI works in L3 acquisition and what role the background languages play in CLI. Although there are at least three principle theories concerning the role of the background languages in CLI in L3 acquisition (see Falk & Bardel, 2010), most relevant to the present study is Jason Rothman's Typological Primacy Model (or "TPM", Rothman, 2011). The TPM suggests that all background languages can play a role in L3 acquisition, except for those cases where the (psycho)typological distance (as defined by Kellerman, 1983) between either the L1 or L2 and the L3 is relatively small, in which case CLI will come principally from the (psycho)typologically similar language. In other words, if a person perceives that one of his previous acquired languages is most similar to the target language, transfer will come principally from that (psycho)typologically-similar background language, regardless of the order of its acquisition.

In studying how English-Spanish and Spanish-English bilinguals learn Portuguese, Rothman (2010) found that typological similarity overrode L1/L2 status in CLI, even when in one case English transfer would have been preferred (according to the CEM model) and in another Spanish transfer would have been preferred. In another study, Rothman (2011) found that Italian/English bilinguals learning Spanish and Spanish-English bilinguals learning Portuguese transferred from Italian and Spanish respectively, rather than from English, regardless of which language would have provided "positive transfer". Additionally, Montrul, Dias & Santos (2010) found similar results in their study of Spanish-English and English-Spanish bilinguals learning clitic and object

expression in Brazilian Portuguese as an L3. All subjects, regardless of L1/L2 status, transferred from Spanish instead of English (see also Carvalho and da Silva, 2006, who provide additional supporting evidence).

However, the issue may be complicated by *how* the background languages were acquired (i.e. the context of acquisition) and if this influences how language learners perceive the role of their background languages. One reason this is particularly important when considering the acquisition of Portuguese by Spanish speakers in the United States is because, as Carvalho (2002, 2011) has observed, there are at least three general groups of "Spanish speakers" who enroll in Portuguese for Spanish-speakers classes in the United States: English-Spanish bilinguals who acquired Spanish as adults (L2S bilinguals in the present study); Spanish-English bilinguals who acquired English as adults (L1S bilinguals); and simultaneous/early Spanish-English speakers who acquired Spanish from birth and English early on in life (i.e. speakers of Spanish as a heritage language, or HS bilinguals). As many in the field of Spanish as a heritage language point out, there is enormous variation in the proficiencies and linguistic characteristics in this last group alone (see, for example, Alarcón, 2010; Beaudrie, 2009; Beaudrie & Ducar, 2005; Potowski, 2005; Valdés 1995, 2005).

Furthermore, some studies have suggested that the context in which one's Spanish is acquired may play a role in the different types and degrees of CLI evident among different Spanish-speaking learners of Portuguese. For example, Johnson (2004), in a pilot study to determine the differences between these three groups, compared the errors of 21 subjects in two compositions in a beginning PSS course. Preliminary results indicated that the native Spanish speakers and the HS speakers made some errors that the

L2S speakers did not, including orthographic errors (such as adding a spurious "h" in words like *achar* and confusing final *am* and *ão*) and errors with the possessive distinction between *seu* and *dele/dela* (see pp. 58-60).

Similarly, Carvalho and da Silva (2006) found that although both L2S and L1S bilinguals (including two HS speakers) transferred knowledge from Spanish in subjunctive exercises, they did so differently. They conclude that L1S speakers may benefit less from a contrastive analysis approach to grammar than do L2S speakers, presumably because of the former group's lesser metalinguistic knowledge.

In summary, although there is a high degree of typological similarity between Spanish and Portuguese, it is unknown whether or not this linguistic proximity is equally salient to all learners and whether or not they view this linguistic proximity as an advantage or a disadvantage. Thus, the present study takes Rothman's Typological Primacy Model as a point of departure; the present study will not only look at whether Spanish-English bilinguals perceive Spanish as being the principle source of CLI when learning Portuguese, but also whether or not they perceive the role that Spanish plays in acquiring Portuguese as positive or negative. In addition, the effect of the context of acquisition (i.e. language background) on these perceptions will be analyzed. While it seems important to know if learners perceive Spanish as the typologically similar language and therefore the principal source of CLI in L3 Portuguese acquisition, it also seems reasonable to assume that *how* learners perceive the role that Spanish plays in L3 Portuguese acquisition will reveal how that language is affecting the person's acquisition of the target language.

The Study

The present study was conducted to answer three main research questions: (1) What types of bilingual students enroll in PSS courses with regard to their language background (the "context" of their acquisition of Spanish and English)?; (2) What are their proficiency levels in Spanish as measured by a Spanish Proficiency Pretest used by Montrul and Perpiñán (2011); (3) What are participants' language learning perceptions concerning the role of Spanish in learning Portuguese? It was hypothesized that there would be statistically significant differences between participants' perceptions of the role of Spanish correlated principally with the context of their acquisition of Spanish and English (i.e. their Language Background), and *not* significantly correlated with their scores on a Spanish Proficiency Pretest, as one might initially expect (i.e. more proficient at Spanish=more perceived benefit of Spanish when learning Portuguese). This hypothesis was influenced by my experience as an instructor of Portuguese for Spanish students. More particularly, I had noticed that many students who learned Spanish as adults (L2S speakers) struggled less with the material than those who either learned it from birth or who spoke it as a heritage language, even though the former group's proficiency in Spanish was frequently lower than the latter two groups. Possible reasons for this will be discussed in the Discussion section.

Participants

The present study involved 72 total participants enrolled in a first-semester Portuguese for Spanish-speakers course at a university in the southwestern United States. Participants came from four different sections taught by three different instructors (one teacher taught two separate sections). All participants were at least 18 years old and a large majority was pursuing either a major or a minor that involved Spanish (e.g.,

Spanish translation and interpretation, Spanish, Latin American studies, etc.). In addition, all participants spoke both Spanish and English.

Initially, the questionnaire sought to distinguish seven separate groups of bilinguals: (1) L1 Spanish speakers who learned English after the age of 11; (2) L1 English speakers who learned Spanish after age 11; (3) simultaneous bilinguals who were first exposed to Spanish and English from birth; (4) early Spanish-English bilinguals who were first exposed to English between the ages of 1 to 5; 5) late Spanish-English bilinguals who were first exposed to English between the ages of 6 and 11; 6) early English-Spanish bilinguals who were first exposed to Spanish between the ages of 1 to 5; 7) late English-Spanish bilinguals who were first exposed to Spanish between the ages of 6 and 11. Below are the two questions from the Language Background Questionnaire that served as the primary basis for classifying students according to the context of their acquisition of Spanish and English (age 6 was chosen to correspond with the start of formal schooling).

2. a) At what age were you first exposed to English?
From birth ☐ 1-5 yrs old ☐ 6-11 yrs old ☐ after age 11 ☐
b) Where were you first exposed to English? (check one) Home ☐ School ☐ Both ☐

3. a) At what age were you first exposed to Spanish?
From birth ☐ 1-5 yrs old ☐ 6-11 yrs old ☐ after age 11 ☐
b) Where were you first exposed to Spanish? Home ☐ School ☐ Both ☐

Groups 1 and 2 above correspond to what are traditionally referred to as L1 Spanish (L1S) bilinguals and L2 Spanish (L2S) bilinguals, respectively, whereas groups 3-7 would all be considered different types of heritage Spanish speakers (or HS bilinguals, see Beaudrie & Ducar, 2005). It was initially thought that potentially there could be a

difference between simultaneous bilinguals, early bilingual heritage speakers and late bilingual heritage speakers (i.e., those who learned after age 5, presumably in a formal environment), but there were only five late Spanish-English bilinguals and 6 late English-Spanish bilinguals among the participants.

After analyzing not only the language usage patterns of the participants as children and adults, but also their proficiency self-ratings (see questions in Appendix C) and scores on the Spanish Proficiency Pretest, it was decided to combine the late Spanish-English bilinguals and the L1 Spanish bilinguals into the L1S group, and the late English-Spanish bilinguals and the L1 English bilinguals into the L2S group. In addition, based on the questionnaire data, the group differences in language usage patterns between most of the early bilinguals (both Spanish-English and English-Spanish) and the simultaneous bilinguals were minimal and thus it was decided that most of the participants from these three groups could be combined for the purposes of analysis into the HS group. However, as can be seen below, five of the early English-Spanish bilinguals were included in the L2S group because it was clear that their "exposure to Spanish" before the age of 6 was negligible. Figure 1 shows the combined groups and the number of participants in each group.

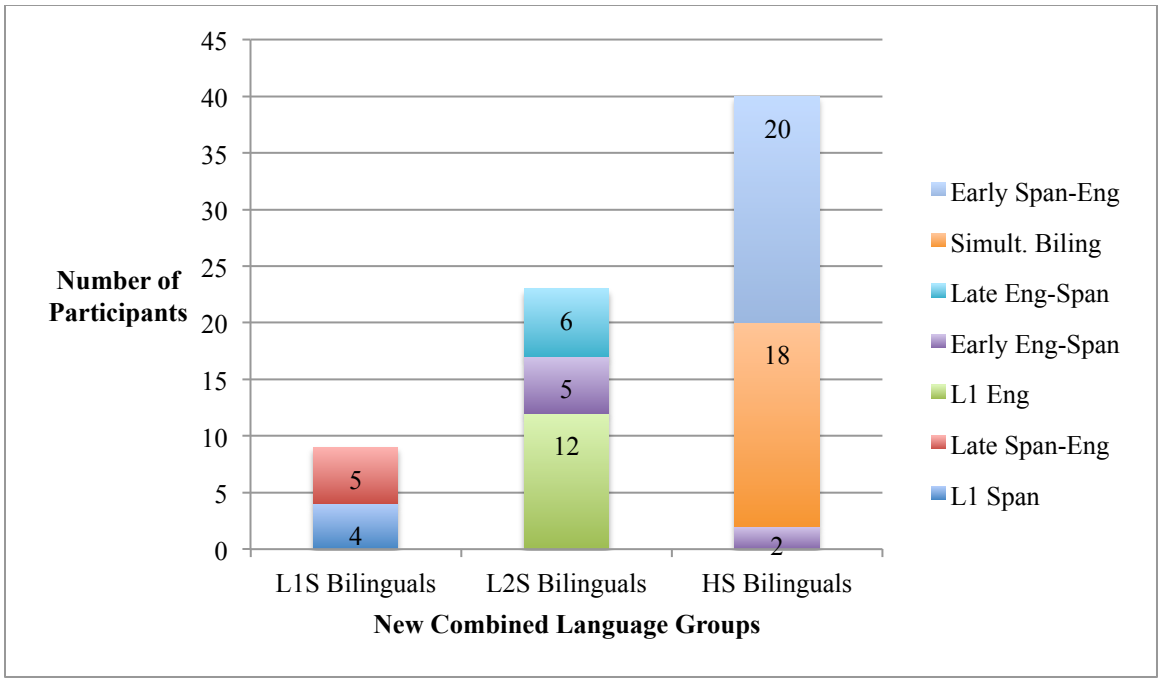

Figure 1. Composition of combined language background groups

Procedure

The present chapter reports participants' data from three separate aspects of a larger study on CLI among Spanish-English bilinguals learning Portuguese as an L3: (1) participants' scores on a brief Spanish Proficiency Pretest; (2) Language Background Questionnaire data from three groups of Spanish-English bilingual learners regarding their language backgrounds and language usage; (3) Language Learning Perceptions Questionnaire data that measured participants' perceptions regarding the role that Spanish and English[5] play when learning Portuguese (see Appendices B, C, and D, respectively). The Spanish Proficiency Pretest consisted of a cloze part of a Diploma de Español como Lengua Extranjera (DELE) test and a multiple choice vocabulary section of an old

[5] This study limits itself to participants' responses about the role of Spanish in learning L3 Portuguese mainly due to space constraints. However, related to Rothman's Typological Primacy Model, many students did not see any connection between English and Portuguese and mentioned how they felt English played no role in learning L3 Portuguese. This, of course, does *not* mean that it in actuality had no effect.

Modern Language Association test (see appendix B). This measure of general proficiency in Spanish has been used in other studies by Silvina Montrul (see for example Montrul 2010; Montrul & Perpiñán, 2011). Each participant received a numerical score out of 50 on the Spanish Proficiency Pretest.

Each participant completed the Spanish Proficiency Pretest and the Language Background Questionnaire during the third day of the course as these tests and tasks were part of the regular coursework given that semester. The Language Learning Perceptions Questionnaire was completed two months into the semester when it was assumed that participants had been exposed to a sufficient amount of material to have an opinion on how Spanish influences one's learning of Portuguese.

Results

Data from the Language Background Questionnaire, the Language Learning Perceptions Questionnaire and the Spanish Proficiency Pretest were analyzed to answer the three main research questions mentioned above.

Participants

As mentioned above, of the 72 participants in the present study, nine have been classified as L1S, 23 as L2S, and 40 as HS. Thus, the majority of the students (55.6%) are HS bilinguals whereas L1S and L2S bilinguals make up only 12.5% and 32%, respectively, of the participants in the study. As has been noted above, one of the main findings that researchers in the field of Spanish as a Heritage Language have found is that HS learners have specific affective and linguistic needs that must be addressed in language classrooms (Beaudrie, 2009; Carreira, 2004; Parodi, 2008; Valdés, 1995, 2000, 2005). Carreira implies that *all* language courses that include heritage speakers, and not just Spanish courses, should be "infused" with a "heritage language focus" (p. 21).

Further discussion of the results and implications of this demographic will be discussed in the Discussion section below.

Spanish Proficiency Pretest

Data from the Spanish Proficiency Pretest show a large variation in the Spanish proficiency of the participants in the study, with scores ranging from 15/50 to 49/50. The effect of Language Background Group on Spanish Proficiency Pretest scores was tested using a one-factor between subjects ANOVA. The effect of Language Background Group was significant (F(2,69)=44.15, p=0.000). Table 1 shows the average proficiency score for each of the three language background groups.

Table 1

Mean Spanish Proficiency Pretest Scores, Std. Deviations, Range by Group

Language Background Group	Mean	N	Standard Deviation	Range	Max	Min
L1S Bilinguals	43.89	9	2.369	7	47	40
L2S Bilinguals	28.87	23	9.072	32	47	15
HS Bilinguals	43.05	40	4.120	18	49	31
TOTAL	38.63	72	8.991	34	49	15

As can be clearly seen from Table 1, the mean score for the L2S bilinguals is much lower than the mean scores for either of the other two groups. However, the variation in scores among the L2S bilinguals is much greater than the variation in the other two groups and thus it was suspected that there was a significant inequality of the variances (heteroscedasticity) between the groups. Levene's Test of Equality of Error Variances confirmed this suspicion (Spanish Proficiency Pretest Scores: $F(2,69)=12.95$, $p=0.000$). Although violations of the assumption of homoscedasticity are known to bias standard error estimates, the p-value for the ANOVA above is so low, and the F statistic so high, that correcting for this would most likely not change the results of the

significance test. Furthermore, this heterogeneity between groups on the Spanish Proficiency Pretest is one of the defining characteristics of these participants. Indeed, this fact of unequal variances should not be surprising; when attempting to measure the language proficiency of groups of speakers the greatest differences would be expected within the group that had learned the language late in life (i.e. as an L2). In addition, the variance among the HS group, a population whose heterogeneity has been mentioned above (see, for example, Beaudrie 2009; Valdés 1995, 2005), is greater than the variance among the L1S group. Just on the basis of this analysis it is clear that students in Portuguese for Spanish-Speakers courses can be a very heterogeneous group, not only in terms of language background but also in terms of their proficiency in Spanish.

Language Learning Perceptions: Likert Scale Items

Finally, to investigate whether or not participants perceive the role of the background languages differently, as a group, participants were asked to indicate on a scale from 1 to 5 (with 3 being a *neutral* effect) if, overall, Spanish was helpful or confusing when learning Portuguese. Because it was evident from the researcher's experience that certain aspects of Spanish seemed to influence learner's Portuguese acquisition more (or in a different way) than other aspects, the questionnaire also consisted of separate questions regarding the influence of the background languages on learning Portuguese with respect to six areas: listening, reading, vocabulary, speaking/pronunciation, writing and grammar. All questions were identical with the exception of the specific area being investigated. A sample question is included below (see Appendix D for all questions).

1. On a scale of 1 to 5, **overall** how much does your knowledge of Spanish help or confuse you with learning Portuguese?

1	2	3	4	5
It really confuses me	It makes it somewhat confusing	It neither confuses me nor helps me	It helps me a little bit	It greatly helps me

The initial hypothesis was that, at least in "overall" terms, there would be a statistically significant difference in how the Language Background groups perceived the role of Spanish in acquiring Portuguese. Specifically, it was hypothesized that the English-Spanish group would perceive Spanish as more of an advantage when acquiring Portuguese than would the other two groups. In addition, it was hypothesized that L2S bilinguals would view Spanish as more beneficial for "Grammar" and "Writing" than would the other two groups. There were no hypotheses made about the other aspects (Listening, Reading, Vocabulary, Speaking/Pronunciation).

Participants were asked to rate how they perceived the role of Spanish *overall* in learning Portuguese. A random effects model was used to test the relationship between the independent variables Language Background Group (Group) and Spanish Proficiency Score (Proficiency) and the dependent variable Participants' Score on Overall Effect of Spanish on Portuguese. It was also important to control for a teacher effect. The advantage of using a random effects model is that it allows the effect of Teacher to be controlled for by analyzing it as a random variable. This method of analysis was used for the other six areas of the language mentioned above. A summary of the results described below can be found in Table 2.

Table 2

Mean Scores by Language Background Group and Significance of Main Effects

	Mean Scores by Language Background Group			Significance of Main Effects	
Question (Dependent Variables)	L1S Bilinguals	L2S Bilinguals	HS Bilinguals	Group	Proficiency
Overall	2.79	4.70	4.25	p=0.0001*	p=0.1187
Listening	4.22	4.22	4.50	p=0.2603	p=0.5765
Reading	3.89	4.39	4.38	p=0.0461*	p=0.0088*
Vocabulary	3.33	3.96	4.00	p=0.2266	p=0.8194
Speaking/Pronunciation	2.22	2.35	3.18	p=0.0547	p=0.3034
Writing	2.33	3.57	3.48	p=0.0608	p=0.7976
Grammar	2.89	4.22	3.68	p=0.0480*	p=0.7845
Comparison of Port & Span	3.56	4.52	4.50	p=0.0012*	p=0.0521
Skimming Similar Grammatical Concepts	2.56	2.61	2.78	p=0.6560	p=0.2685

*Significant at $p<0.05$

Question 1: Overall. Although HS bilinguals view the overall role of Spanish as helpful (mean=4.25), the L2S group perceive Spanish as more helpful in learning Portuguese than do the other two groups (mean=4.70). In contrast, L1S bilinguals view the overall role of Spanish as somewhat confusing for learning Portuguese (mean=2.79). A random effects model analysis indicated that the relationship between *Group* and *Overall Perception of Spanish* was significant ($F(2,67)=10.54$, $p=0.0001$). In addition, all contrasts between groups were significant (*L2S vs. HS*: $t(1,67)=-3.70$, $p=0.0004$; *L1S vs.L2S*: $t(1,68)=-4.46$, $p<0.0001$); *L1S vs. HS*: $t(1,67)=2.22$, $p=0.0295$). The relationship between *Proficiency* and *Overall Perception of Spanish* was not significant ($F(1,67)=2.50$, $p=0.1187$).

Question 2: Listening. One of the aspects of Portuguese that most surprises many Spanish speakers is how much they are able to comprehend with little or no knowledge of the language (see Jensen, 1989). Not surprisingly, all groups viewed

Spanish as being helpful for learning Portuguese (L2S mean=4.22; L1S mean=4.22, HS mean=4.50). A random effects model analysis found that neither Group nor Proficiency were significantly related to scores on the effect of Spanish on Listening in Portuguese (Group: $F(2,67)=1.29$, $p=0.2603$; Proficiency: $F(2,67)=0.56$, $p=0.5765$).

Question 3: Reading. The L2S (mean=4.39) and HS (mean=4.38) groups found Spanish to be somewhat helpful when reading in Portuguese whereas the L1S rated Spanish as slightly above neutral (mean=3.89). A random effects model analysis found a significant relationship between both independent variables Group and Proficiency and the dependent variable Reading in Portuguese (Group: $F(2,67)=4.10$, $p=0.0209$; Proficiency: $F(1,68)=7.27$, $p=0.0088$). Additionally, the contrasts L2S vs. HS and L1S vs L2S were significant (L2S vs HS: $t(1,68)=2.03$, $p=0.0461$; L1S vs L2S: $t(1,68)=-2.86$, $p=0.0057$). The L1S vs HS contrast was not significant ($t(1,68)=-1.71$, $p=0.0922$).

Because both *Group* and *Proficiency* were significant the interaction between the two was tested, but the estimated g matrix was not positive definite and therefore the parameters could not be estimated. However, to give an idea of the actual effect of *Proficiency*, the parameter estimate was 0.0446, implying that with every incremental point increase on the Spanish Proficiency Pretest, the rating would rise by only 0.045 Likert scale points.

Question 4: Learning vocabulary. Both L2S (mean=3.96) and HS (mean=4.00) bilinguals indicated that Spanish has a somewhat helpful role in learning vocabulary in Portuguese, while the L1S bilinguals reported that it was only marginally more helpful than neutral (mean=3.33). In fact, a random effects model analysis found no significant relationships between *Group* and *Proficiency* and the role of Spanish on Learning

Vocabulary in Portuguese (*Group*: $F(2,67)=1.52$, $p=0.2266$; *Proficiency*: $F(1,68)=0.05$, $p=0.8194$).

Question 5: Speaking/pronunciation. Both L1S (mean=2.22) and L2S (mean=2.35) groups reported that Spanish is somewhat confusing for speaking in Portuguese whereas the HS group felt that Spanish played a neutral role in learning to speak in Portuguese (mean=3.18). What was clear from the data is that all groups rated *Speaking/Pronunciation* as the area least benefitted by a knowledge of Spanish. A random effects model analysis found no significant relationships for *Group* nor for *Proficiency* (*Group*: $F(2,68)=3.03$, $p=0.0547$; *Proficiency*: $F(1,68)=1.08$, $p=0.3034$). However, the contrast for the *L2S vs HS* was significant (*L2S vs. HS*: $t(1,68)=-2.33$, $p=0.0230$), implying significance for *Group* as a whole. However, since the p values are so near .05, this could be the result of an inflated F value because of the heteroscedasticity between the groups' Spanish proficiency scores.

Question 6: Writing. Interestingly, L1S reported that Spanish somewhat confused their writing in Portuguese (mean=2.33) whereas the L2S (mean=3.57) and HS (mean=3.48) indicated a neutral effect of Spanish. However, similar to the analysis above, a random effects model analysis found no significant relationships for *Group* nor for *Proficiency* (*Group*: $F(2,67)=2.92$, $p=0.0608$; *Proficiency*: $F(1,67)=0.07$, $p=0.7976$), but a significant contrast for the *L2S vs HS* (*L2S vs. HS*: $t(1,67)=-2.33$, $p=0.0228$), implying significance for *Group* as a whole. Again, this potentially could be a result of inflated F values due to the unequal variances of the groups.

Question 7: Learning Portuguese grammar. It was hypothesized that L2S bilinguals would view Spanish as more helpful for learning grammar in Portuguese than

the other two groups and this was seen in their mean score of 4.22 compared with a mean of 2.89 for the L1S group and 3.68 for the HS group. The random effects model analysis showed a significant relationship for *Group* ($F(2,67)=3.18$, $p=0.0480$). In addition, the contrasts *L1S vs. HS* and *L1S vs. L2S* were significant (*L1S vs. HS*: $t(1,67)=-2.03$, $p=0.0460$; *L1S vs. L2S*: $t(1,68)=2.45$, $p=0.0171$). The contrast *L2S vs. HS* was not significant ($t(1,67)=1.21$, $p=0.2309$). Additionally, the relationship between *Proficiency* and *Grammar* was not significant ($F(1,67)=0.08$, $p=0.7845$).

Question 8:Perceptions on comparing Spanish and Portuguese in the classroom. In addition to the above questions regarding specific aspects of Spanish, participants were asked to respond to the following question:

One of the methods this course uses is to compare Portuguese to Spanish. Is this helpful for you?

1	2	3	4	5
It really confuses me	It makes it somewhat confusing	It neither confuses me nor helps me	It helps me a little bit	It greatly helps me

Both L2S (mean=4.52) and HS (mean=4.50) bilinguals indicated that the comparisons helped whereas the L1S bilinguals' mean of 3.56 suggests a neutral effect for the comparisons. In addition, participants' responses were analyzed using the same random effects model as above. Results from a mixed effects model analysis showed a significant effect of *Group* on participants' responses ($F(2,67)=7.71$, $p=0.0010$). In addition, *L1S vs HS* and *L1S vs L2S* were significant (*L1S vs. HS*: $t(1,67)=-3.37$, $p=0.0012$; *L1S vs L2S*: $t(1,68)=-3.71$, $p=0.0004$) whereas the *L2S vs HS* contrast was not significant ($t(1,67)=1.58$, $p=0.1196$). In addition, the relationship between *Proficiency* and participants' perceptions of the comparison of Spanish to Portuguese was not significant ($F(1,67)=3.91$, $p=0.0521$).

Question 9: Thoughts on briefly skimming similar grammatical concepts.

Finally, participants were asked the following question:

In this course we assume that you have knowledge of Spanish grammar rules. When those grammar rules are similar to Portuguese, we usually do not go into as much depth as on those areas where the two languages differ. How do you feel about this?

1	2	3	4	5
The course **assumes way too much** knowledge of Spanish grammar rules	The course **assumes a little too much** knowledge of Spanish grammar rules	The course is just right in this regard	The course spends **a little too much time** reviewing grammar rules that were just like Spanish	The course spends **way too much time** reviewing grammar rules that were just like Spanish

Participants' responses showed that all groups felt that the course assumed a little too much knowledge of Spanish grammar rules (Means: L1S=2.56; L2S=2.61; HS=2.78). Results from a random effects model analysis showed no significant effects of *Group* or *Proficiency* on participants' responses (*Group*: $F(2,68)=0.42$, $p=0.6560$; *Proficiency*: $F(1,68)=1.24$, $p=0.2685$).

In conclusion, as can be seen from Table 2, there is a significant effect of *Group* on participants' perceptions of the role of Spanish in learning Portuguese with respect to the language *overall*. In addition, there are significant effects of *Group* on *reading, grammar,* and the *comparison* of the two languages. Thus, for the role of Spanish *overall* we can reject the null hypothesis and conclude that the data suggest that L2S bilinguals will rate Spanish as more helpful than will the other two groups. However, on closer analysis things are not so clear; although L2S bilinguals on average rated Spanish as more helpful, many times the HS bilinguals rated Spanish as just as helpful or more so. It seems that the only constant is that L1S bilinguals routinely rate Spanish lower (in terms of being advantageous to learning Portuguese) than the other two groups.

Language Learning Perceptions: Open-Ended Questions

In addition to the quantitative-based questions discussed above, participants responded to two open-ended questions that asked what aspects of the Portuguese language were *easiest* and what were *most confusing* because they were Spanish speakers and one question regarding what they would recommend to the teacher to help them learn better. This last question was asked to help shed some light on what areas of the language were particularly difficult for them and how this related to their knowledge of Spanish. Although answers were varied for all questions, there were some common themes that help illuminate participants' perceptions of how Spanish affects their learning of Portuguese. Following is a brief description and summary of the similarities and differences of responses based on Language Background Group. When participants included more than one aspect of the language in their responses, each aspect was counted. Consequently, total responses do not always equal total number of participants. In addition, all responses were organized according to general language area and then compared with total responses from each group. Percentages were rounded up to the nearest percent and thus may not equal 100%.

Question 8: What aspects of Portuguese are easiest because you are a Spanish speaker? Although participants in all groups mentioned similar aspects, the distribution of answers reveals subtle differences between groups. *Listening* and *Speaking/Pronunciation* were by far the most common themes in the Spanish-English bilingual group whereas *Grammar/Verb Conjugations* was the most common response among the L2S group. HS bilinguals mentioned *Grammar*, *Vocabulary* and *Listening*

about equally. In addition, the term "verb conjugations" was mentioned multiple times by both the L2S and HS groups, but never by the L1S group (see Table 3).

Table 3

Responses—Easiest Aspects of Portuguese for Spanish Speakers

Language Aspect	L1S Bilinguals	L2S Bilinguals	HS Bilinguals
Listening	58% (7/12)	19% (7/37)	29% (17/59)
Speaking/Pronunciation	25% (3/12)	--	5% (3/59)
Grammar/Verb Conj.*	8% (1/12)	46% (17/37)	22% (13/59)
Vocabulary	8% (1/12)	22% (8/37)	32% (19/59)
Reading	--	14% (5/37)	12% (7/59)
TOTAL	12/12 responses	37/37 responses	59/59 responses

* L1S bilinguals never mentioned "verb conjugations", whereas the other two groups mentioned it frequently.

Question 9: What aspects of Portuguese are most confusing because you are a Spanish speaker? Again, although groups gave similar answers, the distribution of each answer among the groups reveals differences in how each group perceives how Spanish affects their learning/acquisition of Portuguese. L1S bilinguals cited *Grammar/Verb Conjugations, Spanish Interference, Speaking/Pronunciation*, and *Writing/Written Accents* as the most confusing aspects of Portuguese. L2S bilinguals mentioned *Speaking/Pronunciation, Vocabulary,* and *Grammar* as the most confusing. Interestingly, none of their responses mentioned "verb conjugations" whereas the other two groups mentioned them extensively. Finally, *Grammar/Verb Conjugations* and *Speaking/Pronunciation* were the most confusing aspects for the HS bilinguals (see Table 4).

Table 4

Responses—Most Confusing Aspects of Portuguese for Spanish Speakers

Language Aspect	L1S Bilinguals	L2S Bilinguals	HS Bilinguals
Listening	--	3% (1/32)	--
Speaking/Pronunciation	27% (4/15)	53% (17/32)	27% (17/63)
Grammar/Verb Conj.*	27% (4/15)	19% (6/32)	44% (28/63)
Vocab./False Cognates	--	22% (7/32)	11% (7/63)
Gen. Interference from Sp.	27% (4/15)	--	8% (5/63)
Writing/Accents	20% (3/15)	3% (1/32)	10% (6/63)
TOTAL	15/15 responses	32/32 responses	63/63 responses

* L1S never mentioned "verb conjugations", whereas it was mentioned frequently by the other two groups.

Question 10: If you could give some suggestions to a teacher on how they could facilitate your learning of Portuguese, what would you suggest? Participants gave a large variety of answers to this question including some specific suggestions (for example, "have a quiz each day of the week" and "review more the [written] accents and contractions"), however no appreciable differences among groups were evident. Notwithstanding, four main suggestions were mentioned relatively frequently by all groups: (1) slow down the course; (2) spend more time on grammar, especially verb conjugations; (3) spend more time on speaking/pronunciation; and (4) highlight both similarities and differences between Spanish and Portuguese instead of assuming students will just "pick up" on the similarities.

Discussion

Limitations

Although great care was taken with regards to study design, data collection and data analysis, the present study suffers from some limitations. First, the overall sample size is too small, and the difference between samples in each group too large, to have much statistical power and to confidently be able to generalize to other populations of

bilingual speakers learning Portuguese as an L3. As such, the research serves as an exploratory study about language learning perceptions.

Second, the data violate one of the principle assumptions of the general linear model, namely that of homogeneity of variances with respect to Spanish proficiency levels among groups. As mentioned earlier, this tends to inflate the *F* or *t* score. For tests where the probability level is low (i.e. $p<0.01$) this may not be much of a problem. However, when p values are close to 0.05, it may only be a function of the inflated *F* value and, therefore, invalid. Because of this limitation, further studies must be done to suggest whether or not the differences shown in the present study accurately reflect real differences among these groups, for example the (nominally) statistically significant group differences reported above on *reading* and *grammar*.

Finally, all participants come from one institution in the southwestern United States using the same curriculum and textbook. Differences in perceptions may have been affected by either the curriculum or the population differences inherent in this particular institution. Further studies would help indicate if a curriculum/institution effect were in fact significant.

Contributions and Pedagogical Implications

Notwithstanding the limitations mentioned above, the present study makes some unique contributions to the PSS field. First, it is clear that the bilingual participants in the present study are a heterogeneous group not only based on their proficiency in Spanish, but also regarding how and when they acquired/learned Spanish. In addition, it has been suggested that participants' perceptions of the role or influence of Spanish in learning Portuguese is affected more by how and when they learned Spanish (their Language

Background Group) than by their proficiency in Spanish. This is evident not only by their scores on the Likert-scale items but also by their responses to the open-ended questions. In particular, the data show that when acquiring L3 Portuguese, L2S and HS bilinguals view Spanish as more of an advantage than do L1S bilinguals, especially in terms of grammar and verb conjugations. Correspondingly, L1S bilinguals perceive Spanish as facilitating listening comprehension but confusing the learning of grammar and verb conjugations. Both HS and L1S bilinguals perceive Spanish as more helpful for speaking and pronunciation in Portuguese than do L2S bilinguals, although all groups mentioned that speaking and pronunciation in Portuguese were difficult and required more time to master than they had been given.

These findings do not seem surprising when considering that L1S and HS bilinguals, many of whom have never taken foreign language courses in Spanish, may not be as familiar with the metalinguistic terminology used in L2/L3 courses as are their L2S counterparts. Thus, when confronted with terms such as “subjunctive”, “direct/indirect object pronouns”, “preterit and imperfect”, etc., L1S and some HS bilinguals have to not only digest the language forms in Portuguese, but also learn the terminology. Conversely, L2S bilinguals, on the other hand, have most likely already heard these terms when learning Spanish and therefore may be able to more readily make the connections between the concepts they’ve previously been exposed to in Spanish courses to what they are learning in Portuguese.

The findings in this chapter suggest the importance of designing programs that not only take advantage of the strengths and weaknesses of each group, but also challenge each group adequately. For example, focusing as much on speaking and listening

comprehension as on written grammar exercises might force the L2S bilinguals to develop in areas in which they may not be as proficient. Also, more explicit instruction in metalinguistic terminology, along with contrastive analysis of forms in both Spanish and Portuguese might help those L1S and HS bilinguals who struggle with grammar concepts that seem less daunting for L2S bilinguals.

