Perfect Timing: Acquisition of the Spanish Present Perfect in a Francophone Context

by

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A thesis submitted in conformity with the requirements for the degree of Doctor of Philosophy
Department of Spanish and Portuguese
University of Toronto

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Abstract

This thesis explores the possible role of cognate (similar) morphological forms and semantics in a model of cross-linguistic influence in bilingual language acquisition. Much of the previous research on the question of what counts as similarity and overlap in different languages, as a condition on language influence, has focused on syntactic structures (e.g., Hulk & Müller, 2000; Strik & Pérez-Leroux, 2011; Unsworth, 2003; Yip & Matthews, 2000, 2007, 2009). Verbal morphemes and their corresponding semantics, however, have not been investigated before as conditions on language influence. Some of the work on this area has examined the role of shared semantic features related to Tense in bilingual children growing up in a language contact situation in Quechua and Spanish (e.g., Sánchez, 2004). Morphological similarity, however, has not been explicitly tested as to whether it determines language influence. This dissertation investigates whether cognate morphological forms and semantics (i.e., semantic features) are determinants of language influence, and whether quantitative and/or qualitative differences between monolingual and bilingual children occur.

I present an experimental study that tests the grammatical knowledge of Spanish tense-aspect-mood and copula selection in Spanish heritage children growing up in a Canadian Francophone context. Four semantic contrasts are tested (e.g., Preterite/Present Perfect,
Preterite/Imperfect, Subjunctive/Indicative, and *ser/estar*), all of which have shown sensitivity to bilingual effects such as language transfer, incomplete acquisition, and attrition. Such effects have been attested in studies on child and adult Spanish heritage language acquisition (e.g., Cuza, 2008, 2010; Cuza & Miller, 2015; Miller & Cuza, 2013; Montrul, 2002b; Montrul & Slabakova, 2002, 2003; Silva-Corvalán, 1994, 2003). In order to examine the subtle, yet important, differences between the Spanish and French tense-aspect-mood systems, a contrastive analysis as in Cowper’s (2005) feature geometry analysis for features of Inflection is adopted.

Results from a receptive vocabulary and a sentence imitation task show that while monolingual children outperform heritage children, the latter also show growth and development despite prolonged contact with French. This trend is also confirmed in the contextualized preference-based elicitation task, the main task chosen for this study. Language influence from French to Spanish occurs in heritage children, specifically overextension of certain verbal forms and feature reassembly, but no effect of form similarity (i.e., a cognate boost) is found.
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Chapter 1: Introduction

1.1. Purpose of study

English and French are the official languages of Canada and heritage languages, such as aboriginal and immigrant minority languages, are also widely spoken from coast to coast to coast. Heritage languages are the ancestral languages of bilingual speakers immersed in a majority language environment. In language contact situations, bilingual children grow up with reduced and fluctuating exposure (input) in the heritage language, which can result in insufficient development. This is called heritage language acquisition. Heritage learners are often proficient bilingual speakers who develop a unique linguistic knowledge in the heritage language with varying degrees of success because of dynamic input conditions. Their language environment is shaped by variable social and familial conditions. For example, due to early and reduced exposure to the heritage language at home, plus early and increased exposure to the majority language at home, school or in the community, the heritage language can become the weaker of the two (Benmamoun, Montrul, & Polinsky, 2010). Heritage children have knowledge of and intuitions about their first language; however, this differs from monolingual children. For instance, Spanish heritage children have been shown to say things such as (1) to (3).

(1) CHI: voy en niños schools y en los niños schools me pegan
     go.PRES.1SG in boys schools and in the boys schools me hit.PRES.3PL
     y luego yo les pego pa(ra) (a)trás.
     and after I them hit.PRES.1SG for back
     “I go to a boys’ school and at the boys’ school they hit me and I hit them back.”
     (Silva-Corvalán CHILDES corpus, MacWhinney, 2000)
(2) CHI: y mi mami me está dando *todo [todas] las medicinas and my mommy me is.PRES.3SG give.PROG all the medicines cuando yo tengo tos. when I have cough “and my mommy is giving me all of the medicines when I have a cough.” (Silva-Corvalán CHILDES corpus, MacWhinney, 2000)

(3) CHI: cuando llegues a mi casa quiero que me *dices [digan] when arrive.SUBJ.2SG at my house want.PRES.1SG that me say.PRES.2SG

hello.

hello
“When you arrive at my house I want you to say hello to me.”

(Silva-Corvalán CHILDES corpus, MacWhinney, 2000)

The language-mixed utterance about school in (1) illustrates an English noun-noun word order modification. In (2), there is a mismatch in number and gender agreement between the adjective todo (“all”) and the noun las medicinas (“medicine”), while (3) highlights the illicit use of the Present Indicative in an embedded clause under the verb of volition querer (“want”) for which the Present Subjunctive is obligatory in Spanish. Effects of bilingualism are specific and systematic, and reflect properties of the grammars in contact. For example, bilingual effects may include: (i) differences in rates of production; (ii) cross-linguistic language influence; and, (iii) transfer. (Yip & Matthews, 2007) have attributed these effects to sub-set/super-set relationship: bilingual effects > language influence > transfer. In this study I ask how similarity of verbal forms and meanings can determine language influence in the grammars of bilingual children.

The heritage children in this study belong to a Spanish-speaking population of approximately 11,325 (8.1% of population) in the officially bilingual (English-French) National Capital Region of Ottawa-Gatineau (Census Canada, 2011). In Ottawa-Gatineau, Spanish as a heritage or immigrant minority language is second to Arabic (e.g., 28,665 speakers, 20.4% of population) (Census Canada, 2011). The Spanish heritage children studied here are bilingual school-aged children who have generally acquired Spanish (i.e., their heritage or first language)
from birth at home and, French (i.e., their second first language and the socially dominant language) at home, day care or school before 3;0 to 4;0 years of age. They use Spanish productively in their daily interactions. Since they live in a Francophone context they are constantly confronted with and able to make room for new variants in either language. The bilingual grammars of Spanish-French children are different from the bilingual grammars of Spanish-English and even Spanish monolinguals’, but all are possible grammars. Rather than adopt the Minimalist Program per se, within the general framework of generative grammar I assume that natural languages are constrained by universal principles. Heritage languages are similarly constrained. In fact, I assume as in recent work (Flores, 2014; Rothman & Treffers-Daller, 2014) that heritage language development is an instance of first language (L1) development, but that the developmental trajectory differs from monolingual children. Bilingual grammars, like first language grammars, are dynamic and flexible systems.

While bilingual children can differentiate their languages (e.g., De Houwer, 1990; Meisel, 1989, 2007), their grammars still show signs of interaction of the two languages throughout development (Müller, 2003; Paradis & Genesee, 1996), as inferred in (1) to (3). This interaction is known as cross-linguistic influence and, because of this influence, bilingual children’s grammars are more variable than monolingual children’s’ (Flores, 2014). Language influence can alter the developmental timetable of a bilingual child’s two languages. For example, bilingual children often acquire a given linguistic construction on the same schedule as monolingual children; however, they can also show acceleration/delay and/or bilingual effects such as language transfer, incomplete language acquisition or attrition. They might also have smaller vocabularies than monolingual children. The process of language influence, however, seems to be selective and does not affect all areas of the grammar equally (Meisel, 1989). It has been shown in the structuralist tradition (Weinreich, 1968), for example, that language influence
primarily affects meaning; the uses and meanings of existing forms can shift their semantic space, rather than introduce new forms. There is evidence for this in heritage children, for example, in the Spanish Preterite/Imperfect past tense contrast, as in (4) and (5) from Miller & Cuza (2013).

(4) a. Ayer, Dora tuvo cita con el dentista. episodic

yesterday Dora have.PRET.3SG appointment with the dentist

“Yesterday, Dora had an appointment with the dentist (but no longer has an appointment).”

b. Ayer, Dora tenía cita con el dentista.

yesterday Dora have.IMP.3SG appointment with the dentist

“Yesterday, Dora had an appointment with the dentist (and may still have an appointment).”

(Miller & Cuza, 2013:125)

(5) a. De pequeña, Dora siempre caminaba a la escuela. characterizing

of child Dora always walk.IMP.3SG to the school

“As a child, Dora always walked to school (and may still walk to school).”

b. De pequeña, Dora siempre caminó a la escuela.

of child Dora always walk.PRET.3SG to the school

“As a child, Dora always walked to school (but no longer walks to school).”

(Miller & Cuza, 2013:125)

Given the two contrasting verbal forms in (4) and (5), these contexts are said to be optional, or interpretable, since both the Preterite and Imperfect are possible: there is no difference in grammaticality, but there is a difference in meaning. For example, in each context the verbal forms in the (a) sentences achieve the desired interpretation (episodic or characterizing), whereas the verbal forms in the (b) sentences reflect what Spanish heritage children actually do when presented with such contexts. For example, in (4b) they overextend the Imperfect to characterizing situations in the past for which the Preterite is expected, and in (5b) they overextend the Preterite to episodic situations that require the Imperfect. Spanish monolingual children living in a Spanish monolingual environment generally match these tenses to the correct contexts and meanings. Bilingual development can therefore exhibit quantitative differences
(e.g., Hulk & Müller, 2000; Meisel, 2007) such as higher or lower rates of production which lead to a change in the use, meaning, extension and frequency of a given form, as in (4) and (5). Qualitative differences, such as the introduction of new or different structures (e.g., Strik & Pérez-Leroux, 2011), are also possible. In contrast to Meisel (2007), it is assumed here that both quantitative and qualitative differences signal a change in the bilingual child’s underlying representation of language.

This study examines the possibility of quantitative and qualitative differences by considering the role of overlap in language influence for bilingual grammars. Overlap is defined here as two languages sharing similar verbal morphemes and meanings (i.e., semantic features). Most of the work addressing the question of what counts as overlap in different languages, as a condition on language influence, has focused on syntactic structures, including: direct object drop (Hulk & Müller, 2000; Yip & Matthews, 2000), root infinitives (Hulk & Müller, 2000; Unsworth, 2003), wh-questions (Strik & Pérez-Leroux, 2011; Yip & Matthews, 2000, 2007, 2009), and prenominal relative clauses (Yip & Matthews, 2000). I instead explore new dimensions of a model of language influence by focusing on verbal morphemes (e.g., –ó, the 3rd-person singular morpheme of the Spanish Preterite) and their corresponding meanings (e.g., a completed past event as in Ayer comiò tres helados/“Yesterday s/he ate three ice creams”). Some of the work on this area has in fact examined the role of shared semantic features related to Tense in bilingual children growing up in Quechua and Spanish (e.g., Sánchez, 2004), yet morphological similarity has not been explicitly tested as to whether it determines language influence. Research from the lexical literature has shown that cognate words, that is translation equivalents and nouns that have form overlap in the two languages (e.g., libro in Spanish and livre in French; Buch in German and book in English), impact how bilinguals process their language (e.g., Costa, La Heij, & Navarette, 2006; Finkbeiner, Gollan, & Caramazza, 2006;
Kroll, Bobb, & Wodniecka, 2006; Kroll, Sumutka, & Schwartz, 2005). Cognate status also plays a role in lexical transfer in bilingual children (e.g., Pearson et al., 1995; Quay, 1995; Schelletter, 2002, 2005). However, few studies have investigated cognate status in grammar, specifically cognate verbal forms and meanings from the domain of tense-aspect-mood. In Sánchez (2004), for example, it was shown that cognate status can apply to the functional elements of grammar, such as partially overlapping semantic features related to Tense (e.g., evidentiality and background features) in closely related languages. Features (phonological, formal, semantic) are the minimal units that form the lexical items of every language, and the differences between languages result from the differences among features Lardiere (2009). Tense-aspect-mood is an interesting domain in the study of bilingual children because it involves morphology, syntax, semantics, and modality.

In order to explore cognate verbal forms and meanings as a condition of language influence in bilingual grammars, it would be crucial to find a case in the grammar in which two languages share cognate forms. What is interesting about Spanish and French is that they are congruent enough morphologically and semantically to invite the bilingual child to select cognate verbal forms and/or meanings. For example in (6), the Spanish Present Perfect and the French Passé Composé share similar morphology in that they both consist of an auxiliary (e.g., haber/avoir ‘have’) in the Present plus the Past Participle of the main verb, as in (6a) and (6b) respectively. These Perfect forms also exhibit semantic similarity since they both express a past event or situation that is anterior to a reference point that coincides with the present moment. In addition, in modern spoken French the Passé Composé replaces the Passé Simple and can therefore express a completed past event or situation that is anterior to the present moment. This second meaning aligns semantically with the Spanish Preterite, as in (6c). In Spanish,
particularly Latin American varieties, use of the Preterite is obligatory required with past-oriented adverbials such as *ayer* ("yesterday").

(6) **Spanish Present Perfect**
    a. Mafalda ha ganado tres veces (*ayer*).
    Mafalda has.PRES.3SG win.PP three times
    “Mafalda has won three times.”

**French Passé Composé**
    b. Mafalda a gagné trois fois (hier).
    Mafalda has.PRES.3SG win.PP three times
    “Mafalda has won/won three times.”

**Spanish Preterite**
    c. Mafalda ganó tres veces (ayer).
    Mafalda win.PRET.3SG three times
    “Mafalda won three times.”

Partially shared morphological forms and meanings, as in (6), allow us to study mainstream treatments of language influence in child bilingual grammars such as Hulk and Müller (2000). I test Spanish heritage children’s knowledge of verbal forms in the domains of tense-aspect-mood and ‘be’ copula in Spanish as they grow up in a Francophone context. Four specific meaning contrasts are examined: Preterite/Present Perfect, Preterite/Imperfect, Indicative/Subjunctive, and the ‘be’ copulas *ser/estar*. These contrasts have shown evidence of the effects of bilingualism such as language influence, protracted development, incomplete acquisition and language loss in studies on Spanish heritage language acquisition in child (e.g., (Cuza & Miller, 2015; Miller & Cuza, 2013; Silva-Corvalán, 2003) and adult (Cuza, 2008; Montrul, 2002; Montrul & Slabakova, 2002, 2003; Silva-Corvalán, 1994) populations. A contrastive analysis such as a feature geometry analysis for Inflection for tense-aspect-mood (e.g., Cowper, 2005) is implemented to explore the acquisition of morpho-semantics in heritage children. In doing so assumptions from the distributed morphology framework (e.g., Halle & Marantz, 1993) are adopted, which formalizes Saussure’s (1916) observation that meaning depends on contrast. Following the Minimalist model (Chomsky, 2000, 2001) and distributed morphology, it is assumed here that
syntax manipulates the universal set of features from which languages draw their inflectional features, properties, and lexical items. As a result, language acquisition and language variation must occur either before or after syntax. The operation before syntax involves the lexicon in which space lexical items are bundled and then enter into syntactic computation, while the operation after syntax refers to the post-syntactic insertion of vocabulary items, which produce certain tense forms. The goal of this study is to therefore ask:

(i) Is there an effect of bilingualism, that is, language influence in the acquisition of verbal forms in the domains of tense-aspect-mood and copula selection in bilingual children?
   a. If so, does language influence only occur when two forms that are in semantic contrast in one language show morphological and/or semantic similarity with a form in the other language, leading to ambiguity?

(ii) Does the type of context such as obligatorily or interpretable also play a role in language influence? If so, what is the effect of these contexts in the acquisition of verbal forms in bilingual children?

(iii) Do we find quantitative and/or qualitative differences between bilingual and monolingual children?

(iv) Does length of exposure to the community language matter in language influence in younger and older bilingual children?