The idea of building metalinguistic awareness and highlighting divergent aspects of the language has been recommended many times in studies of Spanish-speakers learning Portuguese (see, for example, Åkerberg, 2002; Almeida Filho, 1995, Carvalho, Freire & da Silva, 2010; Carvalho & da Silva, 2008; Júdice, 2000, among others). The present study also supports the idea that convergent, and not just divergent, aspects of the language need to be highlighted, even if doing so means that courses may not be as "accelerated" or fast-paced as originally planned. It is clear from student recommendations that many felt that the course, at least during the initial two months, went too fast and desired more time to be able to internalize the grammar and vocabulary they were learning.

Finally, the majority of the participants in the present study would be considered heritage speakers of Spanish, or what we have termed "HS bilinguals". One of the main findings in the field of Spanish as a heritage language is that many of these bilinguals have specific affective and linguistic needs that must be addressed (Beaudrie, 2009; Carreira, 2004; Parodi, 2008; Valdés, 1995, 2000, 2005). This may be accomplished in the Portuguese for Spanish-speakers classroom in at least three ways: (1) teacher training on the different affective needs and characteristics of HLLs of Spanish; (2) a focus on

multilingualism and its implications; and (3) explicitly teaching sociolinguistic topics (including register awareness) in PSS courses.

First, teachers of PSS courses should have some basic knowledge about heritage speakers of Spanish in the U.S., including the different varieties they speak, the social stigma often associated with their heritage language, the lack of formal training in their heritage language, and their high receptive/lower productive abilities in the language. Teachers of PSS courses would then be taught that this knowledge must apply to how they teach Portuguese. For example, because contrastive analysis plays a role in PSS classes (Carvalho, 2002), teachers in these courses, cognizant of the many different varieties of Spanish that their students speak, would be careful not to over generalize about certain grammar, pragmatic, or cultural aspects of Spanish in comparing it with Portuguese. In addition, this knowledge would help them be sensitive to these students' difficulties with certain formal features of the language, such as subjunctive forms and clitic usage, that tend to be easier for L1S and L2S speakers to acquire (see Carvalho & da Silva, 2006).

Second, a focus on bilingualism would not only alter instructional methods, but would have implications on assessment as well. Cenoz (2003, 2011) argues that bilinguals are not akin to two monolinguals in one individual; they learn, process, and use language in a qualitatively different way than do monolinguals (see also Valdés, 2005). Consequently she asserts that this implies that a more holistic, learner-centered view of language acquisition should be taken with regard to multilinguals, including in the assessment of their language ability. In effect, students would not be compared to monolingual speakers of Portuguese, but would be assessed based on a bilingual norm.

This may include formative assessments that would include self-assessment measures (see Mejía, 1995). Also, Cenoz suggests that this may imply accepting some interaction phenomena in assessment and encouraging users to use the resources at their disposal (including their implicit and explicit knowledge of Spanish) while simultaneously increasing their already-developed metalinguistic skills (see also Sanz, 2000). In addition, speaking requirements may even be delayed while students are allowed to listen and read in the target language for a brief period before being required to produce orally in the target language (compare with Grannier, 2000).

Finally, teachers should approach sociolinguistic topics, including dialect and register variation, in PSS courses through explicit teaching and illustrative examples from authentic sources (movies, music, literature, news, blogs, etc.) (see Carreira, 2000; Carvalho, Freire, & da Silva, 2010; Leeman, 2005; Martínez, 2003). This could include topics such as presenting the difference between clitic usage in formal and vernacular registers with both a descriptive and a sociolinguistic approach. These dialectal variations can serve as opportunities to talk about language variation, standard vs. vernacular dialects, and the relationships between language ideologies and power (Leeman, 2005; Martínez, 2003). Finally, students could be asked to share their own experiences with these issues and apply this knowledge to their own dialects.

In this way, PSS courses could be "infused with a heritage language focus" (Carreira, 2004). Not only would this focus prove beneficial to the heritage speakers of Spanish in these courses, it would help educate all students about the nature of bilingualism/multilingualism, language variation, and language ideologies and equip them to better understand the languages that they, and others, use.

CHAPTER 3 - CLI IN L3 PORTUGUESE MOOD ACQUISITION: OBLIGATORY CONTEXTS

Introduction

Portuguese as a foreign language, especially in the United States, has long been approached with a tacit recognition that many students bring some knowledge of Spanish with them, presumably due to the large presence of Spanish, both as the most commonly taught foreign language in K-12 U.S. education (Furman, Goldberg, & Lusin, 2007) and as the second most spoken language in the U.S. with estimates of over 37 million speakers (Ryan, 2013). As early as 1954, *Hispania* published an article by James S. Holton describing the relative ease with which a Spanish speaker could learn Portuguese (with the main purpose being to acquaint oneself with great Luso-Brazilian literature). Since then there has been much material produced and research devoted to issues related to Spanish speakers learning Portuguese including journal articles, at least three special symposiums (which have produced two published proceedings), two full-length textbooks, a full podcast series produced by the Center for Open Educational Resources and Language Learning (COERLL) at the University of Texas at Austin, and a recent edition of the Portuguese Language Journal devoted to Spanish-speaking learners.

In conjunction with the steady increase in scholarship, universities have offered more and more Portuguese for Spanish-speakers courses that have tended to differentiate themselves from regular Portuguese courses principally by their more accelerated pace and inclusion of ancillary/supporting materials contrasting Spanish and Portuguese. The very existence of these courses presupposes that Spanish speakers learning Portuguese will have different resources from which to draw (as well as some unique challenges to

overcome) compared with those who do not know Spanish[6]. In addition, it is implied that the more proficient one is in Spanish, the easier one can use that proficiency and knowledge to learn Portuguese, or in other words, the more they will benefit from the CLI, or transfer, that is assumed will occur.

However, assuming transfer from Spanish (and especially positive transfer) may not be justified when considering research in L3 acquisition dealing with the potential sources of transfer in TL acquisition by multilinguals. It has been shown that the so-called "L2 status factor" (Bardel & Falk, 2007) or "foreign language effect" (Meisel, 1983), (psycho)typology (e.g., Kellerman, 1983; Rothman, 2011), language proficiency and usage frequency of the background languages can all play significant roles in L3 acquisition. See reviews by Ecke (2014) on CLI at the lexical level, García-Mayo (2012) and García-Mayo & Rothman (2012) on CLI at the morpho-syntactic level and Cabrelli Amaro (2012) and Wrembel, Gut & Mehlhorn (2010) on CLI at the phonological level.

Notwithstanding, it has generally been assumed that Spanish/English bilinguals learning Portuguese would perceive Spanish, but not English, as more similar to Portuguese, and a recent study (Santos, 2013), as well as the results reported in Chapter 2, provide some confirming evidence for this. However, transfer due to typological similarity should not automatically suggest ease of acquisition, as the similarities between the languages will occasion both positive and negative transfer. Furthermore, previous literature has identified at least three different populations of Spanish/English bilinguals (with respect to the context of acquisition of Spanish) who enroll in Portuguese courses in the United States: (1) L1S bilinguals; (2) L2S bilinguals; and (3) HS bilinguals (see

[6] Although most of these Portuguese courses are geared specifically for Spanish-speakers, many programs also encourage speakers of other Romance languages to enroll.

Carvalho & da Silva, 2006; Johnson, 2004). These studies have suggested that these three different groups behave differently with respect to their learning of L3 Portuguese, suggesting that context of acquisition also plays a role in language learning and transfer.

Thus, it is unclear just how the context in which the previous languages were acquired might affect CLI in L3 learning. More particularly, does the context of acquisition affect learners' perceptions of the role of Spanish in learning Portuguese? Does it affect the ability to transfer over similar knowledge from Spanish when learning Portuguese as an L3, or does proficiency in Spanish explain the differences observed? Results reported in Chapter 2 regarding language-learning *perceptions* provide evidence for strong group differences based on the context of Spanish acquisition that did not correlate positively with Spanish language proficiency (i.e., overall, L2S speakers viewed Spanish as more facilitative in learning Portuguese than did L1 or HS speakers). The present chapter will now consider the results concerning participants' knowledge of the present indicative/subjunctive distinctions in volitional and adverbial contexts in Spanish as well as their ability to transfer over this knowledge to L3 Portuguese.

The following section will review the relevant literature on L3 acquisition as well as its application to Portuguese for Spanish-speakers. It will also offer a brief description of the present subjunctive in both Portuguese and Spanish, as well as the findings from previous studies on the acquisition/learning of mood distinctions by L1S, L2S and HS speakers. Sections 3 and 4 will detail the methods and results, respectively, of 5 separate tasks: a Spanish proficiency test; two sentence completion tasks (one each in Spanish and Portuguese); and two preference/grammaticality judgment tasks (P/GJ tasks, see Ayoun,

2000[7]), again in both Spanish and Portuguese. The results, somewhat surprisingly, indicate significant effects of context of acquisition that interact with proficiency in Spanish. In other words, those participants who were more proficient in Spanish did not necessarily transfer their knowledge to Portuguese better than those who were not as proficient. Finally, section 5 will provide a discussion of the results and some implications for Portuguese for Spanish-speakers pedagogy.

Literature Review

Third Language Acquisition

Recent research has provided arguments and evidence for considering L3 acquisition separate from L2 acquisition. Most noticeably, bilinguals acquiring a third language tend to be more successful than monolinguals at acquiring the TL (e.g., Cabrelli Amaro, Flynn, & Rothman, 2012; Cenoz, 2003; Cenoz & Valencia, 1994; Klein, 1995; Sanz, 2000). It has been argued that this is because bilinguals learn, process, and use language in qualitatively different ways than do monolinguals (Cenoz, 2003, 2011;Valdés, 2005). More particularly, when learning a third language, bilinguals have more resources, both linguistic and experiential, at their disposal. Falk and Bardel (2010), adapting Hufeisen's model (1998), describe a simplified view of how L3 acquisition is different from L1 and L2 acquisition in terms of resources and input available to language learners. They show that L1 acquisition relies principally upon target language (TL) input whereas, in addition to TL input, L2 acquisition relies on learner's encyclopedic knowledge of the world, and L1. In comparison, L3 acquisition relies on TL input, learners' encyclopedic knowledge of the world, L1, L2, and experiences and learning strategies acquired during

[7] The P/GJ in the present study and the P/GJ in Ayoun (2000) differ slightly. See Footnote 12.

L2 acquisition. They conclude that these strategies and experiences can be very important in L3 acquisition and differentiate it from L2 acquisition.

Role of background languages in CLI in L3 acquisition. Although it is generally assumed that the strategies and experiences that bilinguals bring with them when learning a third language positively contribute to their achievement in the L3 (see, e.g., Cenoz & Valencia, 1994; Falk & Bardel, 2010), much of the recent research has attempted to understand how CLI plays out in L3 acquisition. Some have argued that all previously acquired languages can have an effect (known as the "Cumulative Enhancement Model", or CEM—see Flynn, Foley, & Vinnitskaya, 2004; Slabakova, 2012), especially if similarity between the language equivalents is detected (Hall & Ecke, 2003; Ringbom, 2001), while others have shown that the most recently acquired background language (i.e., the L2), has a privileged status in CLI, both positively and negatively (also known as the "L2 status factor"—see Falk & Bardel, 2010; Bardel & Falk, 2007; 2012; Meisel, 1983; Williams & Hammarberg, 1998).

Rothman (2011) has suggested, however, that at least for syntax/morphology, there are special cases where the (psycho)typological similarity between either the L1 or L2 and the L3 may override either the CEM or the "L2 status factor". In studying how English-Spanish and Spanish/English bilinguals learn Portuguese, Rothman (2010) found that typological similarity overrode L1/L2 status in CLI, even when in one case English transfer would have been preferred (according to the CEM model) and in another Spanish transfer would have been preferred. In another study, Rothman (2011) found that Italian/English bilinguals learning Spanish and Spanish/English bilinguals learning Portuguese transferred from the Italian and Spanish respectively, rather than from English,

regardless of which language would have provided "positive transfer". Additionally, Montrul, Dias, & Santos (2011) found similar results in their study of Spanish/English and English/Spanish bilinguals learning clitic and object expression in Brazilian Portuguese as an L3. All subjects, regardless of L1/L2 status, transferred from Spanish instead of English (see also Carvalho & da Silva, 2006, who provide additional supporting evidence). In light of these studies, Rothman proposed the Typological Primacy Model (TPM), which states that the CEM will hold in all cases except when the background language is typologically similar to the L3 (or is perceived to be so by the user), in which case the typologically-similar background language will serve as the source of linguistic influence.

If either the TPM or the CEM were correct, we would expect Spanish/English bilinguals, regardless of order or context of acquisition, to principally transfer from Spanish when learning Portuguese. This should especially be true when acquiring/learning mood distinctions, since these distinctions are very similar in Spanish and Portuguese. If, however, the L2 Status Factor were correct, we would expect the L2S bilinguals to transfer more from Spanish than either the L1S bilinguals or HS bilinguals. Additionally, it may be that an explicit knowledge of such syntactic structures, which L2S speakers presumably have due to how they learned Spanish, facilitates transfer. Or conversely, it may be that each speaker is successfully transferring over similar structures, but that the nature of each speaker's knowledge of those structures in Spanish is different, resulting in different outcomes in Portuguese.

In summary, L3 acquisition research has found that bilinguals tend to have more resources to employ in learning their third language than do monolinguals. In addition,

their L1 and L2 can both contribute to CLI, most likely mediated by psychotypology. Furthermore, there are a multitude of interacting factors that contribute to bilinguals' CLI in, and ultimate attainment of, the L3, not the least of which is each speaker's L2 proficiency. Thus it is important, when studying the nature of CLI to take into account not only the typological similarity of each language, but each speaker's proficiency in the background languages in question.

Because of the great deal of psychotypological and typological similarity between Spanish and Portuguese (Jensen, 1989; Santos, 2013) the present study will take as a theoretical basis the TPM while simultaneously shedding additional light on not only the *source* of transfer in the L3 acquisition of Portuguese by Spanish speakers, but also how this may interact with the *context of acquisition* of the background languages and participants' performance in Spanish.

Importance of CLI in the teaching of Portuguese to Spanish speakers. Studies on the acquisition of Portuguese by Spanish-speakers (PSS) have been particularly influenced by the idea of CLI (or transfer). Carvalho (2002) mentions how a weak form of contrastive analysis (CA) has influenced the PSS field from the beginning (see, e.g., Azevedo, 1978; Takeuchi, 1984; Van de Wiel, 1995) and suggests that the greatest virtue of contrastive analysis is in helping teachers and materials developers know where they can simplify their teaching to more effectively spend time on those things that demand the most attention. Júdice (2000) recommends beginning PSS courses start by emphasizing "transparencies", or those areas that are so similar that students can use their knowledge of Spanish with little or no modification. She then stresses explicitly talking about "opacities", or those areas that differ. Incidentally, this applies to not only the

linguistic system, but to cultural and pragmatic issues as well (see also Júdice, 1995; Koike & Flanzer, 2004; Silva, 2008).

The idea that the "opacities" should take up the majority of in-class time and attention assumes that Spanish speakers will naturally transfer the "transparencies" over to Portuguese. Anecdotal evidence shows that this occurs, which is most likely the principal reason for many Spanish speakers' rapid gains in learning Portuguese. However, this process of transfer is not universal for all students, especially in the United States where the term "Spanish speaker" does not necessarily mean "L1 Spanish speaker". (Incidentally, some of the articles focusing on the "transparencies" inherent between Spanish and Portuguese were written in Brazil and assume a monolingual Spanish-speaking learner). Some students seem to be much more successful at transferring over these similarities than others. Is this because they have a better grasp on these concepts, either intuitively (i.e., general linguistic competence) or consciously (i.e., they have greater metalinguistic knowledge)? Or is it the case that not all Spanish speakers share a similar understanding or proficiency in these so-called areas of transparency? Thus it becomes important to determine not only learners' ability to transfer similar forms into Portuguese, but also to know if each Spanish speaker has sufficient knowledge of these "transparent" areas to be able to transfer them.

It is in this area that the PSS field has begun to highlight the importance of how the background languages, particularly Spanish, have been acquired/learned. As has been mentioned, there are at least three types of "Spanish speakers": L1S, L2S, and HS bilinguals. As many in the field of Spanish as a heritage language point out, there is huge variation in the proficiencies and characteristics in this last group alone (see, e.g.,

Alarcón, 2010; Beaudrie, 2009; Beaudrie & Ducar, 2005; Potowski, 2005; Valdés 1995, 2005). Studies by Carvalho and da Silva (2006) and Koike and Gualda (2008) give support for the idea that these three groups of bilinguals behave differently when learning L3 Portuguese, showing principally that the L2S speakers benefit more from contrastive analysis and explicit instruction, respectively, than did the other two groups. In addition, Johnson (2004) reported that the L1S and HS groups tended to make certain orthographic errors that the L2S group did not make.

In light of the above-mentioned studies, the present study aims to provide more empirical data on the similarities/differences of these three groups concerning their knowledge of mood distinctions and morphology in obligatory (volitional) and lexically-triggered (adverbial) contexts in Spanish and their ability to transfer this knowledge from Spanish to Portuguese. Accordingly, the following sections will briefly comment on the subjunctive mood and review the literature concerning L1S, L2S and HS speakers' acquisition and/or knowledge of indicative/subjunctive distinctions in these contexts.

The Subjunctive Mood

Although it is not in the scope of this chapter to detail the subjunctive mood in Spanish and Portuguese, a brief description may be of some use. Montrul (2004) has stated that although modality, or "the semantic notion that determines the contexts and conditions in which a proposition is to be evaluated", exists in all language, mood is the "grammatical expression of modality, and refers to the probability, obligation or necessity of what is stated, according to the point of view of the speakers" (p. 100, paraphrased from Comrie, 1976). Although the indicative and imperative is found in both matrix and subordinate clauses, the subjunctive is principally found in complement

clauses, relative clauses, adjunct clauses, and some *if* clauses (Mikulski, 2010) and can be triggered lexically, syntactically or semantically (c.f. Blake, 1983; Mikulski, 2010; Montrul, 2009).

Although both Spanish and Portuguese have a productive subjunctive mood (English does not), Portuguese has productive past, present, and future forms whereas Spanish only has productive past and present forms; the future form in Spanish can still be seen in some older literature, legal documents, and some idioms. Although the use of the subjunctive in Portuguese and Spanish can differ greatly depending on education level, speech register, and dialect, the usage of the present subjunctive in formal varieties is remarkably similar in both Spanish and Portuguese, especially in volitional contexts (indirect commands) and in adverbial contexts triggered lexically[8].

L1 acquisition of mood in Spanish. It is clear that the full range of mood use by native Spanish speakers is only acquired after years of formal schooling (Blake, 1983; Montrul, 2009). Most studies have shown that the first aspects of the subjunctive to be acquired by native speaking children are in volitional (obligatory) contexts and certain adverbial and temporal clauses that are lexically triggered (Blake, 1983; García & Terrell; 1977, as summarized in Blake, 1983 and Studerus, 1995; Montrul, 2009). Knowledge and use of mood distinctions in adjectival clauses and semantically triggered temporal clauses is acquired after the beginning of formal schooling, usually between ages 6 and 12 (Blake, 1983; Montrul, 2009).

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[8] Perini (2002) mentions that the present subjunctive "tends to disappear" (p. 202) in some informal varieties of spoken Portuguese. However, he explains that this phenomenon is regional and register specific. Additionally, students in Portuguese classes are routinely taught and exposed to formal/standard varieties of the language where present subjunctive usage closely mirrors that of formal/standard varieties of Spanish.

Mikulski (2010) mentions that even though the full range of the subjunctive is principally found in prestige varieties of Spanish, the subjunctive in volitional contexts (i.e., contexts that express an indirect command, wish, or desire such as *Quiero que me digas la verdad*. 'I want you to tell me the truth.') is found in everyday speech from Spanish speakers across a variety of dialects and registers. In addition, adverbial clauses that are lexically triggered are also very common and relatively consistent, although Sanchez-Naranjo & Perez-Leroux (2010) found some evidence that native Spanish-speaking children may even show some variability in certain adverbial clauses.

L2 acquisition of mood in Spanish. Many studies have sought to determine L2 learners' ability to acquire mood distinctions in an L2. Gudmestad (2006) used a variationist approach with data obtained from a written preference task to determine what syntactic features predicted L2 users' subjunctive usage. Looking at intermediate and advanced groups, he found that irregular verbs strongly predicted both intermediate and advanced groups' subjunctive usage on a written preference test. In addition, advanced learners seemed to specifically recognize that expressions of desire (volitional contexts) involved the use of the subjunctive.

Collentine (2010) reviewed studies conducted between 2003 and 2010 on the acquisition of the Spanish subjunctive by L2 learners. He observed that research has shown that it continues to be difficult for L2 speakers to acquire the indicative/subjunctive distinction, however, like Gudmestad (2006), he conceded that some gains are seen, especially with certain tasks and in obligatory and categorical contexts. He posits that the challenge for the L2 educator is to design activities that use

the subjunctive in real-world situations and that highlight the subtle pragmatic/semantic differences between the subjunctive and the indicative (i.e., in variable contexts).

Borgonovo, Bruhn de Garavito, and Prévost (2008) studied the acquisition of the subjunctive by L1 French speakers learning L2 Spanish in Quebec, specifically the specific/non-specific distinction in relative clauses. Specifically, they used two tasks: an appropriateness judgment task (AJT) to ascertain whether participants could correctly choose the sentence that corresponded with a given scenario (interpretation-to-form) and a sentence combination felicity task (SCFT) that tested whether they could correctly choose the correct scenario that corresponded with a given sentence (form-to-interpretation). Results indicate that the responses of the advanced L2S speakers on the SCFT were very similar to the responses of the native Spanish speaker controls, but that this result was not present on the AJT. They conclude that the advanced L2S speakers could acquire this semantically-triggered distinction and suggest researchers use tasks that test the form-to-interpretation direction.

In a later study, Gudmestad (2012a, 2012b) used a variationist analysis to study the responses of participants from various proficiency levels on three different task types: a monologic role-play, a contextualized-clause-elicitation task, and a contextualized-verb-elicitation task. Results indicated that each proficiency group used the subjunctive most in volitional contexts, then in the following (descending) order: comment, uncertainty, temporality and assertion. In addition, she found that form regularity, specifically irregular verbs that change a vowel in the root, favor subjunctive usage. In addition, there were some interaction effects between task type, verb regularity, and subjunctive usage (2012b). However, most importantly, it was shown that advanced L2

speakers of Spanish could acquire the subjunctive in more semantically triggered contexts (2012a).

Finally, with regard to L3 acquisition, Carvalho and da Silva (2006) used think-aloud exercises to study the acquisition of the Portuguese subjunctive by English/Spanish (ES) and Spanish/English (SE) bilinguals. In their study the ES bilinguals did better than the SE bilinguals. SE bilinguals' mistakes were usually of morphology, however there was an example of hypercorrection. Their data showed that these learners were on the path to acquiring the subjunctive in Portuguese and that typological distance played a stronger role in transfer than order of acquisition. In addition, they suggest that L1S speakers benefit less from a contrastive analysis approach than do L2S speakers.

In conclusion, L2/Ln learners have been shown to acquire the indicative/subjunctive distinctions in Spanish in obligatory contexts and some categorical (lexically triggered) contexts, although most do not converge on monolingual speakers' more subtle usages of mood in semantically triggered contexts. Thus we would expect L2 speakers of Spanish who are learning Portuguese as an L3 to successfully transfer over the knowledge that they have of mood distinctions due to the explicit knowledge that they are assumed to possess. However, what is not known, and what this study will investigate, is how much knowledge of mood distinctions the majority of the L2 speakers of Spanish have who are enrolled in Portuguese-for-Spanish-speakers courses.

L2/Ln acquisition of mood in other languages. Although most research on the L2 acquisition of mood distinctions has been conducted with Spanish as the target language, a brief review of the research on L2 mood acquisition in other languages attests to the difficulty in acquiring the subjunctive. Howard (2008, 2012) analyzed corpus data

from sociolinguistic interviews from three different groups of Anglophone Irish learners of French where French was, in fact, participants' L3/Ln (all had studied Irish and some had also studied Spanish, Italian or German). Results showed clearly that the groups did not productively use the subjunctive except with the verb *falloir*. The author concluded that the subjunctive in L2 French is definitely a late-acquired feature of the language, either because of its semantic complexity, non-salience, infrequent usage, or use in embedded clauses. Interestingly, Poplack (2001) used a variationist analysis with a corpus of L1 French from Canada and found that the verb *falloir* constituted a large majority of subjunctive occurrences in the corpus and there was considerable variability in subjunctive usage when compared with prescriptive norms.

Ayoun (2013), as part of a large and multi-faceted study of the L2 acquisition of tense-mood-aspect (TAM) in French by 42 Anglophone learners, used a production task and a sentence completion task to test participants' knowledge of the subjunctive in French. Results showed that even the advanced group, which consisted of some graduate students, had not fully acquired the subjunctive in French. In addition, it was clear that the subjunctive constituted a late-acquired feature of the language for these participants (many of whom had acquired temporal and aspectual distinctions) and that they began by acquiring the subjunctive with orders/interdictions (i.e. in volitional contexts). She stresses that because the subjunctive is a late-acquired feature, it is imperative for researchers to study participants with advanced proficiency in the language (c.f., for example, Alhawary, 2009, who studied the L2 acquisition of Arabic by English speakers and concluded that the participants were not at a high enough level to use the subjunctive

productively and Giacolone Ramat, 1992, who stated that the L2 acquisition of mood in Italian followed the acquisition of temporal and aspectual distinctions).

HS bilinguals' knowledge of mood distinctions. A reduced use of the subjunctive by HS speakers[9] has been amply documented (Merino, 1983; Montrul, 2007; Potowski, 2005; Silva-Corvalán, 1994a, 1994b, 2000) and has been ascribed to incomplete acquisition, language attrition, or a combination of both. Silva-Corvalán (1994a, 1994b) found that Spanish speakers in Los Angeles simplified and overgeneralized with regards to the indicative/subjunctive distinction. Specifically, she found that many speakers at the low end of the bilingual continuum did not productively use the subjunctive outside of fixed expressions, whereas among more proficient bilinguals the loss of the subjunctive was more extensive in non-obligatory contexts than in obligatory contexts. Incidentally, Polinsky (1995) found a very similar loss of mood distinctions in heritage speakers of Russian in the United States.

Montrul (2007) found that although 2nd generation heritage speakers may have the ability to distinguish between the indicative and the subjunctive in obligatory contexts they do not distinguish the subtle meaning differences of mood in variable contexts, suggesting incomplete acquisition. In a subsequent study, Montrul (2009) looked at oral production, written interpretation and written elicitation to test subjunctive usage among different proficiency levels of heritage speakers and concluded that most HS speakers

[9] A Spanish heritage language speaker/learner has been defined in a number of ways, including a person with membership in a specific community (with no proficiency "requirement", per se, in the heritage language) to someone with a personal or affective connection to a heritage culture or language (see, for example, Byrnes, 2005; Carreira, 2004; Potowski, 2005; Valdés, 1995, 2005). Thus, Spanish heritage speaker/learners are an extremely heterogeneous group ranging from those who have only basic receptive skills (see Beaudrie, 2009; Beaudrie & Ducar, 2005) to extremely proficient users who principally desire instruction in advanced writing and literature (Alarcón, 2010).

have some difficulty with mood (subjunctive/indicative distinctions), with the lowest level speakers not distinguishing well between the two in both elicitation/production tasks (in writing and speaking) and on acceptability judgments.

Finally, Mikulski (2010) looked at L2S learners' (Spanish as a foreign language, or SFL learners in her study) and HS learners' (Spanish as a heritage language, or SHL learners in her study) ability to distinguish between native-like and non-native-like usages of the subjunctive in volitional (obligatory) conditions. Mikulski found that as a group, HS learners did indeed show an advantage over L2S learners recognizing native-like usage of the subjunctive in obligatory contexts. Interestingly, HS learners also showed more intra-group variability than did the L2S learner group. On the other hand, Montrul & Perpiñán (2011) found that HS learners were only more accurate than L2S learners on a sentence conjunction judgment task involving the subjunctive, but not on a morphology recognition task.

In summary, existing research seems to suggest that most HS speakers exhibit reduced knowledge of mood in Spanish (as compared to monolingual speakers of Spanish), with a possible exception being that HS learners' ability to recognize native-like usage of the subjunctive in volitional (obligatory) contexts. It seems that only advanced L2S speakers and advanced HS speakers approximate native speaker norms with regard to the subjunctive in volitional and lexically triggered adverbial clauses (i.e., obligatory contexts), and they generally do not approach native speaker patterns regarding subjunctive usage in variable contexts.

Study

Research Questions

Although experience has shown that certain bilingual speakers of Spanish and English transfer over their knowledge of Spanish better when learning Portuguese as a third language than do other bilinguals, it is not clear if Spanish proficiency or order and context of language acquisition (language background group) are correlated with bilinguals' success in transferring over similar grammatical knowledge. Moreover, it is not known how much knowledge participants in each language background group have of certain grammatical concepts in Spanish to begin with. Consequently, the present study seeks to answer these questions by focusing on, first, three groups of Spanish/English bilinguals' knowledge of mood distinctions in Spanish in lexically-triggered obligatory contexts (principally volitional and adverbial constructions) in the present tense (indicative/subjunctive) and, second, investigate if they are able to transfer over that knowledge when learning L3 Portuguese. Specifically, it seeks to answer two principal questions: (1) Do L1S, L2S, and HS bilinguals significantly differ in their knowledge of mood distinctions in obligatory contexts in Spanish? (2) Are there significant differences between participants' success at transferring their knowledge of mood distinctions in Spanish to Portuguese as measured by two sentence completion tasks and two preference/grammaticality judgment tasks in Spanish and Portuguese and if so, are these differences correlated with context of acquisition (Language Background Group)?

Participants

Experimental group. The majority of participants in the present study were the same as those who participated in the study reported in Chapter 2, with the exception of 18 participants, 11 of whom did not participate in the present study, and seven who did

not participate in the study reported in Chapter 2. To review, these were students enrolled in four different sections of a beginning Portuguese for Spanish-speakers course taught by three different instructors (one instructor taught two separate sections) at a university in the southwestern United States. All participants spoke both English and Spanish and most were pursuing either a major or a minor in a Spanish-related field (e.g., Latin American Studies, Translation and Interpretation, etc.). There were a total of 68 participants consisting of 13 females, 53 males, and two who did not indicate their biological sex. The average age of the participants was 21 years with a range of 18-45 years (two participants did not indicate their age).

Identical to Chapter 2, participants were first categorized into seven distinct language background groups using the language background questionnaire mentioned in Chapters 1 and 2. Then, these categories were consolidated into three groups according to their responses on the Language Background Questionnaire (see explanation under "Participants" section in Chapter 2). In the end, there were a total of eight participants in the L1S bilingual group (learned English after the age of 5), 22 participants in the L2S bilingual group (learned Spanish after the age of 5), and 38 participants in the HS

bilingual group[10] (learned both Spanish and English before the age of 5). Figure 2 shows the combined groups and the number of participants in each group[11].

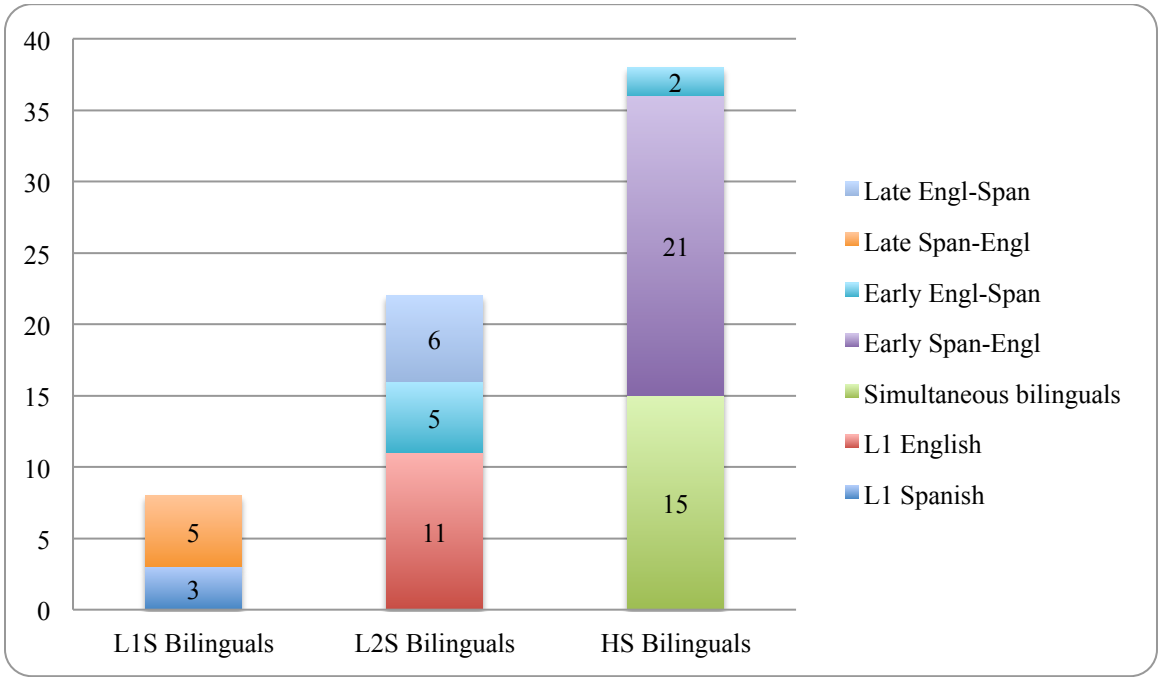

Figure 2. Composition of combined language background groups for Chapter 3

Control (comparison) group. Although the present study focused on contexts that are considered categorical in the standard varieties of Spanish and Portuguese, a control group of native speakers of Spanish and Portuguese from Mexico and Brazil were recruited for comparison purposes. Nine native Spanish speakers from Mexico (6 females,

[10] Child (2013) refers to these groups as Spanish-English, English-Spanish, and Early bilinguals, respectively. The less cumbersome terminology of L1S, L2S and HS bilinguals has been adopted in the present study, although these are the same groups in Child (2013).

[11] Due to the fact that all participants had spent a considerable portion, if not all of their lives, in the United States and were studying at a U.S. university, it was assumed that English proficiency did not play a significant role in participants' scores. However, just to be sure, students were asked to complete a 40-item English grammaticality judgment task in order to test for any significant difference in English proficiency. Of the sixty-eight participants in the present study, one L1S bilingual, two L2S bilinguals, and three HS bilinguals did not complete the tasks for the English pretest. For the remaining 62 participants who did complete the English pretest, no significant effect of Language Background Group on participants' scores on the English pretest were found (Language Background Group: $F(2,59)=0.146$, $p>.05$).

3 males, avg. age=32 years) and 12 native Portuguese speakers from Brazil (10 females, 2 males, avg. age=35 years) completed the sentence completion tasks in their respective languages. Seven of the nine Mexicans who completed the sentence completion task and all 12 Brazilians completed the P/GJ task in their respective languages. Of the Brazilian participants, one had completed high school (*ensino médio*), four had a bachelor's degree, four had a master's degree, and three had doctorate degrees. Of the Mexican participants, one had completed an advanced high-school diploma (educación media-superior), six had bachelor's degrees, one had a master's degrees and one had a doctorate. In addition, all control participants indicated they were bilingual to some degree.

Tasks

In addition to the Spanish Proficiency Pretest and Language Background Questionnaire described in Chapter 2, participants completed four additional tasks over a two-month period: two sentence completion tasks in Spanish and Portuguese, respectively, and two P/GJ tasks in Spanish and Portuguese, respectively (see Appendices B-C and E-H). Tasks and activities were part of the planned activities for the course and students were asked for their consent to use their task results in the present study.

Sentence completion tasks. The Spanish sentence completion task consisted of a paragraph with 20 spaces where participants had to fill in the correct form of the verb in parentheses, with ten spaces each of the subjunctive and indicative. This Spanish task was borrowed directly from Montrul & Perpiñán (2011) with the exception that in Montrul & Perpiñán's study the task had two conjugated versions of the verb (one each in the indicative and the subjunctive) that participants could choose from; for the present study, the task was modified so that participants had to actually come up with a finite

form of the infinitive verb in parentheses. The Portuguese sentence completion task was original and contained 20 blanks (10 each of indicative and subjunctive) and was of a similar length and language type. Many of the verbs in the subjunctive in this task were volitional and adverbial, although the Spanish task included "triggers" such as *no creo que…, es posible que…, me preocupa que…* and *es importante que….* In addition, the Portuguese task did have three verbs/conjunctions not fitting into this description, but that generally lexically trigger the subjunctive, including *talvez* and *oxalá*, and a verb in a dubitative context (*duvidar*). As such, the purpose of the sentence completion tasks was to get a rough estimate of participants' knowledge and use of present tense mood distinctions in general (see Appendices E & F).

Preference/Grammaticality Judgment tasks. Finally, the P/GJ tasks (cf. Ayoun, 2000)[12] in Spanish and Portuguese consisted of 20 pairs of identical sentences with only one difference between the two sentences: the target verb was either conjugated in the present indicative or the present subjunctive. Participants were given three choices from which to choose: *Sentence A*, *Sentence B*, or *Both* and were asked to choose the answer that "sounded best" to them or "what they would most likely use". When they felt that either one could be correct depending on the situation, they were instructed to choose *Both* as the answer. Participants were encouraged to respond quickly and go with their

[12] The P/GJ task used in the present study differs slightly from that used by Ayoun (2000) in that the present study asked participants to choose between Sentence A, Sentence B, or Both. In contrast, Ayoun asked if the participant preferred Sentence A or Sentence B and then, after the choice had been made, asked if the participant considered the sentence not chosen as grammatical or not. The latter way of structuring the question hopes to avoid the potential of the participant defaulting to "Both" so as not to have to make a definite decision.

initial reaction and instinct to discourage them from thinking about grammar rules[13]. Two examples of the stimuli are included below in both Spanish and Portuguese (see Appendices G & H for all stimuli used in the task).

Ex. 1 (volitional)

Spanish A. Juan quiere que usted le da un regalo para su cumpleaños.
B. Juan quiere que usted le dé un regalo para su cumpleaños.

Portuguese A. João quer que Joana lhe dê um presente.
B. João quer que Joana lhe dá um presente.

Ex. 2 (adverbial/purpose clause)

Spanish A. Les digo esto para que saben la verdad.
B. Les digo esto para que sepan la verdad.

Portuguese A. Só digo isto para que sabem a verdade.
B. Só digo isto para que saibam a verdade.

The entire P/GJ task included a total of 50 pairs of sentences belonging to 5 different syntactic/semantic categories. Each syntactic/semantic category contained ten pairs of sentences, with two pairs each of the first person singular and plural, second person singular, and third person singular and plural conjugated forms. In addition, each group of ten sentence pairs was counterbalanced so that in half of the cases the first sentence contained a verb in the present indicative and half of the cases the first sentence appeared in the present subjunctive. Moreover, each pair of sentences was randomized (this task was administered digitally) so that participants would not see all pairs from one syntactic/semantic group together. Finally, six native-speaker instructors of Spanish from Mexico, Uruguay, Argentina, Venezuela, Spain, and the United States, respectively,

[13] It could be argued that this is problematic since participants were asked to essentially use their intuitions, which might tend to foster judgments more common to spoken/informal language, on a formal, written test. This potentially would be a problem with most, if not all, studies using written grammaticality judgment tasks. This is one reason why this chapter looks at two different measures of subjunctive knowledge (namely the sentence completion task and the P/GJ task).

checked the sentence pairs for grammatical accuracy. As stated before, the present chapter is only reporting on the results from two of the syntactic/semantic contexts (a total of 20 sentence pairs): volitional and adverbial/purpose clauses.

The Portuguese version of the P/GJ task was very similar to the Spanish version (translated into Portuguese, of course) with most sentences only containing very small changes concerning the names of people, places or objects in the sentences so that participants would not recognize that they were, in effect, taking the same test again. Again, each syntactic/semantic group of sentence pairs was counterbalanced and all sentence pairs were randomized when presented to the participants. Finally, a native Portuguese-speaking professor double-checked the sentence pairs for grammatical accuracy.

Procedure

Participants completed all six tasks mentioned above over a two-month period. The preliminary tasks (Spanish Proficiency Pretest and the Language Background Questionnaire) were administered on the third day of the course. The Spanish sentence completion task and the Spanish P/GJ task were administered to participants in a computer lab during the sixth week of class before the instructors introduced the subjunctive in the course. Then, four weeks later (after the Portuguese present subjunctive had been taught and practiced in class), the Portuguese sentence completion task and the Portuguese P/GJ task were administered to participants.

For the sentence completion tasks, responses that contained the correct verbal morphology were considered correct and received one point. This included misspelled words and words that contained incorrect root forms such as **empece* and **empieze* for

empiece and **tosso, *tozco,* and **tueso* for *toso* on the Spanish test and **dudo* for *duvido*, **lleve* for *leve*, and **respete* for *respeite* in Portuguese. In addition, verbal forms were considered correct that contained standard modal morphology but were conjugated in the wrong grammatical person. There were relatively few of the examples mentioned above found among participants' responses on the Spanish task; however, the Portuguese task contained myriad examples. However, in some cases it was impossible to tell whether or not the participant was attempting to use subjunctive or indicative morphology, such as in **te* for both *tenho* and *tenha* or **se/*seu* for both *sou* and *seja*. No points were given for these and other ambiguous responses.

For the P/GJ tasks, responses were given one point when the correct form of the verb was chosen. Obviously, this assumes a prescriptive/normative perspective assuming a standard dialect. There were three reasons for this: (1) This is generally how students are taught and graded in post-secondary schooling; (2) Standard dialects of Portuguese and Spanish are almost identical with regards to the prescriptive usage of present indicative/subjunctive distinctions[14]: (3) Volitional and adverbial/purpose clauses that are lexically triggered are considered to be the most common and consistent usages of the subjunctive in Mexican Spanish (Blake, 1983; Montrul, 2009).

Hypotheses

To review, the research questions for the present study were the following: (1) Do the three groups of bilinguals significantly differ in their knowledge of mood distinctions

[14] Again, these forms can be variable in everyday usage in non-standard varieties of both Spanish and Portuguese. See Perini (2002, pp. 202-203) for a discussion on how the present subjunctive can be quite variable in some regional varieties of colloquial Portuguese, even in contexts that would be obligatory in standard Brazilian Portuguese (e.g., volitional).

in Spanish in obligatory contexts?; (2) Are there significant differences between participants' success at transferring their knowledge of mood distinctions in Spanish to Portuguese as measured on two sentence completion tasks and two P/GJ tasks in Spanish and Portuguese and if so, are these differences correlated with context of acquisition (Language Background Group)?

Hypothesis 1: There will be a significant difference in the knowledge of mood distinctions between the three groups with the L2S bilinguals scoring significantly lower on the tasks than the other two groups.

It was not known whether the HS group would score lower than the L1S group since previous research has indicated that HS speakers sometimes approximate native speaker norms in knowledge of mood distinctions in obligatory contexts, but rarely in semantically triggered contexts (c.f. Merino, 1983; Mikulski, 2010; Montrul 2007, 2009; Silva-Corvalán, 1994a, 1994b).

Hypothesis 2: There will be a significant difference in participants' success at transferring over their knowledge of mood distinctions in Spanish to Portuguese as measured by the difference between their scores on the Spanish tasks and the Portuguese tasks. Specifically, L2S bilinguals > L1S bilinguals > HS bilinguals. In other words, the difference between the L2S bilinguals' scores in Spanish and Portuguese would be smaller than the difference between the scores of the other two language groups.

The first part of the hypothesis comes from my personal experience teaching Portuguese courses for Spanish speakers. The second part of the above hypothesis was based on three assumptions: (1) Participants in the L2S group had learned Spanish in a formal environment and would be familiar with the terminology and learning context that are generally used when teaching a foreign language in formal environments; (2) HS bilinguals have not had as much formal education in Spanish as L1S bilinguals, resulting in them having less explicit knowledge and metalinguistic awareness than the other two groups; (3) An explicit knowledge of grammar and its terminology (metalinguistic

awareness) would aid participants in recognizing both when certain grammatical aspects were similar between Spanish and Portuguese and, consequently, their ability to transfer over their knowledge of mood distinctions in Spanish. The results show only partial confirmation for the above assumptions.

Results

Spanish Proficiency Pretest

Almost identically to the results reported in Chapter 2, group means from the Spanish Proficiency Pretest show a large difference between the scores of the L2S bilinguals when compared with the L1S bilinguals and the HS bilinguals, with L2S bilinguals scoring much lower, on average, than the other two groups. The effect of Language Background Group on Spanish Proficiency Pretest scores was tested using a one-factor between subjects ANOVA. The effect of Language Background Group was significant ($F(2,65)=41.96$, $p=0.000$). Planned comparisons indicated that the difference between the L2S group and the other two groups was significant at the 0.05 level; the differences between the L1S and HS groups, however, was not significant. Table 5[15] shows the average proficiency score for each of the three language background groups with ranges, standard errors and standard deviations.

Table 5

Mean Spanish Proficiency Pretest Scores, Std. Deviations, Range by Language Background Group

Language Background Group	N	Mean	Max	Min	Std. Error	Std. Deviation
L1S Bilinguals	8	44.50	48	42	.779	2.204
SH Bilinguals	38	42.74	49	31	.674	4.157
L2S Bilinguals	22	28.64	47	15	1.938	9.090
TOTAL	68	38.38	49	15	1.101	9.075

[15] See discussion in Chapter 2 in the section titled “Spanish Proficiency Pretest”.

Interestingly, and not surprisingly, the Spanish Proficiency Pretest scores positively correlate with scores on both the Portuguese sentence completion task, (r(66)=0.423, p=0.000), as well as on the adverbial contexts of the P/GJ task in Portuguese (r(66)=0.462, p=0.000). However, Spanish proficiency scores do not positively correlate with scores on the volitional portion of the P/GJ in Portuguese (r(66)=0.223, p>.05). Looking at the scatterplots it is clear that there is something else interacting with these correlations, since there are multiple participants with very high Spanish proficiency scores and very low scores on tasks in Portuguese. As will be shown below, Language Background Group interacts with Spanish proficiency in language scores of these bilinguals.

Spanish and Portuguese Sentence Completion Tasks

The Spanish and Portuguese sentence completion tasks were analyzed using a multivariate within-subject analysis of variance with Language Test as the within-subject variable and Language Background Group and Instructor as the between-subjects variables[16]. The effect of Instructor was included to try and test for any instructor or teacher effects on participants' performance on the Portuguese task. Results of the analysis showed significant main effects for Language Background Group (Language Background Group: F(2,63)=5.749, p=0.005) and Language Test (Language Test: F(1,63)=6.15, p=0.016) and no significant main effect for Instructor (Instructor: F(2,63)=1.108, p>.05). In addition, there was a significant two-way interaction of Language Background Group and Language Test (Language Background Group*Score:

[16] Spanish Proficiency Pretest scores were not included as a factor in this or the following analysis because they would be significantly correlated with the sentence completion and P/GJ tasks (both being, essentially, measures of proficiency).

$F(2,63)=4.558$, $p=0.014$). The interaction between Language Test and Instructor was not significant (Language Test*Instructor: $F(2,63)=0.212$, $p>.05$).

Post hoc comparisons showed that the difference between the L2S group's scores and the scores of both the L1S group and the HS group were significant, but that the L1S and HS groups' scores were not significantly different from each other. Means and standard deviations for each language task for the three groups are shown in Table 6 and Figure 3.

Table 6

Means and Standard Deviations on the Spanish and Portuguese Sentence Completion Tasks

		Spanish Task		Portuguese Task	
Language. Background Group	n	Mean	Std. Dev.	Mean	Std. Dev.
Native Speaker Controls	9/12*	19.78	0.44	19.17	1.47**
L1S Bilinguals	8	19.00	1.069	15.88	2.232
HS Bilinguals	38	17.61	2.656	16.39	2.834
L2S Bilinguals	22	14.91	2.975	15.55	3.334

*The native speaker participants only took the test that corresponded with their respective native languages; hence, there were 9 native Spanish speakers and 12 native Portuguese speakers. Since the purpose of this study was to compare responses of bilinguals in Spanish and Portuguese, these native speaker controls were not included in the statistical analysis but their descriptive statistics are included here for comparison purposes. A one way ANOVA indicated that the scores for the Spanish and Portuguese native speakers were not significantly different from each other ($F(1,19)=1.447$, $p>.05$).

**The larger standard deviation of the Portuguese group was based on one participant who scored 15/20 (whereas the second lowest score was 18 and most were 20). However, there was nothing in this participant's information that would warrant exclusion from the group.

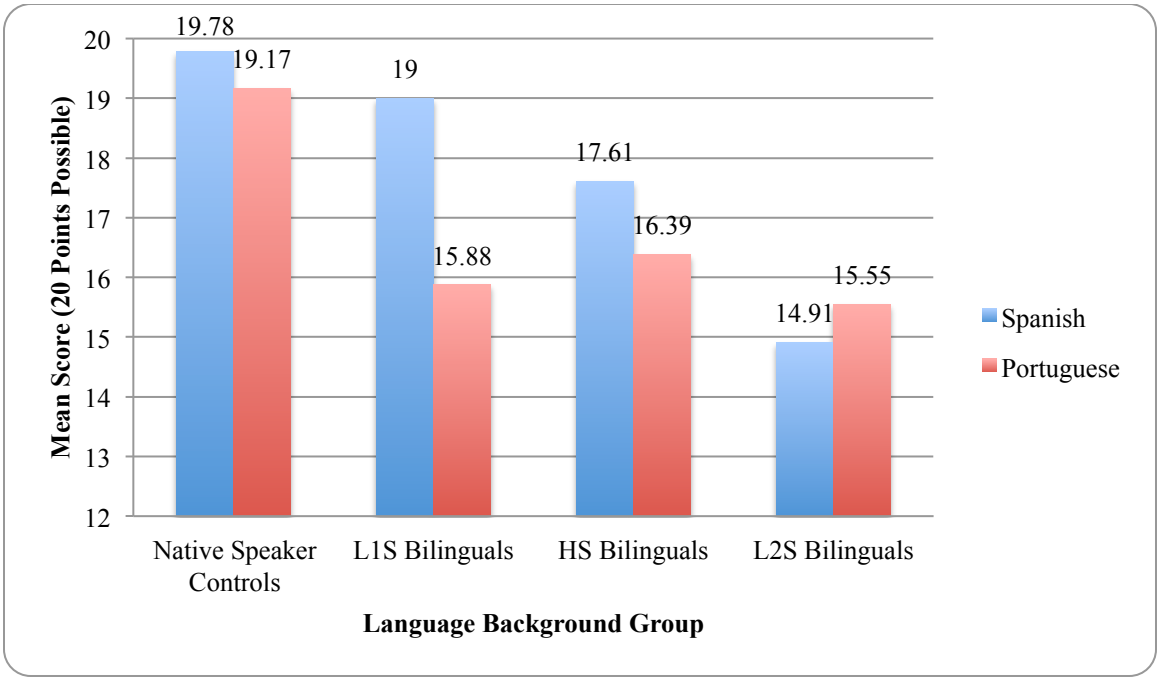

Figure 3. Mean scores on the Spanish and Portuguese sentence completion tasks by language background group

Spanish and Portuguese Preference/Grammaticality Judgment Tasks

The purpose of the Spanish and Portuguese modified grammaticality judgment tasks was to attempt to quantify participants' knowledge of mood distinctions in obligatory contexts (volitional and adverbial/purpose clauses) in Spanish and Portuguese, namely between the present indicative and the present subjunctive. The scores on the Spanish and Portuguese modified grammaticality judgment tasks for volitional and adverbial clauses were analyzed using a three-factor (2x2x3) mixed-design repeated measures multivariate analysis (Wilks Lambda) with Language Test (Spanish and Portuguese) and Syntactic/Semantic Category of the task (Volitional and Adverbial/Purpose Clause) as within-subjects factors and Language Background Group (L1S, L2S, HS) as a between-subjects factor. Although Instructor was included in an initial analysis (and was not found to be significant) it was excluded in the final analysis

because the distribution of participants in each language group among the different instructors was so skewed (for example, one instructor only had one L1S bilingual).

The analysis showed significant main effects of Language Background ($F(2,65)=3.488$, $p=0.036$), Language Test (Wilks Lambda=0.712, $F(1,65)=26.319$, $p=0.000$) and Syntactic/ Semantic Category (Wilks Lambda=0.909, $F(1,65)=6.540$, $p=0.013$). In addition, there were significant two-way interactions of Language Test by Language Background (Wilks Lambda=0.708, $F(2,65)=13.404$, $p=0.000$) and Syntactic/Semantic Category by Language Background (Wilks Lambda=0.870, $F(2,65)=4.846$, $p=0.011$). Neither the two-way interaction of Language Test by Syntactic/Semantic Category (Wilks Lambda= 0.977, $F(1,65)=1.562$, $p > .05$) or the three-way interaction of Language Test by Syntactic/Semantic Category by Language Background (Wilks Lambda=0.982, $F(2,65)=0.590$, $p>.05$) was significant. Pairwise comparisons indicated that the difference in scores between the Spanish and Portuguese tasks were significant for both the L1S group ($MD=2.625$, $SE=0.541$, $p=0.000$) and for the HS group ($MD=1.224$, $SE=0.248$, $p=0.000$), but not for the L2S group ($MD=-0.364$, $SE=0.326$). That is, both the L1S and HS groups scored significantly higher on the Spanish task than on the Portuguese task. In addition, pairwise comparisons showed that the difference in scores between the Volitional category and the Adverbial category was significant for the L2S group ($MD=1.114$, $SE=0.275$) ($F(1,65)=16.345$, $p=0.000$) but not for the other two groups. In other words, L2S participants scored significantly higher, as a group, on the volitional category than they did on the Adverbial category. However, there was no statistically significant difference between the scores on the two syntactic/semantic categories for both the L1S and HS groups. Table 7 shows the mean

scores and standard deviations by Language Background Group and Figures 4 and 5 show the mean scores by Language Background Group for the Volitional and Adverbial contexts, respectively.

Table 7

Mean Scores and Standard Deviations on the Spanish and Portuguese P/GJ Tasks

		Spanish Volitional		Portuguese Volitional		Spanish Adv./Purpose Clause		Portuguese Adv./Purpose Clause	
Language Background Group	n	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Native Speakers Controls	7/12*	9.79	0.27	9.54	0.69	9.79	0.39	9.13	0.91
L1S Bilinguals	8	9.31	0.46	7.13	1.62	9.44	0.62	6.38	1.85
HS Bilinguals	38	8.95	1.65	7.72	1.96	8.91	1.62	7.68	2.16
L2S Bilinguals	22	7.39	2.32	7.91	1.97	6.43	3.09	6.64	2.86

*Like the sentence completion task above, the native speaker participants only took the test that corresponded with their respective native languages; for the P/GJ task there were 7 native Spanish speakers and 12 native Portuguese speakers. Since the purpose of this study was to compare responses of bilinguals in Spanish and Portuguese, these native speaker controls were not included in the statistical analysis but their descriptive statistics are included here for comparison purposes. A one way ANOVA was done for both the "Volitional" category and the "Adverbial/Purpose Clause" category and indicated that the scores for the Spanish and Portuguese native speakers were not significantly different from each other ($F(1,17)=0.791$, $p>.05$) and ($F(1,17)=3.284$, $p>.05$) respectively.

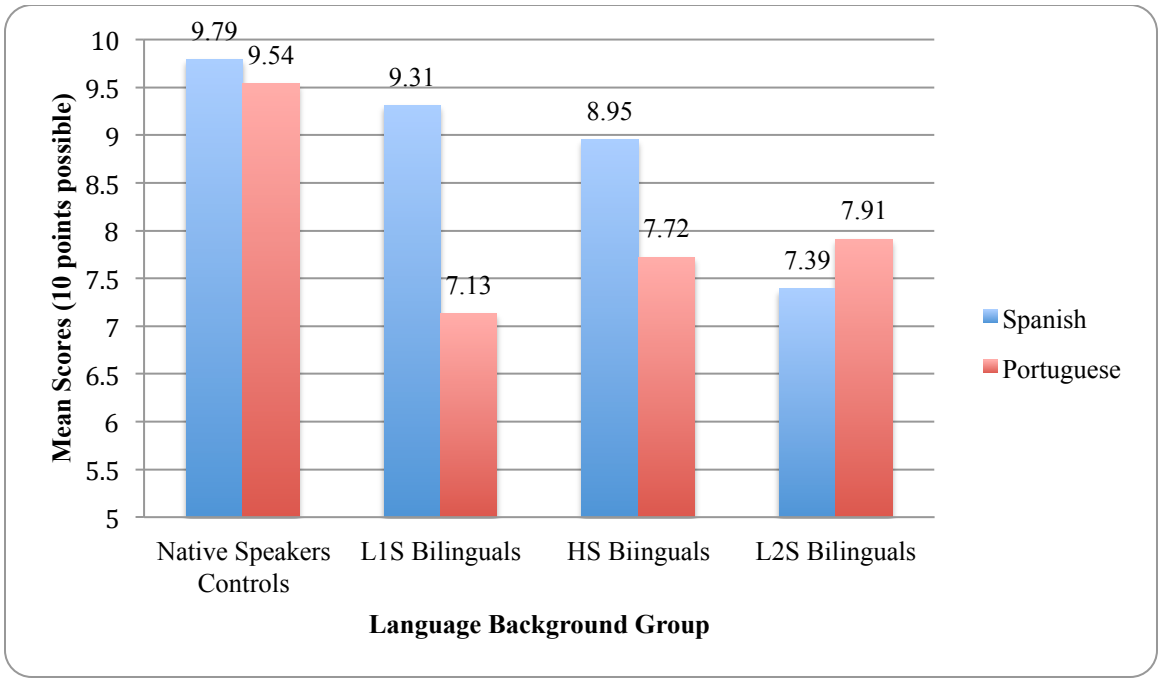

Figure 4. Mean scores for "volitional" category by language background group

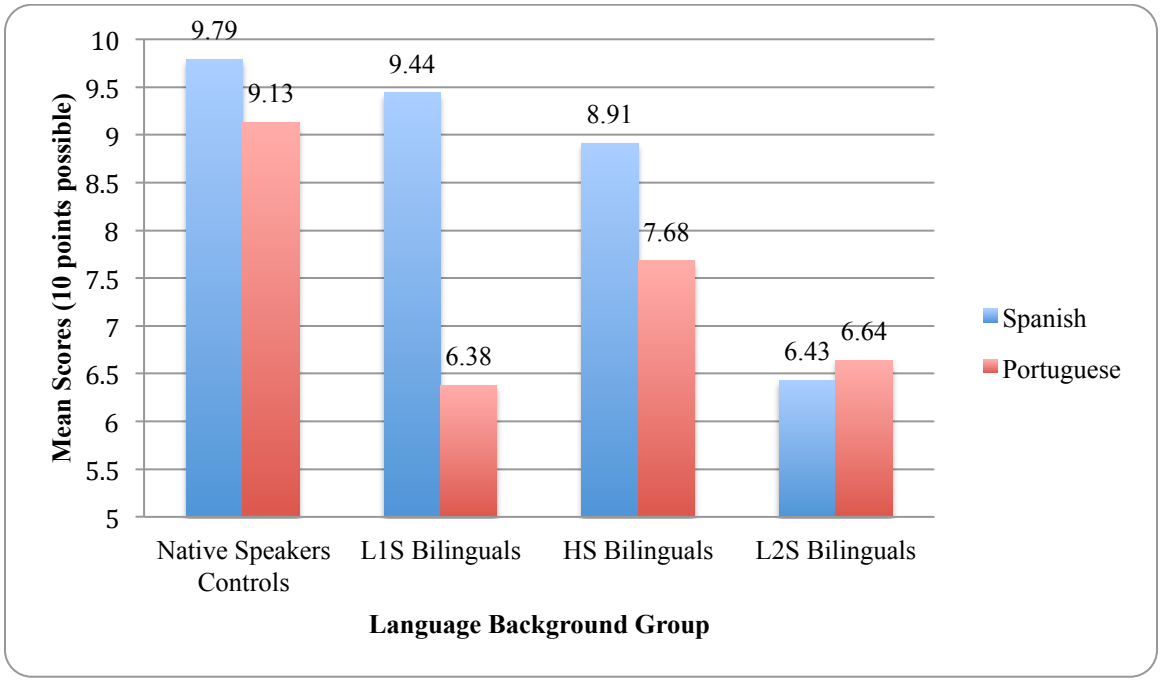

Figure 5. Mean scores for "adverbial/purpose clause" category by language background group

Discussion

The purpose of the present study was to test Spanish/English bilinguals' knowledge of mood distinctions in obligatory contexts in Spanish, specifically the present indicative/subjunctive distinction in volitional and adverbial contexts, and subsequently to test their abilities to transfer this knowledge over to Portuguese when learning Portuguese as a third language in a formal learning environment. The following paragraphs will compare the results of the study to the hypotheses and discuss some possible explanations and implications of the same.

Hypothesis 1: There will be a significant difference in the knowledge of mood distinctions between the three groups with the L2S bilinguals scoring significantly lower on the tasks than the other two groups.

As hypothesized, there was a significant difference between the scores of the L2S group and the other two groups, on both the sentence completion task as well as on the P/GJ task. There was no significant difference between the L1S and HS groups indicating that, at least for volitional and adverbial contexts, the HS participants in the present study were approaching native speaker norms. These results for the HS participants are similar to results reported in Mikulski (2010) that show that HS bilinguals show more knowledge of mood distinctions in obligatory contexts than do L2S bilinguals.

Hypothesis 2: There will be a significant difference in participants' success at transferring over their knowledge of mood distinctions in Spanish to Portuguese. Specifically, L2S bilinguals > L1S bilinguals > HS bilinguals. In other words, the difference between the L2S bilinguals' scores in Spanish and Portuguese would be smaller than the difference between the scores of the other two language groups.

The results presented above only partially confirm the first hypothesis; success at transferring knowledge of mood distinctions from Spanish to Portuguese (as measured by the difference in scores between the Spanish and Portuguese tasks) was indeed significantly correlated with Language Background Group with the L2S group

transferring more of their knowledge from Spanish to Portuguese than the other two groups. However, in contrast with the hypothesis, the L1S group could be said to be the least successful, followed by the HS group. That is, although the difference between the L2S and L1S groups' scores in Portuguese is negligible, the difference between the L1S bilinguals' scores in Spanish in Portuguese is significantly greater than the difference for the L2S bilinguals on each language task.

One possible explanation for the fact that the participants in the HS group performed so much better than hypothesized is that these bilinguals were all majoring in a Spanish-related major (Spanish, translation, Latin-American studies, etc.) and had taken at least one Spanish course at the post-secondary level. In fact, many had taken multiple courses in Spanish language, literature, and linguistics and presumably had been forced to write essays in Spanish. Taking this into account, these participants more closely resemble the L2S speakers than HS speakers with little to no formal education in the Spanish language[17].

Even so, the L2S group is clearly different from the other two groups. Why were they able to score higher on the Portuguese tasks than on the Spanish tasks when the other two groups (especially the L1S group) showed large discrepancies between their scores in Spanish and Portuguese? Additionally, why did the L1S bilinguals (the group with the highest proficiency in Spanish as measured by both the Spanish Proficiency

[17] Thanks to the person who first brought this fact to my attention at the 2013 Second Language Research Forum. It should be noted that this goes against the negative assumption that many have of heritage speakers lacking formal education in their heritage language and is evidence for the success that heritage language programs can have (many of these students had taken Spanish heritage language courses).

Pretest and the two grammar tasks analyzed here) show the biggest difference between their scores in Spanish and their scores in Portuguese?

The difference in scores can be viewed in a couple of different ways. First, all groups performed about the same on the Portuguese tasks, but obviously the L1S and HS bilinguals did not do as well on the Portuguese tasks as they did on the Spanish tasks (what is taken here as a rough measure of their success in transferring over similar grammatical concepts from Spanish to Portuguese). It is clear from their scores on the Spanish tasks that they have an underlying knowledge of mood distinctions in Spanish. It could be that, as the Missing Surface Inflection Hypothesis would suggest (e.g., Haznedar, 2003; Haznedar & Schwartz, 1997; Prévost & White, 1999, 2000), it was simply a morphology problem and the L1S and HS bilinguals just did not produce or recognize which morphological ending indicated the subjunctive and which indicated the indicative. This, however, does not explain why the L2S bilinguals would be significantly better than the other two groups. Conversely, it is theoretically possible that the background language (Spanish) did not play a role and any adult learner of Portuguese would score within the range attested by the three groups given similar circumstances. Yet if this were the case for other aspects of the language it would suggest that Portuguese for Spanish-speakers courses are unnecessary and that L3 acquisition is not appreciably different from L2 acquisition. Most L3 acquisition research, of course, suggests that background languages do indeed influence L3 phonological acquisition (e.g., Cabrelli Amaro,, 2012), lexical acquisition (e.g., Ecke, 2014; Ringbom, 2001) and acquisition of morphosyntax (e.g., García Mayo & Rothman, 2012).

What may better explain the group differences seen in the present study is the complex interaction between the contexts of acquisition of Spanish (formal vs. informal environment), the relatively formal feature (indicative/subjunctive distinctions) being tested, the formal (i.e., written) way it was being tested, and the formal environment in which the L3 Portuguese was being learned. Most, if not all, of the participants in the L2S group learned Spanish in a formal environment and would presumably be familiar with not only the linguistic terminology frequently used in explaining mood distinctions, but also the "rules" to aid in recognizing and using the morphological endings associated with the subjunctive (i.e., "take the first person singular form in the present tense, take off the *o*, and add the opposite ending"). In learning Portuguese in a similar context as they learned Spanish, these participants would have been exposed to these rule-oriented explanations and terminology before. In short, the L2S bilinguals may have had greater metalinguistic awareness and were thus able to perform better on these very formal, written tasks.

In contrast to L2S bilinguals, the L1S bilinguals and some of the HS bilinguals likely had never heard of such rules (as their implicit knowledge of the language would render them superfluous) and were likely encountering these types of explanations (i.e., how to form the present subjunctive, what situations it is used, etc.) for the first time in the Portuguese course (see also Johnson, 2004, who cites similar reasons for the differences in his study of Spanish-English bilinguals learning Portuguese). Carvalho & da Silva (2006) found similar results in their study and concluded that L2S speakers "consciously [apply] more rules directly transferred from Spanish, while native Spanish

speakers will count more on their intuition through the use of analogies, generalizations, and even avoidance" (p.195).

In addition, as reported in Chapter 2, questionnaire data from most of these same participants indicated that participants in the L1S group viewed the role of Spanish in L3 Portuguese learning as less facilitative and more confounding than did those in the L2S and HS groups. In fact, when mentioning what aspects of the language were difficult or easy for them because they were Spanish speakers, participants in the L2S group routinely mentioned "grammar" and "verb conjugations" whereas the L1S group never mentioned the term "verb conjugations". It seems that this lack of metalinguistic knowledge or of a linguistic framework made it more difficult for participants in the L1S group to see the similarities between the two languages and take advantage of their knowledge of Spanish, which, to reiterate, was demonstrably greater than the knowledge of the participants in the L2S group who viewed the role of Spanish in learning Portuguese so positively.

Thus, if the present study had tested participants acquiring Portuguese in an informal, immersion environment, using a relatively common grammatical feature, and tested in an informal (oral) register, the outcome might certainly be different. But it is precisely because many Spanish-speakers in the United States have acquired Spanish in an informal context, are learning Portuguese in a formal context, and are regularly assessed in formal (i.e., in a written register using standard/formal varieties of the language) that the present study was thus designed. This suggests that instructors need to take into account how much metalinguistic knowledge of formal varieties learners may have and adjust their assumptions and practices accordingly. In addition, it would be

ideal if learners of L3 Portuguese could be assessed using a variety of different registers and modalities, as it seems that the written modality and formal registers tend to play to the experiences and previous knowledge of L2S bilinguals.

In relation to the broad issue regarding the role of the background languages in L3 acquisition, the present study provides some evidence for the L2 status factor as well as the TPM, although the study was not designed to specifically test between the TPM and the L2 status factor. That all groups scored relatively high on the Portuguese tasks measuring subjunctive knowledge (a linguistic feature whose acquisition difficulty has been reviewed here) is consistent with the TPM. In fact, it is difficult to explain the relatively high scores of these participants after only two months of instruction in Portuguese without acknowledging the abundant influence of Spanish on their L3 Portuguese learning. However, what is not totally consistent with the TPM is the significant difference between the groups' success at transferring over their knowledge of mood distinctions.