With these questions in mind, it is hypothesized that cognate verbal forms and meanings are a condition on language influence, and that bilingual children exhibit quantitative and qualitative differences with respect to monolinguals. A contextualized preference-based elicitation task in Spanish was designed for this study to find out whether heritage children’s Spanish exhibits influence from French.
The structure of this thesis is as follows. In Chapter 2, the literature on child heritage language acquisition is presented. I then discuss cross-linguistic influence with a focus on studies that have addressed the notion of morphological similarity. Chapter 2 also explores heritage language acquisition of tense-aspect-mood in Spanish, a domain that has consistently shown evidence of effects of bilingualism, primarily cross-linguistic influence (e.g., semantic extension), incomplete acquisition, and attrition. The chapter concludes with an overview of first language acquisition of the Spanish Present Perfect, the phenomenon of principal interest. In Chapter 3, the essence of the Spanish Present Perfect is discussed. I assume elements from various approaches in order to examine the denotation (e.g., Bello, 1847; Rojo & Veiga, 1999), time span (e.g., Iatridou, 2003; Iatridou, Anagnostopoulou, & Pancheva, 2003) and the types of uses of this compound form. Chapter 3 also discusses variation within Spanish and across Romance varieties with a particular focus on French. Chapter 4 presents the case of Spanish and French in contact and examines the possibility of semantic feature reassembly (i.e., the organization of semantic feature representation) with respect to four meaning contrasts in Spanish: Preterite/Present Perfect, Preterite/Imperfect, Subjunctive/Indicative, and copulas *ser/estar*. The chapter concludes with the study’s research questions, hypotheses, and predictions. In Chapter 5, I present the research methodology including the participants, as well as the instruments (e.g., language questionnaires), tasks (e.g., receptive vocabulary, sentence imitation and contextualized preference-based elicitation tasks), and the procedures that were used. This chapter also presents the results of the study. Finally, in chapter 6, I summarize and discuss the findings of this study and future lines of research. The test materials are attached as appendices.
Chapter 2: Heritage Language Acquisition

2.1. **Introduction**

This chapter has four main goals. First, it discusses the general patterns and outcomes of child bilingual language acquisition with a special emphasis on heritage language development. Second, it explores the question of selectivity in cross-linguistic influence and compares Hulk and Müller’s (2000) model for cross-linguistic influence with other studies that have also treated surface overlap. Third, it presents what is known about the acquisition of cognates more generally, and where they happen in the lexicon. Fourth, it discusses why tense-aspect-mood is interesting for bilingual children, specifically heritage children, and then presents what it is that heritage children need to know in order to acquire the Spanish Present Perfect. I am particularly interested in finding out whether cognate morphological forms and/or semantics play a role in a model of cross-linguistic influence for bilingual grammars.

2.2. **Heritage Children**

2.2.1. **General patterns and outcomes in heritage language development**

Heritage children grow up in all different kinds of family configurations. For instance, one or both parents may speak the heritage language at home, and children may also receive community support in the heritage language through local cultural organizations, churches, and Saturday schools. Exposure to the heritage language is therefore highly variable and factors such as family configuration, community support, and schooling in the majority language affect timing in heritage language development. This means that heritage children can be one of two types of bilinguals: simultaneous or sequential. Simultaneous language acquisition refers to bilingual children who undergo early and systematic exposure to two or more languages from birth to approximately 3;0 to 4;0 years of age (Meisel, 2008), whereas sequential (also known as
successive, consecutive, child L2) bilingual acquisition refers to children who acquire one language from birth and then a second language after age 3;0 to 4;0 (Hulk & Cornips, 2006; Meisel, 2010; Paradis & Genesee, 1996). Second language (L2) acquisition takes place when children and adults start learning their L2 after age 8;0 (Meisel, 2010). Like other typically developing children, heritage learners are exposed to their first or home language from early on in life and receive input in this language throughout childhood (Benmamoun et al., 2010). What is strikingly different about heritage learners from L2 learners, however, is that they acquire their first language under reduced input conditions, which has been shown to have implications in adulthood. Though the heritage language is usually acquired with some success and maintained for a number of years, it is not (always) used continuously or completely acquired. This is because exposure to and use of the heritage language are generally limited to the home environment. Differences in language histories and the age-of-onset of acquisition, i.e., the age at which time the child begins to acquire her first and second languages, may lead to different acquisition outcomes.

One domain that exhibits different outcomes for heritage speakers and other types of bilinguals is the Preterite/Imperfect past tense contrast in Spanish. For instance, heritage children use the Preterite in contexts that favour the Imperfect such De pequeña, Dora siempre caminó a la escuela (“As a little girl, Dora always walked-PRET to school”) and the Imperfect in contexts that favour the Preterite Ayer, Dora tenía cita con el dentista (“Yesterday, Dora had-IMP a dentist appointment”) (Miller & Cuza, 2013:125). In fact, in a study on tense and aspect distinctions in Spanish in adult heritage speakers, Montrul (2002) attributed the non-native grammars of adults to incomplete acquisition who had acquired Spanish and English simultaneously as children, and attrition to early and late L2 learners of Spanish. Incomplete acquisition occurs when heritage speakers fail to acquire a certain construction or property such
as the Preterite/Imperfect tense contrast in Spanish (see Cuza, Pérez-Tattam, Barajas, Miller, & Sadowski, 2013; Montrul, 2002). Attrition, on the other hand, occurs when younger heritage children are more accurate than older children such as the case of the Spanish Present Subjunctive as attested in both heritage children and adults (see Merino, 1983; Montrul, 2009; Silva-Corvalán, 1994, 2003).

In the earliest stages of heritage language acquisition a dramatic change in the amount of input of the heritage language occurs. This means that the child’s almost exclusive use of the heritage language shifts to that of the socially dominant community language at day care or school, a shift that takes place prior to ultimate attainment of the heritage language. As a result the heritage learner generally becomes more comfortable in the community language as her exposure to it increases. Heritage children can therefore exhibit varying degrees of linguistic competence in each of their two languages. For example, while some heritage children exhibit only receptive (hearing) competence in their heritage language (see Au, Knightly, Jun, & Oh, 2002; Sherkina-Lieber, 2011), others might be more balanced in each of their languages. Though early input in the heritage language is ideal for complete language acquisition in adulthood, so too is the amount and quality of input in the heritage language (Benmamoun et al., 2010). Heritage learners are therefore a linguistically heterogeneous population. Social and familial conditions affect the quantity and quality of input they receive in the heritage language, which in turn affect the activation of certain functional features and the acquisition of tense-aspect-mood, for example.

Cross-linguistic research has shown that incomplete acquisition (e.g., Montrul, 2002), L1 attrition (e.g., Cuza, 2008, 2010; Montrul, 2002), contact variety acquisition (Rothman, 2007), and the reassembly of functional features related to Tense (e.g., Cuza & Pérez-Tattam, 2015; Putnam & Sánchez, 2013; Sánchez, 2004), can influence heritage language acquisition in
children and adults. Some of the explanations that have been offered to account for these processes include age effects, quality versus quantity of input, structural compatibility/complexity, the transfer of elements from one language to the other, and language experience. Recent work by Putnam & Sánchez (2013) has challenged the notion of incomplete acquisition, and how heritage grammars and heritage acquisition look. They argue that less input may not necessarily explain all that is going on with the learner and that the learner’s linguistic representation should also be considered. Their model of the dis/association of functional, semantic, and phonological features (representations) focuses on the access and activation of functional features rather than on broad notions of input. This model draws on insights from studies on L2 acquisition as in Sánchez (2004) and Lardiere (2005), which have shown that functional features from one language can be mapped onto lexical items in the other language regardless of the L2 input.

2.3. Cross-linguistic influence

2.3.1. Internal and external mechanisms for cross-linguistic influence

Three decades ago, when studies on simultaneous bilingual children showed evidence of cross-linguistic influence (the influence of one language over the other), it was widely held that children passed through different stages in their language development, as argued in Volterra & Taeschner’s (1978) Unitary Language Hypothesis. Crucially, the Unitary Language Hypothesis predicted that bilingual grammars were a unified or “fused” system, one that included elements from both languages. Though the Unitary Language Hypothesis motivated much of the foundational research on child bilingual acquisition, the last 30 years of research have shown a radical shift and have presented arguments that instead support language autonomy. For example, under the autonomous development hypothesis it is argued that simultaneous bilingual children separate their two languages from early on and acquire them independently from one
another throughout development (De Houwer, 1990; Genesee, 1989; Meisel, 1986, 2007; Paradis, 2001; Paradis & Genesee, 1996). Evidence in support of language differentiation is found in early language production (e.g., De Houwer, 1990; Deuchar & Quay, 2000; Köppe, 1996; Paradis & Genesee, 1996), and in the early perception of phonological contrasts (e.g., Paradis, 2001). However, the two languages may influence one another throughout development (see Müller, 2003; Paradis & Genesee, 1996). This interaction is known as cross-linguistic influence. As a result of cross-linguistic influence bilingual grammars are often found to be more variable than monolingual grammars.

By assuming language autonomy in bilingual children, I also assume new mechanisms for cross-linguistic influence. However, cross-linguistic influence is selective and does not affect all speakers or domains equally. An important question to ask is what exactly are the mechanisms that allow cross-linguistic influence? Many studies have shown that cross-linguistic influence is constrained by language-internal, as well as language-external factors. One of the leading goals in the field today is to determine under which circumstances (i.e., in which grammatical domains and under which conditions of language exposure) cross-linguistic influence occurs (see also Strik & Pérez-Leroux, 2011).

Previous studies on syntax have identified three main language-internal factors for cross-linguistic influence. First, cross-linguistic influence can occur because of syntactic ambiguity or partial overlap on the surface structure (see Döpke, 1998; Hulk & Müller, 2000; Müller, 1998, 2003; Müller & Hulk, 2001). For example, syntactic ambiguity can arise if language B exhibits only one possible construction/analysis for a given phenomenon (e.g., adjectives follow the noun) and language A has two possible constructions/analyses for the same phenomenon, one that is shared by both languages (e.g., adjectives precede OR follow the noun). This configuration predicts influence from language B to A.
Second, it appears that cross-linguistic influence is constrained by domain-specific vulnerabilities, particularly when a phenomenon is located at the interface between two modules of grammar such as syntax and pragmatics (e.g., Hulk & Müller, 2000; Müller & Hulk, 2001; Paradis & Navarro, 2003; Serratrice & Sorace, 2003) or syntax and semantics (e.g., Montrul & Ionin, 2010; Serratrice, Sorace, Filiaci, & Baldo, 2011). In fact, Hulk & Müller’s (2000) proposed model predicts syntactic cross-linguistic influence from language B to A in bilingual children when partial overlap AND interface conditions are jointly met. This means that:

(i) both languages exhibit surface structure overlap leading to structural ambiguity, i.e., if language A exhibits one or more “analyses” for a given construction, and language B contains evidence for one of these two analyses, as in (7).

(7) Language A Language B
    X     ←     X
    Y

and;

(ii) the “interface” between two modules of grammar, particularly syntax and pragmatics, is involved.

Platzack (2001) argued that elements in the Complementizer Phrase (CP) domain, i.e., the structural “interface” between sentential and discourse grammar, are vulnerable to cross-linguistic influence in bilingual language acquisition. Some researchers, however, have questioned whether cross-linguistic influence is restricted to the syntax-pragmatics interface and argue that vulnerability instead be defined in language processing terms such as language activation and inhibition or syntactic priming (see Bohnacker, 2007; Meisel, 2007; Pérez-Leroux, Cuza, & Thomas, 2011; Serratrice, Sorace, Filiaci, & Baldo, 2009).

Third, it has been shown that cross-linguistic influence is constrained by syntactic complexity (e.g., Jakubowicz, 2005; Jakubowicz & Strik, 2008; Strik & Pérez-Leroux, 2011).
Under this view, cross-linguistic influence can ensue when the syntactic derivation in language A is more complex than the equivalent structure in language B. This model thus predicts influence from language B to A. The general assumption for all three factors is that cross-linguistic influence is unidirectional and dependent on a certain language pairing.

In contrast to language-internal conditions many studies have argued that language-external conditions, including language dominance (i.e., the influence of the stronger/community language over the weaker/minority one), amount and quality of input, and the relative frequency of a given structure in the input, are also determinants of cross-linguistic influence in bilingual grammars (see Döpke, 1998; Gathercole & Thomas, 2009; Kupisch, 2007; Meisel, 2007; Paradis, 2011; Unsworth, 2014; Yip & Matthews, 2000, 2007). Some studies maintain that language dominance alone cannot explain all instances of cross-linguistic influence (e.g., Müller, 1998; Nicoladis, 2002, 2006), while others have argued that language dominance and cross-linguistic influence are not related. For instance, Cantone, Müller, Schmitz, & Kupisch (2008) found that cross-linguistic influence also occurs in balanced bilingual children and from the weaker to the stronger language.

### 2.3.2 Alterations in the timetable of bilingual development

Research has shown that cross-linguistic influence may alter the developmental timetable of the two languages of bilingual children. In comparison to monolingual development these alterations can result in:

(i) acceleration/delay (i.e., changes or differences in rates of development with respect to L1 development) (see Berardini & Schlyter, 2004; Gawlitzek-Maiwald & Tracy, 1996; Kupisch, 2007), as well as developmentally-related grammatical
omissions (i.e., protracted rates of omission) (e.g. direct object pronouns as in Pirvulescu, Pérez-Leroux, Roberge, Strik, & Thomas, 2014).

The following bilingual effects can also transpire:

(i) transfer (i.e., the introduction of structures or patterns of one language into the other) (e.g., Cuza, Pérez-Leroux, & Sánchez, 2013; Döpke, 1998; Pérez-Leroux et al., 2011; Strik & Pérez-Leroux, 2011; Yip & Matthews, 2000, 2007, 2009).

(ii) a plateau in language growth leading to the incomplete acquisition of a certain construction or property (see Cuza, Pérez-Leroux, et al., 2013; Montrul, 2002; Montrul & Sánchez-Walker, 2013).

(iii) rapid acquisition of the socially-dominant language and decreased use of the home language leading to language loss of previously acquired properties in the first language (Cuza et al., 2013; Merino, 1983; Montrul, 2002).

For some researchers cross-linguistic influence can only exhibit quantitative differences, i.e., higher or lower rates in production of a given phenomenon (see Hulk & Müller, 2000; Kupisch, 2007; Meisel, 2007, 2009, 2010), while others have shown that cross-linguistic influence can also exhibit qualitative differences, i.e., the introduction of new or different structures or patterns (e.g., wh-in-situ questions in Dutch under French influence, see Strik & Pérez-Leroux, 2011).

Meisel (2007) has argued that what looks like qualitative differences stems from processing effects and not representational ones. In this study it is assumed that cross-linguistic influence can include both quantitative and qualitative differences, and that these differences stem from an underlying change in representation. Semantic extensions are counted here as quantitative differences since they affect the frequency for which a given form is used, changing the underlying representation.
2.3.3. **Selectivity and structural compatibility**

Cross-linguistic influence is fundamental to the bilingual experience and can be realized uni- or bi-directionally. For example, where external factors such as input are concerned, Müller (2003) found that elements from the weaker language were influenced by the stronger language, and vice versa. Yet, cross-linguistic influence is also a highly selective process: not everything that can transfer transfers. Though there is little consensus about how to treat transfer, the general assumption is that transfer affects different points of development and is a formally selective process with respect to properties, parameters and the degree of structural compatibility between the two languages (Zobl, 1980). As far as internal factors are considered, let us recall that Hulk and Müller’s (2000) model predicts that syntactic cross-linguistic influence can only occur when the two necessary conditions are jointly met: 1) partial surface structure overlap between the two languages and, 2) the affected property lies at the syntax-pragmatics interface.

To illustrate, in their longitudinal study Hulk and Müller examined the domain of object drop (omission) in Dutch-French and German-Italian bilingual children (German: *Ik heef gevondeen/*“I have [that] found”, *Hein* 2;6, from Müller & Hulk, 1999 and Müller, Hulk, & Jakubowicz (1999). According to the authors object drop satisfied both conditions in Germanic (object-drop) and Romance (non-object drop) and a delay was thus reported for this domain in bilingual children. In the same study Hulk and Müller also examined root infinitives (RIs). This is a stage when children’s early clausal utterances optionally contain a finite or non-finite verb, such as in Dutch (*Pop ete/*“Puppet eat”, *Anouk, 2;4.9*). In contrast to object drop, it was found that RIs only satisfied the second condition (i.e. the interface condition) and thus showed no evidence of cross-linguistic influence in bilingual children.