Regarding the L2 status factor, the results suggest that the L2S group transferred principally from Spanish and the L1S group did not seem to transfer all their knowledge of Spanish to Portuguese, both of which are consistent with a "foreign language effect" (Meisel, 1983). In addition, the fact that the participants were at an early proficiency stage in Portuguese is consistent with the prediction that the L2 exerts a stronger influence at the initial stages of acquisition (e.g., Bardel & Falk, 2007, 2012; Williams & Hammarberg, 1998). Finally, the fact that the L2S group performed essentially identically on the Spanish and Portuguese tasks whereas the L1S group did not is consistent with results regarding L3 lexical transfer; forms tend to be transferred from the L2 (something

that these tasks tested), whereas the L1 generally has more influence with transfers of meaning (Ringbom, 2001).

However, with the HS group, the L2 status factor is more difficult to test. First, it has been suggested that the L2 status factor only applies to those who have learned a foreign language after acquiring their L1 (Bardel & Falk, 2007, 2012; Cabrelli Amaro, 2012). Bardel & Falk (2012) explain that the cognitive differences between the L1 and L2 (in essence, the difference between the implicit and explicit ways in which the L1 and L2, respectively, are acquired and used) account for the L2 status factor in L3 acquisition, especially in the beginning stages. By this definition, the HS bilinguals do not have a "true" L2. However, even if it could be argued that the HS participants' dominant language is functionally equivalent to their L1 (with the other language being the L2), heritage speakers' language dominance can vary depending upon the contexts in which the languages are used. A general trend of most of the HS bilinguals in the present study is that they used Spanish with family and at church, English at school and work, and both languages with friends. In addition, many rated themselves equally proficient in both Spanish and English. Consequently, it is difficult to know what language is their dominant language, although it could be argued that the HS bilinguals could have been in an English-dominant (L1) mode since the context (school/formal) was most similar to their formal schooling in English. This would partially explain the fact that they did not transfer as much of their knowledge from Spanish to Portuguese as the L2S group did.

In fact, these macro-type theories may be too broad to describe a process as complex as CLI/language transfer in L3 acquisition. To whit, many of the scholars who have proposed and tested these theories have conceded that other factors can, and do,

influence L3 acquisition (e.g., Bardel & Falk, 2012; García Mayo & Rothman, 2012). Murphy (2003) highlighted the number of personal and linguistic factors that both individually influence and interact in CLI, including L3 proficiency, amount of target language exposure and use, language mode of the speaker, (meta)-linguistic awareness, age, speech context (formal or informal), word frequency, word class, and morphology, etc. In his recent review of L3 lexical acquisition, Ecke (2014) stated, "It seems that most L3 researchers nowadays acknowledge that typological similarity, L2 status, proficiency, and usage frequency of interacting languages are the factors that minimally need to be taken into account in explaining CLI patterns in lexical production" (p. 11). In fact, he found that many of the studies showed a combination of L2 and typological similarity in the CLI observed. Finally, Slabakova (2012) has suggested that CLI is modular and that transfer is not uniform across grammar as a whole, but instead that different parts of the grammar may influence L3 acquisition differently (and interact with psychotypology). Thus, it may be that mood distinctions transfer over differently from knowledge of tense and aspect, or of lexical items, etc. Further studies need to be conducted to shed light on this hypothesis.

Limitations

The present study suffers from some limitations. First, and foremost, the small number of L1S participants in the study makes it difficult to generalize to this population in the United States. Furthermore, the task type used (formal/non-conversational) and the register and variety assumed (written/standard) all limit how far we can generalize these results. It may be that L1S speakers and HS speakers are able to transfer the knowledge they have in Spanish to Portuguese with much more success in informal, spoken registers.

Further studies using different tasks would help to know how much these findings could be generalized and could involve eliciting oral responses, involving grammaticality judgments based on listening to native speech, using spontaneous production from oral interviews or analyzing written production from multiple registers to take into account register and language variety (see Geeslin, 2010).

Additionally, although experience and anecdotal evidence suggest that L2S bilinguals have more metalinguistic knowledge of Spanish than do L1S and HS bilinguals, empirical studies should be conducted to try and measure each groups' metalinguistic knowledge and how that may interact with CLI in formal L3 learning and more informal L3 acquisition. Although difficult to assess, metalinguistic awareness could be measured in other through terminology tests (Correa, 2011), tests that require participants to recognize, correct, and *explain* errors (Galambos & Goldin-Meadow, 1990), tests requiring think-alouds (Carvalho & da Silva, 2006), and tests requiring subjects to label grammatical features in a sentence (Alderson, Clapham, & Steel, 1997).

Finally, it could be argued that there was a mismatch between the task type and register (formal/written) and the directions given to participants to respond according to what "sounded best" and "what you would most likely use" (which could be construed as asking for a less formal, more colloquial variety of language). Further studies could compare different registers and task types to see if there is indeed an effect of task type and register.

Contributions

As mentioned at the beginning of the chapter, an important question in L3 acquisition research currently is determining the role that the background languages play

in CLI. Theories such as the CEM, the TPM and the L2 Status Factor all offer some descriptive adequacy with regards to the transfer observed in L3 acquisition. The results of the present study suggest, however, that these "macro" type theories may not be detailed enough to describe a process as complex as CLI/transfer in L3 acquisition. What is clear is that not only do order of acquisition and psychotypology play a role in CLI, but the context of acquisition interacts with both of these factors to mediate the CLI seen in L3 acquisition.

In addition, the present research, combined with the research reported in Chapter 2, contributes to the literature regarding Spanish for Portuguese Speakers in at least two important ways: First, it makes it clear that the context of acquisition can not only affect what aspects of the two languages learners may perceive as "transparent" and which they may perceive as "opaque" (Júdice, 2000), but also learners' success at transferring similar linguistic structures from Spanish to Portuguese. Secondly, the results indicate that there is not a linear correlation between Spanish proficiency and success when learning Portuguese as an L3. This has implications for how much teachers of these courses should assume their students will transfer as well as for how fast specific aspects of the grammar should be taught, especially those areas which theoretically should be "transparent" to the learner.

On the other hand, even though there were differences in the success of participants at transferring their knowledge of mood distinctions in Spanish to Portuguese, all participant groups scored surprisingly high on the Portuguese tasks, especially considering that they were novice learners of L3 Portuguese and mood acquisition is notoriously difficult for adult learners (Collentine, 2010). At the end of her monograph

on the acquisition of tense, aspect, mood and modality in L2 French, Ayoun (2013) mentioned that, “It would also be interesting to compare English-speaking and Spanish-speaking (or another language instantiating a frequent use of subjunctive) learners of L2 French to determine whether or not L1 knowledge of the subjunctive facilitates its acquisition in L2 French” (p. 197). The results of the present study suggest that knowledge of the subjunctive, whether in an L1 or an L2, does indeed facilitate its acquisition in another language.

In conclusion, the present study contributes specifically to research regarding Portuguese for Spanish speakers and more generally to research on the role of background languages in L3 acquisition. Although scores in Portuguese were correlated with general proficiency in Spanish, this correlation was mediated by the context in which one acquired Spanish. It is clear that we cannot assume that the more proficient one is in Spanish, the quicker or easier they will be able to learn Portuguese. On a broader scale, it is evident that the context in which one acquires a language can affect how that language affects the subsequent learning/acquisition of new languages. Future studies are needed to determine how this may differ with languages that are not so typologically similar as Spanish and Portuguese.

CHAPTER 4 - CLI IN L3 PORTUGUESE MOOD ACQUISITION: NON-OBLIGATORY CONTEXTS

Introduction

As previously discussed in Chapters 2 and 3, Portuguese for Spanish-speakers courses in the United States have generally been offered as accelerated courses due to both the implicit and explicit assumptions that a knowledge of, and proficiency in, Spanish will aid in the learning of Portuguese. This no doubt stems from the assumption that the extensive typological similarity between the two languages will be "transparent" (Júdice, 2000) to learners (either subconsciously or consciously) and thus facilitate transfer of those features that are analogous between the two languages. Indeed, rapid gains by learners are not uncommon in these courses (Carvalho 2002, 2011; Carvalho, Freire, & da Silva, 2010). However, as previous research has suggested, the order and context of acquisition of Spanish seems to play a role in how much Spanish-speakers view the role of Spanish as facilitative when learning Portuguese and in how they transfer their knowledge of Spanish to Portuguese (e.g., Chapters 2 & 3; Carvalho & da Silva, 2006; Johnson, 2004). Consequently, it is the goal of the present chapter to shed additional light on how the order and context of acquisition are related to the CLI seen among Spanish-English bilinguals learning Portuguese as a third language (L3).

Chapter 3 focused on how these three groups of bilinguals transfer over their knowledge of mood distinctions (specifically between the present indicative and subjunctive) in obligatory (also known as lexically-triggered or connective-governed) contexts. These obligatory contexts were chosen because they are the first to be acquired by native Spanish speakers in early childhood (i.e., between the ages of 2 and 5, see Blake, 1983; Studerus, 1995; Montrul, 2009) in addition to being the most easily

mastered by L1 English speaking learners of Spanish (Collentine, 2010; Gudmestad, 2006). Thus, it was hypothesized that those who learned Spanish from birth and were exposed to English after age 5 (L1S bilinguals) and those who were exposed to both English and Spanish before the age of 5 (HS bilinguals) would have fully acquired the subjunctive usage in these obligatory contexts. In addition, if native English-speaking bilinguals exposed to Spanish after age 5 (L2S bilinguals) had acquired or learned about mood distinctions at all, it would be in these same contexts.

Results from Chapter 3 indicated that all groups were able to use the subjunctive, although the L1S bilinguals and the HS bilinguals did indeed score significantly higher than the L2S bilinguals. However, and somewhat paradoxically, the L2S bilinguals scored just as high on the Portuguese tasks as they did on the Spanish tasks, indicating that they were able to transfer over their knowledge of mood distinctions in Spanish in these contexts to Portuguese. Conversely, the other two groups scored significantly lower on the tasks in Portuguese than they did in Spanish, indicating that they were not completely transferring over their knowledge of mood distinctions from Spanish to Portuguese.

The present study presents a continuation of Chapter 3 by analyzing the performance of these same participants on these same tasks in Spanish and Portuguese, but this time focusing on variable contexts that are semantically, rather than lexically, triggered. Blake (1983) and Montrul (2009) have affirmed that because many uses of the subjunctive are used infrequently and in formal environments, the whole range of the subjunctive is generally only fully acquired by native speakers between the ages of 6 and 12 (i.e., during the first years of formal schooling). Because of this fact, it is unknown

whether or not HS speakers and L2S speakers (both of whom had primary and secondary schooling in English) have acquired these more subtle, variable uses of the subjunctive and, if so, if they are able to transfer over their knowledge of the Spanish subjunctive in these contexts to Portuguese. Therefore, the present study aims to compare the responses of the three groups of bilinguals on the P/GJ task in Spanish and Portuguese in three semantically triggered (variable) contexts.

Literature Review

Acquisition of Mood Distinctions in Spanish

The following sections will detail the acquisition of mood distinctions by native speakers of Spanish, HS speakers, and L2S learners.

L1 acquisition of mood distinctions. In her book detailing the morphosyntactic development of native and heritage speakers of Spanish, Montrul (2004) cites several studies showing that the subjunctive begins to be attested by age 2, usually in commands (both direct and indirect) and adverbial clauses. However, the full range of the subjunctive is acquired gradually between ages 2-10 (and maybe later, see Blake, 1983). Although between ages 5-7 children show signs of using the subjunctive in both obligatory and variable contexts, their usage shows great variability when compared with older children and adults (Blake, 1983; Sanchez-Naranjo & Pérez-Leroux, 2010). In summary, the subtler, more semantically-triggered uses of the subjunctive seem only to fully be acquired after the start of formal schooling and with increased cognitive development (Montrul, 2004).

L2S speakers' knowledge of mood distinctions. Collentine (2010) reviewed studies done between 2003 and 2010 on the acquisition of the Spanish subjunctive by L2 learners. He observed that the subjunctive, although relatively infrequent and "in spite of

its low communicative value" (p. 49) had still been given much attention in L2 classrooms and learning environments. However, research had shown that it continues to be difficult for learners because of the syntactic, semantic, and pragmatic complexity involved. In addition, he mentioned that because of the subtlety of mood morphology in the present tense, many learners might fail to even notice it, especially in speech. He did concede (with Gudmestad, 2006) that some gains have been seen among L2 learners, especially with certain tasks. He posited that the challenge for the L2 educator was to design activities that use the subjunctive in real-world situations and that highlight the subtle pragmatic/semantic differences between the subjunctive and the indicative (e.g., in variable contexts). He suggested that future research concentrate on the role of transfer, how general pragmatic knowledge affects mood acquisition, the role of study-abroad vs. traditional classrooms in the acquisition of these distinctions, and the relationship among phonological acquisition and mood acquisition.

HS bilinguals' knowledge of mood distinctions. Because the definition of HS speakers can vary so widely, it is difficult to accurately summarize their acquisition of the subjunctive. The majority of Spanish speakers in the present study indicated that although they were introduced to both Spanish and English since birth, their home language was predominantly Spanish and their formal schooling was in English. If this is representative of the majority of HS speakers, then taking into account the research showing how the full range of mood distinctions is not acquired until after the beginning of formal schooling, we can expect that many heritage speakers will not approximate native speaker norms in subjunctive usage, especially in semantically-triggered contexts. In fact, this reduced use of the subjunctive by HS speakers has been amply documented (Merino,

1983; Montrul, 2002, 2007; Potowski, 2005; Silva-Corvalán, 1994a, 1994b, 2000) and has been ascribed to incomplete acquisition, language attrition, or a combination of both.

In one of the early studies, Merino (1983) administered a Spanish test twice over a two-year period to bilingual Chicano children in Kindergarten through 4th grade and found that many showed language attrition in their use of the preterit/imperfect, subjunctive, relatives, and conditionals as they progressed through school. Specifically, she found that many in the 4th grade performed no better (and sometimes worse) as those in Kindergarten. In short, she found evidence of erosion of the home language as these children's knowledge of English increased.

Silva-Corvalán (1994a, 1994b) found that Spanish speakers in Los Angeles simplified and overgeneralized with regards to the indicative/subjunctive distinction. Specifically, she found that many speakers at the low end of the bilingual continuum did not productively use the subjunctive outside of fixed expressions, whereas among more proficient bilinguals the loss of the subjunctive was more extensive in non-obligatory contexts than in obligatory contexts. She noted how this tendency towards simplification is inherent in Romance languages, but that language contact situations seem to speed up this process, with English having an indirect effect on this attrition of mood distinctions.

Montrul (2007) used two tasks (a morphology recognition task and a sentence conjunction judgment task) to test 20 2nd generation HS speakers' receptive ability concerning the subjunctive. She also compared their results with 15 monolingual speakers of Spanish. Results showed that although 2nd HS speakers had the ability to distinguish between the indicative and the subjunctive in obligatory contexts they did not

distinguish the subtle meaning differences of mood in variable contexts, suggesting incomplete acquisition.

In a subsequent study, Montrul (2009) used an oral production task, a written interpretation task and a written elicitation task to test subjunctive usage among different proficiency levels of HS speakers. She concluded that although the results showed most HS speakers had a good understanding of preterit/imperfect distinctions, most also had some difficulty with the subjunctive/indicative distinctions, with the lowest level speakers not distinguishing well between the two in both elicitation/production tasks (in writing and speaking) and on acceptability judgments. Incidentally, this same imbalance with regard to tense-aspect and mood was also found among the low/intermediate HS learners in Lynch's 2008 study.

In conclusion, research suggests that most HS language speakers exhibit reduced knowledge of mood distinctions in Spanish (as compared to monolingual speakers of Spanish), with a possible exception being HS learners' ability to recognize native-like usage of the subjunctive in volitional (i.e., obligatory) contexts. However, it is important to realize that, although a reduced usage of the verbal system has been shown to apply to many HS learners of Spanish, Potowski (2005) reiterates that many features common to HS learners' Spanish (and U.S. dialects of Spanish) are common to contact varieties of language everywhere. Thus, although formal monolingual uses of mood in Spanish follow prescriptive norms, actual usage is variable, especially among bilinguals (see, for example, Merino, 1983; Mikulski, 2010; Montrul & Perpiñán, 2011; Potowski, Jegerski, & Morgan-Short, 2009; Silva-Corvalán, 1994a, 1994b). Thus, it is necessary to consider the heterogeneity inherent in the Spanish verbal system and how that variety may lead to

different outcomes when a Spanish speaker is expected to transfer knowledge of mood distinctions in Spanish into a typologically similar language, such as Portuguese, during the learning process. Put differently, although it is important to know if L3 learners are transferring over similar features from their Spanish into Portuguese, it is also crucial to know what those features are in each speaker's particular variety. For example, even if transfer is happening, if the particular feature is not evident in the speaker's variety of Spanish, then we may assume that transfer cannot occur and the feature or usage will have to be learned. Thus, if it can be shown that some speakers have a reduced form of the subjunctive, then those particular areas of the language may need to be explicitly taught in the L3 classroom. Consequently, the present study aims at quantifying not only students' ability to transfer their knowledge of mood distinctions from Spanish to Portuguese, but to first accurately assess their usage of the subjunctive in Spanish in non-obligatory (i.e., variable) contexts.

Study

Although the present study focuses on Spanish-English bilinguals' ability to transfer their knowledge of the subjunctive in variable contexts when learning L3 Portuguese, the data from the present study come from the same larger study from which the data in Chapter 3 (which looked at the subjunctive in obligatory contexts) were taken.

Research Questions

The main purpose of the present study is to shed more light on how Spanish-English bilinguals transfer their knowledge of Spanish when learning Portuguese as an L3. Chapter 2 showed how the context of acquisition could affect one's perceptions of the role of Spanish in learning Portuguese. Specifically, L2S bilinguals, despite scoring significantly lower on a Spanish proficiency test than L1S and HS bilinguals, perceived

Spanish as more facilitative to L3 Portuguese learning did L1S bilinguals. Correspondingly, results from Chapter 2 showed that L2S bilinguals transfer more of their knowledge of mood distinctions in obligatory contexts to the same contexts in Portuguese than do either L1S bilinguals or HS bilinguals.

Accordingly, the present study builds on Chapter 3 by looking at these same groups and their transfer of mood distinctions in variable contexts. Specifically, the present study asks two principal questions: (1) Do the L1S, L2S, and HS bilinguals show similar patterns of subjunctive usage in non-obligatory (variable) contexts in Spanish as measured by a P/GJ task in Spanish?; (2) Do the different groups transfer over their patterns of subjunctive usage in Spanish to Portuguese in a similar manner when comparing their selection of *Subjunctive*, *Indicative*, or *Both* in each semantic category on the P/GJ task in Spanish and an identical P/GJ task in Portuguese?

Participants

Participants for the present study are the same participants as those in Chapter 3. See section "Participants" in Chapter 3.

Tasks

The tasks reported in this chapter are two P/GJ tasks in Spanish and Portuguese, respectively (see Appendices B-C and E-H). As the data for the present study come from the exact same study as that reported in Chapter 3, only the results of the "variable contexts" sections of the P/GJ tasks will be reported here.

Preference/Grammaticality Judgment (P/GJ) tasks. In designing the present study it was important to get as accurate an assessment as possible of participants' knowledge of subjunctive/indicative distinctions and morphology, especially considering

the research mentioned above showing HS speakers' reduced knowledge and use of mood distinctions in more variable contexts. In her landmark study of Spanish speakers in Los Angeles, Silva-Corvalán (1994a; 1994b) published a table of the uses of the subjunctive in a variety of syntactic/semantic contexts according to diminishing frequency of occurrence. This list was used as a basis for the present study. Consequently, for the larger study, a representative sample of five of the contexts (from highest to lowest frequency of use in Silva-Corvalán's study) was chosen for the P/GJ task to test participants' knowledge of mood distinctions: Volitional, Purpose/Adverbial clauses, Comment/Emotion, Uncertainty/Doubt/Denial, and Adjective/Relative clauses. Table 8 shows the data from Silva-Corvalán (1994a) with the contexts used in the present study in **bold** (volitional and adverbial/purpose clauses were reported in Chapter 3).

Table 8

*Syntactic/Semantic Contexts From the Study Reported in Silva-Corvalán (1994a) Showing Frequency of Subjunctive Usage Among Spanish Heritage Speakers in Los Angeles (with the contexts used in the present study in **bold**)*

Matrix	N	%	Example with Sub Form
Volitional	170/204	83.3	quiero que hable
Purpose Clause (Adverbial)	80/105	76.2	para que hable
Concessive Clause	25/34	73.5	aunque hable
Comment (emotion)	32/56	57.1	lamento que hable
Modal (main clause)	16/44	36.4	debiera hablar
Mental Act	9/32	28.1	no advierte que hable
Temporal clause	70/252	27.8	cuando hable
Apodosis	70/270	25.9	…le hablara
Protasis	78/306	25.5	si viniera
Uncertainty (doubt)	78/393	19.8	no sé si hable
Modal clause	16/108	14.8	así como hable
Locative clause	10/70	14.3	donde hable
Adjectival (relative) clause	86/758	11.3	el que hable
Assertive	4/52	7.7	sé que hable

For the present study, the P/GJ tasks in Spanish and Portuguese consisted of 30 pairs of identical sentences with only one difference between the two sentences: the target verb was either conjugated in the present indicative or the present subjunctive (see Appendices G & H). Participants were given three choices from which to choose: *Sentence A*, *Sentence B*, or *Both* and were asked to choose the answer that "sounded best" to them or "what they would most likely use". When they felt that either one could be correct depending on the situation, they were instructed to choose *Both* as the answer. Participants were encouraged to respond quickly and go with their initial reaction and instinct to discourage them from thinking about grammar rules. Three examples of the stimuli are included below in both Spanish and Portuguese (see Appendices G & H for all stimuli used in the task).

Ex. 1 (comment/emotion)

Spanish	A. Lamento que no puedas venir.
	B. Lamento que no puedes venir.
Portuguese	A. Lamento que elas não podem vir.
	B. Lamento que elas não possam vir.

Ex. 2 (doubt/uncertainty/question)

Spanish	A. María duda que yo conozco a Kobe Bryant.
	B. María duda que yo conozca a Kobe Bryant.
Portuguese	A. Joana duvida que eu conheça a Christina Aguilera.
	B. Joana duvida que eu conheço a Christina Aguilera.

Ex. 3 (adjective/relative clauses)

Spanish	A. Queremos alquilar una casa que sea del estilo español.
	B. Queremos alquilar una casa que es del estilo español.
Portuguese	A. Queremos alugar uma casa que fique perto do parque
	B. Queremos alugar uma casa que fica perto do parque.

Each syntactic/semantic category in the P/GJ task contained ten pairs of sentences, with two pairs each for the first person singular and plural, second person singular, and third person singular and plural conjugated forms. In addition, each group of ten sentence

pairs was counterbalanced so that in half of the cases the first sentence contained a verb in the present indicative and half of the cases the first sentence appeared in the present subjunctive. Moreover, each pair of sentences was randomized (this task was administered digitally) so that participants would not see all pairs from one syntactic/semantic group together. Finally, six native-speaker instructors of Spanish from Mexico, Uruguay, Argentina, Venezuela, Spain, and the United States, respectively, checked the sentence pairs for grammatical accuracy. As stated before, the present chapter is only reporting on the results from three of the syntactic/semantic contexts (a total of 30 sentence pairs): Comment/Emotion, Doubt/Uncertainty/Denial, and Adjective/Relative clauses.

The Portuguese version of the modified grammaticality judgment task was nearly identical to the Spanish version (translated into Portuguese, of course) with small changes made to the names of people, places or objects in the sentences so that participants would not recognize that they were, in effect, taking the same test again. Again, each syntactic/semantic group of sentence pairs was counterbalanced and all sentence pairs were randomized when presented to the participants. Finally, a native Portuguese-speaking professor double-checked the sentence pairs for grammatical accuracy.

Procedure

As reported in Chapter 3, the Spanish P/GJ task was administered to participants in a computer lab during the sixth week of class before the instructors introduced the subjunctive in the course. Then, four weeks later (after the Portuguese present subjunctive had been taught and practiced in class), the Portuguese P/GJ task was administered to participants.

Grammars of Spanish and Portuguese indicate that in standard varieties, the subjunctive should be used with verbs expressing comment and emotion as well as verbs expressing doubt and uncertainty whereas adjective clauses can call for either the subjunctive or the indicative, depending on the presupposition assumed by the speaker (e.g., Butt & Benjamin, 2013; Montrul, 2004; Perini, 2002). However, research also suggests that all of these contexts are semantically-triggered, and thus do not categorically call for the subjunctive (Blake, 1983; Montrul, 2004). Additionally, some researchers have noted how these contexts can show quite a bit of variability, contrary to the descriptions and rules given by some textbooks (e.g., Silva-Corvalán, 1994a; Studerus, 1995). Thus, it was assumed that there were no "correct" answers on each question. Consequently, each section of the P/GJ task in Spanish (containing 10 pairs of sentences each) was analyzed to see the relative percentages that each participant chose between *Subjunctive*, *Indicative*, or *Both*. Then, those percentages were compared with the percentages chosen on the corresponding Portuguese P/GJ task to see if participants were performing similarly between Portuguese and Spanish (see Results section below for a more detailed description of the analysis).

Hypotheses

To review, the research questions for the present study were the following: (1) Do the three groups of bilinguals show similar patterns of subjunctive usage in variable contexts in Spanish as measured by a P/GJ task?; (2) Do the three groups transfer over their patterns of subjunctive usage in Spanish to Portuguese in a similar manner when comparing their selection of *Subjunctive*, *Indicative*, or *Both* in each semantic category on the P/GJ task in Spanish and an identical P/GJ task in Portuguese?

Hypothesis 1a: For verbs of Comment/Emotion *and* Doubt/Uncertainty/Denial *(where there are strong tendencies toward subjunctive usage by native speakers), L2S and SH bilinguals will choose the subjunctive significantly less than the L1S bilinguals.*

Hypothesis 1b: For Adjective/Relative Clauses *(which, theoretically, allow both indicative and subjunctive, depending on context), the L2S bilinguals and HS bilinguals will not accept both sentences as much as the L1S bilinguals (showing a lack of knowledge of the semantic distinctions between the subjunctive and indicative in these contexts).*

These hypotheses comes from the fact that previous research has shown that HS bilinguals often show monolingual-like knowledge of mood distinctions in obligatory contexts, but seldom in semantically triggered contexts (c.f. Merino, 1983; Mikulski, 2010; Montrul 2007, 2009; Silva-Corvalán, 1994a, 1994b).

Hypothesis 2: There will be a significant difference in the way participants transfer knowledge of mood distinctions in these variable contexts in Spanish to Portuguese as measured by the difference between their percentage of subjunctive usage on the Spanish tasks and the Portuguese tasks. Specifically, L2S bilinguals' will show less difference on the tasks in Spanish and Portuguese than the other two groups (i.e., they will view the two tasks as essentially testing the same conceptual knowledge of mood distinctions regardless of the language).

This hypothesis is based off of results in both Chapter 2 and Chapter 3. These results indicate that L2S speakers perceive the similarities between Spanish and Portuguese as facilitative and presumably would transfer over their knowledge when learning L3 Portuguese more readily than L1S and HS bilinguals.

Results

Spanish Proficiency Pretest

Results from the Spanish Proficiency Pretest were reported in Chapter 3 (see Table 5). Most importantly to remember is that the effect of Language Background Group on Spanish Proficiency Pretest scores was analyzed and found to be significant. Specifically, the L2S group scored significantly lower than the L1S and HS groups. In contrast, there was no significant difference between the latter two groups.

Preference/Grammaticality Judgment Tasks

The purpose of the P/GJ tasks was to test the following: (1) whether or not bilingual participants would accept the subjunctive, the indicative, or both in situations where traditional Spanish grammars tend to suggest subjunctive usage; (2) whether or not participants would choose similarly in Portuguese as they did in Spanish. Chapter 3 focused on contexts where the subjunctive is considered obligatory. In contrast, the present chapter focuses on more semantically triggered contexts where some variability is expected to occur. Thus, the analysis used in Chapter 3 (where a "correct" response is assumed to exist) is not appropriate for the three categories reported on below.

Consequently, the relative percentages of *Subjunctive, Indicative,* and *Both* were compared for Language Background Group, Language Test (Spanish and Portuguese), and Syntactic/Semantic Category. To do this, three separate 3-factor (2x2x3) mixed-designs repeated measures multivariate analyses (Wilks Lambda) were used for each Syntactic/Semantic Category of the task (Comment/Emotion, Doubt/Denial, Adjective/Relative Clauses)[18] with Language Test (*Spanish, Portuguese*) and Percentage Scores (*Subjunctive, Indicative* on the first two categories and *Both* and *Subjunctive* on the Adjective/Relative Clause category) as within-subjects factors and Language Background Group (*L1S, L2S, HS*) as a between-subjects factor. The Percentage Scores were only analyzed for two of the three responses (*Subjunctive* and *Indicative* on the semantic categories Comment/Emotion and Doubt/Uncertainty/Denial and *Both* and

[18] Initially, this was done with one 4-factor analysis (which would generally be more parsimonious), however the significant four-way interaction made it extremely difficult to interpret the results. The three separate 3-factor analyses performed show more clearly how participants differed in their judgments of sentences in the category *Adjective/Relative Clauses* than in the other categories.

Subjunctive for the category Adjective/Relative Clauses) since, with these two percentages, the percentage of the time that participants chose the other option could easily be inferred.

Syntactic/semantic category 1: Comment/emotion. The analysis for the Comment/Emotion category showed significant main effects of Language Background ($F(2,65)=21.314$, $p=0.000$), Language Test (Wilks Lambda=0.840, $F(1,65)=12.357$, $p=0.001$) and Percentage Score (Wilks Lambda=0.657, $F(1,65)=33.907$, $p=0.000$). In addition, there was a significant two-way interaction of Language Background by Percentage Score (Wilks Lambda=0.866, $F(2,65)=5.026$, $p=0.009$). Finally, there was also a significant three-way interaction of Language Test by Percentage Scores by Language Background (Wilks Lambda=0.911, $F(2,65)=3.188$, $p=0.048$). Pairwise comparisons indicated that all three language groups differed significantly from each other in their choosing of the subjunctive in these contexts: L1S-L2S (MD=-0.219, SE=0.362, $p=0.000$), L1S-HS (MD=0.108, SE=0.034, $p=0.002$) and L2S-HS (MD=0.111, SE=0.023, $p=0.000$). Figure 6 shows the percentage breakdown of responses on both the Spanish and Portuguese P/GJ tasks by Language Background Group on the Syntactic/Semantic Category *Comment/Emotion*.

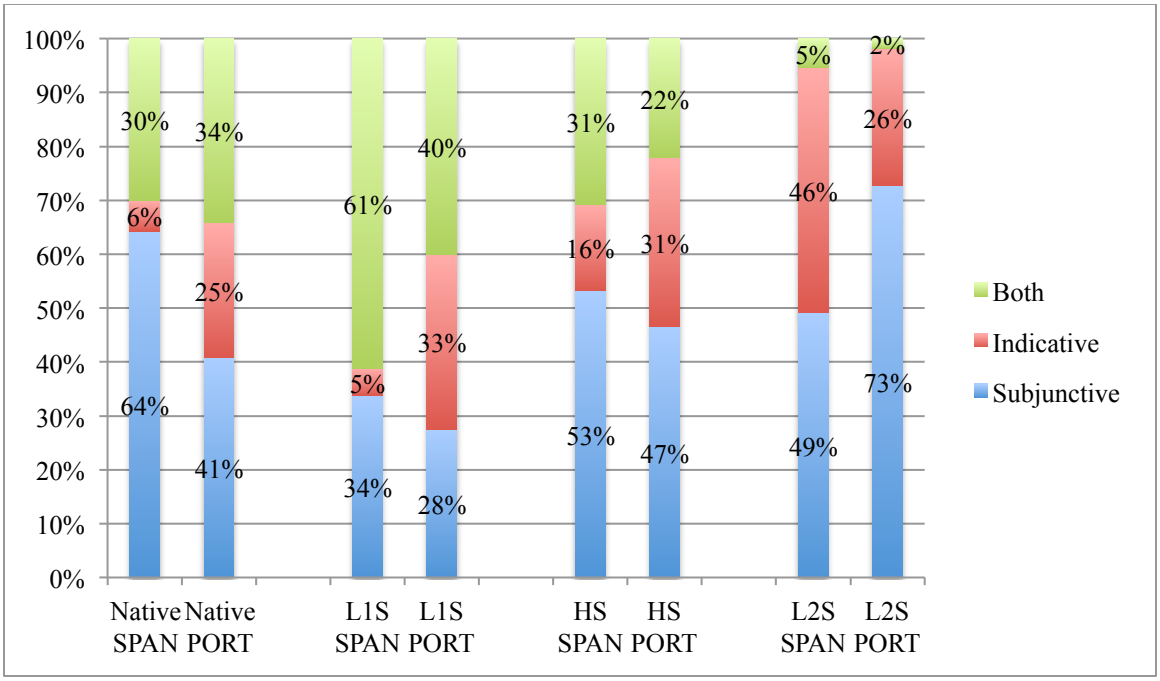

Figure 6. Percentage of responses (indicative, subjunctive, both) by language background group on verbs of "comment/emotion" for Spanish and Portuguese tasks

Syntactic/semantic category 2: Doubt/uncertainty/denial. The analysis for the Doubt/Uncertainty/Denial category also showed significant main effects of Language Background ($F(2,65) = 32.938$, $p=0.000$) and Percentage Score (Wilks Lambda=0.524, $F(1,65)=59.008$, $p=0.000$). Additionally, the Language Test by Percentage Score interaction was significant (Wilks Lambda=0.764, $F(1,65)=20.053$, $p=0.000$). The main effect of Language Test, the other two-way interactions, and the three-way interaction were not significant. Pairwise comparisons indicated that all three language background groups differed significantly from each other in their choosing of the subjunctive in these contexts: L1S-L2S (*MD*=-0.223, *SE*=0.028, $p=0.000$), L1S-HS (*MD*=0.133, *SE*=0.027, $p=0.000$) and L2S-HS (*MD*=0.090, *SE*=0.018, $p=0.000$). **Error! Reference source not found.** shows the percentage breakdown of responses on both the Spanish and Portuguese P/GJ tasks by Language Background Group on the Syntactic/Semantic Category *Doubt/Uncertainty/Denial*.

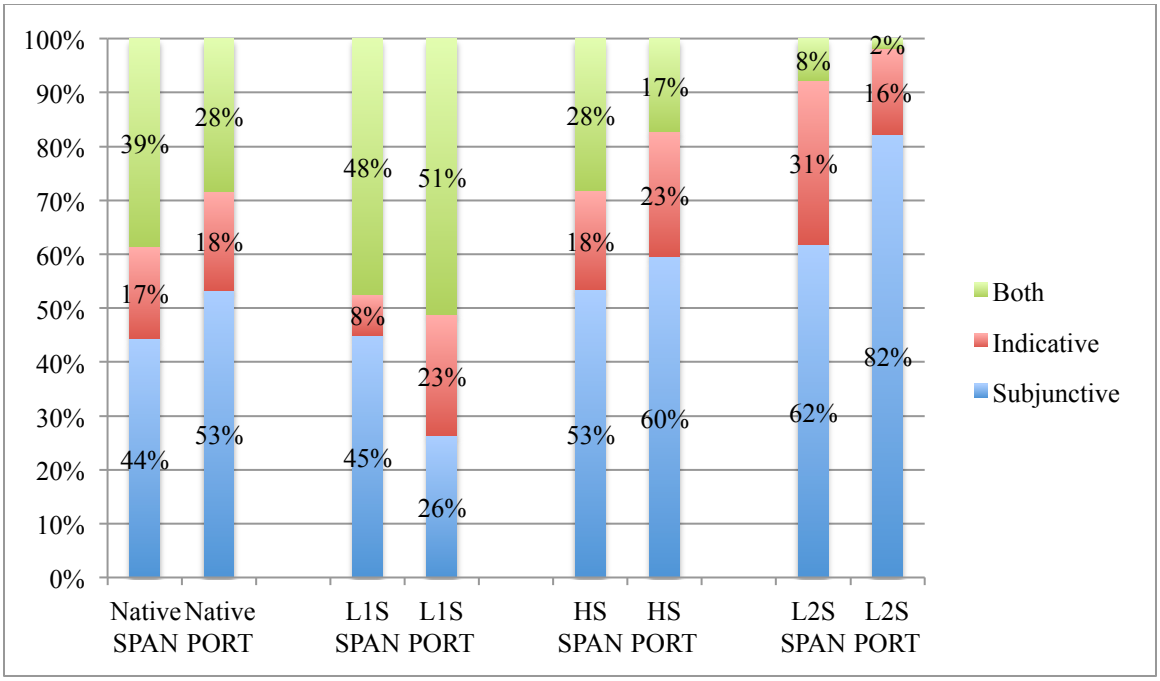

Figure 7. Percentage of responses (indicative, subjunctive, both) by language background group on verbs of "doubt/uncertainty/denial" for Spanish and Portuguese tasks

Syntactic/semantic category 3: Adjective/relative clauses. The analysis for the syntactic/semantic category indicated significant main effects of Language Background ($F(2,65) = 18.498$, $p=0.000$) and Language Test (Wilks Lambda=0.683, $F(1,65)=30.115$, $p=0.000$). Furthermore, the Percentage Score by Language Background interaction was significant (Wilks Lambda=0.670, $F(2,65)=16.031$, $p=0.000$) as was the Percentage Score by Language Test interaction (Wilks Lambda=0.933, $F(1,65)=4.693$, $p=0.034$). All other main effects and interactions were not significant. Pairwise comparisons indicated that the L2S group differed significantly from the other two groups in their accepting *Both*[19] in adjective/relative clause contexts: L1S-L2S ($MD=0.117$, $SE=0.024$, $p=0.000$), HS-L2S ($MD=0.081$, $SE=0.015$, $p=0.000$). The L1S and HS groups did not differ significantly from each other: L1S-HS ($MD=0.036$, $SE=0.022$, $p>0.05$). Figure 8 shows

[19] This category was analyzed with the response *Both* being the reference since typical grammars show that sentences in these categories are completely dependent on the presupposition on the part of the speaker (e.g., Montrul, 2004).

the percentage breakdown of responses on both the Spanish and Portuguese P/GJ tasks by Language Background Group on the Syntactic/Semantic Category *Adjective/Relative Clauses*.

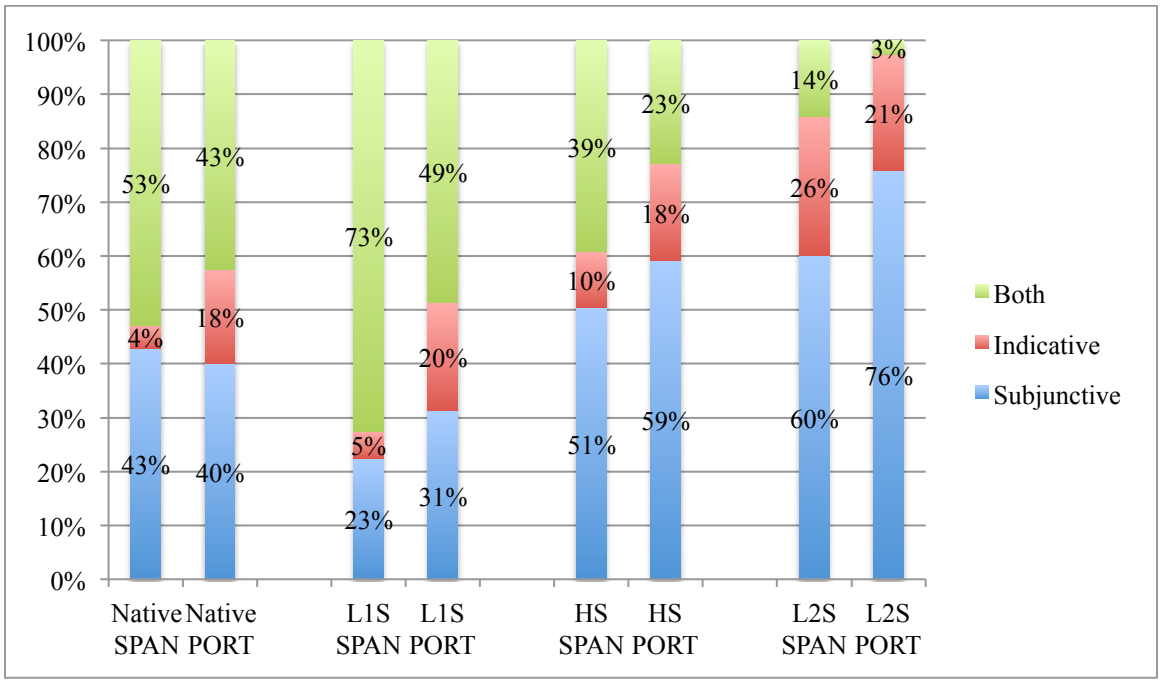

Figure 8. Percentage of responses (indicative, subjunctive, both) by language background group on "adjective/relative clauses" for Spanish and Portuguese tasks

Discussion

The results described above, at first glance, are not exactly transparent; comparing the average percentage of time that participants in each Language Background Group chose between *Subjunctive*, *Indicative*, or *Both* on the P/GJ tasks in both Spanish and Portuguese was bound to provide complex results. However, there are some trends and patterns in the data that become apparent upon further analysis. In broad terms, it is apparent that L1S bilinguals and HS bilinguals differ in unique ways from L2S bilinguals. However, to fully understand how the results apply to the research questions and hypotheses posed earlier, a little more discussion is needed. Accordingly, this section will

discuss the results for each syntactic/semantic category separately to be able to then summarize the patterns that are common across categories.

Discussion of Results by Syntactic/Semantic Category

Category 1: Comment/emotion. L1S bilinguals and the HS bilinguals accepted *Both* much more than the L2S bilinguals did in Spanish (61% and 31% versus 5%, respectively). These results suggest that L1S bilinguals and HS speakers accept quite a bit of variability with verbs in this category (with L1S bilinguals accepting more than the native Spanish speakers in the comparison group). This is in accordance with Blake's (1983) finding of evidence of variability in what he called "predicates of attitude and assertion" (p. 26) both among young L1S speakers and in the responses of adults in his study. In addition, Butt & Benjamin (2013, p. 262) mention this variability with verbs of emotion. In contrast, L2S bilinguals accepted *Indicative* in this context in Spanish much more than the other two groups while simultaneously not accepting *Both*. Whether this is because those participants in the L2S group did not realize that the subjunctive is used in these contexts or they do not realize the accepted variability with these types of sentences is not clear. At the very least, it is clear that they do not approximate the L1S bilinguals or the native Spanish speakers in the comparison group.

For the Portuguese test, the L1S and HS bilinguals accepted *Indicative* more, and *Subjunctive* less, than they did on the P/GJ task in Spanish. In contrast, the L2S group chose the *Subjunctive* much more in Portuguese than they did in Spanish (73% vs. 49% respectively) and selected *Both* even less than they did on the Spanish P/GJ task (2%). These results by the L2S bilinguals seem to show a rule-based (or lexically-triggered) view of the subjunctive (i.e., "use the subjunctive with *alegrarse* or *tener miedo de que*,

etc.…"). It is important to keep in mind that the Portuguese P/GJ task followed four weeks of instruction on the subjunctive in Portuguese where the subjunctive was presented in a very rule-based fashion. What is curious is that the L1S and HS groups actually decreased their use of the subjunctive on these sentences in Portuguese after receiving the same classroom instruction. This fact will be discussed in more detail below.

Category 2: Doubt/uncertainty/denial. Similar to the previous syntactic/semantic category, L1S bilinguals accepted both *Both* and *Subjunctive* overwhelmingly (45% and 48%, respectively) compared with solely *Indicative* (8%) in the category of Doubt/Uncertainty/ Denial. The HS bilinguals also chose *Indicative* much less than the other two choices, but more than the L1S bilinguals (18%). Conversely, the L2S bilinguals chose *Indicative* in 31% of the cases and *Both* in only 8% of the cases. Similarly to contexts of emotion/comment/attitude/etc., the L2S bilinguals do not seem to accept variability between the subjunctive and indicative due to either context or different shades of semantic meaning. It appears that their knowledge of mood distinctions in these contexts is, again, lexically triggered rather than semantically triggered.

This tendency among the L2S speakers is amplified on the Portuguese P/GJ task, where they actually chose *Subjunctive* 82% of the time and *Both* only 2% of the time. As has been mentioned, this could be expected since they had just had 4 weeks of rule-based instruction in the use of the subjunctive in Portuguese. Indeed, even the HS bilinguals showed higher percentages of *Subjunctive* and *Indicative* than *Both* on the Portuguese P/GJ task. However, the L1S group, similarly to how they responded with the Comment/Emotion category, actually showed a large decrease in their acceptance of *Subjunctive* and a marginally higher rate of acceptance of *Both*.

Category 3: Adjective/relative clauses. Adjective/relative clauses are different from the examples we have seen in the last two categories. Generally speaking, Spanish and Portuguese grammars and foreign language textbooks on Spanish present the subjunctive in comment/emotion and doubt/uncertainty clauses as more or less obligatory, at least in standard varieties (Blanco & Tocaimaza-Hatch, 2007; Montrul, 2004; Perini, 2002. Butt & Benjamin, 2013 are an exception showing a multitude of exceptions to the rule). In contrast, relative clauses are routinely presented as being variable, that is, semantically triggered based on either the presupposition of the speaker (Montrul, 2004) or if it references something not yet identified (Butt & Benjamin, 2013), among other things. Thus, it was assumed that all groups would accept *Both* more readily with these clauses than the sentences in the previously reviewed sections. Indeed, the L1S bilinguals overwhelmingly accepted *Both* and *Subjunctive* with these clauses (73% and 23%) showing an understanding of the contextual/semantic nature of mood in these clauses. On the other hand, the HS bilinguals accepted *Both* and *Subjunctive* at about the same rate (39% and 51% respectively) as they did with the previous two categories. Furthermore, as can be seen, they tended toward *Subjunctive* much more than the L1S speakers. Finally, and again in contrast with the other two groups, the L2S bilinguals accepted *Both* much less than the other two groups and *Indicative* much more than the other two groups.

For the Portuguese P/GJ task, the L2S bilinguals followed a similar pattern of choosing more *Subjunctive* and less *Both* (76% and 3%, respectively). This clearly shows a lack of understanding of the semantic nature of mood selection in relative/adjective clauses. Interestingly, and in contrast with the other two categories, the L1S bilinguals accepted more *Subjunctive* on the Portuguese task than on the Spanish task. However,

both the L1S and HS bilinguals increased their acceptance of *Indicative* on the Portuguese tasks similarly to the other categories.

Conclusions

General Patterns

Taken as a whole, the results show some unique patterns that differ for each language background group. Specifically, and most strikingly, the results suggest that the L2S bilinguals do not fully understand the variable nature of mood selection in these particular semantically triggered contexts. Similar to results reported in Chapter 3 for obligatory contexts, L2S bilinguals show an increased acceptance of the subjunctive on the Portuguese tasks after four weeks of in-class subjunctive instruction. However, they also decrease in their selection of *Both* on the Portuguese task, suggesting they view the subjunctive as rule-based/lexically triggered and obligatory. This may be due to how the subjunctive is presented in the classroom or to the possibility that they have had insufficient input in both Spanish and Portuguese to fully comprehend the variable nature of mood selection in semantically triggered contexts.

The L1S participants in the study, on the other hand, clearly show an understanding of the variable nature of the subjunctive in the semantically triggered categories studied. However, the comparisons of their judgments on the P/GJ tasks in the two languages differ considerably from the L2S bilinguals. Whereas the L2S group tended to choose *Subjunctive* more in the Portuguese task, the L1S group decreased their acceptance of *Subjunctive* (except with the Adjective/Relative Clauses) and increased their acceptance of *Indicative* responses. In addition, with the categories Comment/Emotion and Adjective/Relative Clauses, they showed a drastic decrease in choosing *Both* on the Portuguese task. Why this is so is not clear, but in contrast with

L2S bilinguals, L1S bilinguals seem to be more accepting of sentences in the indicative after four weeks of instruction in Portuguese than they were in Spanish. It could be that on the Spanish task they are using their intuitions, whereas on the Portuguese task they are using more of a rule-based approach learned from classroom instruction.

Finally, the HS bilinguals show a more advanced knowledge of the subjunctive than do the L2S bilinguals. In series of studies looking at HS speakers' knowledge of mood distinctions, Silvina Montrul has found (Montrul 2007, 2009; Montrul & Perpiñán, 2011) that all but the most advanced HS speakers of Spanish show a lack of understanding of mood distinctions in semantically triggered contexts. The results from the present study show that the HS participants understand, at least partially, the variable nature of indicative/subjunctive distinctions in these variable contexts in Spanish. In addition, they were relatively consistent in the way they transferred their knowledge of the subjunctive in Spanish to Portuguese. Similarly to L1S bilinguals, their *Indicative* choices increased considerably on the Portuguese tasks and their acceptance of *Both* decreased when compared with the Spanish tasks. However, their acceptance of *Subjunctive* was relatively the same for the tasks in each language. In summary, they tended to choose *Subjunctive* less than the L2S bilinguals in both Spanish and Portuguese and *Both* less than the L1S bilinguals in both languages.

It was hypothesized that L2S and HS bilinguals would choose the subjunctive significantly less than L1S bilinguals on sentences containing verbs of Comment/Emotion and Doubt/Uncertainty/Denial. In addition, L2S and HS bilinguals would accept *Both* significantly less than L1S bilinguals on sentences containing Adjective/Relative clauses. However, as has been shown, the above hypothesis is only

partially correct in that (a) there is a difference between the groups in their acceptance of the subjunctive in these particular semantically triggered contexts, and (b) the L2S and HS bilinguals chose *Both* less frequently on the sentence pairs in the Adjective/Relative Clause category. However, in stark contrast with hypothesis, the L1S bilinguals chose *Subjunctive* less than the other two groups with the sentence pairs in the Comment/Emotion and Doubt/Uncertainty/Denial categories, opting instead for *Both*. This suggests that either there may be more variability with these sentences than is typically described in grammars and L2 textbooks, or that this variability is unique to the particular group of L1S bilinguals tested. Because of the small sample size (n=8), this must be interpreted cautiously.

In addition, it was hypothesized that L2S bilinguals would transfer over their knowledge of mood distinction in these semantically triggered contexts to Portuguese more consistently than would the other two groups. In other words, the difference between their percentage of accepting *Subjunctive*, *Indicative*, or *Both* on the Spanish and Portuguese tasks would be less than the differences for the other two groups. Again, hypothesis 2 is only partially confirmed by the results, namely that there were significant differences in the way each group transferred over their knowledge of mood distinctions in these particular contexts from Spanish to Portuguese. However, it is unclear whether there was *less* difference among the L2S bilinguals' Spanish and Portuguese tasks as compared to the other two groups. What is clear is that the tendencies that the L2Spanish group showed on the Spanish task were amplified on the Portuguese task, namely to accept more *Subjunctive*, and less *Indicative* and *Both*. In contrast, the L1S bilinguals and

the HS bilinguals showed more complicated patterns of transfer from Spanish to Portuguese.

Limitations

The present study suffers from some limitations. First, the small sample size, specifically of L1S bilinguals, does not allow broad generalizations to all L1 Spanish speakers. In addition, as mentioned in Chapter 2, the HS bilinguals were either majoring or minoring in a Spanish-related field and had all had at least one language course in Spanish and thus were most likely more linguistically aware of standard varieties of Spanish than other HS learners in other studies (c.f. Silva-Corvalán, 1994a; Montrul, 2009). Furthermore, the study does not distinguish between transfer and learning. Initially, it was thought that the four weeks of instruction would be additive in terms of participants' knowledge and judgments of mood distinctions. However, the results suggest that formal instruction in Portuguese may have affected the L1S and HS bilinguals differently than the L2S bilinguals. Specifically, the textbook presented mood distinctions as a list of verbs, conjunctions, and situations where the subjunctive should be used, with little mention of the inherent variability present in semantically triggered contexts (which is typical of most L2 explanations of mood distinctions at the early stages of learning). This seemed to strengthen the L2S bilinguals' strategy of using a very rules-based approach. However, the L1S and HS bilinguals were learning about mood distinctions (which they intuitively acquired in Spanish) for the first time in an explicit (and simplified) fashion. It is possible that the mismatch between their intuitive knowledge of the variation inherent in these semantically triggered contexts and their

newly-gained, and much simplified, explicit knowledge caused some of the confusion seen in their Portuguese results.

Finally, the present data come from one task eliciting written data; tasks eliciting oral data may yield different results. In addition, since the P/GJ task could be considered a "more guided" type of task (Geeslin, 2010, p. 505), participants were not asked to produce these forms in less guided speech or writing. Their production in spontaneous, informal discourse may be different from their judgments on these tasks. Because of this, additional studies are needed that use more L1S bilinguals, completing different oral and written tasks that look at both receptive and productive knowledge and proficiency.

Contributions

Notwithstanding the above-mentioned limitations, this study contributes to the field of L3 acquisition, especially of typologically similar languages. Specifically, the results from the present study broadly support the hypotheses of the Typological Primacy Model in that all participants seemed to be transferring, at least partially, from Spanish. However, the results also suggest that Spanish does not affect L3 Portuguese learning in the same way for all participants. As results in Chapter 2 attests, L2S bilinguals view the role of Spanish in Portuguese learning differently from L1S bilinguals. This seems to have some carry-over when learning mood distinctions in semantically triggered contexts. It may be, as Slabakova (2012) has suggested, that "what transfers is not 'grammar' as a whole…but parts of grammar; that is, all principles and those parametric values that are useful in accounting for the L3 input" (p. 137) and that even within certain linguistic features there could be a differences in how specific knowledge is transferred (for

example, compare the results in Chapter 2 for the subjunctive in obligatory contexts to the present study's results in variable contexts).

Moreover, the results are especially relevant to the PSS field in providing additional evidence of the initial differences (in terms of knowledge of, and proficiency in, Spanish) between the three groups of bilinguals and suggests that there also may be learning differences that exist between the three groups of Spanish-English bilinguals learning Portuguese in the United States. In other words, the context of acquisition of Spanish is an important factor in how and what participants transfer over from Spanish when learning Portuguese. The present study suggests that L2S bilinguals are more able to transfer over concrete rules and metalinguistic knowledge, but may lack understanding of the more variable, semantically-driven aspects of language use. In contrast, L1S and HS bilinguals do not seem to apply linguistic "rules" as consciously as the L2S bilinguals. Furthermore, they do not necessarily transfer their entire, and more complex, linguistic repertoire from Spanish to Portuguese, possibly because of its complexity and possibly because the way they acquired Spanish (informally) may obscure some of the similarities between the two languages (see Chapters 2 and 3).

In conclusion, the results from the present study suggest that the mood selection in semantically triggered contexts, in both Spanish and Portuguese, is more variable than what is traditionally described. Although L2S bilinguals seem to be able to apply simplified grammatical rules more successfully than do the other two groups, it is clear that these rules can obscure the variation inherent in language. PSS pedagogy would benefit from distinguishing between prescriptive/formal grammar rules and actual usage of certain grammatical structures and highlighting the variability that exists within

dialects and registers of the same language. In addition, PSS pedagogy needs to take into account the more complex, albeit more implicit, knowledge that L1S and HS bilinguals possess while simultaneously helping them to transfer over similar knowledge from Spanish to Portuguese. Classroom discussion and noticing activities designed to heighten students' metalinguistic awareness of both the "transparent" and "opaque" features of the languages would go a long way towards helping learners in all language background groups to successfully transfer their knowledge from Spanish and acquire new knowledge in their L3 Portuguese learning.

CHAPTER 5 - CONCLUSION

This chapter will summarize the findings presented in Chapters 2, 3 and 4. The first section will present the research questions and results and compare how these results relate to the initial hypotheses and to the study as a whole. The second section will discuss the findings of the present study in relation to previous research in L3 acquisition and PSS while proposing some possible reasons for the differences attested between the language background groups in the present study. The third and final section will consider the pedagogical implications and limitations related to the study and propose some possible directions for future research.

Research Questions and Results

The present study has sought to investigate how the context in which one has acquired Spanish affects Spanish-speaking bilinguals' language learning perceptions when learning Portuguese as a third language, as well as how CLI occurs among these same bilinguals. In particular, the present dissertation has been divided into three main chapters investigating: (1) What are the language learning perceptions of three different groups of Spanish-speaking bilinguals learning Portuguese as a third language and do these perceptions correlate with Spanish proficiency and language background?; (2) Do these three groups of Spanish-speaking bilinguals transfer over their knowledge of mood distinctions in obligatory contexts from Spanish to Portuguese in a similar fashion?; (3) Do these three groups of Spanish-speaking bilinguals transfer over their knowledge of mood distinctions in non-obligatory contexts from Spanish to Portuguese in a similar fashion? Consequently, the following sub-sections will revisit the specific research questions and hypotheses posed in Chapter 1 and compare them with the results of each chapter.

Chapter 2 Research Questions and Results

Chapter 2 sought to investigate Spanish-speaking bilinguals' perceptions of the role of Spanish in L3 Portuguese acquisition, as well as obtain a better understanding of the bilingual students enrolling in PSS courses in the southwestern United States. Specifically, the study sought to get a better idea of the language backgrounds of students in PSS courses and their knowledge of Spanish.

Results confirmed a mix of bilingual students in the present study with L1S bilinguals being the least represented group. Although not all students who enrolled in the different sections of the course were included in the study, the patterns reflect fairly accurately the percentages of students from each language group who enrolled in the beginning PSS course. Two facts regarding the make-up of participants were surprising: There were much fewer L1S bilinguals than expected and there were many more HS bilinguals than expected. This dynamic has implications for PSS pedagogy, which will be discussed in the next section.

In addition, although the L2S participants scored significantly lower on the Spanish proficiency test than did the other two groups, the HS participants did not score significantly lower, as a group, than the L1S participants. One possible reason for the fact that there was no statistical difference between the scores of the HS group and the L1S group is that the HS bilinguals were all either majoring or minoring in Spanish and most had taken multiple Spanish courses at the post-secondary level. Thus, they may not necessarily represent the stereotypical HS speaker (c.f. Silva-Corvalán, 1994a). The proficiency results suggest that heritage speakers can show native-like proficiency and, as mentioned earlier, that heritage language programs can be extremely effective in teaching

more standard, formal varieties of the language. In addition, and as one would expect, the range and standard deviation was largest for the L2S group and smallest for the L1S group.

Finally, the study sought to determine whether participants' perceptions of the role of Spanish were correlated with their language background, with the hypothesis being that L2S bilinguals would perceive Spanish as more facilitative for L3 Portuguese acquisition than the other two groups would. In accordance with the hypothesis, perceptions were strongly correlated with language background group and not with Spanish language proficiency and, in general, the L2S bilinguals perceived Spanish to be more facilitative for L3 Portuguese learning than did the L1S bilinguals. However, in contrast with the hypothesis, the HS bilinguals also viewed the role of Spanish more positively than did L1S bilinguals. Finally, there were some general differences between the groups concerning what features of the language they perceived to be most difficult and which they perceived to be most easily learned due to their knowledge of Spanish. Specifically, L1S bilinguals tended to mention *listening* and *speaking* as being facilitated by their knowledge of Spanish, whereas the other two groups mentioned *grammar*, *vocabulary*, and *reading* as being "easier" due to their knowledge of Spanish. Conversely, L2S bilinguals mentioned *speaking and pronunciation* as particularly difficult, whereas HS bilinguals indicated that *grammar/verb conjugations* were more problematic than *speaking/pronunciation* in Portuguese.

Chapter 3 Research Questions and Results

The study reported in Chapter 3 dealt with how Spanish-speaking bilinguals differ regarding their knowledge of mood distinctions in obligatory contexts in Spanish and

how they transferred this knowledge when learning L3 Portuguese. First, the research sought to quantify participants knowledge of mood distinctions in obligatory contexts in Spanish, with the hypothesis that L1S and HS bilinguals would score higher than the L2S bilinguals., The results confirm this initial hypothesis in that the L2S bilinguals' scores were significantly lower than the other two language groups' scores. In addition, there was no statistical difference between the HS bilinguals' scores and the L1S bilinguals' scores, suggesting that these HS bilinguals possess similar knowledge of mood distinctions as L1S bilinguals in the obligatory contexts tested.

Furthermore, the study sought to quantify participants' ability to transfer their knowledge of mood distinctions in these contexts from Spanish to Portuguese. It was hypothesized that L2S bilinguals, despite not having as broad of knowledge of mood distinctions in Spanish as L1S and HS bilinguals, would transfer the knowledge they did have more successfully than the other two groups. This hypothesis derived from the assumption that the L2S speakers would perceive the typological similarity between the two languages more readily than the other two groups, especially the HS bilinguals (because of the latter groups' assumed lack of metalinguistic knowledge).

This hypothesis was partially confirmed in that the L2S bilinguals transferred more of their knowledge of mood distinctions from Spanish to Portuguese than the other two language groups. However, it cannot be determined whether this was due to typological similarity (or perception of such) or not, as these results are also consistent with the L2 status factor. To whit, the fact that the L2S group used the subjunctive as much in Portuguese as in Spanish, whereas the L1S group did not, could be ascribed to transfer from each group's respective L2 (Spanish and English, respectively). Also,

contrary to the hypothesis, the group that showed the greatest discrepancy between their scores in Spanish and in Portuguese was not the HS bilinguals, but instead the L1S bilinguals. The results suggest that L2S bilinguals readily perceive the similarities between Spanish and Portuguese with regard to mood distinctions and are able to use the knowledge they have in both languages equally well. In contrast, L1S and HS bilinguals, for whatever reason, were not able to transfer their knowledge of mood distinctions in Spanish to Portuguese as were the L2S bilinguals.

Chapter 4 Research Questions and Results

Chapter 4 looked at a continuation of the study reported in Chapter 3 that analyzed participants' knowledge of, and ability to transfer, mood distinctions in obligatory contexts. However, unlike Chapter 3, Chapter 4 focused on non-obligatory, or variable contexts and hypothesized that there would be a significant difference in the knowledge of mood distinctions in non-obligatory contexts in Spanish between the three groups. Specifically, it was expected that the L1S bilinguals would choose the subjunctive more than L2S and HS bilinguals on sentences with verbs expressing *comment/emotion* and *doubt/uncertainty/denial*. The hypothesis, however, can be rejected. It was the L1S bilinguals who selected the subjunctive less than the other two groups (which also closely resembled the responses of the 7 native Spanish-speaking Mexican participants in the comparison group). Furthermore, L2S bilinguals preferred the subjunctive more than the other two groups did. It is clear that L1S bilinguals view the use of the subjunctive in these two categories as variable.

Second, it was expected that the L1S bilinguals would recognize both subjunctive and indicative phrases as grammatical when part of *relative/adjective* clauses. This

hypothesis was confirmed in that the L1S bilinguals chose "Both" (indicating either Indicative or Subjunctive) 73% of the time compared to 39% and 14% for the HS and L2S bilinguals, respectively. Indeed, L2S bilinguals viewed sentences with *adjective/relative* clauses almost identically to sentences containing verbs of *doubt/uncertainty/negation*. In effect, results suggest that the L2S speakers were using a lexically triggered, rule-based strategy, as opposed to a semantically triggered strategy, on the task.

Concerning the participants' abilities to transfer over their knowledge of mood distinctions in these contexts in Spanish to Portuguese, it was hypothesized that L2S bilinguals would show less difference on the tasks in the two languages than the other two groups. The formulation of this hypothesis made it difficult to test since each group showed differing patterns of transfer from Spanish to Portuguese. However, there were a few trends that seemed to partially confirm the hypothesis: First, for all semantic categories the L2S speakers chose "Subjunctive" more on the Portuguese test than on the Spanish test, indicating not only that they were transferring over a very rule-based strategy that they had most likely used in Spanish, but also that they were applying this strategy even more strictly on the Portuguese task. It is important to remember that the Portuguese task was completed after 1 month of instruction on the subjunctive (among other grammatical features). Second, the responses of the L1S and HS bilinguals on the Portuguese task were not so consistent but showed tendencies of choosing "Both" less than on the Spanish task. This may be because they were affected by the nature in which the subjunctive in these categories had been taught in the Portuguese class (i.e., as rule-based, lexically-triggered, and quasi-obligatory).

Results Summary

As the above summary of the research questions and results show, L2S bilinguals differ from L1S bilinguals and, to some extent, from HS bilinguals both in the way they perceive the role of Spanish in L3 Portuguese learning as well as in how they transfer over knowledge of mood distinctions in Spanish to Portuguese. Specifically, it seems that L2S bilinguals as a group have fewer problems applying a rule-based, contrastive approach to transferring their knowledge of Spanish to Portuguese, which is to their advantage on phrases containing obligatory contexts. L1S and HS bilinguals, on the other hand, do not seem to use the same type of analysis or processing as the L2S bilinguals on the sentence completion tasks and the P/GJ tasks, especially in Portuguese.

Chapter 2 reports that, when asked to rate the role of Spanish in learning L3 Portuguese overall, the L2S bilinguals averaged a 4.7 on a Likert scale, indicating that Spanish "greatly helps" in learning Portuguese. Comparatively, HS bilinguals averaged 4.25, indicating that "it helps a little bit". In contrast, L1S bilinguals responded to the same question with an average of 2.7, somewhere between "it makes it somewhat confusing" and "it neither confuses nor helps me". Interestingly, this relationship corresponds to how each group transferred over their knowledge of mood distinctions as measured by the sentence completion task and the P/GJ task. In other words, the L2S bilinguals' scores in Spanish and Portuguese were much closer to each other than were the HS bilinguals' scores, and the HS bilinguals' scores more similar in the two languages than were the scores of the L1S bilinguals.

Although the results, particularly those reported in Chapters 3 and 4, show differing patterns of patterns of transfer, they also suggest that L1S bilinguals and, to a

large extent, HS bilinguals posses a very different type of knowledge of mood distinctions in Spanish as compared to L2S bilinguals. Specifically, it is evident that the former two groups distinguish between sentences where mood is triggered lexically and where it is triggered either by the discourse semantics or the pragmatics of the situation. In other words, mood distinctions can appear in obligatory and variable contexts. In contrast, L2S bilinguals responded to all items on the P/GJ task as if subjunctive use were obligatory and lexically triggered. Possible reasons for this are many and include the fact that many foreign language textbooks do not go into the variable nature of the subjunctive (out of practical necessity), acquisition of variable contexts is difficult even for advanced students (e.g., Collentine, 2010; Mikulski, 2010; Montrul & Perpiñán, 2011; Stokes, 1988), and participants actually knew of some of these variable contexts but were overgeneralizing because of the formal nature of the task. Regardless, the data reported in Chapters 3 and 4 confirm what many researchers and grammars have already reported; native speakers of Spanish distinguish between obligatory and variable contexts and can show quite a bit of variability regarding subjunctive usage in contexts that standard usage might deem obligatory (i.e., for verbs of "doubt, attitude and comment") (e.g., Butt & Benjamin, 2013; Blake, 1983; Elordi, 2012; Montrul, 2004; Silva-Corvalán, 1994a).

In summary, the present study provides additional and confirming evidence for the suggestion made by Johnson (2004) and Carvalho and da Silva, (2008; see also Carvalho, 2011) for distinguishing between at least three separate groups of Spanish speakers in Portuguese for Spanish speaker courses in the United States. The differences in the articles just mentioned, coupled with those from the present study suggest the importance of seriously considering how the context of acquisition of Spanish affects

proficiency levels in Spanish, as well as the nature of the linguistic knowledge these bilinguals possess in Spanish and how this may affect their L3 Portuguese learning.

Discussion

The following sections will discuss how research in L3 acquisition and, more particularly, in the PSS field, can help illuminate the results of the present study and the contribution of the present study to these fields.