In related work, Müller and Hulk (2001) compared results from longitudinal studies on the acquisition of object-drop in bilingual (Dutch-French, German-French and German-Italian)
and monolingual children. Like in their previous study the authors predicted that cross-linguistic influence in bilingual grammars is favourable, and also unidirectional, when the above-mentioned conditions are both met. They reported that Germanic influences Romance and that the difference between monolingual and bilingual acquisition was quantitative rather than qualitative. The authors suggested that bilingual children have difficulty mapping universal strategies onto language-specific rules (i.e., pragmatic onto syntactic). Although in both studies the authors’ predictions are supported in the data, there are some problems with Hulk and Müller’s influential model for transfer. This model does not exclude quantitative differences in a principled way. Moreover, the notion of overlap is not well defined and it is therefore not clear what overlap involves.

Keeping in mind the notion of overlap, are qualitative differences possible in a model for cross-linguistic influence? Using original longitudinal data from a bilingual German-English child and her monolingual peers, Unsworth (2003) explored this possibility with RIs. She tested Hulk and Müller’s (2000) original proposal and extended their model so as to include RI referential properties such as predicate type (eventive versus non-eventive) and future/modal reference, none of which were examined in Hulk and Müller’s study. Unsworth predicted cross-linguistic influence on the basis of their model, but found no evidence of qualitative or quantitative cross-linguistic influence. Unsworth’s findings for this particular bilingual child are consistent with what other studies have reported for monolingual children (see Hoekstra & Hyams, 1998; Wijnen, 1997). What Unsworth challenges in Hulk and Müller’s study is their notion of overlap, the predictive power of their proposal, and whether their proposal can be extended to different domains and language pairings.

To further explore the question of how Hulk and Müller’s proposal could be extended to different domains and languages, the notion of overlap must be discussed. Yip and Matthews
(2009), for example, have contributed to this theory by reformulating Hulk and Müller’s proposal to find out whether overlap occurs at the word order (surface strings) level or at a more abstract level. They investigated \textit{wh}-movement and \textit{wh}-in-situ in information and echo questions in Cantonese-, Japanese-, and Korean-English bilingual children. All four languages have different word orders: Cantonese and English are SVO languages; Japanese and Korean are SOV. English allows \textit{wh}-movement, and \textit{wh}-in-situ in echo questions only. Neither Cantonese, Japanese nor Korean permits \textit{wh}-movement, however, \textit{wh}-in-situ structures are allowed in all three languages for information and echo questions. Given the common thread between the Asian languages, it was proposed that surface overlap at the level of parameter resetting predicts transfer of the single \textit{wh}-in-situ option from all three languages to English. If, however, overlap occurs at the word order level, then transfer from Cantonese to English is predicted. Overall, evidence of \textit{wh}-in-situ transfer from Cantonese to English was attested and, as a result, the authors conclude that surface overlap at the word order level is a condition on transfer.

Finally, Strik and Pérez-Leroux (2011) have also suggested that Hulk and Müller’s notion of structural overlap be refined in order to clearly explain at which level(s) overlap applies (e.g., surface strings, constituent structure, prosodically compatible structures, lexical association, to both congruent categories and features or to one and not the other, etc.) and what the consequences of overlap should be in bilingual grammars, as Unsworth (2003) has also asked. In their elicited production study, Strik and Pérez-Leroux considered the role of cross-linguistic influence in the domain of \textit{wh}-movement and subject-verb inversion in school-aged Dutch-French simultaneous bilingual children (5;0- and 7;0-year-olds). Dutch and French are typologically different languages. In contrast to Hulk & Müller’s (2000) partial surface structure overlap approach to transfer, Strik and Pérez-Leroux predicted transfer from the language with more structural options (French) to the language with one interrogative option (Dutch) based on
the derivational complexity approach. The derivational approach as in Strik & Pérez-Leroux (2011) refers to the introduction of novel surface structures—such as *wh*-in-situ—when they arise from steps in a derivation. Under this assumption, Strik and Pérez-Leroux define complexity in terms of internal merge (i.e., move) steps taken before spell-out. They argue that “*wh*-in-situ, as the initial step of any *wh*-movement derivation, is less complex and can therefore be introduced by transfer” (2011:11). Overall, they reported that the majority of children’s responses consisted of target-like *wh*-fronted questions with subject-verb inversion; however, they also found two qualitatively different structures as a result of transfer from French. These structures included *wh*-in-situ questions and *wh*-fronted questions without inversion. They argued that a complexity-based theory of transfer provides a better account for the presence of such qualitatively different structures than the partial surface structure overlap approach. In sum, given the above-mentioned studies, it appears that overlap is a sufficient but not necessary factor for transfer in bilingual grammars. Yet the notion of overlap requires further elucidation. Could overlap also include cognate morphological structures and their meanings as a condition of language influence? In morphologically related languages such as Spanish and French, for example, does cognate status satisfy the criteria of overlap? In order to investigate this issue, it might be interesting to find a construction in the grammar that allows morphological overlap such as the Spanish and French Present Perfects (e.g., *he corrido*/*I have run*, *j’ai coulu*/*I have run, I ran*), and which also exhibit semantic feature similarity.

### 2.3.4. Insights from studies on languages in contact

Models of cross-linguistic influence based on partial surface structure overlap or derivational complexity have not considered the possible role of cognate morphological structures. The structuralist tradition on the study of languages in contact, however, has shown that structural compatibility plays a key role in transfer (Weinreich, 1968). In fact, the notion of
structural compatibility in this tradition predates Hulk & Müller’s (2000) model. In the structuralist tradition cross-linguistic influence primarily affects the uses and meanings (signified) of forms, which shift their semantic extension, rather than introduce new forms (signifiers) (Weinreich, 1968). Three types of transfer effects have been identified in phonology and morpho-syntax which include (Weinreich, 1968):

(i) neutralization;
(ii) reduction or extension; and,
(iii) reinterpretation of features (or distinctions).

Given languages A and B in contact (including language acquisition contexts), neutralization is the reduction/loss/substitution of a contrast in language A to one of its two terms, due to transfer from language B, which lacks the contrast in language A. For example, English possesses the phonemic distinction /n/ and /ŋ/ as in sin and sing and there are no restrictions on the occurrence of these nasals in final position (-n#, -nj#). Spanish, in contrast, does not exhibit this minimal pair and only possesses /n/ (-n#). It has been shown that Spanish speakers in a language contact situation with English have difficulty pronouncing and identifying this nasal contrast in English due to influence from Spanish, and thus neutralize the distinction to /n/ in final position (Lehiste, 1988:5). Reduction or extension arises when the range of applicability of a given form, meaning or sound in language B becomes more narrow or broad on the model of A. For instance, reduction (or underdifferentiation) can occur when language B (i.e., Spanish), which has gender distinctions, is used by a speaker of language A (i.e., English), which does not have such distinction. It is widely known, for example, that L1 speakers of English have difficulties mastering gender distinctions in languages such as Spanish and French and reduce these distinctions based on the English model. An example of extension (or overdifferentiation) is when phonemic distinctions from language A (English) are imposed on the sounds of language B
(Spanish), i.e. when allophones of Spanish are treated as phonemes because they are phonemes in English. For instance, both Spanish and English have the sounds [d] and [ð]. In English they are distinct phonemes, yet in Spanish they are allophones of a single phoneme, which surfaces as [ð] in intervocalic position (Madrid), and as [d] in initial position (disco/“disc”) and in word-medical clusters after [n] (mundo/“world”). Speakers of English therefore associate the two Spanish sounds with the English phonemes /d/ and /ð/ and may therefore have difficulty perceiving them as allophones of one phoneme (Lehiste, 1988:5). Finally, (iii) reinterpretation of features (or distinctions) can occur when features in language B are partially shared with concomitant features in A and thus reinterpreted in B on the model of A. For example, an L1 English speaker acquiring L2 Spanish interprets the Spanish vowel features of quality and duration as primary and secondary based on that of English (language A); however, vowel duration is not important in Spanish (language B) in terms of the system as it only matters for stress.

When focusing on the effects of lexical transfer, the following categories are applied to phonology and morpho-syntax (Weinreich, 1968:47-50):

(i) transfer of form (signifier) such as the outright transfer of a phonemic sequence (word) from A to B. Examples from Mexican Spanish include enchilada, taco, tortilla which have no equivalents in English (Lehiste, 1988:24).

(ii) transfer of meaning (signified) only (i.e. semantic shift of elements from B based on the content of form-similar elements in A). For example, in Colorado Spanish, ministro (“cabinet official”) now also includes the meaning of a Protestant clergyman based on the English model minister (Lehiste, 1988:20); and,
(iii) transfer of both form (signifier) and meaning (signified) from A to B as in the case of compound lexical items, also known as relexification. For example, the English adjective-noun compound conscientious objectors has become objetores conscientes in Florida Spanish (see Ortoz, 1949).

With respect to the third type of lexical transfer, transfer can affect both the signifier and signified and lead to semantic extensions, i.e., when learners shift the range of a given form’s semantic function.

More recently, the functionalist view of Weinreich’s proposal also introduces the notion of overlap. For example, Silva-Corvalán (1994) has proposed that in a language contact situation the presence of superficially parallel structures (i.e., string order) is what is required for transfer to affect certain areas of language. In contrast to Hulk and Müller’s (2000) proposal, Silva-Corvalán (1994) claims through a functionalist lens that “[…] what is borrowed across languages is not syntax, but lexicon and pragmatics” (Silva-Corvalán, 1998:226).¹ One of her main observations concerns evidence of syntactic calques (transfer of meaning to Spanish from already existing lexical items in English) such as Los Angeles Spanish Es un modo de tener un buen tiempo for general Spanish Es un modo de pasar un buen momento/pasarlo bien on the English model “It’s one way to have a good time” (D39,f28,3,ELA42, Silva-Corvalán, 1994:174). Her second observation is that of a pragmatic shift/extension of an existing given structure such as subject expression and word order in Los Angeles Spanish Yo llegué a las 4 y luego ellos llegaron for the preferred Spanish post-verbal word order in Yo llegué a las 4 y luego llegaron ellos on the obligatory English pre-verbal subject-verb order model “I arrived at 4

¹ Depending, of course, on the theoretical framework, some would argue that Silva-Corvalán is hiding syntax in the lexicon and, thus, syntax is actually involved. It is assumed here, under a
o’clock and then they arrived”. In her analysis of a corpus of Spanish heritage adults from Los Angeles, she observes that “patterns of tense expansion appear to be as regular as patterns of loss” (1994:39), particularly in speakers who were born in the United States or who emigrated from Mexico before age 6. In Weinreich’s terms, this equates to extension/reduction of a given form or function, as well as the neutralization (loss) of certain contrasts/distinctions.

Silva-Corvalán (1994) showed that the Spanish heritage speakers extended the Spanish Present Indicative to contexts that generally favour the Present Subjunctive, as in (8) and (9).

(8) Present Indicative for Present Subjunctive
I hope que no me toca [toque] la misma problema. 
I hope.PRES.1SG that no me touch.PRES.1SG the same problem
“I hope I don’t run into the same problem.”

(D39, f28, 3, ELA42, Silva-Corvalán, 1994:42)

(9) Present Indicative for Present Subjunctive
Yo estoy encargado en, en el taller. Nomás cuidando que
I be.PRES.1SG in charge of.PP in in the shop. Just looking after that

salen [salgan] los trabajos en tiempo.
leave.PRES.3PL the jobs in time
“I’m in charge of, of the shop. Just supervising to make sure that the jobs are done on time.”

(H48, m39, 3, ELA23, Silva-Corvalán, 1994:43)

It appears that in production the overextended use of the Spanish Present Indicative to Present Subjunctive contexts due to contact with the English Present Indicative leads to a loss in the use of Subjunctive morphology. However, in order to see whether heritage speakers have lost this contrast it would be necessary to know what they know (i.e., do they have this contrast in their grammars?), and not only what they say.

Silva-Corvalán’s (1994) data also points to alterations in tense use. For example, heritage speakers use the Imperfect in Preterite-favouring contexts (10), and the Preterite in Imperfect-favouring contexts (11). Interestingly, heritage speakers have the right contrast with the verb ser.
(10)  
**Imperfect for Preterite**  
Yo fui el único hijo que tenían [tuvieron].  
I be.PRET.1SG the only son they have.IMP.3PL  
“I was the only son they had.”  

(A29, m60, 2, ELA2, Silva-Corvalán, 1994:44)

(11)  
**Preterite for Imperfect**  
En la casa mi mamá era la única que habló [hablaban] español, y las demás hablan [hablaban] en inglés.  
At home my mom be.IMP.3SG the only that speak.PRET.3SG Spanish and the rest speak.PRET.3SG in English  
“At home-my mom was the only one who spoke Spanish, and the others spoke only English.”  

(D36, m45, 3, ELA43, Silva-Corvalán, 1994:44)

The examples in (10) and (11) suggest neutralization of the Preterite/Imperfect contrast in that both forms are used interchangeably due to contact with English.

Her data also shows an alteration for a different and less common temporal contrast, i.e. the Present Perfect/Preterite distinction. In some lower proficiency bilinguals Silva-Corvalán found that the Present Indicative substituted the compound Present Perfect, as in (12) in which the verb *estar* appears in the Present tense instead of the Present Perfect that Silva-Corvalán expected. She also observed that the Preterite extended to contexts in which the Present Perfect was expected, as in (13).

(12)  
**Present Indicative for Present Perfect**  
Esta fue la primera casa que compramos. Estamos como fifteen years aquí.  
This be.PRET.3SG the first house that buy.PRET.1PL be.PRES.1SG like fifteen years here  
“This was the first house we bought. We’ve been here for about fifteen years.”  

(R50, m46, 3, ELA36, Silva-Corvalán, 1994:43)
Si un castizo se casa otra vez con un español, ya nomás lo llaman español, ya se limpió.

"If a “castizo” in turn marries a Spaniard, then they call him Spanish, because his blood has gotten clean.”

(D36,m45,3,ELA43, Silva-Corvalán, 1994:43)

These examples suggest a possible reduced use of the Spanish Present Perfect. However, it could also be argued that Silva-Corvalán’s expected uses of the Present Perfect in (12) and (13) are actually analyzed on the basis of the English Present Perfect. For example, (12) could be a calque from English since in Spanish the Present Indicative is generally used (i.e., Hace cince años que vivimos aquí/“It’s been fifteen years that we live-PRES here”), while in (13) the Preterite is felicitous in Spanish. In any case, due to prolonged contact with English, both the Spanish Present Indicative and Preterite become competitors for the Present Perfect, and Spanish heritage speakers overextend these forms to Present Perfect-favouring contexts. This seems to signal an overextension of form and a potential loss of morphemes and semantic features.

Silva-Corvalán concluded that semantically related forms in the Spanish tense-aspect-mood system replaced simplified and lost forms. More precisely, it appears that simplification means loss of (semantic) features (i.e., realignment of features in Weinreich’s terms), while loss of forms refers to the loss of morphemes with respect to certain contrasts (i.e., neutralization following Weinreich). She attributed these patterns to variable input, which is part of the

2 For Silva-Corvalán, the example in (13) illustrates a clear Present Perfect use of the past with present relevance; however, she also states that (13) is felicitous with the Preterite because of the adverbial modifier ya (“already”). In Mexican Spanish ya generally combines with the Preterite, so (13) cannot be properly considered an overextension of the Preterite when in fact this form appears more frequently with ya in Mexican Spanish, as shown in recent variationist studies (Howe, 2013; Schwenter & Torres Cacoullos, 2008).
linguistic life of a heritage speaker, and to the simplification of forms and features. Putnam & Sánchez (2013) argue that the simplification process argued for in Silva-Corvalán (1994, 2000) is similar to the reduced feature matrices that they observed in their model for heritage grammars. Furthermore, they suggest that new associations may indicate that the value specification of one language is chosen for a given feature or constraint, instead of interrupted or incomplete acquisition as proposed in other frameworks (Putnam & Sánchez, 2013:21). For heritage speakers this means that fewer and/or different features are encoded/realized in the comparable L1 grammar. As such, heritage speakers might select a less specified default form with respect to semantic features, which may result in the semantic extension of a given form and/or feature reanalysis. This has been shown for shared semantic features related to Tense in Quechua and Spanish in bilingual children (see Sánchez, 2004).

2.3.5. Cognate status in bilingual lexical processing and lexical transfer in bilingual children

The lexical literature offers plenty of evidence on how cognate status and form similarity impact bilingual lexical processing and lexical transfer. For example, studies on lexical processing in bilinguals argue that lexical activation is a non-selective process; both lexicons remain active in speech production and word recognition (e.g., Costa et al., 2006; Finkbeiner et al., 2006; Kroll et al., 2006, 2005). These studies argue that when a bilingual speaker is presented with a picture of a book, or sees the word book, the lexical representations of both libro and livre, in the case of a Spanish-French bilingual, are activated because of their synonymy (see Peterson & Savoy, 1998). At the same time, synonymy makes it more difficult for the speaker to select the target word lexical node. Research on early lexical development in bilingual children is ripe with evidence of translation equivalents such as libro and livre which share similar sounds, orthography and/or meaning (see Pearson et al., 1995). Some studies have also shown evidence
of an effect of form similarity, i.e. accelerated reaction times in translation tasks for form-similar nouns and verbs (see Schelletter, 2002, 2005).

Cross-language lexical overlap in bilingual children was first identified by Pearson et al., (1995) and Quay (1995). Pearson et al. (1995), for instance, tested the empirical and theoretical claims of Volterra & Taeschner’s (1978) Unitary Language Hypothesis, as well as the applicability of Clark’s (1987) principle of contrast in bilingual children, both of which proposals predicted that bilingual children avoid translation equivalents in early lexical development. The authors examined early vocabulary development in the spontaneous speech of 27 Spanish-English bilingual children (aged 0;8 to 2;6) living in Miami. They found that overall approximately one-third of the children’s vocabularies consisted of translation equivalent pairs (i.e., Spanish/English words and phonetically distinct pairs appearing in both lexicons such as *doggie-perro, apple-manzana, bear-oso*). The remaining two-thirds of their vocabularies consisted of English and Spanish singlets. The percentage of translation equivalents in the bilingual children’s’ two lexicons was comparable to percentages of overlap derived from comparisons of Spanish and English monolingual children with similar-sized lexicons. In a bilingual case study of an infant acquiring Spanish and English from birth to 1;10, Quay (1995) asked what lexical resources make it possible for a bilingual child to choose between two languages, and whether translation equivalents in the bilingual lexicon are important for the interpretation of language choice. In a similar vein to Pearson et al.’s (1995) findings, she reported that almost half of the child’s vocabulary (42%) consisted of translation equivalent pairs. The authors reported that the bilingual children do not, therefore, provide support for the avoidance of translation equivalents. While a bilingual child’s vocabulary may be smaller in each of her two languages compared to that of a monolingual child, her overall vocabulary is larger because of the frequent activation and abundance of translation equivalents.
Building on Pearson et al.’s (1995) and Quay’s (1995) work on lexical redundancy, Schelletter (2002) investigated whether form similarity also plays a role in early lexical development in bilingual children. She examined the development of nouns in a longitudinal study of a young German-English bilingual child (aged 1;11-2;9), as well as the reaction times of school-aged German-English bilingual children (aged 8;0-9;0, grouped as fluent bilinguals or L2) and adults in picture-naming and translation tasks in a second study. In the longitudinal study, the influence of form similarity on nouns and their translation equivalents in each of the two languages was determined by three categories: identical, similar, and dissimilar. Overall, form-similar nouns (e.g., boat-Boot, apple-Apfel) comprised nearly 40% of all nouns types in the bilingual child’s two languages, and 30% of all tokens. In the German context, translation equivalents made up 33% of the child’s vocabulary, whereas in the English it was 54%. Translation equivalents were observed for both form-similar and form-dissimilar nouns; form similarity was reportedly linked to frequency of use (i.e., a higher proportion of tokens was observed in both English and German). In the second study, specifically in the picture-naming task, a slight effect of form similarity (i.e., accelerated reaction times for form-similar nouns versus slower reaction time for form-dissimilar nouns) was noted for both child groups and both language directions, particularly in German. No effect of form similarity was found for adults. In translation, an effect of form similarity was reported for all groups and language directions; however, reaction time differences were greater for English for all groups, particularly for the

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3 In Schelletter (2002), form-identical nouns shared the same phonological form in German and English and most consisted of anglicisms (e.g., teddy, baby). The criterion for form-similar nouns was that 50% or more of the phonemes that made up the noun and its translation equivalent are similar, but phonetically distinguishable (e.g., nose-Nase, bed-Bett). This meant that consonants shared at least two of: place or articulation, manner of articulation and voicing. Vowels differed minimally within the given vowel classification. Form dissimilar shared less than 50% of their phonemes with the translation equivalents (e.g., boy-Junge, head-Kopf).
less fluent children. In sum, form similarity was said to facilitate translation in all groups and also showed a slight effect in children’s picture naming. Schelletter also argued that form similarity affected the representations of both child and adult learners.

In later work, Schelletter (2005) asked if her previous findings could also extend to form-similar verbs, and to what extent children make use of strategies such as form similarity when available. She administered a longitudinal case study on the spontaneous speech of one German-English bilingual child (aged 1;11 to 2;8), as well as a reaction time study that employed a bilingual translation task with German-English bilingual school-aged children (7;0 to 10;0 years of age). In the longitudinal study it was found that form similarity as a strategy was more prevalent in the child’s English than German and that it affected noun acquisition more than verb acquisition. In the reaction time study, a strong effect of form similarity for nouns was reported for both groups in the translation task. Translation times for form-similar nouns were lower than that of non-similar nouns. This finding was in line with previous findings from studies of cognate strategies and dis/advantages in L2 adults (see Dufour et al., 1996; Kroll & de Groot, 1997; Kroll & Stewart, 1994; Talamas et al., 1999; van Hell & de Groot, 1998). In addition, an effect of directionality in the English-dominant bilingual child group was reported, as the children were slower at translating nouns into German than into English. With verbs, the German-dominant group showed no effect of form similarity, whereas the English-dominant group did. In sum, the reaction time study showed a strong effect of form similarity for nouns for both groups; however, the effect for verbs was weaker and only occurred in the English dominant group. Schelletter concluded that even though verbs share surface form similarity with respect to phonemes and orthography, the meaning of their translation equivalent was not always similar. The effect of form similarity for verbs was therefore less prevalent in bilingual children.
While the lexical literature shows evidence of the lexical co-activation of translation equivalents and of form similarity facilitating translation, no studies from the child bilingual literature have explicitly tested whether surface morphological similarity determines cross-language influence, and not just ease of translation. In this study I am interested in investigating whether cognate status satisfies the criteria of surface overlap in morphologically related languages that share overlapping semantic features. An important question to ask is whether cognate status impacts grammar and, more specifically, whether it affects the morpho-semantic representations of tense-aspect-mood.

2.3.6. Cross-linguistic influence in tense-aspect-mood in Spanish

The tense-aspect-mood system is an interesting area of inquiry in child bilingual acquisition, especially child heritage acquisition, because it involves the clause, morphology, syntax, semantics, and modality. Tense, for example, is deictic and a core grammatical category that “relates the time of the situation referred to some other time, usually to the moment of speaking” (Comrie, 1976:1-2). By contrast, aspect is defined as the “different ways of viewing the internal temporal consistency of the situation” (Comrie, 1976:3). Aspect refers to how an event or situation is viewed over time and is related to the notion of un/boundedness, also known as telicity. Mood is also a grammatical category, but it is different than tense and aspect in that is describes the actuality of the event in terms such as possibility, necessity or desirability (Chung & Timberlake, 1985). Tense-aspect-mood therefore presents issues of temporal ordering, aspectual considerations, and semantic interpretations. In addition, tense-aspect-mood has been frequently mentioned as a domain that is sensitive to bilingual effects. What is interesting about the study of heritage children is that their input is more complex and dynamic with respect to quality and quantity of input. Many researchers have said that tense-aspect-mood links to interface, but form similarity is better captured in a featural-based analysis. In tense-aspect-mood
learners are faced with the challenge of mapping verbal forms (tense and mood morphology) onto the correct meanings (semantics). Two important questions to consider in this domain are: (i) how are morpho-semantic properties/features acquired and represented, and (ii) how does semantic transfer work in tense-aspect-mood? One proposal on how features work comes from the literature on L2 acquisition as in Lardiere (2009). Though we are not talking about L2 here, Lardiere’s (2009) proposal for the L2 acquisition of plural marking in English, Mandarin Chinese and Korean is interesting and relevant nonetheless. In it, she assumes that functional categories such as Inflection are hierarchically ordered bundles of features or feature matrices that must be assembled for each language (Lardiere, 2009:182). Learners are therefore exposed to already-assembled (morpho)lexical items (i.e., vocabulary items in a distributed morphology framework) in the L1 input. These lexical items provide the building blocks from which learners eventually construct featural representations. The challenge for bilingual learners is to reconfigure features from the way they are represented in the L1 into new formal configurations on possibly different types of lexical items in the L2 (Lardiere, 2009:173). Drawing on insights from the Minimalist model (Chomsky, 2000, 2001), distributed morphology (Halle & Marantz, 1993) and L2 acquisition (Lardiere, 2009), it is assumed here that feature reassembly or feature organization can occur at the pre-lexical stage before computation or after spell-out in the morphology, and that these processes also applies to heritage learners. In other work, Montrul and Slabakova (2002) have proposed that in tense-aspect-mood L2 learners can:

(i) acquire new features;
(ii) learn new functional categories that are not already present in the L1;
(iii) learn that L1 features have different strengths or values in [2L1] or L2.

One of the greatest difficulties for the learner may be the transfer of representations with respect to how the same features are assembled into lexical items in the L1 (Lardiere, 2009:182). This is
not surprising since learners look for morpholexical correspondences (i.e., cognates, translation equivalents) in their L2 based on semantic meaning or grammatical function, an assumption on which the feature reassembly approach rests (Lardiere, 2009:191).

Most of the work addressing the question of what counts as overlap in different languages (as a condition on language influence) has been on structures rather than on influence on morphemes and their meanings. Some of the work on this area, however, has examined the role of shared semantic features such as Sánchez (2004), which is the most explicit account of how the same functional head can bundle different features in two different languages. In her study on child L2 acquisition, Sánchez reported feature reassembly in past tense forms that shared partial overlap between incompatible systems such as Quechua and Spanish in bilingual children (10-16 years-old, mean age=12;6) living in a language contact situation in Peru. In Quechua, past tense features are linked to evidentiality (i.e., related to the source of information), such as reportative (–sqa morpheme) versus witnessed (–rqa morpheme) interpretations, in the matrix of features associated with Tense, as in (14).

**Quechua**

(14) a. Manku Qhapaq-qa Titiqaqa qucha-manta-s
   Manku Qhapaq.TOP Titikaka Lake.ABLATIVE.EVID/VAL
   
   lluqsimu-sqa.
   emerge.PAST REPORT.3SG
   “Manku Qhapaq emerged from the Titicaca Lake.” (reportative)

   b. Huwan-mi Mariya-ta qhawa-rqa-n.
   Huwan.EVID Mariya.ACC see.PAST.3SG
   “Huwan saw Mariya.” (Sánchez, 2004:149)

In contrast, in Spanish past tense features are linked to (aspectual) features related to foregrounding (Preterite forms), backgrounding (Imperfect forms) or discourse values, such as
mirativity (i.e., new or unexpected information to the speaker used with Imperfect forms), as in (15).

**Spanish**

(15)  

a. Compré.  
\textit{buy.PRET.1SG}  
“I bought.”

b. Compraba.  
\textit{buy.IMP.1SG}  
“I bought/was buying/use to buy.”

c. Anda, ¡sabía nadar!  
\textit{how to swim.IMP.3SG}  
“Hey, s/he knew how to swim!”

(Sánchez, 2004):148-149)

Sánchez predicted that syntactic convergence would occur when functional features not present in one of the languages were activated by input and production in the other language. She therefore hypothesized that convergence would take place when the matrix of features associated with one functional category was partially similar between the two languages, such as Inflection as illustrated in (16).

(16) Feature matrices for Inflection in Quechua and Spanish (adapted from Sánchez, 2004:150).

<table>
<thead>
<tr>
<th>Quechua Infl</th>
<th>Spanish Infl</th>
</tr>
</thead>
<tbody>
<tr>
<td>[past]</td>
<td>[past]</td>
</tr>
<tr>
<td>[evidentiality]</td>
<td>[perfectivity]</td>
</tr>
<tr>
<td>[mirativity]</td>
<td>[background]</td>
</tr>
<tr>
<td>[mirativity]</td>
<td>[mirativity]</td>
</tr>
</tbody>
</table>

An elicited production story retell task in both languages confirmed evidence of convergence in the specification of background and evidentiality features in the shared functional category Inflection. This meant that in the Spanish narratives children increased their use of past tenses (i.e., Imperfect and Pluperfect forms) associated with evidentiality, and showed evidence of influence from Quechua. In the Quechua narratives, on the other hand, an emergence of
background/foreground distinctions was found, suggesting evidence of influence from Spanish. In both cases, both new features and the rebundling of already existing features were found. Sánchez’s study raises an important question about how the languages of a bilingual speaker interact and suggests that transfer can result in the redistribution and frequent activation of features that are not present in language A, but present in language B, as proposed by Weinreich (1968). This conclusion aligns with other feature-based proposals as in Lardiere (2009).