L3 Acquisition Research

As mentioned previously, L3 acquisition has generally shown a "bilingual" or "multilingual" advantage in learning a foreign language (e.g., Berkes & Flynn, 2012; Cenoz, 2003, 2011; García-Mayo, 2012). This has been attributed to, among other things, the additive influence of the background languages, enhanced language learning strategies, and greater metalinguistic knowledge (Cenoz, 2003; Falk & Bardel, 2010; Rothman, Iverson, Judy, 2011). The results of the present study, however, suggest that these effects are not universal or uniform.

Multilinguals' background languages. L3 acquisition research from a generative perspective has principally been concerned with the role of the background languages in CLI (Ecke, 2014; Cabrelli Amaro, 2012; García-Mayo, 2012; García-Mayo & Rothman, 2012). The principal theories look at the filtering effect of the L2 (Bardel & Falk, 2007, 2012; Falk & Bardel, 2010), the positive cumulative effect of all previously acquired languages (Flynn et al. 2004, Berkes & Flynn, 2012), and the special effect that typology and psychotypology can play in CLI (Rothman, 2010, 2011; Rothman & Amaro, 2011).

For the present study, Rothman's Typological Primacy Model was taken as a theoretical framework. Indeed, the results from the studies in Chapters 2-4 could be

interpreted as evidence for a strong effect of typology on CLI influence in L3 acquisition. However, as discussed in Chapter 3, they are also consistent with an L2 effect. In fact, consistent with Ecke's observation of the many studies on L3 lexical acquisition, the results suggest "that both typological similarity and L2 status appear to come into play in a combined fashion…" (Ecke, 2014, p. 6). Furthermore, the results reported in Chapters 2, 3 and 4 further complicate matters. For instance, Chapter 2 showed that the context of acquisition of Spanish is correlated with *how* bilinguals view the role of the background languages in L3 acquisition. In addition, the results from Chapters 3 and 4 correlate with those in Chapter 2 suggesting that *how* one views the role of the background languages may affect how successful one is at positively transferring over similar grammatical concepts. Finally, as many have suggested (e.g., Bardel & Falk, 2012; Ecke, 2014; Cabrelli Amaro, 2012) both typology and L2 status interact with proficiency, both in the L2 and in the L3. The present study was conducted with beginning L3 Portuguese learners. We may expect more advanced learners to show different CLI patterns in L3 Portuguese acquisition.

To be fair, all of the principal researchers who have proposed the theories mentioned above have admitted that there are multiple factors that affect the CLI witnessed among different groups of multilinguals, let alone in individuals. For example, Murphy (2003) views the sources of CLI as a complex interaction of phenomena such as typology, proficiency, grammatical features, language modality, etc. (see also Ecke, 2014; Hall & Ecke, 2003; Hall et al., 2009). Odlin (1989) wrote extensively about the complexity of transfer in L2 acquisition, which one could assume to be even less

complex than L3 acquisition. Recently, Berkes and Flynn, who proposed the Cumulative Enhancement Model, remarked:

> We may, therefore, argue that the series of studies presented here provides strong support against simplified accounts of language transfer from either L1 or any previous language. Any theory of acquisition based entirely on transferring surface elements from one language to another cannot give an explanatorily adequate account for how language develops in the mind of the learner. We could, however, observe that specific previous linguistic knowledge does make a difference in subsequent language development. (2012, p. 20)

Echoing a similar sentiment, Slabakova has said, "What transfers is not 'grammar' as a whole…but parts of grammar; that is, all principles and those parametric values that are useful in accounting for the L3 input" (2012, p. 137). Finally, lest it be assumed that this recognition of the complexity of transfer is relatively new, consider the comment by Meisel in talking about transfer phenomena:

> In most cases, convergence of strategies, apparently, is the most adequate explanation. As in real life, linguistic phenomena can hardly have only one parent. And, as I have tried to show, it is extremely difficult to give convincing empirical evidence for what caused a certain phenomenon to appear, even if it could be predicted quite plausibly by theoretical deduction. (1983, p. 44).

Thus, the present results add more evidence for taking into account the many interacting factors that can affect CLI.

Multilinguals' language learning strategies. One issue that is extremely pertinent to the results of the present study is how the different contexts in which the participants acquired/learned Spanish may have affected their language learning strategies. The L1S and HS bilinguals acquired Spanish in natural environments whereas the L2S bilinguals all learned their Spanish principally in formal, academic environments. Because of this fact, it can be assumed that L2S bilinguals were fairly used to the type of instruction that would occur in the PSS course. That is, they knew about the terminology

related to the subjunctive, the steps for forming the subjunctive (i.e., "the subjunctive is formed by taking the first person singular of the present, taking off the 'o', and adding the opposite ending"), and they had been exposed to the specific words and phrases that can "trigger" the subjunctive in Spanish. Consequently, when learning Portuguese they could apply the knowledge and learning strategies that they already had acquired from learning Spanish to learning Portuguese. In other words, they had a very explicit knowledge of this particular feature of the language (and, most likely, of the language as a whole). In comparison, it is not inconceivable that it was the first time that the L1S bilinguals would have been exposed to much of the terminology and explicit instruction that this feature of the language generally receives in foreign language courses.

Four decades ago Selinker wrote about the concept of "transfer of training" (1972; see also Odlin, 1989), which discussed how some formal language instruction could produce both positive and negative transfer in students that would not otherwise occur, as well as "strategies of second-language learning". Odlin (1989) mentioned that, "The existence of differences in acquisition patterns seen in comparative studies may not in all cases be due to CLI alone. It is conceivable, for example, that some of the differences reflect transfer of training" (p. 34). Meisel (1983) mentions that learners may develop different "learner orientations" (comparable to Selinker's idea of "strategies of second-language learning") based on either structural or functional learning (p. 28-29). Both "transfer of training" and transfer of learner orientations/strategies could certainly be the case for the differences seen in the results of the different groups seen in Chapters 3 and 4. One of the reasons that the difference in Spanish and Portuguese scores among the L2S bilinguals was so low compared to the other two groups could be because they were used

to formal tasks (such as the sentence completion tasks) and to using some form of metalinguistic analysis, whereas the other two groups may not have been. It is not known how transfer might differ with more naturalistic tasks or in casual speech (see Recommendations for Further Research below).

Multilinguals' greater metalinguistic knowledge. Finally, bilinguals are said to have highly developed metalinguistic skills (see Cenoz, 2011; Cenoz & Valencia, 1994; Falk & Bardel, 2007; Sanz, 2000, among others). However, the many studies designed to compare bilinguals' metalinguistic skills with monolinguals' metalinguistic skills have shown mixed, and often contradictory, results. Ben-Zeev (1977) and Yelland, Polland and Mercuri (1993) found that bilingual children were better at word substitution/verbal transformation and word recognition, respectively, than monolingual children (see also Bialystok, 1988, 1991; Cummins, 1978; Diaz, 1985). Galambos and Goldin-Meadow (1990) found that this metalinguistic advantage extended to syntactic aspects of the language as well. They found that pre-kindergarten bilingual children were significantly better at recognizing and correcting syntactic errors in phrases. They were not, however, any better at explaining errors. Similar to Yelland et al.'s study (1993), they found that this advantage disappeared by grade 1. They conclude that being bilingual "hastens…but does not alter the course" (Galambos & Goldin-Meadow, 1990, p. 53) of linguistic awareness. Finally, in a review of research comparing bilingual and monolingual children's metalinguistic skills, Bialystok (2001) concluded that studies showed mixed results in terms of bilinguals' advantage concerning their acquisition of word awareness, phonological awareness, and syntactic awareness.

Thus, the evidence is somewhat contradictory concerning what many researchers have claimed about bilinguals' greater metalinguistic abilities. If metalinguistic knowledge is defined as the ability to verbalize a grammatical rule, then it can probably be assumed that the L2S bilinguals had more metalinguistic knowledge than the other two groups. It could be the case that the tasks used in the present study were themselves a partial measure of metalinguistic knowledge. Truscott (1998) claims that many tasks, including sentence completion tasks and some grammaticality judgment tasks are merely tests of metalinguistic knowledge. He further claims that, "Thus, learners' success on tests of metalinguistic knowledge does not imply that they have acquired any actual knowledge of language" (p. 118). Although this view seems extreme, it may be that much of the difference seen in the results could be a result of the nature of the task and of the ability of the L2S bilinguals to use their metalinguistic knowledge to complete the tasks. This, of course, underscores the importance of further studies using different, more naturalistic tasks and also, as García-Mayo (2012) has proposed, of taking into account metalinguistic knowledge in L3 acquisition research.

Portuguese for Spanish Speakers (PSS) Research

PSS research has emphasized the importance of helping Spanish speakers recognize the "transparent" aspects of the two languages while focusing time and energy on the "opaque" features (c.f. Almeida Filho, 1995; Carvalho, 2011; Jordan, 1991; Júdice, 2000). The present study sheds light on this concept in two ways: First, Chapter 2 showed that Spanish speakers do not all view the same features as being easy or difficult (which, by extension could be related to "transparency" and "opacity"). Thus, it makes it slightly more difficult to know exactly what grammatical features should take up more class time

and which could be skimmed. Second, even if all learners perceive a particular feature of Portuguese to be similar to Spanish, the nature of their knowledge of that particular feature of the language (due to the context of acquisition) may enhance or decrease their ability to learn and use it in Portuguese.

This is not to say that there are no aspects of the language that are universally transparent or opaque. Experience in PSS courses, which generally skim over those features deemed "transparent", attests that the majority of learners are able to arrive at an intermediate level of Portuguese proficiency much quicker than someone who does not know Spanish (or another Romance language such as Italian or French). However, the differences mentioned above may necessitate different teaching and assessment strategies so as to be able to effectively reach all Spanish-speaking learners of different language backgrounds. Accordingly, the final section of this chapter will offer some pedagogical implications for teaching Portuguese to Spanish speakers. In addition, it will address the limitations of the present study and offer some suggestions for future research.

Pedagogical Implications, Limitations, Contributions and Directions for Future Research

This section will detail some pedagogical implications of the results of the present study, both for SLA/L3 acquisition in general and, more specifically, to PSS courses in the United States. Following this discussion, the limitations of the present study will be examined. Finally, the principal contributions of the present study will be discussed and some directions for future research will be proposed.

Pedagogical Implications for L2/L3 Acquisition

Recent trends in SLA have begun to stress the importance of the dynamic nature of language acquisition and the importance of individual differences in language learning

(De Bot, Lowie & Verspoor, 2007). Odlin (2012) shows evidence that when individuals are aggregated into groups for analysis important information can be lost. Outliers can teach us much about the range of possibilities in SLA. Both the research on L3 acquisition highlighting the unique nature of L3 acquisition, and the importance of the context of acquisition of the background languages(s) that the present study has highlighted suggest the importance of individual differences in adult language acquisition. Of course, language educators need to take advantage of these individual differences by incorporating multiple styles of language instruction and assessment.

However, what is more surprising than the multitude of individual differences between language learners, but instead evidence of group differences in spite of the differences inherent among the individuals that make up those groups. Thus, the present study's results suggest that it is important for language educators in L2 and L3 acquisition to know the language backgrounds of their learners. This not only includes what language(s) they know, but also a general understanding of what type of language(s), typologically speaking, may be influencing target language acquisition. It is understood that, to many, this will sound too much like the contrastive analysis of the 1950's and 1960's (Lado, 1957). However, the present study suggests that there is the possibility of throwing out the proverbial baby with the bathwater concerning contrastive analysis. Obviously, knowledge of learners' background languages cannot predict all errors or difficulties that learners may have (see Odlin, 1989), but it can help to inform the choices that teachers make when combined with their own experiential knowledge.

With regards to L3 acquisition in particular, the present study's results serve as a warning for educators not to assume that bilinguals/multilinguals have more

metalinguistic knowledge than monolinguals (although many will have this knowledge, especially if they have learned their L2 in a formal-instruction environment). Schmidt's Noticing Hypothesis (Schmidt 1990, 1993, 2010) may prove useful in helping learners not only become learn target language structures, but also to become aware of their own implicit language knowledge (but see Cross, 2002; Truscott, 1998). Even if the Noticing Hypothesis only helps with metalinguistic knowledge and metalinguistic tasks, as its critics have proposed (see Cross, 2002; Truscott, 1998), many of the activities suggested to help learners notice form may also be useful in helping bilingual learners transfer over similar grammatical and pragmatic features from their background languages to the target language (for example, Fouser, 2001).

Pedagogical Implications for PSS Pedagogy

The implications mentioned above are equally, if not more, important for PSS pedagogy than for general L2/L3 pedagogy. Specifically, it is clear from some of the responses reported in Chapter 2 that L2S bilinguals and some HS bilinguals differ considerably from L1S bilinguals regarding what aspects of the language they feel are easy/difficult. Most likely this is a result of the different contexts in which they have acquired Spanish. Although PSS pedagogy emphasizes "transparencies" and "opacities" between the two languages (Júdice, 2000), these may be different for learners in different language background groups. Thus, teachers would do well to be flexible in their course preparation to allow for more or less time, depending on the make-up of their students, to cover both transparent and opaque language features in Portuguese. This may also mean slowing down the presentation of much of the material (a frequent comment in the Language Learning Perceptions Questionnaire reported in Chapter 2).

In addition, results of the present study suggest that L2S bilinguals perform better on formal tests of grammatical knowledge whereas L1S bilinguals seem to prefer listening and speaking. Consequently, PSS courses should emphasize and assess *all* areas of linguistic competence, not only to highlight the strengths of each group of learners, but also to help develop those linguistic skills that tend to be difficult for each language background group. In addition, due to the typological similarity between the two languages, Spanish bilinguals as a whole are uniquely advantaged in that they can understand a large portion of spoken and written Portuguese from the first day of class. Because of this, teachers have a unique opportunity to incorporate authentic spoken and written language in the classroom from the very beginning and to emphasize discourse and pragmatic features that generally could only be approached in more advanced language classes (c.f. Koike & Flanzer, 2004; da Silva, 2008).

In addition, teachers of PSS courses should have some basic knowledge about HS speakers in the U.S., including the different varieties they speak, the social stigma often associated with their heritage language, the lack of formal training in their heritage language, and their generally high receptive/lower productive abilities in the language. This knowledge could be applied to the teaching of Portuguese to Spanish bilinguals. For example, because contrastive analysis plays a role in these courses (Carvalho 2002), teachers in these courses who are cognizant of the many different varieties of Spanish that their students speak would be careful not to over generalize about certain grammar, pragmatic, or cultural aspects of Spanish in comparing it with Portuguese. In addition, this knowledge would help them be sensitive to these students' difficulties with certain

formal features of the language, such as subjunctive forms and clitic usage that tend to be easier for L1 and L2S speakers to acquire (see Carvalho & da Silva, 2006).

In essence, these suggestions are advocating for a focus on bilingualism that have implications on instructional and assessment methods (Cook, 1999). Cenoz (2003, 2011) argues that bilinguals are not akin to two monolinguals in one individual; they learn, process, and use language in a qualitatively different way than do monolinguals (see also Valdés, 2005). These facts imply that a more holistic, learner-centered view of language acquisition could be taken with regard to multilinguals, including in the assessment of their language ability (Cenoz, 2011). In effect, students would not be compared to monolingual speakers of Portuguese, but would be assessed based on a bilingual norm. This may include formative assessments that would include self-assessment measures (see Mejía, 1995). Also, Cenoz suggests that this may imply accepting some interaction phenomena in assessment and encouraging learners to use the resources at their disposal (including their implicit and explicit knowledge of Spanish) while simultaneously increasing their already-developed metalinguistic skills (see also Sanz, 2000). In addition, speaking requirements may even be delayed while students are allowed to listen and read in the target language for a brief period before being required to produce orally in the target language (c.f. Grannier, 2000).

Finally, teachers could approach sociolinguistic topics not generally approached in beginning language courses, including dialect and register variation, through explicit teaching and illustrative examples from authentic sources (movies, music, literature, news, blogs, etc.) (see Carreira, 2000; Leeman, 2005; Martínez, 2003). This could include topics such as presenting the difference between clitic usage in formal and

vernacular registers from both a descriptive and a sociolinguistic approach. Similar aspects of the language that show large variation in register and dialect in Portuguese have typically proven difficult to teach (see Jensen, 1999 in Carvalho, 2002). However, rather than posing difficulties for teachers, these variations can serve as opportunities to talk about language variation, standard vs. vernacular dialects, and even the relationships between language ideologies and power (Leeman, 2005; Martínez, 2003, 2006). In addition, students could be asked to share their own experiences with these issues and apply them to their own language varieties. Not only would this focus prove beneficial to the HS bilinguals in these courses, it would help educate all students about the nature of bilingualism, both inter- and intra-language variation, and language ideologies, equipping them to better understand the languages that they, and others, use.

Limitations

Although care was taken to assure that the data collection materials, methods, and procedure were as valid as possible, the present study suffers from some limitations. First, and foremost, the sample size (especially of the L1S bilinguals) is quite small. As mentioned in Chapter 2, the original plan was to include various levels of HS bilinguals based on when they were first exposed to English. However, because of the low sample size the groups were modified slightly so that the L1S group consisted of those who had been exposed to the L2 after age 5 (the beginning of formal schooling). In addition, there were some individuals in the L2S group who were exposed to Spanish after age 5 but before age 11. Some might argue that individuals in both of these groups could have theoretically been included in the HS group based on their age of exposure to English or Spanish, respectively. To deal with this their language usage patterns and self-ratings

were taken into account and they were assigned to language groups accordingly. Although the researcher strongly believes that these "border" cases actually have more in common with their respective groups than with HS speakers, the case could be made that they are also heritage speakers. This problem is a direct result of the low sample size and future studies will need to include more "true" L1S and L2S speaking individuals (i.e. those who have acquired their L2 after adolescence).

Another limitation relates to the formal nature of the grammatical feature in question. Although the Spanish present subjunctive was chosen due to its similarity with Portuguese, it is admittedly a feature of the language that does not have as much communicative value as other grammatical features, (i.e., the aspectual distinctions between the preterit and imperfect). It is unknown whether or not the same patterns of transfer would obtain if participants were tested regarding aspectual distinctions, or copula contrasts, etc.

In addition, the formal nature of the sentence completion tasks and the P/GJ tasks makes it difficult to know if these results would transfer to other tasks (both more and less guided). It could be the case, as Truscott (1998) has proposed, that these tasks only measure metalinguistic knowledge and have nothing to do with natural language use. Although this seems to be an extreme position, it would be interesting to see how performance on different tasks (and, ultimately in unguided speech and writing) would compare with the present results.

Finally, the present study only looked at participants in a beginning level PSS course. It is not known whether or not similar results regarding language learning

perceptions and transfer of mood distinctions would persist for more advanced learners of Portuguese.

Contributions

The present study contributes to both the fields of L3 acquisition in general and PSS in particular. First, the study provides additional empirical support for the Typological Primacy Model while simultaneously suggesting that the context of acquisition interacts with typology in CLI. Notwithstanding, the results also affirm what many have suggested; specifically, CLI in L3 acquisition is complicated and cannot be traced to a single source (e.g., Ecke, 2014; Meisel, 1983; Murphy, 2003; Odlin, 1989; Slabakova, 2012). Second, the study shows that language background can be correlated with language learning perceptions and that these perceptions do not necessarily correlate positively with language proficiency. Third, the results indicate that L2S bilinguals transfer more of their knowledge of mood distinctions in both obligatory and variable contexts despite their knowledge differing significantly from native speakers in Spanish. In addition, L2S bilinguals also show a very rule-oriented, lexically governed pattern for both obligatory and variable contexts in both Spanish and Portuguese. L1S and HS bilinguals, on the other hand, distinguish between obligatory and variable contexts in Spanish, but their results in Portuguese do not mirror their results in Spanish as closely as do the results of the L2S bilinguals.

Directions for Future Research

Although the present study has contributed to both L3 acquisition research in general and PSS research more particularly, it is recommended that future studies be done to shed additional light on the similarities and differences between L1S, L2S and HS

bilinguals when learning Portuguese. In light of the limitations mentioned above, future studies should seek to recruit more participants, especially L1S speakers, and employ other tasks to measure transfer of mood distinctions. Relating to this last suggestion, the data collection from the present study also included oral response data from a picture elicitation task that was not analyzed for the present study. The next step will be to analyze this data and compare the results from the oral elicitation task to the results reported in the present study.

Geeslin (2010) has argued strongly for the use of multiple types of tasks, including those that could be considered "more-guided" as opposed to "less-guided/more naturalistic". She specifically uses these terms instead of less and more "naturalistic" since it is her belief that each type of task is valid and gives a different view into the difficult linguistic constructs that SLA/L3 acquisition has sought to measure. Consequently, for future studies, it is recommended that a variety of different tasks, both more and less guided, should be employed to attempt to assess the same construct of transfer mood distinctions. Some ideas of more-guided tasks could include sentence conjunction judgment tasks (Montrul, 2007) and scenario selection tasks (Elordi, 2012), while less guided tasks could include interviews and writing tasks (c.f. Stokes, 1988). Clearly, multiple measures, whether they converge on or diverge from existing results, would contribute important information regarding CLI in mood selection in L3 Portuguese learning by Spanish bilinguals'.

In addition to employing multiple tasks and measures of mood selection, future studies should look at CLI among Spanish speaking learners of Portuguese by testing other grammatical features of the language besides mood distinction. Although some

research has been done in this area, much more needs to be done and could include copula usage, aspectual distinctions (c.f., Salaberry, 2005), cognate word acquisition/retrieval (c.f. Ecke, 2014; Hall & Ecke, 2003; Hall et al. 2009), phonology and pronunciation (c.f. Cabrelli Amaro, 2012; Jensen, 2008), writing and spelling (c.f. Jensen, 2004), and many others. As Slabakova (2012) has mentioned, it may be that different grammatical aspects of the language transfer over differently. This may also depend on the perceived form similarity of the particular feature in question. This would be especially important in the case of HS speakers because of their documented reduced use of the Spanish verbal system (e.g., Silva-Corvalán, 1994a). Would HS speakers' transfer patterns for mood selection (which many studies have shown does not fully mirror monolingual Spanish patterns) differ from their patterns regarding aspect, which has been shown to be similar (and vulnerable) when compared to monolingual Spanish speakers (c.f. Montrul, 2002, 2007, 2009; Silva-Corvalán, 1994a)?

In addition to testing multiple features of the language, it would be revealing to test participants at multiple levels of proficiency in L3 Portuguese to see if the CLI observed changes with advanced levels of acquisition. Studies have shown that the sources of CLI can change with increased proficiency in the target language (e.g., Falk & Bardel, 2010; see also reviews in Bardel & Falk, 2012; Cabrelli Amaro, 2012; Ecke, 2014). Cross-sectional and longitudinal studies could shed light on this, in particular, if sources of CLI would change with increased proficiency in Portuguese or if the extreme typological similarity between Spanish and Portuguese would override this trend.

Another avenue of study regarding Spanish for Portuguese speakers would be to investigate the role that the status of the language in the community has on how Spanish

speakers transfer from Spanish to Portuguese. In their study of Serbian multilinguals learning Portuguese, Pinto & Carvalhosa (2012) propose that the high language status of Spanish could have been one of the reasons many of their polyglot participants tended to transfer from Spanish rather than their other background languages. Although they provide no evidence for this proposition, the idea seems worth pursuing for two reasons: (1) Spanish speakers have suffered from societal and political antagonism in the United States (Leeman, 2005) and (2) HS speakers are aware that the varieties of Spanish that many of them speak are, unfortunately, undervalued by many in the Spanish-speaking world (e.g., Beaudrie 2009; Beaudrie & Ducar, 2005; Bills, 2005; Parodi, 2008; Pomerantz, 2002; Rodríguez, 2007). This last reason alone may contribute to reluctance by HS bilinguals to transfer from Spanish under the assumption that their Spanish will not prove helpful in learning Portuguese. Future studies could employ matched guise tasks and interviews to determine if learners' perceptions of the status of Spanish (and more particularly, their varieties of Spanish) affect their willingness to transfer from Spanish when learning Portuguese.

Additionally, results from the present study suggest that formal instruction may benefit L2S bilinguals more than L1S bilinguals. However, the study has no way of determining if the differences in results were a result of instruction, language background, language typology, or language status (or a combination of all of these factors). Future studies could look into the role that explicit instruction has on CLI and how instruction interacts with the context of acquisition (language background) and typology.

Finally, although the results from the present study are compatible with the Typological Primacy Model, the study was not designed to specifically test this

hypothesis. In addition, the results show that context of acquisition can interact with typology in how bilinguals transfer similar linguistic features. García-Mayo and Rothman (2012) have stressed that more studies of CLI need to be done with multiple language pairings, including typologically similar and distant languages. In addition to multiple language pairings, Odlin (2012) has advocated studies that include both L2 and L3 learners from the same language pairings to truly investigate the differences between L2 and L3 acquisition. As more studies are done to investigate the nature of CLI in L3 acquisition, researchers and teachers will not only have a better understanding of third language acquisition, but they will also better understand the many factors that affect adult language acquisition in general.

APPENDIX A - CHILD (2013)

Child, M. W. (2013). Language learning perceptions: The role of Spanish in L3 Portuguese acquisition. Portuguese Language Journal, 7, 1-55. http://www.ensinoportugues.org/wp-content/uploads/2013/11/Child-2013-Language-Learning-Perceptions-The-Role-of-Spanish-in-L3-Portuguese-Acquisition.pdf

Language Learning Perceptions:

The Role of Spanish in L3 Portuguese Acquisition

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Abstract

This article reports on a study conducted to answer three main research questions: 1) What types of bilingual students enroll in Portuguese for Spanish-speakers courses with regard to their language background (the context of their acquisition of Spanish and English)? 2) What are their proficiency levels in Spanish as measured by a Spanish proficiency pretest used by Montrul and Perpiñán (2011)? and 3) What are participants' language learning perceptions concerning the role of Spanish in learning Portuguese? It was hypothesized that there would be statistically significant differences between participants' perceptions of the role of Spanish correlated principally with the context of their acquisition of Spanish and English (i.e., their Language Background), and not significantly correlated with their scores on a Spanish Proficiency Pretest, as one might initially expect (i.e., more proficient at Spanish=more perceived benefit of Spanish when learning Portuguese). Results indicate that, overall, Language Background Group is significantly correlated with participants' perceptions of the role of Spanish in L3 Portuguese Acquisition while Spanish Proficiency is not significantly correlated with participants' perceptions. Differences based on Language Group and specific aspects of the language, along with pedagogical implications, are discussed.

Introduction

This article focuses on three groups of Spanish-English bilinguals enrolled in a beginning Portuguese for Spanish-speakers course in the southwestern United States. In particular, the study sought to better understand the composition of bilingual students enrolled in these courses, their Spanish language proficiency, and their perceptions of the role of Spanish in learning L3 Portuguese in a formal context.

Studies on L3 acquisition have increasingly shown how acquiring[20] an L3 differs from L2 acquisition. Perhaps most noticeable is the fact that bilinguals tend to acquire the target language better than monolinguals do (Cenoz, 2003; Cenoz & Valencia, 1994; Klein, 1995; Sanz, 2000). Cenoz (2003, 2011) argues that this is because bilinguals learn, process, and use language in a qualitatively different way than do monolinguals (see also Valdés, 2005). More particularly, when acquiring a third language, bilinguals have much more linguistic and cultural knowledge from which to draw. In addition, they most likely have gained certain language-learning skills while acquiring their second language that they can then employ in L3 acquisition (Falk & Bardel, 2010).

Although L3 acquisition studies, and L3 acquisition in general, are not as common in the United States as in Europe, a specific case of L3 acquisition has shown an increase in interest both in terms of students enrolled as well as in research published: the burgeoning field of Portuguese for Spanish speakers. Students' interest in learning Portuguese has steadily increased over the last decade in universities across the United States (Carvalho 2002, 2011; Carvalho, Freire & da Silva, 2010), principally among Spanish speakers. Generally Portuguese for Spanish-speakers courses have been designed around the idea that Spanish-speaking students benefit from cross-linguistic influence (CLI, also referred to as *transfer*) due to the typological similarity that exists between Portuguese and Spanish. This CLI, in theory, effectively allows teachers to lightly touch upon those aspects of the language that are similar while spending more time and attention on dissimilar aspects (see Carvalho, 2002; Júdice, 2000). However, Carvalho (2002, 2011) has pointed out that more empirical evidence is needed to better understand

[20] Although there has been much written about the differences between the concepts of "learning" and "acquisition", this distinction is beyond the scope of the present work. Because of this, I have decided to use both terms interchangeably.

the nature of CLI between Spanish and Portuguese, implying that this strategy of focusing principally on dissimilar aspects of the language may not always be appropriate.

Many studies have been conducted to understand how CLI works in L3 acquisition and what role the background languages play in CLI. Although there are at least three principle theories concerning the role of the background languages in CLI in L3 acquisition (see Falk & Bardel, 2010), most relevant to the present study is Jason Rothman's Typological Primacy Model (or "TPM", Rothman, 2011). The TPM suggests that all background languages can play a role in L3 acquisition, except for those cases where the (psycho)typological distance (as defined by Kellerman, 1983) between either the L1 or L2 and the L3 is relatively small, in which case CLI will come principally from the (psycho)typologically similar language. In other words, if a person perceives that one of his previous acquired languages is most similar to the target language, transfer will come principally from that (psycho)typologically-similar background language, regardless of the order of its acquisition.

In studying how English-Spanish and Spanish-English bilinguals learn Portuguese, Rothman (2010) found that typological similarity overrode L1/L2 status in CLI, even when in one case English transfer would have been preferred (according to the CEM model) and in another Spanish transfer would have been preferred. In another study, Rothman (2011) found that Italian/English bilinguals learning Spanish and Spanish-English bilinguals learning Portuguese transferred from Italian and Spanish respectively, rather than from English, regardless of which language would have provided "positive transfer". Additionally, Montrul, Dias and Santos (2010) found similar results in their study of Spanish-English and English-Spanish bilinguals learning clitic and object

expression in Brazilian Portuguese as an L3. All subjects, regardless of L1/L2 status, transferred from Spanish instead of English (see also Carvalho & da Silva, 2006, who provide additional supporting evidence).

However, the issue may be complicated by *how* the background languages were acquired (i.e., the context of acquisition) and if this influences how language learners perceive the role of their background languages. One reason this is particularly important when considering the acquisition of Portuguese by Spanish speakers in the United States is because, as Carvalho (2002, 2011) has observed, there are at least three general groups of "Spanish speakers" who enroll in Portuguese for Spanish-speakers classes in the United States: English-Spanish bilinguals who acquired Spanish as adults, Spanish-English bilinguals who acquired English as adults, and simultaneous/early Spanish-English speakers who acquired Spanish from birth and English early on in life (i.e., speakers of Spanish as a heritage language, or "SHL" speakers). As many in the field of Spanish as a heritage language point out, there is enormous variation in the proficiencies and linguistic characteristics in this last group alone (see, for example, Alarcón, 2010; Beaudrie, 2009; Beaudrie & Ducar, 2005; Potowski, 2005; Valdés 1995, 2005).

Furthermore, some studies have suggested that the context in which one's Spanish is acquired may play a role in the different types and degrees of cross-linguistic influence evident among different Spanish-speaking learners of Portuguese. For example, Johnson (2004), in a pilot study to determine the differences between these three groups, compared the errors of 21 subjects in two compositions in a beginning Portuguese for Spanish speakers course. Preliminary results indicated that the native Spanish speakers and the SHL speakers made some errors that the L2 Spanish speakers did not, including

orthographic errors (such as adding a spurious "h" in words like *achar* and confusing final *am* and *ão*) and errors with the possessive distinction between *seu* and *dele/dela* (see pp. 58-60).

Similarly, Carvalho and da Silva (2006) found that although both English-Spanish and Spanish-English bilinguals (including two Spanish heritage speakers) transferred knowledge from Spanish in subjunctive exercises, they did so differently. They conclude that L1 Spanish speakers may benefit less from a contrastive analysis approach to grammar than do L2 Spanish speakers, presumably because of the former group's lesser metalinguistic knowledge.

In summary, although there is a high degree of typological similarity between Spanish and Portuguese, it is unknown whether or not this linguistic proximity is equally salient to all learners and whether or not they view this linguistic proximity as an advantage or a disadvantage. Thus, the present study takes Rothman's Typological Primacy Model as a point of departure; the present study will not only look at whether Spanish-English bilinguals perceive Spanish as being the principle source of CLI when learning Portuguese, but also whether or not they perceive the role that Spanish plays in acquiring Portuguese as positive or negative. In addition, the effect of the context of acquisition (i.e., language background) on these perceptions will be analyzed. While it seems important to know if learners perceive Spanish as the typologically similar language and therefore the principal source of CLI in L3 Portuguese acquisition, it also seems reasonable to assume that *how* learners perceive the role that Spanish plays in L3 Portuguese acquisition will reveal how that language is affecting the person's acquisition of the target language.

The Study

The present study was conducted to answer three main research questions: 1) What types of bilingual students are enrolling in Portuguese for Spanish-speakers courses with regard to their language background (the context of their acquisition of Spanish and English)? 2) What are their proficiency levels in Spanish as measured by a Spanish Proficiency Pretest used by Montrul and Perpiñán (2011), and 3) What are participants' language learning perceptions concerning the role of Spanish in learning Portuguese. It was hypothesized that there would be statistically significant differences between participants' perceptions of the role of Spanish correlated principally with the context of their acquisition of Spanish and English (i.e., their Language Background), and *not* significantly correlated with their scores on a Spanish Proficiency Pretest, as one might initially expect (i.e., more proficient at Spanish=more perceived benefit of Spanish when learning Portuguese). This hypothesis was influenced by my experience as an instructor of Portuguese for Spanish students. More particularly, I had noticed that many students who learned Spanish as adults (L2 Spanish speakers) struggled less with the material than those who either learned it from birth or who spoke it as a heritage language, even though the former group's proficiency in Spanish was frequently lower than the latter two groups. Possible reasons for this will be discussed in the Discussion section.

Participants

The present study involved 72 total participants enrolled in a first-semester Portuguese for Spanish-speakers course at a university in the southwestern United States. Participants came from four different sections taught by three different instructors (one teacher taught two separate sections). All participants were at least 18 years old and a

large majority was pursuing either a major or a minor that involved Spanish (e.g., Spanish translation and interpretation, Spanish, Latin American studies, etc.). In addition, all participants spoke both Spanish and English.