Studies on child heritage acquisition and L1 attrition in heritage adults have also shown that the Spanish Preterite/Imperfect contrast is vulnerable to transfer due to prolonged contact with English. For instance, Miller and Cuza (2013) conducted an elicited production study that tested aspectual interpretations of this contrast in three groups of Spanish heritage children based on their age at the time of testing (N=14, mean age=6;3 to 10;10), as well as parents (N=5), living in a contact situation with English in the United States. They asked whether children correctly produce Preterite and Imperfect forms in combination with certain predicate and situation types, whether the forms children produce are different from their parents’, and whether difficulties increase with age. Overall, Miller and Cuza found target production increased with age. To illustrate, younger children (age range=6;3 to 6;9) exhibited an overall accuracy rate of 46%, middle children (age range=7;5 to 8;7) improved to 54%, and older children (age range=9;1 to 10;10) were the most accurate at 69%. Parents achieved 89%. An interesting pattern emerges when each group’s target responses by tense are broken down. For example, younger children produced the Imperfect at 36% target production and the Preterite at 59%. Middle children sharply increased their target production of the Preterite (91%) but decreased in the Imperfect (26%). Older children’s use of the Preterite (79%) decreased, while their target use of the Imperfect rose to 63%. Parents were highly accurate with target morpheme production of both tenses. A closer look at children’s non-target responses shows that younger children
overextend the Present (41%) to describe past events that required the Imperfect in characterizing situations (*De niña, Dora vive en México/*“As a little girl, Dora lives-PRES in Mexico”). They also extended the Present (17%) to contexts that required the Preterite in episodic situations (*Ayer, Dora juega al baloncesto/*“Yesterday, Dora plays-PRES basketball”) (Miller & Cuza, 2013:125). Middle children’s non-target responses instead consisted of an overextended use of the Preterite (82%) in Imperfect-favouring habitual contexts (*De pequeña, Dora siempre caminó a la escuela/*“As a little girl, Dora always walked-PRET to school”) (Miller & Cuza, 2013:125). Older children’s errors were more evenly distributed; however, they showed difficulty with the use of the Preterite (using the Imperfect instead), and vice versa with the Imperfect (29%) in Preterite-favouring contexts for episodic situations (*Ayer, Dora tenía cita con el dentista/*“Yesterday, Dora had-IMP a dentist appointment”) (Miller & Cuza, 2013:125). In contrast to previous research, which has shown difficulties with certain combinations (e.g., stative predicates plus episodic interpretation and achievement predicates plus characterizing interpretation as in Silva-Corvalán, 2003), predicate type did not impact accuracy in older bilingual children. One of the major differences between the three groups was that younger children used the Present in place of the Preterite, while middle and older children used the Present in place of the Imperfect. These findings suggest that the two older groups have some knowledge of the meaning components of the Present and Imperfect tenses (i.e., that the Present expresses simultaneity with the moment of speech, while the Imperfect expresses simultaneity with some past reference, see Bello, 1847; Rojo & Veiga, 1999). Overall, it was found that younger heritage children overextended the Present to all past contexts, whereas older children overextended the Preterite to characterizing situations in which the Imperfect was felicitous. No increased difficulties with age were reported.
Similarly, research from studies on the L1 attrition of the Spanish aspectual interpretation of the Preterite/Imperfect contrast in adults has shown that semantic features of functional categories are affected by incomplete acquisition and that tense-aspect interpretations are vulnerable to bilingual effects across bilingual grammars (e.g., Cuza, 2008; Montrul, 2002). For instance, Montrul (2002) investigated whether age-of-onset of bilingualism had an effect on ultimate attainment in the acquisition of the Spanish Preterite/Imperfect distinction in production and interpretation in Spanish L1 adults living in English. Her data confirmed evidence found earlier by Silva-Corvalán (1994) that aspectual distinctions between Preterite/Imperfect forms among simultaneous bilinguals and late L2 child learners may be lost. Her data point to the incorrect use of change-of-meaning stative verbs (e.g., Conocía-IMP versus Conoci-PRET/“I knew” versus “I met”). These uses have also been attested in L2 Spanish/L1 English learners in Montrul and Slabakova (2002, 2003). In addition, Montrul found evidence of the alternation of Preterite forms for the Imperfect (Un lobo la vio y la perseguía (instead of persiguió)/“A wolf saw her”, (Montrul, 2002:50) and Imperfect forms for the Preterite (Cuando caminó por el bosque se encontró con el lobo (instead of caminaba)/“When (she) was walking in the forest, she met the wolf”, Montrul (2002:50). It was concluded that the late child L2 learners of Spanish, or the attrited group, mixed up morphological forms and had difficulties discriminating the meaning interpretations between Preterite and Imperfect tenses.

Using truth-value judgment, acceptability judgment and elicited production tasks, Cuza (2010) examined the possibility of attrition in the use and interpretation of the Spanish Preterite in L1 Spanish adults living in a long-term language contact situation with English in the United States. In particular, he examined episodic contexts with stative (María disfrutó muchísimo la cena con John/“Mary enjoyed-PRET the dinner with John very much”) and eventive (Juan construyó su casa en un año/“Juan built-PRET this house in a year”) verbs versus the use of the
Imperfect in characterizing contexts with stative (María parecía molesta esta mañana/“Mary seemed-IMP upset this morning”) and eventive (Juan siempre jugaba béisbol con sus amigos/“Juan always played-IMP baseball with his friends”) verbs. Results from both studies showed that while L2 speakers differed greatly from their L1 counterparts in that they accepted both the Preterite in characterizing contexts and the Imperfect in episodic contexts, long-time L1 Spanish immigrants overaccepted non-target uses and sometimes perform below the L2 group. Cuza’s findings point to an overall neutralization of the Preterite/Imperfect contrast whereby L1 speakers overextended the Preterite to characterizing situations and the Imperfect to eventive predicates in coercion contexts (i.e., special-meaning stative verbs that alternate between stative and eventive readings with the Preterite and Imperfect such as Conocí/Conocía “I met-PRET/I knew-IMP”). In addition, L2 learners exhibited difficulty with the use of the Imperfect with stative verbs in contexts requiring the Preterite. These same learners also avoided using the past tense in narrative contexts due to influence from English. In sum, in the acquisition of Preterite/Imperfect contrast bidirectional alternations across child bilingual and long-term L1 immigrant populations are common. As a result, these alternations can lead to bilingual effects such as cross-linguistic influence, specifically the reassembly of feature matrices associated with a shared functional category (e.g., Tense), overextension of semantically-related forms, and neutralization of the Preterite/Imperfect contrast.

With respect to other tense-aspect-mood contrasts in Spanish, Cuza (2010) reported evidence of attrition in the Present Indicative/Present Progressive contrast in long-term Spanish immigrants living in English in the United States. This was the case for the ongoing value of the Spanish Present Indicative (María juega al fútbol/“Maria plays-PRES soccer (right now)”) due to extended contact with the English Present Progressive. His study pointed to the transfer of English selectional properties of the Present Indicative [+state, -process], which leads to a
reduction in the range of aspectual selection of the Spanish Present Indicative. For instance, in elicited production, long-term Spanish immigrants showed lower levels of the use of the Spanish Present Indicative (María juega al fútbol “Maria plays-PRES soccer”), yet higher rates of the Spanish Present Progressive forms (María está jugando al fútbol “Maria is-PRES playing-PROG soccer (right now”). Group and individual results from all three tasks (i.e., acceptability judgment, truth-value judgment and elicited production) showed a reduced proportion of acceptance and use of the Present Indicative in Spanish with an ongoing meaning, but higher rates of the Present Progressive by Spanish-immigrants. As a consequence of contact with English, Cuza argued that the reduction in the range of aspectual selection of the Spanish Present Indicative led to convergence toward the restrictive L2 grammatical configuration (Present Indicative values in English: [+generic, -ongoing]), therefore narrowing the possible options in the L1 (Present Indicative values in Spanish: [+generic, +ongoing]).

Turning now to mood, very little is known about the development of the Spanish Subjunctive in early bilinguals. The few existing studies have shown patterns of loss in school-aged and older children with respect to the Subjunctive (e.g., Merino, 1983; Silva-Corvalán, 2003). For instance, in a two-part longitudinal study Merino (1983) investigated the early acquisition of syntax in school-aged Spanish heritage children (N=41) in Kindergarten to grade 4, most of whom attended a bilingual Spanish/English program in San Francisco. In Study I, the Bilingual Language Acquisition Scale, an instrument developed by Merino to measure proficiency in comprehension and production, was employed to assess children’s performance with the Subjunctive in Spanish and English, as well as number, gender, word order, relatives, and the Conditional. In the comprehension component children selected one of two pictures that matched the sentence they heard. In production, a delayed imitation task was administered to elicit children’s utterances based on pictures. Overall, Merino reported evidence of language loss
rather than language development in children’s use of the Spanish Subjunctive across all grades. Children’s participation in the bilingual program had no significant effect on their comprehension and production skills in Spanish or English; however, while children’s performance in English increased from Kindergarten to grade 4, fourth graders’ performance in Spanish declined. In fact fourth graders performed similarly to Kindergarteners with the Subjunctive, and were comparable to second graders for other phenomena such as Conditional forms. These differences were statistically significant.

In Study II, conducted two years later, Merino retested 32 of the original children using the same instrument. She observed that while children’s performance in English had continued to improve, their production skills in Spanish had declined sharply. In Spanish, 50% of children showed attrition, 25% improved their performance, and 25% showed no gains in performance from Study I. Most children (88%) lost more or gained less in Spanish than they did in English. Overall, significant differences between the two studies were reported for children’s performance in Spanish for Subjunctive forms, past tenses, and relative constructions. Children’s accuracy with Spanish Subjunctive forms dropped from 70% in the first study to 55% in the follow-up. As for the Subjunctive, children who in the first study had produced *El señor saca un libro para que lea* (“The man takes out a book so that s/he reads-SUBJ it”) with the obligatory Subjunctive construction *para que* (“so that”) then produced *El señor saca un libro para que leer-INF* (Merino, 1983:291) in the follow-up study. Overall, Merino’s data indicates attrition in the Spanish Subjunctive in older school-aged children, as well as the possibility of an overextension of infinitival constructions in contexts that require the Present Subjunctive.

In a similar vein, Silva-Corvalán (2003) explored whether grammatical simplification (i.e., loss of (semantic) features) was a result of incomplete acquisition in early years or attrition in Spanish-English bilingual children with varying levels of proficiency in Spanish. She
examined the spontaneous production data of seven Spanish/English bilingual children (two longitudinally from birth) from the ages of 5;1 to 5;11. She reported that children who spoke only Spanish at home used the Preterite, Imperfect, and Present Subjunctive forms productively, as did the adult L1 speaker. These same children also started using the Imperfect Subjunctive, whereas children from Spanish-English and English-only homes did not produce the Subjunctive in any recordings from age 5;5 onward even when they had produced the Present Subjunctive from 3;0 to 3;3 and the Imperfect Subjunctive sporadically. Silva-Corvalán attributed these trends to attrition and also argued that US-born bilingual children’s tense-aspect-mood system in Spanish is incomplete by the time they enter Kindergarten (see Silva-Corvalán, 2001).

Consistent with Silva-Corvalán’s (1994) findings mentioned earlier, but instead using elicited oral and written production tasks, Montrul (2009) found that adult heritage speakers’ use of the Present Subjunctive differed significantly from that of native speakers’. For instance, in production heritage speakers demonstrated limited knowledge of the semantic and pragmatic implications of the Present Subjunctive/Present Indicative contrast in both obligatory (e.g., with negation, No creo que *es-PRES/sea-SUBJ bueno para tu salud tomar tanto alcohol/“I don’t think it’s good for your health to drink so much alcohol”) and optional (Busco un estudiante que habla-PRES/hable-SUBJ japonés/“I’m looking for a student that speaks Japanese”) contexts. In the latter context, evidence of overextension of the Present Indicative for the target Present Subjunctive was reported.

With other Subjunctive forms, research has shown that use of the Imperfect Subjunctive in the Spanish grammars of heritage adults, as well as L1 Spanish adults in contact with French,

\[4\] A recent corpus study instead shows that L1 Spanish-speaking adults use the Indicative in certain contexts with negated creer (Harrington, 2015).
is rare. For instance, in her corpus study, Silva-Corvalán (1994, 2003) reported that the Imperfect Subjunctive was present in the spontaneous production of Mexican-born speakers (e.g., Group 1), whereas for approximately 70% of US-born speakers (e.g., Groups 2 and 3) the Imperfect Subjunctive form either did not form part of their verbal system or was not produced in obligatory contexts. In addition, in recent sociolinguistic work on the Spanish of L1 Cuban adults living in contact with French in Montreal, Cruz (2013) presented evidence for the use of the Imperfect Indicative for the target Imperfect Subjunctive in contexts of hypothetical manner (*era como si* “it was as if…”) that obligatorily require the latter form in Spanish, as in (17a). Cruz attributed this finding to language influence from French from the cognate *comme si* plus Imperfect Indicative expression, as in (17b).

(17) a. *Era como si yo, por la primera vez en mi vida, tenía… era responsable de mí misma.*

*b.*IMP.*3SG* as *if I for the first time in my life have.*IMP.*1SG* be.*IMP.*1SG

responsible de mí misma.

responsible of me myself

“It was as if I, for the first time in my life, I had… I was responsible for myself.”

(AM9, Cruz (2013))

b. *C’était comme si moi, pour la première fois dans ma vie, j’avais … j’étais responsable de moi-même.*

*be.*IMP.*3SG* as *if I for the first time in my life have.*IMP.*1SG*

j’étais responsable de moi-même.

be.*IMP.*1SG responsible of me myself

“It was as if I, for the first time in my life, I had, I was responsible for myself.”

The example in (17a) suggests evidence of overextension of the Spanish *como si*+Imperfect Indicative to *como si*+Imperfect Subjunctive-favouring contexts based on the French grammatical model.

In sum, findings from studies on tense-aspect-mood across various Spanish heritage adult and child populations show that this domain is vulnerable to cross-linguistic influence, incomplete acquisition and attrition. It appears that features can redistribute by virtue of language contact, (cognate) morphological forms can reattach to different meanings and result in semantic
reduction/extensions, and certain contrasts such as the Preterite/Imperfect can neutralize (Cruz, 2013; Cuza, 2008, 2010; Merino, 1983; Montrul, 2002, 2009; Sánchez, 2004; Silva-Corvalán, 1994, 2001). Yet, in spite of all of this evidence, there are still very few studies that actually explore heritage acquisition as it happens in children. How do we know that what heritage children do is different than monolinguals? What are the questions about heritage children, and what would they contribute to the ongoing study of adult heritage speakers? In order to answer these questions let us first take a look at what monolingual children do with respect to acquisition of the Present Perfect in Spanish, the phenomenon of focus in this study.

2.4. Acquisition of the Present Perfect

The Present Perfect is a complex tense that situates a past action in reference to the present, as illustrated in (18). The Preterite, on the other hand, is a simplex tense and situates a past action as directly anterior to the present, as shown in (19).

(18) Han comprado un lagarto.
    have.PRES.3PL buy.PP a lizard
    “They have bought a lizard.”

(19) Compraron un lagarto.
    buy.PRET.3PL a lizard
    “They bought a lizard.”

Given these circumstances, how do children acquire this association, that is, how do they map a past form to the correct meaning? (A detailed analysis of the Present Perfect is provided in chapter 3.) Research has shown that children are highly sensitive to the perceptual properties of events (Penner, Schulz, & Wymann, 2003) and can discriminate past, present and future events as early as 2;0 (Valian, 2006; Wagner, 2001). Temporal ordering and completion clues are key ingredients in children’s success with tense. Though children attend to tense from a young age, a number of experimental studies have shown that aspect continues to present difficulties in
comprehension throughout the preschool years (Hodgson, 2003; Jeschull, 2007; van Hout, 2001; Wagner, 2001). In early production, it has been proposed that children demonstrate a close lexical association between tense forms and lexical aspect (i.e., lexical semantic verb classes such as states, activities, accomplishments, achievements), particularly in the Preterite and Imperfect contrast. This is known in the literature as the Aspect First hypothesis which predicts that in the acquisition of tense, L1 and L2 learners’ first tensed utterances will initially spell-out inherent semantic properties of verbs or predicates rather than mark past versus non-past (e.g., Preterite –ó morpheme appears first with telic (bounded) verbs such as perder (“lose”) and terminar (“finish”), while the Imperfect –aba morpheme emerges first with atelic (unbounded) verbs such as statives amar (“love”) and vivir (“live”) (see Antinucci & Miller, 1976; Bloom, Lifter, & Hafitz, 1980; Bronckart & Sinclair, 1973; Jackson-Maldonado & Maldonado, 2001; Shirai & Andersen, 1995). In a similar vein, recent work on L2 acquisition has focused on the correlation between the Preterite and telic aspect (i.e., accomplishment and achievement predicates versus activity and stative predicates) (Salaberry, 2011), and on the Preterite and dynamicity (i.e., accomplishment, achievement and activity predicates versus statives) (Domínguez, Tracy-Ventura, Arche, Mitchell, & Myles, 2013).

2.4.1. Across languages

Cross-linguistically it appears that semantic complexity—rather than morphological complexity—presents challenges for children in the L1 acquisition of the compound Present Perfect. For example, in English, 2;0-year-old children can discriminate Present/Simple Past tenses in copula be constructions (is/was sad) and, yet, they are unsuccessful with Progressive be (was/is crying) (Valian, 2006). Research points to a ‘sharp dialectal divide’ with respect to the emergence of the English Present Perfect. For instance, in North American English-speaking children, it has been shown that the Present Perfect emerges late by about age 4;0 (Slobin, 2007).
Furthermore, in a study that compared the productive use of the Present Perfect in the spontaneous speech of Scottish and American preschool-aged children, Gathercole (1986) found that Scottish children produced the Present Perfect in potential Present Perfect contexts approximately 60% of the time while American children did so less than 1%. It was concluded that dialectal differences between Scottish and American children were driven by the relative frequency of the Present Perfect in the parental input. For example, Scottish adults used the Present Perfect in their speech to children more frequently than American adults did. As a result, Scottish children produced the Present Perfect well before American children. While frequency of input played a central role in the timing and order of acquisition of the Present Perfect, Gathercole also reported that frequency interacted with other factors such as syntactic, semantic, and cognitive simplicity. This, she argued, makes some Present Perfect uses easier to learn than others.

In French, the Passé Composé is a morphologically complex yet semantically simple Perfect tense. Morphologically, the Passé Composé comprises the Present tense form of auxiliaries avoir (“have”) or être (“be”) plus the Past Participle (J’ai mangé/“I ate”, Je suis tombé/“I fell”). Semantically, the Passé Composé is said to contain both a perfect and Simple Past sense (Vet, 1992). Some researchers, however, have argued against polysemy in this compound form (see de Swart, 2009). Unlike in other languages with a Present Perfect/Simple Past distinction such as English and Spanish, this distinction no longer exists in modern spoken French. This means that the Passé Composé has become the default past (perfective) tense. So, while the Passé Simple is the (perfective) past tense used to foreground events in written narratives and the Imparfait is used to background events in the past, the complex Passé Composé is instead used for foregrounding in current speech (Labelle & Morris, 2011).
In L1 French acquisition, the Present tense emerges first while past and future forms come later (Prévost, 2009). Children produce the Present Indicative, Imperative, Infinitive and bare past participles (without an auxiliary) in early spontaneous speech before age 3;0 (Royle & Thordardottir, 2007). This stage is followed by the appearance of auxiliaries and modals in syntactic constructions (i.e., Passé Composé, *J’ai mangé*/*I ate/have eaten*; periphrastic future, *Je vais manger*/*I am going to eat*; modal structures, *Je veux manger*/*I want to eat*), in addition to other syntactically complex structures (e.g., verb + prepositional phrase + infinitive, *C’est pour manger*/*It’s for eating*). The compound Passé Composé emerges between 1;6 and 2;1 (Bassano, 1998; Bassano, Maillachon, Kampfler, & Dressler, 2001; van der Velde, 1999) and is the first syntactically complex (i.e., auxiliary-based) construction that L1 French children use (Kilani-Schoch, 2003; Thordardottir, 2005). The simplex Imparfait emerges between 2;4 and 2;7 (van der Velde, 1999). Though the Passé Simple does not emerge until after age 5;0, children are exposed to it through literature from a young age (Labelle & Morris, 2011). In fact, in the Quebec school curriculum the Passé Simple is not mentioned until grade 6 (11;0- to 12;0-years of age) and not formally taught until high school (Labelle & Morris, 2011). Yet, the production of verbs in the Passé Simple by primary school-aged children suggests that children develop an implicit knowledge of this tense through story-telling long before they receive formal instruction of it (Labelle & Morris, 2011). For instance, in a corpus study of oral and written stories produced by school-aged children from Montreal, Godard (1991) found that more than a quarter of children in grade 2 and more than two-thirds of children in grades 3, 4 and 5 children used the Passé Simple.

In an large-scale elicited production study that investigated the joint demands of tense and lexical aspect, Labelle, Godard, & Longtin (2002) asked 130 Quebecois French-speaking children aged 5;06 to 9;0 years to provide an appropriate continuation for a given tensed stimulus
sentence. Five-year-old children demonstrated excellent performance of the Passé Composé in Passé Composé contexts, yet they also extended the Passé Composé to other past tense contexts, such as the Imperfect (20) and Pluperfect (21), as well future contexts (22) (Labelle et al., 2002: 314).  

(20)  *Il trouvait la réponse parce que il a vu la réponse de la feuille du professeur.*  
He find.IMP.3SG the response because he have.PRES.3SG see.PP the response of the sheet of the professor  
“He was finding the answer because he saw the answer on the teacher’s sheet.”

(21)  *Il avait joué au nintendo avec ses amis parce que j’ai été dans ma chambre jouer avec mes barbies.*  
he have.IMP.3SG play.PP of the nintendo with his friends because I have.PRES.1SG be.PP in my room to play with my barbies  
“He had played Nintendo with his friends because I was in my room.”

(22)  *Tu chercheras la réponse quand mon père est arrivé.*  
you look.FUT.2SG the response when my father be.PRES.3SG arrive.PP  
“You will look for the answer when my father came in.”

Children in grades 3 (mean age=8;9) and 2 (mean age=7;8) performed significantly better in providing correct continuations than did children in grade 1 (mean age=6;9) and Kindergarten (mean age=5;8). Though it appears that L1 French children easily acquire Passé Composé morphology from early on, it is unclear whether they acquire the correct meaning association and aspectual restrictions of this form. As a result, Labelle et al. have proposed that there are in fact two Passé Composés: one whose reference expresses true precedence to the moment of speech as in the Simple Past sense, and a second whose reference expresses current relevance with the moment of speech as in the Perfect.

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5 In (20)-(22), the italics represent the test sentence the child was read aloud and from which she was asked to create a story. The child’s continuation response, appearing in normal font, immediately follows the test sentence.
2.4.2. Spanish

In Spanish, children begin to acquire the past from around age 2;0, however, the emergence and ordering of past tense forms varies by region. For instance, in Latin American dialects the Preterite is the first past tense to emerge while in Peninsular Spanish the Present Perfect appears simultaneously with the Present and before the Preterite (see Aguado, 1995; Bel, 2002; Cuervo & Markle LaMontagne, 2014; Hernández Pina, 1984; López Ornat, 1994; Markle LaMontagne & Cuervo, 2015). In Aguado’s (1995) study of L1 Spanish children (mean age=2;6) from Pamplona recorded in semi-structured play sessions, the Present is the most prevalent form (60%), as in Cortés & Vila (1991), followed by the Present Perfect (9%), Imperfect (1%) and Preterite (0.4%). Bel (2002) reported similar findings for Spanish and Catalan in that L1 children correctly use present, past and future forms with present, past and future reference.

In a corpus study that compared early tense use in Peninsular and Mexican Spanish children and asked whether children’s early uses of the Present Perfect involved acquisition of a complex/indirect referential system, Cuervo & Markle LaMontagne (2014) confirmed similar findings for tense distribution in the Peninsular Spanish of two children and also showed that the Present Perfect appeared with all types of aspectual classes (ser/“be”, comersel/“eat”, caerse/“fall down”, terminar/“finish”, pasar/“happen”, perder/“lose”, jugar/“play”, decir/“say”, ver/“see”, tomar/“take”, etcetera). In age-matched Mexican children, however, they reported that the same verbs that appeared in the Present Perfect in Peninsular Spanish appeared in the Preterite, the most frequent past tense form, in Mexican Spanish (see also Jackson-Maldonado & Maldonado, 2001). The authors confirm that these findings for children’s patterns of tense distribution in Peninsular and Mexican children are also reflected in L1 Spanish-speaking adults in recent variationist studies in which the Present Perfect is the preferred past tense form in Peninsular Spanish, while the Preterite is used more frequently in Mexico, as well as in Argentina, El
Salvador and Peru (see Howe, 2013; Schwenter & Torres Cacoullos, 2008). Howe (2013) and Schwenter & Torres Cacoullos (2008) have suggested that the Present Perfect is the default (or ‘neutral’) form of past reference in certain varieties of Peninsular Spanish (i.e., Alicante, Madrid, Valencia), while the Preterite is the default/neutral form in many Latin American varieties. Cuervo & Markle LaMontagne’s results for Peninsular Spanish children are consistent with the acquisition of the Present Perfect as a complex morphological form, but with a simple meaning/structure which is similar to French (see Labelle et al., 2002). Furthermore, they confirmed that the use of the Present Perfect in Peninsular Spanish children was equivalent to the Preterite in the Spanish of Mexican children in that it expresses a direct reference to the past without reference to a moment that is simultaneous with the moment of speech and without setting a time span. Thus, despite very clear differences in the distribution of tenses among L1 Spanish children and the fact that children’s acquisition of the PP is consistent with a simple meaning and structure, Cuervo & Markle LaMontagne confirmed that neither Mexican nor Peninsular children exhibited difficulties with the various complex forms since they also found evidence of the progressive and periphrastic future in the data. This finding is also attested in Jackson-Maldonado & Maldonado (2001).

To further examine the use and meaning of the Present Perfect in Mexican Spanish, Cuervo & Markle LaMontagne’s (2014) findings from the Jackson-Maldonado & Thal (1993) corpus study, as well as a search of three available early speech corpora including

(i) Koki’s (1;07-2;11) longitudinal corpus from Montes (1987, 1992),
(ii) Carlos’ (1;04-3;08) corpus made available by Grinstead (1998), and
(iii) Hess’ (2003) corpus, a cross-sectional study of 24 children aged 6;0, 9;0 and 12;0, show that the Present Perfect is absent from early stages of syntactic development in Mexican children in all three corpora. Parents’ use of the Present Perfect is infrequent and appears after
negation (*Nunca he comido de limón, pero...*“I have never eaten lemon, but...” (CM45, from the Grinstead Corpus; Grinstead (1998)) and as a Past Perfect (*Que no había yo visto/*“That I had not seen...” (XX, Alberto’s mother), *No lo habías visto/*“You had not seen it” (XX, Deborah’s mother) (from the Jackson-Maldonado & Thal (1993) corpus). These findings paint a very different picture from María’s (López Ornat, 1994) and Emilio’s (Vila, 1990) data, which again indicate a productive and robust use of the Present Perfect in Peninsular Spanish from the outset in children and parents alike.

Turning now to elicited production, Markle LaMontagne & Pérez-Leroux (In press) explored first language acquisition of the Present Perfect in school-aged Mexican children and asked whether children are sensitive to properties of the target contexts (i.e., Present Perfect and Preterite). They showed that Spanish-speaking children from Mexico rarely use the Present Perfect if unprimed in a sentence repair task (<1% in combination with frequency adverbial *siempre/*“always” and approximately 7% with phase adverbial *todavía no/*“still not”), yet children’s use of the compound form was more productive if primed in a contextualized preference-based elicitation task (17% with *siempre* and 60% of the time with *todavía no*), adapted from (Pirvulescu & Belzil, 2008). Although Mexican children produced fewer Present Perfect targets compared to Mexican adults, they generally treated the contexts differently. For instance, Mexican children produced more Present in the Present Perfect condition and also extended the Present to the Preterite condition. The Preterite, however, was the most preferred response in Preterite-favouring contexts, while the Present was the most prominent response type in the Perfect condition. The authors have suggested that this is because Mexican children are sensitive to the fact that in Present Perfect scenarios event reference includes the time of speech. In line with evidence from spontaneous speech (e.g., Cuervo & Markle LaMontagne’s (2014) corpus study), Markle LaMontagne & Pérez-Leroux also showed that no one particular lexical
verb class guided Mexican children’s responses in either the Present Perfect or Preterite conditions.

In light of these findings it appears that form (*signifier*) and meaning (*signified*) matter in first language acquisition of the Present Perfect cross-linguistically and in Spanish. Not only is form and meaning important for the Present Perfect in Spanish, but so too are dialectal variation and the presence of certain categorical and variable markers (e.g., adverbials). In the interest of finding out whether cognate morphological forms and semantics play a role in a model of cross-linguistic influence for bilingual grammars, the Present Perfect is an ideal place to start looking.
Chapter 3. The Spanish Present Perfect

3.1. Introduction

The purpose of this chapter is to present the ingredients of the Spanish Present Perfect system, the linguistic phenomenon of focus in this study, and to discuss what Spanish children must learn in order to master this system. Tense, one of the Present Perfect’s key ingredients, locates events on the time axis in relation to the moment of speech, the origin from which all time is measured. Tense is encoded by inflectional morphology on the main or auxiliary verb, as illustrated in (23) and (24) with the Spanish Preterite/Present Perfect tense contrast.

(23) Los niños de tercero leyeron Harry Potter. Preterite
the children of third read. PRET.3PL Harry Potter “The third-graders read Harry Potter.”

(24) Los niños de tercero han leído Harry Potter. Present Perfect
the children of third have.PRES.3PL read.PP Harry Potter “The third-graders have read Harry Potter.”

The child’s task is to map the verbal morphemes –eron and –an/–ido in (23) to (24) onto the right meanings. The Preterite in (23) must align with a past event whose meaning does not include reference to the present moment. The challenge with the Present Perfect in (24), the past tense that consists of the Present tense auxiliary verb haber plus the Past Participle, is to link this verbal form to an event that started in the past and whose meaning also includes reference to the present moment.

This chapter has three main goals: (i) to adopt Rojo & Veiga’s (1999) approach to temporal relations in Spanish, combining it with the Perfect Time Span framework (e.g., Iatridou, 2003; Iatridou et al., 2003; von Fintel & Iatridou, 2005) in order to analyze the interval component of the Spanish Present Perfect, and to implement a feature geometry analysis for Inflection as in Cowper (2005) to examine the morpho-semantic differences of the Preterite/Present Perfect contrast; (ii) to discuss the essence of the Present Perfect including
types and uses of this compound form; and, (iii) to present other relevant variables in determining the computation of the Present Perfect, including adverbial modification, and their role in the acquisition of the temporal boundaries of the Spanish Present Perfect/Preterite tense distinction, all of which inform the experimental design of this study.

3.2. The Essence of the Perfect
3.2.1. Temporal and aspectual approaches

The Present Perfect has been examined extensively across languages, most notably in English (e.g., Binnick, 1991; Comrie, 1976; Iatridou, 2003; Iatridou et al., 2003; Klein, 1992; McCawley, 1971; Portner, 2003; von Fintel & Iatridou, 2005). Though many theories have been proposed, the Present Perfect is intriguing because it shares properties with both temporal and aspectual forms, which begs the question of whether it encodes tense or aspect. Tense and aspect are distinct linguistic categories, yet they are both related to the phenomenon of time (Rojo, 1990:31) and therefore central to the meaning components of the Spanish Present Perfect.

Semantically, the Present Perfect has been treated from the perspective of tense, i.e., a complex tense that works as a vector to refer to another tense. For example, following the classic Reichenbachian (1947) framework of temporality, tense relates three ordered points in a line using the following parameters: speech time (S), reference time (R), and event time (E). Speech time (S) refers to the moment of speech or utterance time. Event time (E) expresses the time (or interval) at which the event holds. Reference time (R) is relative to a reference point or interval at which time the underlying event described in the clause is considered. When the time of speech coincides with the event and reference time, meaning that some moments overlap, a Present tense interpretation is achieved, as indicated by the commas in the notation \((E, R, S)\) and the sentence in (25). When event and reference times precede speech time, as indicated by the underscore in the notation \((E, R_S)\), a past interpretation is achieved, as in (26) with the Preterite.
When the entire event is contained in the time of reference, that is speech and reference times overlap and follow the event time as in the notation \((E_R,S)\), a Present Perfect reading is achieved, as illustrated in (27). The notion of reference time \((R)\) is fundamental to the denotation of the Present Perfect since this compound form expresses a past event whose reference time relates to the moment of speech. In (27), the event time \((E_)\) precedes the reference \((R)\) and speech \((S)\) times, both of which coincide \((R,S)\), that is the past event of José playing baseball precedes a reference point that overlaps with/includes the moment of speech.

(25) José juega al béisbol. Present \((E, R, S)\)
José play.PRES.3SG to the baseball
“José plays baseball.”

(26) José jugó al béisbol. Preterite \((E,R_S)\)
José play.PRET.3SG to the baseball
“José played baseball.”

(27) José ha jugado al béisbol. Present Perfect \((E_R,S)\)
Dora have.PRES.3SG play.PP at the baseball
“José has played baseball.”

In a similar vein, under Rojo & Veiga’s (1999) approach to temporal relations in Spanish, the Present Perfect expresses a past event that is anterior to a reference point that is simultaneous with the moment of speech.