Initially, the questionnaire sought to distinguish seven separate groups of bilinguals: 1) L1 Spanish speakers who learned English after the age of 11, 2) L1 English speakers who learned Spanish after age 11, 3) simultaneous bilinguals who were first exposed to Spanish and English from birth, 4) early Spanish-English bilinguals who were first exposed to English between the ages of 1 to 5, and 5) late Spanish-English bilinguals who were first exposed to English between the ages of 6 and 11, 6) early English-Spanish bilinguals who were first exposed to Spanish between the ages of 1 to 5, and 7) late English-Spanish bilinguals who were first exposed to Spanish between the ages of 6 and 11. Below are the two questions from the Language Background Questionnaire that served as the primary basis for classifying students according to the context of their acquisition of Spanish and English (age 6 was chosen to correspond with the start of formal schooling).

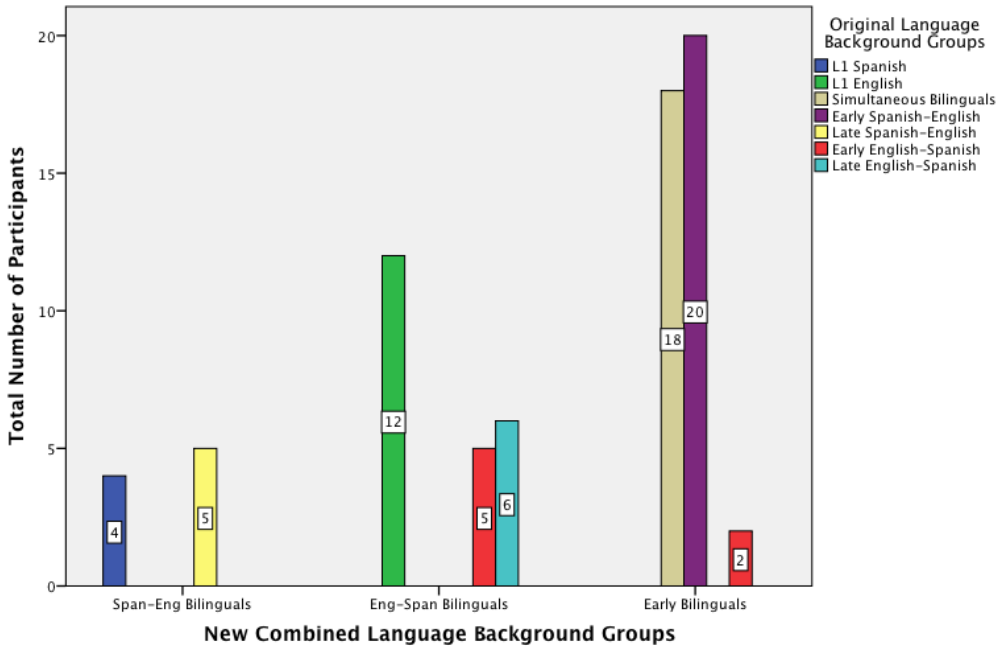
2. a) At what age were you first exposed to English?
From birth ☐ 1-5 yrs old ☐ 6-11 yrs old ☐ after age 11 ☐
b) Where were you first exposed to English? (check one) Home ☐ School ☐ Both ☐

3. a) At what age were you first exposed to Spanish?
From birth ☐ 1-5 yrs old ☐ 6-11 yrs old ☐ after age 11 ☐
b) Where were you first exposed to Spanish? Home ☐ School ☐ Both ☐

Groups 1 and 2 above correspond to what are traditionally referred to as L2 English speakers and L2 Spanish speakers, respectively, whereas groups 3-7 would all be considered different types of heritage speakers of Spanish (see Beaudrie & Ducar, 2005).

It was initially thought that potentially there could be a difference between simultaneous bilinguals, early bilingual heritage speakers and late bilingual heritage speakers (i.e., those who learned after age 5, presumably in a formal environment), but there were only five late Spanish-English bilinguals and 6 late English-Spanish bilinguals among the participants. After analyzing not only the language usage patterns of the participants as children and adults, but also their proficiency self-ratings (see questions in Appendix C) and scores on the Spanish Proficiency Pretest, it was decided to combine the late Spanish-English bilinguals with the L1 Spanish bilinguals and the late English-Spanish bilinguals with the L1 English bilinguals. In addition, based on the questionnaire data, the group differences in language usage patterns between most of the early bilinguals (both Spanish-English and English-Spanish) and the simultaneous bilinguals were minimal and thus it was decided that most of the participants from these three groups could be combined for the purposes of analysis. However, as can be seen below, five of the early English-Spanish bilinguals were included in the "English-Spanish bilinguals" group because it was clear that their "exposure to Spanish" before the age of 6 was negligible. Figure 1 below shows the combined groups and the number of participants in each group.

Figure 1: Composition of Combined Language Background Groups



Procedure

The present paper reports participants' data from three separate aspects of a larger study on CLI among Spanish-English bilinguals learning Portuguese as an L3: 1) Language Background Questionnaire data from three groups of Spanish-English bilingual learners regarding their language backgrounds and language usage, 2) Participants' scores on a brief Spanish Proficiency Pretest, and 3) Language Learning Perceptions Questionnaire data that measured participants' perceptions regarding the role that Spanish and English[21] play when learning Portuguese (see Appendices C, B, and D, respectively). The Spanish Proficiency Pretest consisted of a cloze part of a Diploma de Español como Lengua Extranjera (DELE) test and a multiple choice vocabulary section of an old Modern Language Association test (see Appendix B). This measure of general

[21] This article limits itself to participants' responses about the role of Spanish in learning L3 Portuguese mainly due to space constraints. However, related to Rothman's Typological Primacy Model, many students did not see any connection between English and Portuguese and mentioned how they felt English played no role in learning L3 Portuguese. This, of course, does *not* mean that it in actuality had no effect.

proficiency in Spanish has been used in other studies by Silvina Montrul (see for example Montrul 2010; Montrul & Perpiñán, 2011). Each participant received a numerical score out of 50 on the Spanish Proficiency Pretest.

Each participant completed the Spanish Proficiency Pretest and the Language Background Questionnaire during the third day of the course as these tests and tasks were part of the regular coursework given that semester. The Language Learning Perceptions Questionnaire was completed two months into the semester when it was assumed that participants had been exposed to a sufficient amount of material to have an opinion on how Spanish influences one's learning of Portuguese.

Results

Data from the Language Background Questionnaire, the Language Learning Perceptions Questionnaire and the Spanish Proficiency Pretest were analyzed to answer the three main research questions mentioned above.

Participants

As mentioned above, of the 72 participants in the present study, nine have been classified as Spanish-English bilinguals, 23 as English-Spanish bilinguals, and 40 as early bilinguals. The majority of the students (55.6%) are "heritage speakers of Spanish", whereas Spanish-English bilinguals and English-Spanish bilinguals make up only 12.5% and 32%, respectively, of the participants in the study. As has been noted above, one of the main findings that researchers in the field of Spanish as a Heritage Language have found is that Spanish heritage language learners have specific affective and linguistic needs that must be addressed in language classrooms (Beaudrie, 2009; Carreira, 2004; Parodi, 2008; Valdés, 1995, 2000, 2005). Carreira implies that *all* language courses that

include heritage speakers, and not just Spanish courses, should be "infused" with a "heritage language focus" (p. 21). Further discussion of the results and implications of this demographic will be discussed in the Discussion section below.

Spanish Proficiency

Data from the Spanish Proficiency Pretest show a large variation in the Spanish proficiency of the participants in the study, with scores ranging from 15/50 to 49/50. The effect of Language Background Group on Spanish Proficiency Pretest scores was tested using a one-factor between subjects ANOVA. The effect of Language Background Group was significant ($F(2,69)=44.15$, $p=0.000$). Table 1 shows the average proficiency score for each of the three language background groups.

Table 1 Mean Spanish Proficiency Pretest Scores, Std. Deviations, Range by Group

Language Background Group	Mean	N	Standard Deviation	Range	Max	Min
Spanish-English bilinguals	43.89	9	2.369	7	47	40
English-Spanish bilinguals	28.87	23	9.072	32	47	15
Early bilinguals	43.05	40	4.120	18	49	31
TOTAL	38.63	72	8.991	34	49	15

As can be clearly seen from Table 1 above, the mean score for the English-Spanish bilinguals is much lower than the mean scores for either of the other two groups. However, the variation in scores among the English-Spanish bilinguals is much greater than the variation in the other two groups and thus it was suspected that there was a significant inequality of the variances (heteroscedasticity) between the groups. Levene's Test of Equality of Error Variances confirmed this suspicion (Spanish Proficiency Pretest Scores: $F(2,69)=12.95$, $p=0.000$). Although violations of the assumption of homoscedasticity are known to bias standard error estimates, the p value for the ANOVA above is so low, and the F statistic so high, that correcting for this would most likely not change the results of the significance test. Furthermore, this heterogeneity between

groups on the Spanish Proficiency Pretest is one of the defining characteristics of these participants. Indeed, this fact of unequal variances should not be surprising; when attempting to measure the language proficiency of groups of speakers the greatest differences would be expected within the group that had learned the language late in life (i.e., as an L2). In addition, the variance among the Early bilinguals, a population whose heterogeneity has been mentioned above (see, for example, Beaudrie 2009; Valdés 1995, 2005), is greater than the variance among the Spanish-English bilinguals. Just on the basis of this analysis it is clear that students in Portuguese for Spanish-Speakers courses can be a very heterogeneous group, not only in terms of language background but also in terms of their proficiency in Spanish.

Language Learning Perceptions

Finally, to investigate whether or not participants perceive the role of the background languages differently, as a group, participants were asked to indicate on a scale from 1 to 5 (with 3 being a *neutral* effect) if, overall, Spanish was helpful or confusing when learning Portuguese. Because it was evident from the researcher's experience that certain aspects of Spanish seemed to influence learner's Portuguese acquisition more (or in a different way) than other aspects, the questionnaire also consisted of separate questions regarding the influence of the background languages on learning Portuguese with respect to six areas: listening, reading, vocabulary, speaking/pronunciation, writing and grammar. All questions were identical with the exception of the specific area being investigated. A sample question is included below (see Appendix D for all questions).

1. On a scale of 1 to 5, **overall** how much does your knowledge of Spanish help or confuse you with learning Portuguese?

1	2	3	4	5
It really confuses me	It makes it somewhat confusing	It neither confuses me nor helps me	It helps me a little bit	It greatly helps me

The initial hypothesis was that, at least in "overall" terms, there would be a statistically significant difference in how the Language Background groups perceived the role of Spanish in acquiring Portuguese. Specifically, it was hypothesized that the English-Spanish group would perceive Spanish as more of an advantage when acquiring Portuguese than would the other two groups. In addition, it was hypothesized that English-Spanish bilinguals would view Spanish as more beneficial for "Grammar" and "Writing" than would the other two groups. There were no hypotheses made about the other aspects (Listening, Reading, Vocabulary, Speaking/Pronunciation).

Participants were asked to rate how they perceived the role of Spanish *overall* in learning Portuguese. A random effects model was used to test the relationship between the independent variables Language Background Group (Group) and Spanish Proficiency Score (Proficiency) and the dependent variable Participants' Score on Overall Effect of Spanish on Portuguese. It was also important to control for a teacher effect. The advantage of using a random effects model is that it allows the effect of Teacher to be controlled for by analyzing it as a random variable. This method of analysis was used for the other six areas of the language mentioned above. A summary of the results described below can be found in Table 2.

Table 2: Mean Scores by Language Background Group and Significance of Main Effects

	Mean Scores by Language Background Group			Significance of Main Effects	
Question (Dependent Variables)	Span-Eng	Eng-Span	Early bilinguals	Group	Proficiency
Overall	2.79	4.70	4.25	p=0.0001*	p=0.1187
Listening	4.22	4.22	4.50	p=0.2603	p=0.5765
Reading	3.89	4.39	4.38	p=0.0461*	p=0.0088*
Vocabulary	3.33	3.96	4.00	p=0.2266	p=0.8194
Speaking/Pronunciation	2.22	2.35	3.18	p=0.0547	p=0.3034
Writing	2.33	3.57	3.48	p=0.0608	p=0.7976
Grammar	2.89	4.22	3.68	p=0.0480*	p=0.7845
Comparison of Port & Span	3.56	4.52	4.50	p=0.0012*	p=0.0521
Skimming Similar Grammatical Concepts	2.56	2.61	2.78	p=0.6560	p=0.2685

***Significant at p<0.05**

Question 1: Overall

Although Early bilinguals view the overall role of Spanish as helpful (mean=4.25), the English-Spanish bilinguals perceive Spanish as more helpful in learning Portuguese than do the other two groups (mean=4.70). In contrast, Spanish-English bilinguals view the overall role of Spanish as somewhat confusing for learning Portuguese (mean=2.79). A random effects model analysis indicated that the relationship between *Group* and *Overall Perception of Spanish* was significant ($F(2,67)=10.54$, $p=0.0001$). In addition, all contrasts between groups were significant (*Eng-Span vs. Early bilinguals*: $t(1,67)=-3.70$, $p=0.0004$; *Span-Eng vs.Eng-Span*: $t(1,68)=-4.46$, $p<0.0001$); *Span-Eng vs. Early bilinguals*: $t(1,67)=2.22$, $p=0.0295$). The relationship between *Proficiency* and *Overall Perception of Spanish* was not significant ($F(1,67)=2.50$, $p=0.1187$).

Question 2: Listening

One of the aspects of Portuguese that most surprises many Spanish speakers is how much they are able to comprehend with little or no knowledge of the language (see

Jensen, 1989). Not surprisingly, all groups viewed Spanish as being helpful for learning Portuguese (Eng-Span mean: 4.22; Span-Eng mean: 4.22, Early bilinguals mean: 4.50). A random effects model analysis found that neither *Group* nor *Proficiency* were significantly related to scores on the effect of Spanish on Listening in Portuguese (Group: $F(2,67)=1.29$, $p=0.2603$; Proficiency: $F(2,67)=0.56$, $p=0.5765$).

Question 3: Reading

English-Spanish bilinguals (mean: 4.39) and Early bilinguals (mean: 4.38) found Spanish to be somewhat helpful when reading in Portuguese whereas the Spanish-English bilinguals rated Spanish as slightly above neutral (mean: 3.89). A random effects model analysis found a significant relationship between both independent variables *Group* and *Proficiency* and the dependent variable *Reading* in Portuguese (*Group*: $F(2,67)=4.10$, $p=0.0209$; *Proficiency*: $F(1,68)=7.27$, $p=0.0088$). Additionally, the contrasts *Eng-Span vs. Early bilinguals* and *Span-Eng vs Eng-Span* were significant (*Eng-Span vs Early bilinguals*: $t(1,68)=2.03$, $p=0.0461$; *Span-Eng vs Eng-Span*: $t(1,68)=-2.86$, $p=0.0057$). The *Span-Eng vs Early bilinguals* contrast was not significant ($t(1,68)=-1.71$, $p=0.0922$). Because both *Group* and *Proficiency* were significant the interaction between the two was tested, but the estimated g matrix was not positive definite and therefore the parameters could not be estimated. However, to give an idea of the actual effect of *Proficiency*, the parameter estimate was 0.0446, implying that with every incremental point increase on the Spanish Proficiency Pretest, the rating would rise by only 0.045 Likert scale points.

Question 4: Learning Vocabulary

Both English-Spanish bilinguals (mean: 3.96) and Early bilinguals (mean: 4.00) indicated that Spanish has a somewhat helpful role in learning vocabulary in Portuguese, while the Span-English bilinguals reported that it was only marginally more helpful than neutral (mean: 3.33). In fact, a random effects model analysis found no significant relationships between *Group* and *Proficiency* and the role of Spanish on Learning *Vocabulary* in Portuguese (*Group*: $F(2,67)=1.52$, $p=0.2266$; *Proficiency*: $F(1,68)=0.05$, $p=0.8194$).

Question 5: Speaking/Pronunciation

Both Spanish-English bilinguals (mean: 2.22) and English-Spanish bilinguals (mean: 2.35) reported that Spanish is somewhat confusing for speaking in Portuguese whereas Early bilinguals felt that Spanish played a neutral role in learning to speak in Portuguese (mean: 3.18). What was clear from the data is that all groups rated *Speaking/Pronunciation* as the area least benefitted by a knowledge of Spanish. A random effects model analysis found no significant relationships for *Group* nor for *Proficiency* (*Group*: $F(2,68)=3.03$, $p=0.0547$; *Proficiency*: $F(1,68)=1.08$, $p=0.3034$). However, the contrast for the *Eng-Span bilinguals vs Early bilinguals* was significant (*Eng-Span vs. Early bilinguals*: $t(1,68)=-2.33$, $p=0.0230$), implying significance for *Group* as a whole. However, since the *p* values are so near .05, this could be the result of an inflated *F* value because of the heteroscedasticity between the groups' Spanish proficiency scores.

Question 6: Writing

Interestingly, Spanish-English bilinguals reported that Spanish somewhat confused their writing in Portuguese (mean: 2.33) whereas the English-Spanish bilinguals (mean: 3.57) and Early bilinguals (mean: 3.48) indicated a neutral effect of Spanish. However, similar to the analysis above, a random effects model analysis found no significant relationships for *Group* nor for *Proficiency* (*Group*: $F(2,67)=2.92$, $p=0.0608$; *Proficiency*: $F(1,67)=0.07$, $p=0.7976$), but a significant contrast for the *Eng-Span bilinguals vs Early bilinguals* (*Eng-Span vs. Early bilinguals*: $t(1,67)=-2.33$, $p=0.0228$), implying significance for *Group* as a whole. Again, this potentially could be a result of inflated *F* values due to the unequal variances of the groups.

Question 7: Learning Portuguese Grammar

It was hypothesized that English-Spanish bilinguals would view Spanish as more helpful for learning grammar in Portuguese than the other two groups and this was seen in their mean score of 4.22 compared with a mean of 2.89 for Spanish-English bilinguals and 3.68 for Early bilinguals. The random effects model analysis showed a significant relationship for *Group* ($F(2,67)=3.18$, $p=0.0480$). In addition, the contrasts *Span-Eng vs. Early bilinguals* and *Span-Eng vs. Eng-Span* were significant (*Span-Eng vs. Early bilinguals*: $t(1,67)=-2.03$, $p=0.0460$; *Span-Eng vs. Eng-Span*: $t(1,68)=2.45$, $p=0.0171$). The contrast *Eng-Span vs. Early bilinguals* was not significant ($t(1,67)=1.21$, $p=0.2309$). Additionally, the relationship between *Proficiency* and *Grammar* was not significant ($F(1,67)=0.08$, $p=0.7845$).

Question 8:Perceptions on Comparing Spanish in Portuguese in the Classroom

In addition to the above questions regarding specific aspects of Spanish, participants were asked to respond to the following question:

One of the methods this course uses is to compare Portuguese to Spanish. Is this helpful for you?

1	2	3	4	5
It really confuses me	It makes it somewhat confusing	It neither confuses me nor helps me	It helps me a little bit	It greatly helps me

Both English-Spanish bilinguals (mean: 4.52) and Early bilinguals (mean: 4.50) indicated that the comparisons helped whereas the Spanish-English group's mean of 3.56 suggests a neutral effect for the comparisons. In addition, participants' responses were analyzed using the same random effects model as above. Results from a mixed effects model analysis showed a significant effect of *Group* on participants' responses ($F(2,67)=7.71$, $p=0.0010$). In addition, *Span-Eng vs Early bilinguals* and *Span-Eng vs Eng-Span* were significant (*Span-Eng vs. Early bilinguals*: $t(1,67)=-3.37$, $p=0.0012$; *Span-Eng vs Eng-Span*: $t(1,68)=-3.71$, $p=0.0004$) whereas the *Eng-Span vs Early bilingual* contrast was not significant ($t(1,67)=1.58$, $p=0.1196$). In addition, the relationship between *Proficiency* and participants' perceptions of the comparison of Spanish to Portuguese was not significant ($F(1,67)=3.91$, $p=0.0521$).

Question 9: Thoughts on Briefly Skimming Similar Grammatical Concepts

Finally, participants were asked the following question:

In this course we assume that you have knowledge of Spanish grammar rules. When those grammar rules are similar to Portuguese, we usually do not go into as much depth as on those areas where the two languages differ. How do you feel about this?

1	2	3	4	5
The course **assumes way too much** knowledge of Spanish grammar rules	The course **assumes a little too much** knowledge of Spanish grammar rules	The course is just right in this regard	The course spends **a little too much time** reviewing grammar rules that were just like Spanish	The course spends **way too much time** reviewing grammar rules that were just like Spanish

Participants' responses showed that all groups felt that the course assumed a little too much knowledge of Spanish grammar rules (Means: Span-Eng=2.56; Eng-Span=2.61; Early bilinguals=2.78). Results from a random effects model analysis showed no significant effects of *Group* or *Proficiency* on participants' responses (*Group*: $F(2,68)=0.42$, $p=0.6560$; *Proficiency*: $F(1,68)=1.24$, $p=0.2685$).

In conclusion, as can be seen from Table 2, there is a significant effect of *Group* on participants' perceptions of the role of Spanish in learning Portuguese with respect to the language *overall*. In addition, there are significant effects of *Group* on *reading, grammar,* and the *comparison* of the two languages. Thus, for the role of Spanish *overall* we can reject the null hypothesis and conclude that the data suggest that English-Spanish bilinguals will rate Spanish as more helpful than will the other two groups. However, on closer analysis things are not so clear; although English-Spanish bilinguals on average rated Spanish as more helpful, many times the Early bilinguals rated Spanish as just as helpful or more so. It seems that the only constant is that Spanish-English bilinguals routinely rate Spanish lower (in terms of being advantageous to learning Portuguese) than the other two groups.

Analysis of Open-Ended Questions

In addition to the quantitative-based questions discussed above, participants responded to two open-ended questions that asked what aspects of the Portuguese language were *easiest* and what were *most confusing* because they were Spanish speakers and one question regarding what they would recommend to the teacher to help them learn better. This last question was asked to help shed some light on what areas of the language were particularly difficult for them and how this related to their knowledge of Spanish. Although answers were varied for all questions, there were some common themes that help illuminate participants' perceptions of how Spanish affects their learning of Portuguese. Following is a brief description and summary of the similarities and differences of responses based on Language Background Group. When participants included more than one aspect of the language in their responses, each aspect was counted. Consequently, total responses do not always equal total number of participants. In addition, all responses were organized according to general language area and then compared with total responses from each group. Percentages were rounded up to the nearest percent and thus may not equal 100%.

Question 8: What Aspects of Portuguese Are Easiest Because You Are a Spanish Speaker?

Although participants in all groups mentioned similar aspects, the distribution of answers reveals subtle differences between groups. *Listening* and *Speaking/Pronunciation* were by far the most common themes in the Spanish-English bilingual group whereas *Grammar/Verb Conjugations* was the most common response among English-Spanish bilinguals. Early bilinguals mentioned *Grammar*, *Vocabulary*

and *Listening* about equally. In addition, the term "verb conjugations" was mentioned multiple times by English-Spanish bilinguals and Early bilinguals, but never by the Spanish-English bilinguals (see Table 3 below).

Table 3: Responses—Easiest Aspects of Portuguese for Spanish Speakers

Language Aspect	Span-Eng bilinguals	Eng-Span bilinguals	Early bilinguals
Listening	58% (7/12)	19% (7/37)	29% (17/59)
Speaking/Pronunciation	25% (3/12)	--	5% (3/59)
Grammar/Verb Conjug.*	8% (1/12)	46% (17/37)	22% (13/59)
Vocabulary	8% (1/12)	22% (8/37)	32% (19/59)
Reading	--	14% (5/37)	12% (7/59)
TOTAL for Each Group	12/12 responses	37/37 responses	59/59 responses

* Late Spanish-English bilinguals never mentioned "verb conjugations" whereas it was mentioned frequently by the other two groups

Question 9: What Aspects of Portuguese Are Most Confusing Because You Are a Spanish Speaker?

Again, although groups gave similar answers, the distribution of each answer among the groups reveals differences in how each group perceives how Spanish affects their learning/acquisition of Portuguese. Spanish-English bilinguals cited *Grammar/Verb Conjugations, Spanish Interference, Speaking/Pronunciation*, and *Writing/Written Accents* as the most confusing aspects of Portuguese. English-Spanish bilinguals mentioned *Speaking/Pronunciation, Vocabulary,* and *Grammar* as the most confusing. Interestingly, none of their responses mentioned "verb conjugations" whereas the other two groups mentioned them extensively. Finally, *Grammar/Verb Conjugations* and *Speaking/Pronunciation* were the most confusing aspects for the Early bilinguals (see Table 4 below).

Table 4: Responses—Most Confusing Aspects of Portuguese for Spanish Speakers

Language Aspect	Span-Eng bilinguals	Eng-Span bilinguals	Early bilinguals
Listening	--	3% (1/32)	--
Speaking/Pronunciation	27% (4/15)	53% (17/32)	27% (17/63)
Grammar/Verb Conjug.*	27% (4/15)	19% (6/32)	44% (28/63)
Vocab./False Cognates	--	22% (7/32)	11% (7/63)
Gen. Interference from Sp.	27% (4/15)	--	8% (5/63)
Writing/Accents	20% (3/15)	3% (1/32)	10% (6/63)
TOTAL for Each Group	15/15 responses	32/32 responses	63/63 responses

* Late Spanish-English bilinguals never mentioned "verb conjugations" whereas it was mentioned frequently by the other two groups

Question 10: If you could give some suggestions to a teacher on how they could facilitate your learning of Portuguese, what would you suggest?

Participants gave a large variety of answers to this question including some specific suggestions (for example, "have a quiz each day of the week" and "review more the [written] accents and contractions"), however no appreciable differences among groups were evident. Notwithstanding, four main suggestions were mentioned relatively frequently by all groups: 1) slow down the course, 2) spend more time on grammar, especially verb conjugations, 3) spend more time on speaking/pronunciation, and 4) highlight both similarities and differences between Spanish and Portuguese instead of assuming students will just "pick up" on the similarities.

Discussion

Limitations

Although great care was taken with regards to study design, data collection and data analysis, the present study suffers from some limitations. First, the overall sample size is too small, and the difference between samples in each group too large, to have much statistical power and to confidently be able to generalize to other populations of bilingual speakers learning Portuguese as an L3. As such, the research serves as an exploratory study about language learning perceptions.

Second, the data violate one of the principle assumptions of the general linear model, namely that of homogeneity of variances with respect to Spanish proficiency levels among groups. As mentioned earlier, this tends to inflate the *F* or *t* score. For tests where the probability level is low (i.e., $p<0.01$) this may not be much of a problem. However, when *p* values are close to 0.05, it may only be a function of the inflated *F* value and, therefore, invalid. Because of this limitation, further studies must be done to suggest whether or not the differences shown in the present study accurately reflect real differences among these groups, for example the (nominally) statistically significant group differences reported above on *reading* and *grammar*.

Finally, all participants come from one institution in the southwestern United States using the same curriculum and textbook. Differences in perceptions may have been affected by either the curriculum or the population differences inherent in this particular institution. Further studies would help indicate if a curriculum/institution effect were in fact significant.

Contributions and Pedagogical Implications

Notwithstanding the limitations mentioned above, the present study makes some unique contributions to the field of Portuguese for Spanish speakers. First, it is clear that the bilingual participants in the present study are a heterogeneous group not only based on their proficiency in Spanish, but also regarding how and when they acquired/learned Spanish. In addition, it has been suggested that participants' perceptions of the role or influence of Spanish in learning Portuguese is affected more by how and when they learned Spanish (their Language Background Group) than by their proficiency in Spanish. This is evident not only by their scores on the Likert-scale items but also by their

responses to the open-ended questions. In particular, the data show that when acquiring L3 Portuguese, English-Spanish bilinguals and Early bilinguals view Spanish as more of an advantage than do Spanish-English bilinguals, especially in terms of grammar and verb conjugations. Correspondingly, Spanish-English bilinguals perceive Spanish as facilitating listening comprehension but confusing the learning of grammar and verb conjugations. Both Early bilinguals and Spanish-English bilinguals perceive Spanish as more helpful for speaking and pronunciation in Portuguese than do English-Spanish bilinguals, although all groups mentioned that speaking and pronunciation in Portuguese were difficult and required more time to master than they had been given.

These findings do not seem surprising when considering that Spanish-English bilinguals and Early bilinguals, many of whom have never taken foreign language courses in Spanish, may not be as familiar with the metalinguistic terminology used in L2/L3 courses as are their English-Spanish bilingual counterparts. Thus, when confronted with terms such as “subjunctive”, “direct/indirect object pronouns”, “preterit and imperfect”, etc., Spanish-English bilinguals and some Early bilinguals have to not only digest the language forms in Portuguese, but also learn the terminology. Conversely, English-Spanish bilinguals, on the other hand, have most likely already heard these terms when learning Spanish and therefore may be able to more readily make the connections between the concepts they’ve previously been exposed to in Spanish courses to what they are learning in Portuguese.

The findings in this paper suggest the importance of designing programs that not only take advantage of the strengths and weaknesses of each group, but also challenge each group adequately. For example, focusing as much on speaking and listening

comprehension as on written grammar exercises might force the English-Spanish bilinguals to develop in areas in which they may not be as proficient. Also, more explicit instruction in metalinguistic terminology, along with contrastive analysis of forms in both Spanish and Portuguese might help those Spanish-English bilinguals and Early bilinguals who struggle with grammar concepts that seem less daunting for English-Spanish bilinguals.

The idea of building metalinguistic awareness and highlighting divergent aspects of the language has been recommended many times in studies of Spanish-speakers learning Portuguese (see, for example, Åkerberg, 2002; Almeida Filho, 1995, Carvalho, Freire & da Silva, 2010; Carvalho & da Silva, 2008; Júdice, 2000, among others). The present study also supports the idea that convergent, and not just divergent, aspects of the language need to be highlighted, even if doing so means that courses may not be as "accelerated" or fast-paced as originally planned. It is clear from student recommendations that many felt that the course, at least during the initial two months, went too fast and desired more time to be able to internalize the grammar and vocabulary they were learning.

Finally, the majority of the participants in the present study would be considered heritage speakers of Spanish, or what we have termed "Early bilinguals". One of the main findings in the field of Spanish as a Heritage Language is that many of these bilinguals have specific affective and linguistic needs that must be addressed (Beaudrie, 2009; Carreira, 2004; Parodi, 2008; Valdés, 1995, 2000, 2005). This may be accomplished in the Portuguese for Spanish-speakers classroom in at least three ways: 1) teacher training on the different affective needs and characteristics of HLLs of Spanish, 2) a focus on

multilingualism and its implications, and 3) explicitly teaching sociolinguistic topics (including register awareness) in PSS courses.

First, teachers of PSS courses should have some basic knowledge about heritage speakers of Spanish in the U.S., including the different varieties they speak, the social stigma often associated with their heritage language, the lack of formal training in their heritage language, and their high receptive/lower productive abilities in the language. Teachers of PSS courses would then be taught that this knowledge must apply to how they teach Portuguese. For example, because contrastive analysis plays a role in PSS classes (Carvalho 2002), teachers in these courses, cognizant of the many different varieties of Spanish that their students speak, would be careful not to over generalize about certain grammar, pragmatic, or cultural aspects of Spanish in comparing it with Portuguese. In addition, this knowledge would help them be sensitive to these students' difficulties with certain formal features of the language, such as subjunctive forms and clitic usage, that tend to be easier for L1 and L2 Spanish speakers to acquire (see Carvalho & da Silva, 2006).

Second, a focus on bilingualism would not only alter instructional methods, but would have implications on assessment as well. Cenoz (2003, 2011) argues that bilinguals are not akin to two monolinguals in one individual; they learn, process, and use language in a qualitatively different way than do monolinguals (see also Valdés, 2005). Consequently she asserts that this implies that a more holistic, learner-centered view of language acquisition should be taken with regard to multilinguals, including in the assessment of their language ability. In effect, students would not be compared to monolingual speakers of Portuguese, but would be assessed based on a bilingual norm.

This may include formative assessments that would include self-assessment measures (see Mejía, 1995). Also, Cenoz suggests that this may imply accepting some interaction phenomena in assessment and encouraging users to use the resources at their disposal (including their implicit and explicit knowledge of Spanish) while simultaneously increasing their already-developed metalinguistic skills (see also Sanz, 2000). In addition, speaking requirements may even be delayed while students are allowed to listen and read in the target language for a brief period before being required to produce orally in the target language (compare with Grannier, 2000).

Finally, teachers should approach sociolinguistic topics, including dialect and register variation, in PSS courses through explicit teaching and illustrative examples from authentic sources (movies, music, literature, news, blogs, etc.) (see Carreira, 2000; Carvalho, Freire, & da Silva, 2010; Leeman, 2005; Martínez, 2003). This could include topics such as presenting the difference between clitic usage in formal and vernacular registers with both a descriptive and a sociolinguistic approach. These dialectal variations can serve as opportunities to talk about language variation, standard vs. vernacular dialects, and the relationships between language ideologies and power (Leeman, 2005; Martínez, 2003). Finally, students could be asked to share their own experiences with these issues and apply this knowledge to their own dialects.

In this way, Portuguese for Spanish speakers courses could be "infused with a heritage language focus" (Carreira, 2004). Not only would this focus prove beneficial to the heritage speakers of Spanish in these courses, it would help educate all students about

the nature of bilingualism/multilingualism, language variation, and language ideologies and equip them to better understand the languages that they, and others, use.[22]

[22] I would like to thank Ryan Seltzer for his statistical expertise and for helping me conceptualize the study more clearly, Mohammad Torabi and Mark Borgstrom for additional statistical help, and Silvia Perpiñán for giving me access to the Spanish pretest used in the study. Finally, I would like to thank Ana Carvalho, Jenifer Child, and the two anonymous reviewers for the PLJ for their useful suggestions and corrections. All errors, of course, are my own.

APPENDIX B - SPANISH PROFICIENCY PRETEST

Taken from Montrul & Perpiñán (2011)

Instructions: Each of the following sentences contains a blank space _____ indicating that a word or phrase has been omitted. From the four choices select the one which, when inserted in the space _____, best fits in with the meaning of the sentence as a whole.

1. Al oír del accidente de su buen amigo, Paco se puso _____.

a. alegre
b. fatigado
c. hambriento
d. desconsolado

2. No puedo comprarlo porque me _____ dinero.

a. falta
b. dan
c. presta
d. regalan

3. Tuvo que guardar cama por estar _____.

a. enfermo
b. vestido
c. ocupado
d. parado

4. Aquí está tu café, Juanito. No te quemes, que está muy _____.

a. dulce
b. amargo
c. agrio
d. caliente

5. Al romper los anteojos, Juan se asustó porque no podía _____ sin ellos.

a. discurrir
b. oír
c. ver
d. entender

6. ¡Pobrecita! Está resfriada y no puede _____.

a. salir de casa
b. recibir cartas
c. respirar con pena
d. leer las noticias

7. Era una noche oscura sin _____.

a. estrellas
b. camas
c. lágrimas
d. nubes

8. Cuando don Carlos salió de su casa saludó a un amigo suyo: -Buenos días, _____

a. ¿Qué va?
b. ¿Cómo es?
c. ¿Quién es?
d. ¿Qué tal?

9. ¡Que ruido había con los gritos de los niños y el _____ de los perros!

a. olor
b. sueño
c. hambre
d. ladrar

10. Para saber la hora, don Juan miró el _____.

a. calendario
b. bolsillo
c. estante
d. despertador

11. Yo, que comprendo poco de mecánica, sé que el auto no puede funcionar sin _____.

a. permiso
b. comer
c. aceite
d. bocina

12. Nos dijo mamá que era hora de comer y por eso _____.

a. fuimos a nadar
b. tomamos asiento
c. comenzamos a fumar
d. nos acostamos pronto

13. ¡Cuidado con ese cuchillo o vas a _____ el dedo!

a. cortarte
b. torcerte
c. comerte
d. quemarte

14. Tuvo tanto miedo de caerse que se negó a _____ con nosotros.

a. almorzar
b. charlar
c. cantar
d. patinar

15. Abrió la ventana y miró: en efecto grandes lenguas de _____ salían llameando de las casas.

a. zorros
b. serpientes
c. cuero
d. fuego

16. Compró ejemplares de todos los diarios pero en vano. No halló _____.

a. los diez centavos
b. el periódico perdido
c. la noticia que deseaba
d. los ejemplos

17. Por varias semanas acudieron colegas del difunto profesor a _____ el dolor de la viuda.

a. aliviar
b. dulcificar
c. embromar
d. estorbar

18. Sus amigos pudieron haberlo salvado pero lo dejaron _____.

a. ganar
b. parecer
c. perecer
d. acabar

19. Al salir de la misa me sentía tan caritativo que no pude menos que _____ a un pobre mendigo que había allí sentando.

a. pegarle
b. darle una limosna
c. echar una mirada
d. maldecir

20. Al lado de la Plaza de Armas había dos limosneros pidiendo _____.

a. pedazos
b. paz
c. monedas
d. escopetas

21. Siempre maltratado por los niños, el perro no podía acostumbrarse a _____ de sus nuevos amos.

a. las caricias
b. los engaños
c. las locuras
d. los golpes

22. ¿Dónde estará mi cartera? La dejé aquí mismo hace poco y parece que el necio de mi hermano ha vuelto a _____.

a. dejármela
b. deshacérmela
c. escondérmela
d. acabármela

23. Permaneció un gran rato abstraído, los ojos clavado en el fogón y el pensamiento _____.

a. en el bolsillo
b. en el fuego
c. lleno de alboroto
d. Dios sabe dónde

24. En vez de dirigir el tráfico estabas charlando, así que tú mismo _____ del choque.

a. sabes la gravedad
b. eres testigo
c. tuviste la culpa
d. conociste a las víctimas

25. Posee esta tierra un clima tan proprio para la agricultura como para _____.

a. la construcción de trampas
b. el fomento de motines
c. el costo de vida
d. la cría de reses

26. Aficionado leal de obras teatrales, Juan se entristeció al saber _____ del gran actor.

a. del fallecimiento
b del éxito
c. de la buena suerte
d. de la alabanza

27. Se reunieron a menudo para efectuar un tratado pero no pudieron _____.

a. desavenirse
b. echarlo a un lado
c. rechazarlo
d. llevarlo a cabo.

28. Se negaron a embarcarse porque tenían miedo de _____.

a. los peces
b. los naufragios
c. los faros
d. las playas

29. La mujer no aprobó el cambio de domicilio pues no le gustaba _____.

a. el callejeo
b. el puente
c. esa estación
d. aquel barrio

30. Era el único que tenía algo que comer pero se negó a _____.

a. hojearlo
b. ponérselo
c. conservarlo
d. repartirlo

Sentence Completion Test

Instructions: In the following text, some of the words have been replaced by spaces which are numbered from 1 to 20. First, read the complete text in order to understand it. Then reread it and choose, from the list of words on the answer sheet, the correct word for each space. Mark your answers by circling your choice on the answer sheet, not on the text.

El sueño de Juan Miró

Hoy se inaugura en Palma de Mallorca la Fundación Pilar y Juan Miró, en el mismo lugar en donde el artista vivió sus últimos treinta y cinco años. El sueño de Juan Miró se ha _____ (1). Los fondos donados a la ciudad por el pintor y su esposa en 1981 permitieron que el sueño se _____ (2); más tarde, en 1986, el Ayuntamiento de Palma de Mallorca decidió _____ (3) al arquitecto Rafael Moneo un edificio que _____ (4) a la vez como sede de la entidad y como museo moderno. El proyecto ha tenido que _____ (5) múltiples obstáculos de carácter administrativo. Miró, coincidiendo _____ (6) los deseos de toda su familia, quiso que su obra no quedara expuesta en ampulosos panteones de arte o en _____ (7) de coleccionistas acaudalados; por ello, en 1981, creó la fundación mallorquina. Y cuando estaba _____ (8) punto de morir, donó terrenos y edificios, así como las obras de arte que en ellos _____ (9).

El edificio que ha construido Rafael Moneo se enmarca en _____ (10) se denomina "Territorio Miró", espacio en el que se han _____ (11) de situar los distintos edificios que constituyen la herencia del pintor.

El acceso a los mismos quedará _____ (12) para evitar el deterioro de las obras. Por otra parte, se _____ (13), en los talleres de grabado y litografía, cursos _____ (14) las distintas técnicas de estampación. Estos talleres también se cederán periódicamente a distintos artistas contemporáneos, _____ (15) se busca que el "Territorio Miró" _____ (16) un centro vivo de creación y difusión del arte a todos los _____ (17).

La entrada costará 500 pesetas y las previsiones dadas a conocer ayer aspiran _____ (18) que el centro acoja a unos 150.000 visitante al año. Los responsables esperan que la institución funcione a _____ (19) rendimiento a principios de la _____ (20) semana, si bien el catálogo completo de las obras de la Fundación Pilar y Juan Miró no estará listo hasta dentro de dos años.

Sentence Completion Answer Sheet

1. a. cumplido
   b. completado
   c. terminado

2. a. inició
   b. iniciara
   c. iniciaba

3. a. encargar
   b. pedir
   c. mandar

4. a. hubiera servido
   b. haya servido
   c. sirviera

5. a. superar
   b. enfrentarse
   c. acabar

6. a. por
   b. en
   c. con

7. a. voluntad
   b. poder
   c. favor

8. a. al
   b. en
   c. a

9. a. habría
   b. había
   c. hubo

10. a. que
    b. el que
    c. lo que

11. a. pretendido
    b. tratado
    c. intentado

12. a. disminuido
    b. escaso
    c. restringido

13. a. darán
    b. enseñarán
    c. dirán

14. a. sobre
    b. en
    c. para

15. a. ya
    b. así
    c. para

16. a. será
    b. sea
    c. es

17. a. casos
    b. aspectos
    c. niveles

18. a. a
    b. de
    c. para

19. a. total
    b. pleno
    c. entero

20. a. siguiente
    b. próxima
    c. pasada

APPENDIX C - LANGUAGE BACKGROUND QUESTIONNAIRE

Class Title and Section: _____
Name: _____
Age: _____
Sex: Male ☐ Female ☐
Major: _____
Minor: _____

1. Birthplace: _____
(City/State/Country)

2. a) At what age were you first exposed to English?
From birth ☐ 1-5 yrs old ☐ 6-11 yrs old ☐ after age 11 ☐
b) Where were you first exposed to English? (check one) Home ☐ School ☐ Both ☐

3. a) At what age were you first exposed to Spanish?
From birth ☐ 1-5 yrs old ☐ 6-11 yrs old ☐ after age 11 ☐
b) Where were you first exposed to Spanish? Home ☐ School ☐ Both ☐

4. Where did you attend elementary school?
City_____ State _____

5. What languages do you speak/understand? How would you rate yourself as a speaker of these languages with 1= beginner, 2=intermediate, 3=advanced, 4=native like, and 5=native speaker?

English:	Rating:	1	2	3	4	5
Spanish:	Rating:	1	2	3	4	5
Other: _____	Rating:	1	2	3	4	5
Other: _____	Rating:	1	2	3	4	5

6. What are your parents' and grandparents' native language(s)?

	English	Spanish	Other
Mother:	☐	☐	☐ _____
Father:	☐	☐	☐ _____
Mat. Grandmother	☐	☐	☐ _____
Mat. Grandfather	☐	☐	☐ _____
Pat. Grandmother	☐	☐	☐ _____
Pat. Grandfather	☐	☐	☐ _____

7. Did either or both of your parents or grandparents immigrate to the United States? If so, from where?

Mother: _____
Father: _____
Mat. Grandmother: _____
Mat. Grandfather: _____
Pat. Grandmother: _____
Pat. Grandfather: _____

Before elementary school…

8. What language(s) did/do your parents and grandparents speak to you growing up?

Mother:
Only Spanish ☐ Mostly Spanish ☐ Both Equally ☐ Mostly English ☐ Only English ☐ Other ☐
Father:
Only Spanish ☐ Mostly Spanish ☐ Both Equally ☐ Mostly English ☐ Only English ☐ Other ☐
Mat. Grandmother:
Only Spanish ☐ Mostly Spanish ☐ Both Equally ☐ Mostly English ☐ Only English ☐ Other ☐
Mat. Grandfather:
Only Spanish ☐ Mostly Spanish ☐ Both Equally ☐ Mostly English ☐ Only English ☐ Other ☐
Pat. Grandmother:
Only Spanish ☐ Mostly Spanish ☐ Both Equally ☐ Mostly English ☐ Only English ☐ Other ☐
Pat. Grandfather:
Only Spanish ☐ Mostly Spanish ☐ Both Equally ☐ Mostly English ☐ Only English ☐ Other ☐

9. What language(s) did you speak with your siblings at home growing up?
Only Spanish ☐ Mostly Spanish ☐ Both Equally ☐ Mostly English ☐ Only English ☐ Other ☐

If "Other", then please list the other language spoken at home:_____

10. What language(s) did you speak with your friends growing up?
Only Spanish ☐ Mostly Spanish ☐ Both Equally ☐ Mostly English ☐ Only English ☐
Other ☐

If other, please list the
language:_____

During elementary school…

11. What language(s) did you speak to your teachers in elementary school?
Only Spanish ☐ Mostly Spanish ☐ Both Equally ☐ Mostly English ☐ Only English ☐
Other ☐

12. What language(s) did you speak with your siblings at home during this time?
Only Spanish ☐ Mostly Spanish ☐ Both Equally ☐ Mostly English ☐ Only English ☐
Other ☐

13. What language(s) did you speak with your friends at this time?
Only Spanish ☐ Mostly Spanish ☐ Both Equally ☐ Mostly English ☐ Only English ☐
Other ☐

During middle & high School…

14. What language(s) did you speak to your teachers in middle and high school?
Only Spanish ☐ Mostly Spanish ☐ Both Equally ☐ Mostly English ☐ Only English ☐
Other ☐

15. What language(s) did you speak with your siblings at during this time?
Only Spanish ☐ Mostly Spanish ☐ Both Equally ☐ Mostly English ☐ Only English ☐
Other ☐

If "Other", then please list the other language spoken at
home:_____

16. What language(s) did you speak with your friends at this time?
Only Spanish ☐ Mostly Spanish ☐ Both Equally ☐ Mostly English ☐ Only English ☐
Other ☐

Today…

17. Where do you usually speak/use each language and with whom do you speak? Check all that apply.

English:	At home ☐	At school ☐	At work ☐	With Friends ☐
Spanish:	At home ☐	At school ☐	At work ☐	With Friends ☐
Other:_____	At home ☐	At school ☐	At work ☐	With Friends ☐
Other:_____	At home ☐	At school ☐	At work ☐	With Friends ☐

18. When I watch television, movies, or listen to music I hear…
Only Spanish ☐ Mostly Spanish ☐ Both Equally ☐ Mostly English ☐ Only English ☐

19. When I read magazines, books, newspapers, articles/information on the internet, I read in….
Only Spanish ☐ Mostly Spanish ☐ Both Equally ☐ Mostly English ☐ Only English ☐

20. When I'm in church, I speak…
Only Spanish ☐ Mostly Spanish ☐ Both Equally ☐ Mostly English ☐ Only English ☐
N/A ☐

21. When I'm at school, with my friends I speak…
Only Spanish ☐ Mostly Spanish ☐ Both Equally ☐ Mostly English ☐ Only English ☐

22. When I'm at work, with co-workers, I speak…
Only Spanish ☐ Mostly Spanish ☐ Both Equally ☐ Mostly English ☐ Only English ☐
N/A ☐

23. Before college, how many classes/years in Spanish had you taken up through high school? _____

Explain (if applicable):
_____

24. How many Spanish classes have you taken in college? _____
Please list the course number and title:
_____
_____
_____
_____
_____
_____
_____

_____
_____
_____
_____
_____
_____

Thank you! ***¡Muchísimas gracias!*** ***Muitíssimo obrigado!***

APPENDIX D - LANGUAGE LEARNING PERCEPTIONS QUESTIONNAIRE

Class Title and Section:
_____

Name: _____
Age: _____
Major: _____
Minor: _____

Questions related to your knowledge of Spanish…

1. On a scale of 1 to 5, **overall** how much does your knowledge of Spanish help or confuse you with learning Portuguese?

1	2	3	4	5
It really confuses me	It makes it somewhat confusing	It neither confuses me nor helps me	It helps me a little bit	It greatly helps me

2. On a scale of 1 to 5, how much has your knowledge of Spanish helped or confused you when **listening** to Portuguese?

1	2	3	4	5
It really confuses me	It makes it somewhat confusing	It neither confuses me nor helps me	It helps me a little bit	It greatly helps me

3. On a scale of 1 to 5, how much has your knowledge of Spanish helped or confused you when **reading** Portuguese?

1	2	3	4	5
It really confuses me	It makes it somewhat confusing	It neither confuses me nor helps me	It helps me a little bit	It greatly helps me

4. On a scale of 1 to 5, how much has your knowledge of Spanish helped or confused you in learning **vocabulary** in Portuguese?

1	2	3	4	5
It really confuses me	It makes it somewhat confusing	It neither confuses me nor helps me	It helps me a little bit	It greatly helps me

5. On a scale of 1 to 5, how much has your knowledge of Spanish helped or confused you **speaking/pronouncing** in Portuguese?

1	2	3	4	5
It really confuses me	It makes it somewhat confusing	It neither confuses me nor helps me	It helps me a little bit	It greatly helps me

6. On a scale of 1 to 5, how much has your knowledge of Spanish helped or confused you **writing** in Portuguese?

1	2	3	4	5
It really confuses me	It makes it somewhat confusing	It neither confuses me nor helps me	It helps me a little bit	It greatly helps me

7. On a scale of 1 to 5, how much has your knowledge of Spanish helped or confused you in **learning Portuguese grammar**?

1	2	3	4	5
It really confuses me	It makes it somewhat confusing	It neither confuses me nor helps me	It helps me a little bit	It greatly helps me

8. In your own words, what aspects of the Portuguese language are **easiest** for you because you are a Spanish speaker? Please give some specific details.

9. In your own words, what aspects of the Portuguese language are **most confusing** for you because you are a Spanish speaker? Please give some specific details.

_____
_____
_____
_____

Questions related to your knowledge of English…

10. On a scale of 1 to 5, **overall** how much does your knowledge of *English* help or confuse you with learning Portuguese?

1	2	3	4	5
It really confuses me	It makes it somewhat confusing	It neither confuses me nor helps me	It helps me a little bit	It greatly helps me

11. On a scale of 1 to 5, how much has your knowledge of *English* helped or confused you when **listening** to Portuguese?

1	2	3	4	5
It really confuses me	It makes it somewhat confusing	It neither confuses me nor helps me	It helps me a little bit	It greatly helps me

12. On a scale of 1 to 5, how much has your knowledge of *English* helped or confused you when **reading** Portuguese?

1	2	3	4	5
It really confuses me	It makes it somewhat confusing	It neither confuses me nor helps me	It helps me a little bit	It greatly helps me

13. On a scale of 1 to 5, how much has your knowledge of *English* helped or confused you in **learning words** in Portuguese?

1	2	3	4	5
It really confuses me	It makes it somewhat confusing	It neither confuses me nor helps me	It helps me a little bit	It greatly helps me

14. On a scale of 1 to 5, how much has your knowledge of *English* helped or confused you **speaking/pronouncing** in Portuguese?

1	2	3	4	5
It really confuses me	It makes it somewhat confusing	It neither confuses me nor helps me	It helps me a little bit	It greatly helps me

15. On a scale of 1 to 5, how much has your knowledge of *English* helped or confused you **writing** in Portuguese?

1	2	3	4	5
It really confuses me	It makes it somewhat confusing	It neither confuses me nor helps me	It helps me a little bit	It greatly helps me

16. On a scale of 1 to 5, how much has your knowledge of *English* helped or confused you in **learning Portuguese grammar**?

1	2	3	4	5
It really confuses me	It makes it somewhat confusing	It neither confuses me nor helps me	It helps me a little bit	It greatly helps me

17. In your own words, what aspects of the Portuguese language are **easiest** for you because you are an English speaker? Please give some specific details.

18. In your own words, what aspects of the Portuguese language are **most confusing** for you because you are an English speaker? Please give some specific details.

Final thoughts…

19. One of the methods this course uses is to compare Portuguese to Spanish. Is this helpful for you?

1	2	3	4	5
It really confuses me	It makes it somewhat confusing	It neither confuses me nor helps me	It helps me a little bit	It greatly helps me

Could you please comment on why you answered the way you did and give at least two specific examples/reasons why?

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

20. In this course we assume that you have knowledge of Spanish grammar rules. When those grammar rules were similar to Portuguese, we usually do not go into as much depth as on those areas where the two languages differ. How do you feel about this?

1	2	3	4	5
The course **assumes way too much** knowledge of Spanish grammar rules	The course **assumes a little too much** knowledge of Spanish grammar rules	The course is just right in this regard	The course spends **a little too much time** reviewing grammar rules that were just like Spanish	The course spends **way too much time** reviewing grammar rules that were just like Spanish

Could you please comment on why you answered the way you did and give at least two specific examples/reasons why?

_____
_____
_____
_____
_____
_____
_____
_____
_____

_____
_____

21. If you could give some suggestions to a teacher on how they could facilitate your learning of Portuguese, what would you suggest?

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

Muitíssimo obrigado! ***Thank you!*** ***¡Muchísimas gracias!***

APPENDIX E - SPANISH SENTENCE COMPLETION TASK

(Modified slightly from Montrul & Perpiñán, 2011)

Instrucciones. Escriba la forma correcta del verbo en paréntesis

Doctor Raúl:

Ud. sabe que yo (1)_____(consumir) más de diez cigarrillos al día. Ud. sabe que (2)_____(fumar) lo mismo ahora que hace quince años. Y por eso no creo que mi mala salud hoy (3)_____(ser) una consecuencia del tabaco. ¿Qué (4)_____(creer) Ud.?

Cuando me levanto por las mañanas, yo (5)_____(toser) sin parar durante una hora. ¿Es posible que (6)_____(tener) tos porque por las mañanas siempre hace más frío? Mi segundo síntoma: cuando (7)_____(subir) las escaleras de mi casa, (8)_____(agitarse) muchísimo. Es posible que yo (9)_____(cansarme) simplemente porque ya soy viejo? En tercer lugar, últimamente no (10)_____(tener) mucha hambre. Mi esposa quiere que yo (11)_____(comer) todo el tiempo; y a ella le molesta que yo no (12)_____(alimentarse) bien. Supongo que no (13) _____ (tener) apetito porque (14)_____(fumar) demasiado.

Me preocupa que mis pulmones no (15)_____(estar) en buenas condiciones y que me (16)_____(costar) respirar. Ya sé que no (17)_____(ser) una persona atlética y saludable. Pero me gustaría cambiar. Entiendo que es importante que (18)_____(dejar) de fumar, que (19)_____(empezar) a comer más saludable y que (20)_____(hacer) más ejercicio físico. Necesito hacer algo para mejorar mi salud.

Muchas gracias de antemano.

Carlos González

APPENDIX F - PORTUGUESE SENTENCE COMPLETION TASK

Nome: _____

Instruções: Escreva a forma correta do verbo entre parêntesis

Eu (1) (*ter*) _____ um amigo que (2) (*gostar*) _____ de me dar conselhos e sugestões. Eu sempre lhe (3) (*dizer*) _____ que eu (4) (*ser*) _____ adulto e que eu (5) *(poder*) _____ fazer minhas próprias decisões, mas mesmo assim, ele (6) (*querer*) _____ que eu (7) (*fazer*) _____ tudo que ele diz. Eu (8) (achar) _____ que vou lhe pedir que (9) (*parar*) _____ de se meter na minha vida e que (10) (*respeitar*) _____as minhas decisões. No entanto, eu (11) (*duvidar*) _____ que (12) (*dar*) _____ resultado. Ele diz que só me (13) (*aconselhar*) _____ para que eu (14) (*ter*) _____ sucesso e (15) (*ser*) _____ feliz. Eu realmente quero que ele (16) (*compreender*) _____ que às vezes é importante deixar que uma pessoa (17) (*tomar*) _____ suas próprias decisões, mas parece que ele não (18) (*entender*) _____. Talvez eu (19) (*ter*) _____que ser bem duro com ele. Oxalá que ele não me (20) (*levar*) _____ a mal!

APPENDIX G – SPANISH P/GJ TASK

Volitional

A. Mis padres desean que yo estudie mucho.
B. Mis padres desean que yo estudia mucho.

A. El patrón insiste en que yo esté disponible este fin de semana.
B. El patrón insiste en que yo estoy disponible este fin de semana.

A. Prefiero que me dices la verdad.
B. Prefiero que me digas la verdad.

A. Tu mamá manda que haces el trabajo antes de jugar.
B. Tu mamá manda que hagas el trabajo antes de jugar.

A. Juan quiere que usted le da un regalo para su cumpleaños.
B. Juan quiere que usted le dé un regalo para su cumpleaños.

A Ella quiere que su novio le pida la mano en matrimonio.
B. Ella quiere que su novio le pide la mano en matrimonio.

A. Los dueños piden que quitamos los zapatos al entrar en la casa.
B. Los dueños piden que quitemos los zapatos al entrar en la casa.

A. Mis abuelos siempre quieren que los visitemos en su casa.
B. Mis abuelos siempre quieren que los visitamos en su casa.

A. María y Marta esperan que sus amigos no se olviden de buscarlas.
B. María y Marta esperan que sus amigos no se olvidan de buscarlas.

A. Solo pido que Uds. me dicen la verdad.
B. Solo pido que Uds. me digan la verdad.

Adverbial/Purpose Clause

A. Dame las cartas para que yo las pueda enviar.
B. Dame las cartas para que yo las puedo enviar.

A. No van a empezar hasta que yo vengo.
B. No van a empezar hasta que yo venga.

A. No te puedo ayudar a menos que me dejes saber qué pasa.
B. No te puedo ayudar a menos que me dejas saber qué pasa.

A. Puedes entrar con tal de que les muestres tus credenciales
B. Puedes entrar con tal de que les muestras tus credenciales.

A. No voy a decir nada sin que él me lo diga primero.
B. No voy a decir nada sin que él me lo dice primero.

A. Tenemos que tener todo preparado en caso de que viene el jefe.
B. Tenemos que tener todo preparado en caso de que venga el jefe.

A. Por favor, no salgan antes de que lleguemos.
B. Por favor, no salgan antes de que llegamos.

A. Tan pronto como terminamos, vamos a llamarles por teléfono.
B. Tan pronto como terminemos, vamos a llamarles por teléfono.

A. Vamos a preparar todo para la fiesta sin que ella se da cuenta.
B. Vamos a preparar todo para la fiesta sin que ella se de cuenta.

A. Les digo esto para que saben la verdad.
B. Les digo esto para que sepan la verdad.

Comment/Emotion

A. Mi mamá tiene miedo que yo no consiga un buen trabajo.
B. Mi mamá tiene miedo que yo no consigo un buen trabajo.

A. Mis padres están tristes que no las puedo visitar este año.
B. Mis padres están tristes que no las pueda visitar este año.

A. ¡Estoy muy emocionada que estás aquí!
B. ¡Estoy muy emocionada que estés aquí!

A. Lamento que no puedas venir.
B. Lamento que no puedes venir.

A. Juan se alegra de que Marta esté bien después del accidente.
B. Juan se alegra de que Marta está bien después del accidente.

A. ¡Que bien que tu hijo te respeta.
B. ¡Que bien que tu hijo te respete.

A. Se extrañan que no hablemos alemán.
B. Se extrañan que no hablamos alemán.

A. A la profesora le gusta que hacemos la tarea antes de venir a la clase.
B. A la profesora le gusta que hagamos la tarea antes de venir a la clase.

A. ¡No puedo creer que no te gusten las zanahorias!
B. ¡No puedo creer que no te gustan las zanahorias!

A. Los organizadores de la fiesta tienen miedo que muchos no vengan.
B. Los organizadores de la fiesta tienen miedo que muchos no vienen.

Doubt/Uncertainty/Question

A. María duda que yo conozco a Kobe Bryant.
B. María duda que yo conozca a Kobe Bryant.

A. Es posible que yo tenga problemas en el futuro.
B. Es posible que yo tengo problemas en el futuro.

A. No sé si sabes todo lo que alegas saber.
B. No sé si sepas todo lo que alegas saber.

A. No sé si me quieras tanto como me dices.
B. No sé si me quieres tanto como me dices.

A. No estoy seguro de que el trabajo resulta como quiero.
B. No estoy seguro de que el trabajo resulte como quiero.

A. Yo dudo que un nuevo presidente resuelva todos los problemas.
B. Yo dudo que un nuevo presidente resuelve todos los problemas.

A. ¿Cree Ud. que seamos los únicos que pueden resolver la situación?
B. ¿Cree Ud. que somos los únicos que pueden resolver la situación?

A. Es dudoso que recibamos todo lo que pedimos.
B. Es dudoso que recibimos todo lo que pedimos.

A. No es evidente que ellos son los culpables.
B. No es evidente ellos sean los culpables.

A. No es cierto que los políticos siempre dicen la verdad.
B. No es cierto que los políticos siempre digan la verdad.

Relative/Adjective Clauses

A. Manuel está buscando un hotel que no es caro.
B. Manuel está buscando un hotel que no sea caro.

A. Ellos quieren un abogado que tiene experiencia.
B. Ellos quieren un abogado que tenga experiencia.

A. Quiero comprar un libro que tenga una tapa azul.
B. Quiero comprar un libro que tiene una tapa azul.

A. ¿Hay alguien en el mundo que lo sepa todo?
B. ¿Hay alguien en el mundo que lo sabe todo?

A. Busco libros que contienen información acerca de la economía.
B. Busco libros que contengan información acerca de la economía.

A. ¿Existen restaurantes que sirvan comida mexicana en Chile?
B. ¿Existen restaurantes que sirven comida mexicana en Chile?

A. ¿Hay un tipo de coche que sirva para todos?
B. ¿Hay un tipo de coche que sirve para todos?

A. Queremos alquilar una casa que sea del estilo español.
B. Queremos alquilar una casa que es del estilo español.

A. Quiero vivir en un apartamento que está cerca de la ciudad.
B. Quiero vivir en un apartamento que esté cerca de la ciudad.

A. ¿Hay alguien aquí que habla francés?
B. ¿Hay alguien aquí que hable francés?

APPENDIX H - PORTUGUESE P/GJ TASK

Volitional

A. Meus pais desejam que eu trabalha muito.
B. Meus pais desejam que eu trabalhe muito.

A. Meu patrão insiste que eu estou disponível este fim de semana.
B. Meu patrão insiste que eu esteja disponível este fim de semana.

A. Eu prefiro que você me diga o que realmente quer.
B. Eu prefiro que você me diz o que realmente quer.

A. Sua mãe exige que você faz a tarefa antes de sair.
B. Sua mãe exige que você faça a tarefa antes de sair.

A. João quer que Joana lhe dê um presente.
B. João quer que Joana lhe dá um presente.

A. Ela quer que seu namorado peça a mão dela em casamento.
B. Ela quer que seu namorado pede a mão dela em casamento.

A. Os donos pedem que tiremos os sapatos antes de entrar na casa.
B. Os donos pedem que tiramos os sapatos antes de entrar na casa.

A. Meus avós sempre querem que nós almoçamos com eles nos domingos.
B. Meus avós sempre querem que nós almocemos com eles nos domingos.

A. Renata e Joana esperam que suas amigas não se esqueçam de vir à festa.
B. Renata e Joana esperam que suas amigas não se esquecem de vir à festa.

A. Só peço que vocês me digam a verdade.
B. Só peço que vocês me dizem a verdade.

Adverbial/Purpose Clause

A. Pode me dar o pacote para que eu possa enviá-lo?
B. Pode me dar o pacote para que eu posso enviá-lo?

A. Eles vão participar do evento contanto que eu estou lá também.
B. Eles vão participar do evento contanto que eu esteja lá também.

A. Não te posso ajudar a menos que você me deixa saber o que se passa.
B. Não te posso ajudar a menos que você me deixe saber o que se passa.

A. Você pode vir desde que tem permissão.
B. Você pode vir desde que tenha permissão.

A. Não posso falar nada a menos que ela me dê permissão.
B. Não posso falar nada a menos que ela me dá permissão.

A. Temos que preparar tudo caso venha o chefe.
B. Temos que preparar tudo caso vem o chefe.

A. Por favor, não saiam antes que chegamos.
B. Por favor, não saiam antes que cheguemos.

A. Ele sempre nos dá dinheiro para que lhe compremos algo para comer.
B. Ele sempre nos dá dinheiro para que lhe compramos algo para comer.

A. Vai ser impossível fazer tudo para a festa de surpresa sem que elas vejam.
B. Vai ser impossível fazer tudo para a festa de surpresa sem que elas veem.

A. Só digo isto para que sabem a verdade.
B. Só digo isto para que saibam a verdade.

Comment/Emotion

A. Minha mãe tem medo de que eu não consiga um bom trabalho.
B. Minha mãe tem medo de que eu não consigo um bom trabalho.

A. Meus amigos estão tristes que eu não possa ir com eles.
B. Meus amigos estão tristes que eu não posso ir com eles.

A. Que bom que você não tem que trabalhar o fim de semana!
B. Que bom que você não tenha que trabalhar o fim de semana!

A. Estou muito feliz que você está aqui comigo.
B. Estou muito feliz que você esteja aqui comigo.

A. Miguel fica feliz que a Paula esteja bem depois do acidente.
B. Miguel fica feliz que a Paula está bem depois do acidente.

A. Que pena que custa tanto, realmente queria comprá-lo!
B. Que pena que custe tanto, realmente queria comprá-lo!

A. Eles sentem muito que não possamos vê-los durante sua viagem.
B. Eles sentem muito que não podemos vê-los durante sua viagem.

A. Eles acham estranho que não sabemos falar espanhol.
B. Eles acham estranho que não saibamos falar espanhol.

A. Lamento que elas não podem vir.
B. Lamento que elas não possam vir.

A. Os organizadores da festa têm medo de que muitos não venham.
B. Os organizadores da festa têm medo de que muitos não vêm.

Doubt/Uncertainty/Question

A. Joana duvida que eu conheça a Christina Aguilera.
B. Joana duvida que eu conheço a Christina Aguilera.

A. É possível que eu saiba mais que ele.
B. É possível que eu sei mais que ele.

A. Não creio que você sabe tudo que diz saber.
B. Não creio que você saiba tudo que diz saber.

A. Não sei se você me quer tanto como fala.
B. Não sei se você me queira tanto como fala.

A. Não estou seguro de que a entrevista resulte em uma oferta de trabalho.
B. Não estou seguro de que a entrevista resulta em uma oferta de trabalho.

A. Os investidores duvidam que o novo chefe afeta muito a rentabilidade da companhia.
B. Os investidores duvidam que o novo chefe afete muito a rentabilidade da companhia.

A. Não acredito que sejamos os únicos principiantes aqui.
B. Não acredito que somos os únicos principiantes aqui.

A. É duvidoso que tenhamos tempo suficiente para chegar na hora.
B. É duvidoso que temos tempo suficiente para chegar na hora.

A. Muitas pessoas duvidam que os manifestantes têm razão.
B. Muitas pessoas duvidam que os manifestantes tenham razão.

A. Não é certo que os políticos sempre dizem a verdade.
B. Não é certo que os políticos sempre digam a verdade.

Relative/Adjective Clauses

A. Miguel está à procura dum carro que não custe muito.
B. Miguel está à procura dum carro que não custa muito.

A. Elas buscam um advogado que tenha experiência com isso.
B. Elas buscam um advogado que tem experiência com isso.

A. Quero comprar um livro que tem muitos desenhos.
B. Quero comprar um livro que tenha muitos desenhos.

A. Tem alguém no mundo que sabe tudo?
B. Tem alguém no mundo que saiba tudo?

A. Esta loja tem muitos livros que contêm informação sobre a economia?
B. Esta loja tem muitos livros que contenham informação sobre a economia?

A. Queremos comer num restaurante que serve comida brasileira.
B. Queremos comer num restaurante que sirva comida brasileira.

A. Quero encontrar uma namorada que me ame por quem sou.
B. Quero encontrar uma namorada que me ama por quem sou.

A. Queremos alugar uma casa que fique perto do parque
B. Queremos alugar uma casa que fica perto do parque.

A. Busco uma pessoa que sabe restaurar carros antigos.
B. Busco uma pessoa que saiba restaurar carros antigos.

A. Tem alguém aqui que fale francês?
B. Tem alguém aqui que fala francês?

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