Alternatively, the Present Perfect has also been treated semantically from the perspective of aspect, i.e., a resultant state that follows from a prior event (Giorgi & Pianesi, 1998; Kamp & Reyle, 1993; Klein, 1992; Parsons, 1990; Vlach, 1993). Aspect expresses the internal temporal structure or development of an event or situation. In Discourse Representation Theory (see Kamp & Reyle, 1993; also extended by de Swart, 1998), a framework that incorporates sentence-level and discourse-level semantics in the processing of narrative discourse, the Perfect is treated as an existential operator that maps different types of situations such as processes and events onto states. Under this framework state and process predicates correspond to situation types that
do not have inherent endpoints (e.g., states and activities). By contrast, event predicates correspond to dynamic situation types that are telic and involve an inherent culmination point (e.g., accomplishments and achievements). These types of situations correspond to Vendler’s (1957) original lexical semantic verb classes (states, activities, accomplishments, achievements), also known as Aktionsart. In (28), the telic event of María having arrived late is mapped onto a state, that is María is in the consequent resultant state of having arrived late and this state has current relevance.

(28) María ha llegado tarde.  
María have.PRES.3SG arrive.PP late  
“María has arrived late.”

While much of the previous literature on the Present Perfect discusses the tense versus aspect debate, the analysis adopted in this study instead focuses on the denotation by combining Rojo & Veiga’s (1999) approach to temporal relations in Spanish with the Perfect Time Span framework (e.g., Iatridou, 2003; Iatridou et al., 2003; von Fintel & Iatridou, 2005). Aktionsart is, however, integral to the analysis adopted here as it can restrict certain uses of the Spanish Present Perfect. This study offers an alternative analysis by considering the denotation first and argues that under this view: (i) the core difference in meaning between the Present Perfect and Preterite contrast is temporal and that it can be operationalized further via adverbial complements; (ii) the Present Perfect denotes a time interval or span, whereas the Preterite does not; (iii) the Present Perfect, or antepresente (Bello, 1847), makes indirect reference to the moment of speech, while the Preterite makes direct reference to it; and, (iv) the types and uses of the Present Perfect, as well as any aspectual restrictions, can be derived from two specific properties of the denotation: anteriority and simultaneity.
3.2.2.  Denotation

Spanish, like many natural languages, makes a structural and interpretational distinction between the Preterite and Present Perfect tenses. For example, the Preterite is a morphologically and semantically simple past tense, one that indicates anteriority to the moment of speech without any internal detail, as in (29). The Preterite also carries a completion entailment.

(29)  Julia vio la nueva película de Star Wars.
      Julia see.PRET.3SG the new movie of Star Wars
      “Julia saw the new Star Wars movie.”

In contrast, the Present Perfect is both morphologically and semantically complex. This compound form consists of the Present tense of the auxiliary haber (“have”) plus the Past Participle of the lexical verb. The Present Perfect’s interpretation includes reference to a past temporal span, one that relates to the present moment, as in (30):

(30)  Julia ha visto la nueva película de Star Wars.
      Julia have.PRES.3SG see.PP the new movie of Star Wars
      “Julia has seen the new movie Star Wars movie.”

Without adverbial modification in (30), it can be inferred that Julia has watched the new Star Wars movie at some moment in her life, that is, during an unspecified time span in the past that probably started the same day the movie was released and extends to and includes the present moment.

In their analysis of the Spanish tenses, Rojo & Veiga (1999) propose that the location of an event expressed by a verb on the temporal axis is anterior (A), simultaneous (S), or posterior (P) to the moment of speech, or to a given reference point, as in Figure 3.1. Under this view, anteriority can be expressed directly, as in the Preterite, or indirectly via another reference point, such as the Present Perfect or antepresente (‘before present’) for Bello (1847). The cornerstone of Rojo & Veiga’s (1999) approach is that both the Present Perfect and Preterite tenses express an event that is anterior to a reference point. The Preterite, for example, expresses an event that is
directly anterior to the moment of speech (i.e., the reference point), while the Present Perfect expresses an event that is anterior to a different reference point, one that is simultaneous with the moment of speech. These direct and indirect temporal relations are illustrated in Figure 3.1.

Figure 3.1. *Temporal relations in Spanish (adapted from Bello, 1847; Rojo & Veiga, 1999).*

Essentially, as is shown in Figure 3.1, the Preterite is an absolute tense which includes as part of its meaning the moment of speech as the deictic centre. This, however, is not necessarily the case for relative tenses such as the Present Perfect, and the Past Perfect, whose meaning does not specify that the moment of speech be its reference point. The Present Perfect is to the Present what the Past Perfect is to the Preterite, that is the Present Perfect is anterior to the Present, while the Past Perfect is anterior to the Preterite, both compound forms expressing indirect relations of anteriority to the moment of speech. Following (Reichenbach, 1947) the Past Perfect has a backshifted meaning whereby the event of the main verb is situated earlier than the reference time (i.e., the Preterite). The Present Perfect, on the other hand, expresses a present shifted meaning in that the event of the main verb precedes or overlaps with the reference time (i.e., the Present).
In this study I also assume, and build on, Cowper’s (2005) feature geometry analysis for Inflection in Spanish. The geometry in Figure 3.2 is a dependency structure that is composed of monovalent features, which have syntactic or semantic content and, in some cases, correspond to specific inflectional morphemes. In this framework, features are assembled into lexical items and spelled out as vocabulary items with a small degree of difference between the two languages. This type of hierarchical and contrastive analysis has been done for person, number and tense, and has antecedents in the phonological literature. This analysis hinges on the notions of contrast and (under)specification with respect to the presence or absence of features of Inflection.

Figure 3.2. *Features of Inflection in Spanish* (Cowper, 2005:21).

In these terms, the Preterite is monoclausal and expresses the features [Precedence]-[Entirety], as illustrated in Figure 3.2. [Entirety] is a dependent feature of [Precedence] and expresses that the totality of moments precedes the moment of speech (Cowper, 2005). In Cowper’s view, the Present Perfect is a biclausal structure that comprises two inflections: one that is spelled out by the auxiliary *have* in the Present and which expresses [Deixis], while the other is realized by [Precedence]-[Entirety] and is expressed by the Participle of the main verb. This is shown in Figure 3.3.
Figure 3.3. *Temporal representation of the Spanish Preterite and Present Perfect tenses (Cowper, 2003, 2005).*

<table>
<thead>
<tr>
<th>Spanish Preterite</th>
<th>Spanish Present Perfect</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Diagram" /></td>
<td><img src="image" alt="Diagram" /></td>
</tr>
</tbody>
</table>

Andy vivió en Detroit.  
Andy has lived in Detroit.

When Cowper’s (2005) and Rojo & Veiga’s (1999) frameworks are combined, the Present Perfect expresses the features [Precedence] to [Deixis].

To summarize, there are two dimensions to consider with respect to the Present Perfect and Preterite contrast: (i) direct/indirect relations of anteriority to the moment of speech, and (ii) time interval. From this starting point I articulate the incorporation of Iatridou’s (2003), Iatridou et al.’s (2003), and von Fintel & Iatridou’s (2005) notion of time span into the equation, which complements Rojo & Veiga’s (1999) framework for temporal relations.

3.2.3. **Perfect as Time Span**

At the same time that the Present Perfect expresses anteriority, it also sets a time span, known as the Perfect Time Span (Iatridou, 2003; Iatridou et al., 2003; von Fintel & Iatridou, 2005). The Perfect Time Span approach offers a revised version of the *Extended Now Theory (XN)* (e.g., Dowty, 1979; McCoard, 1978; Vlach, 1993), which claims that the Perfect introduces a time interval that extends into the past from the reference time (i.e., moment of speech). Under the Perfect Time Span framework, the time span is composed of right and left boundaries. The right boundary or bracket extends to, and can include, the present moment and is set by the tense
node. The left boundary extends into the past from the reference time, i.e. the moment of speech, and can be set by a ‘perfect-level adverbial’, such as since, or desde in Spanish, which delimits the time span (*Ha visto seis películas de Disney desde el verano*”“She has watched six Disney movies since the summer”).

The diagram in Figure 3.4 integrates Rojo & Veiga’s (1999) Spanish temporal relations framework with a representation of the Perfect Time Span that is argued for in Iatridou et al., (2003), Iatridou et al., (2003) and von Fintel & Iatridou (2005). The temporal vector at the top of the diagram, i.e. utterance time, indicates the relational nature of the Present Perfect as having a double reference and being past of the present. The lower portion of the diagram instead indicates how temporal relations in Spanish align with the Perfect Time Span, a time interval that may be referred to implicitly or explicitly in Present Perfect utterances.

Figure 3.4. *Temporal relations in Spanish, and the Perfect Time Span* (adapted from Bello, 1847; Iatridou, 2003; Iatridou et al., 2003; Rojo & Veiga, 1999; von Fintel & Iatridou, 2005).
In Figure 3.4, the right boundary/bracket of the Perfect Time Span extends from the present moment into the past and is anchored at the left boundary by the adverbial complement desde la semana pasada (“since last week”), which indicates the Perfect Time Span starting point, as in Desde la semana pasada, Mamá ha llamado tres veces (“Since last week, Mom has called three times”). In contrast, the Preterite does not include a time span, but instead expresses an event that is directly and completely anterior to the moment of speech. In Figure 3.4, this event is further specified by the adverbial ayer (“yesterday”), as in Mamá llamó ayer (“Mom called yesterday”).

Essentially, the Perfect Time Span is a parenthesis, not a reference point, and can include subintervals, which is a characteristic of its granular nature. When a verbal predicate possesses the subinterval property, because of inherent properties or because it is a stative, an adjective, or a Progressive, a universal perfect interpretation holds (Iatridou, 2003). The universal perfect conveys the meaning that the predicate holds throughout some interval stretching from a certain point in the past up to and including the present moment and exhibits atelic Aktionsart (i.e., an unbounded situation that lacks an inherent endpoint) and expresses the lexical semantics of states or activities, as in the stative sentence in (31).

(31) Rebeca ha estado viviendo en Buenos Aires desde el verano.
    “Rebeca has been living in Buenos Aires since the summer.”

Following the Perfect Time Span approach, (31) asserts that there is a time span: (i) whose right boundary is set by the moment of speech via the Present tense, (ii) whose left boundary is (some time in) the summer, (iii) for every subinterval of which it is true that Rebeca lives in Buenos Aires. Thus, Rebeca has lived in Buenos Aires since the summer and continues to do so up to and including the present moment. Her living in Buenos Aires for any length of time beyond the moment of speech can only be inferred.
Alternatively, when the predicate is located within the Perfect Time Span via an existential operator, the existential (also known as experiential) perfect reading is obtained. The existential perfect conveys the meaning that an event has occurred in a given temporal span for at least one subinterval, as illustrated in (32) and (33). For an existential perfect reading to hold, the underlying eventuality of the verbal predicate may exhibit any type of Aktionsart, as in (32) and (33) in which stative (vivir/“to live”) and achievement (llegar/“to arrive”) predicates are expressed respectively. However, even if this compatibility is true, the best, most clear case of the existential perfect is obtained with granular aspect, that is iterative telic predicates such as activities and not states, as shown in in (34).

(32) Rebeca ha vivido en Buenos Aires desde el verano.  
Rebeca have.PRES.3SG live.PP in Buenos Aires since the summer  
“Rebeca has lived in Buenos Aires since the summer.”

(33) Rebeca ha llegado tarde desde el verano.  
Rebeca have.PRES.3SG arrive.PP late since the summer  
“Rebeca has arrived late since the summer.”

(34) Rebeca ha venido a jugar cinco veces desde el verano.  
Rebeca have.PRES.3SG come.PP to play five times since the summer  
“Rebeca has come to play five times since the summer.”

Again following the Perfect Time Span approach, (32) to (34) assert that there is a time span: (i) whose right boundary/bracket is set by the present moment via the Present tense, (ii) whose left boundary/bracket is (some time in) the summer, and (iii) consists of a sub-interval at which it is true that Rebeca lives in Buenos Aires, arrives late and comes to play.\(^6\) In the case of (34), there

\[^6\] Iatridou (2003) proposes that the since-construction contains the morphosyntactic means to express a time span (the β constituent) and can also make a claim about the size of the time span (the α constituent), as is illustrated in (i):

(i) a. It has been two years since I saw him.
    b. light verb [two years]α [in the period since I saw him]β.

(Iatridou, 2003:133)
are at least five sub-events of Rebeca coming to play, as expressed by the iterative telic predicate *venir a jugar cinco veces* (“comes to play five times”). Thus, since the summer Rebeca has lived in Buenos Aires, arrived late and come to play at least one time, but unlike the universal perfect, her living in Buenos Aires, arriving late and coming to play is not required to hold true at the present moment or right boundary/bracket.

By combining the Perfect Time Span approach with Rojo & Veiga’s (1999) framework for temporal relations in Spanish, this study offers an alternative analysis of the Spanish Present Perfect and a revised explanation of the interval component of this form. The two frameworks complement each other and together can provide a better understanding of the meaning and uses of the Present Perfect. What is implicit in one approach is explicit in the other. For example, in Rojo & Veiga (1999) the notions of direct versus indirect temporal reference to the moment of speech are explicit, whereas the notions of right/left boundary, time span, and granularity are implicit. In contrast, in the Perfect Time Span approach (Iatridou, 2003; Iatridou et al., 2003; von Fintel & Iatridou, 2005) the notions of right boundary/left boundary, time span, and granularity are explicit, while the notions of direct versus indirect temporal reference to the moment of speech are implicit.

3.2.4. **Primary Types and Uses of the Present Perfect**

In languages that have Perfects, such as Spanish, there is often variation with respect to some of the Present Perfect’s meaning components. Though in Spanish the core meaning of the Present Perfect is stable, that is it expresses an event that is anterior to a reference point that is simultaneous to the moment of speech (Rojo & Veiga, 1999), its uses differ depending on dialectal variation, *Aktionsart*, and adverbial modification. Cross-linguistically four prototypical uses of the Present Perfect (e.g., Binnick, 1991; Comrie, 1976; McCawley, 1971; Portner, 2003; Said, 1976) are found: perfect of result, perfect of recent past (or ‘hot news perfect), existential
(or experiential) perfect, and universal (or continuative/perfect of persistent situation) perfect, as are illustrated in (35) to (38). Many varieties of Spanish can exhibit all four uses (Howe, 2013).

(35) **Perfect of result**

David ha perdido su cartera.
David have.PRES.3SG lose.PP his wallet
“David has lost his wallet.”

(36) **Perfect of recent past (or ‘hot news’ perfect)**

Anita ha ganado la carrera.
Anita have.PRES.3SG win.PP the race
“Anita has won the race.”

(37) **Existential perfect**

Marta ha visitado el museo tres veces desde 2010.
Marta have.PRES.3SG visit.PP the museum three times since 2010
“Marta has visited the museum three times since 2010.”

(38) **Universal perfect**

a. Pedro ha estado enfermo desde el domingo.
   Pedro have.PRES.3SG be.PP sick since the Sunday
   “Pedro has been sick since Sunday.”

b. Pedro todavía no ha regresado a la escuela.
   Pedro still no have.PRES.3SG return.PP to the school
   “Pedro has still not returned to school.”

The perfect of result focuses on the resultant state that arises after an event or change of state and expresses the outcome that is relevant at the present time, as in (35) in which David’s wallet is still lost at the time of utterance. The perfect of recent past, or ‘hot news’ perfect, reports an event or change of state that recently occurred as in (36) in which Anita has recently won the race. In Mexican Spanish, for example, the recent past/‘hot news’ perfect is generally expressed by the Preterite, while in some varieties of Peninsular Spanish the Present Perfect is instead employed to express this use (Howe, 2013). An appropriate paraphrase for (36), but not for a Preterite counterpart, is *Anita acaba de ganar la carrera* (“Anita has just won the race”). The
existential perfect asserts that the subject undergoes a certain state or experience during a
specific time span in her life, as in (37) which maintains that Marta has visited the museum three
times since 2010. In this case, the left boundary adverbial desde 2010 (“since 2010”) determines
the onset of a delimited timespan: the right boundary is set by the Present, and tres veces (“three
times”) specifies the number of instances that the event of visiting the museum has taken place.
The only temporal requirement for an existential perfect, as in (37), is that instances of the
specific event must occur during the Perfect Time Span, but are not required to hold true at the
right boundary or present moment. In contrast, a universal perfect, as in (38), asserts that the
situation, such as being sick, holds throughout the Perfect Time Span and must also continue up
to and include the present moment. In order for a universal perfect interpretation to hold, the
verbal predicate under the scope of the Perfect is generally atelic. This means that universal
perfects denote a stative situation or an activity with a continuous reading, one that began at a
moment in the past and continues to the present and also includes the present, as in the stative
situation of being sick in (38a) which is set at the left boundary adverbial complement desde el
domingo (“since Sunday”). However, the sentence in (38a) can also give rise to an existential
interpretation, that is, Pedro experienced being sick at least for some time included in the time
span from Sunday to the present moment. Telic predicates, which denote bounded situations with
inherent endpoints, such as accomplishments and achievements, as in Ricardo ha cocido muchas
tortas desde el lunes (“Richard has baked many cakes since Monday”), give rise to existential
interpretations and block the universal or continuative interpretation of a situation even though
this interpretation is expected with the adverbial desde el lunes/“since Monday”. Nevertheless,
negation interacts with telicity yielding a characterization of a continuous temporal span where a
given situation does not occur (Squartini & Bertinetto, 2000), as in not returning to school in
(38b) above. Negation seems to work as an operator, which derives a universal perfect from
predicates of any type of *Aktionsart*. Negative polarity favours the Present Perfect in many varieties of Spanish, including Mexican Spanish.

### 3.2.5. Adverbial modification

Adverbial modification is central to the Present Perfect/Preterite contrast. The Present Perfect Puzzle (Klein, 1992), originally proposed for English, posits that certain past-oriented adverbials (e.g., yesterday, last year, in 2000) are incompatible with the Present Perfect (e.g., *The children have finished their homework, *Last night at 8 o’clock the children have finished their homework*). This incompatibility extends to many other languages, including Spanish, even though one of the meaning components of the Present Perfect includes anteriority to the moment of speech. For example, in (39a) Rosa has recently left the park at an indefinite time in the past, yet her leaving the park cannot be made more precise in the Present Perfect by adding the adverbial complements *ayer a las doce* (“Yesterday at twelve”) as in (39b). In contrast, these adverbials combine perfectly well with the Preterite (40) and Pluperfect (41) tenses.

(39) a. Rosa se ha ido para la piscina.
   Rosa CL have.PRES.3SG leave.PP for the pool
   “Rosa has left for the pool.”

   b. *Ayer a las doce Rosa se ha ido para la piscina.
   Yesterday at the twelve Rosa CL have.PRES.3SG leave.PP for the pool
   “Yesterday at twelve o’clock Rosa has left for the pool.”

(40) Ayer a las doce Rosa se fue para la piscina.
   Yesterday at the twelve Rosa CL go.PRET.3SG for the pool
   “Yesterday at 12 o’clock Rosa left for the pool.”

(41) Ayer a las doce Rosa se había ido para la piscina.
   Yesterday at the twelve Rosa CL have.IMP.3SG leave.PP for the pool
   “Yesterday at twelve o’clock Rosa had left for the pool.”

A possible solution to this puzzle rests in a closer examination of the meaning components of the Spanish Present Perfect, as well as the meanings of the relevant adverbial complements and the temporal references and spans they express.
This study therefore probes the Preterite/Present Perfect contrast with certain adverbial complements, both theoretically and empirically, in order to gain a better understanding of the contrast, as well as the limits of the Perfect Time Span. The temporal property of anteriority, which is fundamental to the denotation of this contrast, can be further modified by adverbials such as deictic adverbial complements. Deictic adverbials make obligatory reference to the utterance time and share a consistent temporal value with the Present Perfect or Preterite, but their meanings are distinct and independent from these past tenses (Rojo & Veiga, 1999:2877). In Spanish there are two main factors that determine the distribution of the Present Perfect and Preterite tenses with deictic adverbial complements (García Fernández, 1999:3166):

(i) the Present Perfect combines felicitously with deictic adverbial complements that include the utterance time as part of their inherent meaning (hoy/“today”, en mi vida/“in my life”, todavía no/“still not”), whereas the Preterite combines with deictic adverbial complements that do not include the utterance time as part of their inherent meaning (anoche/“last night”, ayer/“yesterday”, el año pasado/“last year”).

(ii) the hodiernal/prehodiernal distinction, i.e., past events that are located on the day or in an time span (e.g., week, year) that includes the moment of speech, known as hodiernal (hoy/“today”), versus past events that are not located on the day or in the interval that includes the moment of speech, known as prehodiernal (ayer/“yesterday”). In Spanish, the Present Perfect combines felicitously with hodiernal-level adverbials, while the Preterite does so with prehodiernal-level adverbials.
With respect to use and distribution, the Present Perfect combines with adverbials, as in (iii) from Alarcos Llorach (1947:24), that indicate that an event has taken place during a time interval, one that is located in the present moment in which the speaker speaks or writes:

(iii)  *durante el siglo presente* (“during this century”), *el año en curso* (“the current year”), *en mi vida* (“in my life”), *estos días* (“these days”), *esta mañana* (“this morning”), *este mes* (“this month”), *esta semana* (“this week”), *esta tarde* (“this afternoon”), *esta temporada* (“this season”), *hoy* (“today”), *hoy* (“today”), *todavía no* (“still not”).

In Rojo & Veiga’s (1999) terms, these adverbials and the Present Perfect consistently share the temporal value of indirect anteriority to a reference point that is simultaneous with the moment of speech. In Iatridou’s Perfect Time Span terms (Iatridou, 2003; Iatridou et al., 2003; von Fintel & Iatridou, 2005), durative adverbials that specify a period of time actually make the time span explicit. It is thus understood that the utterance time is included within the span, and that the left boundary is set to the beginning of the span accordingly (e.g., *este mes*/“this month”, *esta semana*/“this week”, *este año*/“this year”). In contrast, the Preterite combines with adverbials that denote an interval which does not include the moment of speech, as in (iv) from Alarcos Llorach, 1947:24):

(ii)  *ayer* (“yesterday”), *anoche* (“last night”), *aquel día* (“that day”), *cuando* (“when”)\(^7\), *el mes pasado* (“last month”), *entonces* (“then”), *hace años* (“years ago”).

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\(^7\) The adverbial *cuando* (“when”) is special in that it would combine with a clause (e.g., tense and event) to determine the time reference (e.g., *cuando era chica*/“when I was-IMP a girl”, *cuando tuve mi primer examen*/“when I had-PRET my first examen”, *cuando esté de vacaciones*/“when I’m-SUBJ on vacation”). The study of this adverbial is left for future work.
Under Rojo & Veiga’s (1999) approach, the Preterite and the adverbials appearing in (ii) consistently share the temporal value of direct anteriority to the moment of speech.

Moreover, certain adverbial complements exhibit different quantificational force and can impact the aspectual nature of verbal predicates, as well as the Perfect Time Span. Aspectual classification further divides adverbial complements into distinct groups depending on how they measure or locate the event, or according to the development of different phases or frequencies (García Fernández, 1999:3135). Cross-linguistically, the following classes of adverbial complements influence the Aktionsart of verbal predicates: duration, localization, phase and frequency adverbials. This study examines the interaction of three adverbials from the duration, localization, and phase groups in combination with the Present Perfect and Preterite tenses.

Duration adverbials provide information about the development of the verbal event (García Fernández, 1999:3135). There are two groups of duration adverbs: quantitative and delimited. This study focuses on delimited adverbs, specifically desde (“since”), which establishes the initial boundary, or left boundary in Perfect Time Span terms, of an event and/or its end. Delimited adverbials can include desde (“since”), desde … hasta (“from … until”), a partir de (“as of”) and combine felicitously with the Present Perfect because of the duration component of their meaning. With respect to Aktionsart, desde plus Noun Phrase or Adverbial Phrase combines with non-punctual situations/events, such as states, activities and accomplishments, as in (42), which yields an existential perfect interpretation, and (43), which yields a continuous or universal perfect reading. Furthermore, the combination of desde plus Noun Phrase or desde plus Adverbial Phrase and an achievement predicate produces grammatical sequences if the process at hand repeats itself and is durative (García Fernández, 1999: 3194), as in (44), which yields a universal perfect reading.
He trabajado en esa obra desde abril hasta junio. “I have worked on that work from April to June.” (García Fernández, 1999:3147)

Ha estado durmiendo desde las tres. “He has been sleeping since three o’clock.” (García Fernández, 1999:3194)

El niño ha recogido casi todos sus juguetes desde ayer/la semana pasada. “The child has cleaned up almost all of this toys since yesterday/last week.”

In contrast, location adverbials situate the event, or the interval expressed by the verbal predicate, on the time axis and sub-divide into two groups: (i) interval adverbials (e.g., anoche/“last night”, ayer/“yesterday”, esta semana/“this week”) and (ii) precise point-in-time adverbials (e.g., a las 3/“at 3 o’clock”) (García Fernández, 1999:3135). The present study focuses on interval adverbials, which refer to a period of time that includes the verbal event and which can combine with either the Present Perfect or Preterite. Nevertheless, the combination of interval adverbials and these tenses depends on whether the past situation occurs on the same day or during a time span that includes the present moment (i.e., hodiernal temporal reference), or on a day that is anterior to the present moment (i.e., prehodiernal temporal reference) and has no relation with it. For instance, esta mañana (“this morning”) plus Present Perfect in (45) yields a recent past interpretation, while ayer (“yesterday” and anoche (“last night”) plus the Preterite in (46) to (47) yield completed past interpretations with no relation to the moment of speech.

Esta mañana he ido al mercado. “This morning I have gone to the market.” (García Fernández, 1999:3162)
Finally, phase adverbials such as todavía ("still") and ya ("already") and their negated forms, todavía no ("still not") and ya no ("no longer"), indicate the successive phases of an event (García Fernández, 1999:3153). The present study focuses on the phase adverbial todavía no ("still not"). Recall that negative polarity favours the Present Perfect in many varieties of Spanish. In addition, negation interacts with telicity (unbounded versus bounded) and yields the characterization of a continuous temporal span, which includes the moment of speech [universal perfect interpretation], during which time a given situation does not occur (Squartini & Bertinetto, 2000). This is illustrated in (48) in which the telic event of María packing her suitcases has not yet occurred.

(46) Juan llegó ayer.
Juan arrive.PRET.3SG yesterday
“Juan arrived yesterday.”

(García Fernández, 1999:3148)

(47) Anoche cenaron en mi casa.
last night eat dinner.PRET.3PL in my house
“Last night they ate dinner at my house.”

(García Fernández, 1999:3161)

In sum, the temporal distinction between the Present Perfect/Preterite contrast can be further operationalized via adverbial complements that share consistent meanings with their respective verbal forms. However, adverbial compatibility with these past tenses is only one side of the coin since some adverbial complements specify the time span while others specify the left and right boundaries.

(48) María todavía no ha hecho las maletas.
María still no have.PRES.3SG make.PP the suitcases
“María has still not packed the suitcases.”

(García Fernández, 1999:3155)
3.2.6. Dialectal Variation

Across the Spanish-speaking world all Perfects (present, past, future) are consistent with respect to the following characteristics: (i) *haber* (“have”) auxiliary selection (49), (ii) lack of gender and number agreement between the Past Participle and the subject or the object, as in (50a) in which the Present Perfect is contrasted with a *tener* small clause construction (50b), and (iii) the disallowance of interpolated elements, such as adverbials, between the auxiliary and the Past Participle (51).

(49) Marco ha ganado un premio.
Marco have.PRES.3SG win.PP an award
“Marco has won an award.”

(50) a. He hecho tres tartas de manzana.
have.PRES.1SG make.PP three pies of apple
“I have made an apple pie.”

b. Tengo tres tartas de manzana hechas.
have.PRES.1SG three pies of apple make.FEM.PL.PP
“I have three apple pies made.”

(51) a. ¿Has dormido hoy?
have.PRES.2SG sleep.PP today
“Have you slept today”?

b. Sí, he dormido hoy.
yes, have.PRES.1SG sleep.PP today
“Yes, I have slept today.”

c. *Sí, he hoy dormido.
yes have.PRES.1SG today sleep.PP
“Yes, I have today slept.”

Furthermore, in Spanish the Preterite, and not the Present Perfect, is generally used in narrative sequences, as is illustrated in (52) from (Howe, 2013).
a. David salió de su oficina a las cinco. Llegó a su casa.  
David leave.PRET.3SG of his office at the five. arrive.PRET.3SG a his house

Bebió una cerveza.  
drink.PRET.3SG a beer
“David left his office at five. He arrived at his house. He drank a beer.”

b. #David ha salido de su oficina. Ha llegado a su casa.  
David have.PRET.3SG of his office has.PRES.3SG arrive.PP at this house

Ha bevido una cerveza.  
has.PRES.3SG drink.PP a beer
“David has left his office. He has arrived at this house. He has drunk a beer.”

(Howe, 2013:35)

Though there is formal uniformity with respect to the characteristics in (49) to (52), there is nevertheless considerable dialectal variation in the semantic distribution of the Present Perfect and Preterite tenses throughout the Spanish-speaking world. For example, in a review of data from Lope Blanch (1971, 1976), recent work in variation shows that the Present Perfect is three times more frequent in Peninsular Spanish (i.e., Alicante, Madrid, Valencia) than in Mexican Spanish (Schwenter & Torres Cacoullos, 2008). In addition, Howe (2013) presents data from other Latin American countries, including Argentina, El Salvador and Peru, and shows that there is a complementary reversal in the distribution of these tenses, i.e., the Preterite is three or more times more frequent than the Present Perfect in these areas. Table 3.1 summarizes the distribution of the Spanish Preterite/Present Perfect contrast across several Spanish dialects.

Table 3.1. Distribution of the Preterite and Present Perfect tenses across several Spanish dialects, as reported in (Schwenter & Torres Cacoullos, 2008) and (Howe, 2013).

<table>
<thead>
<tr>
<th>Language</th>
<th>Preterite (%) (N)</th>
<th>Present Perfect (%) (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>94% (N=783)</td>
<td>6% (N=47)</td>
</tr>
<tr>
<td>El Salvador</td>
<td>78% (N=2616)</td>
<td>22% (N=838)</td>
</tr>
<tr>
<td>Mexico</td>
<td>83% (N=1903)</td>
<td>15% (N=331)</td>
</tr>
<tr>
<td>Peru</td>
<td>72.9% (N=2616)</td>
<td>27.1% (N=972)</td>
</tr>
<tr>
<td>Spain</td>
<td>46% (N=827)</td>
<td>54% (N=965)</td>
</tr>
</tbody>
</table>

The Spanish Present Perfect/Preterite contrast appears in written narrative throughout the Spanish-speaking world and is maintained in modern spoken Peninsular Spanish (Cartagena,
Recent work on variation argues for a core divide between Spanish dialects in which the Present Perfect is the marked form and those in which the Present Perfect has become the semantically neutral form. In line with recent variationist studies (see Howe, 2013; Schwenter & Torres Cacoullos, 2008), in many dialects of Peninsular Spanish the Present Perfect has become the default exponent of past perfective, that is its ‘current relevance’ or relation-to-the-moment-of-speech meaning component is now lost. The Preterite, however, is generally employed with even greater frequency in Latin America and Canary Island (Spain) varieties of Spanish (Cartagena, 1999). In Mexico and Colombia, it has been observed that the Present Perfect shares properties with the Portuguese Present Perfect in that it is a durative and iterative present tense (Cartagena, 1999). In the Southern Cone, i.e., Argentina, Chile, Paraguay and Uruguay, the Preterite is generally used with greater frequency over the Present Perfect (Cartagena, 1999). For example, in vernacular River Plate Argentinean Spanish the Present Perfect is used minimally and limited to the expression of experience and indefinite past, while the Preterite is the default past tense (Rodríguez Louro, 2009). This indicates that Southern Cone Spanish lacks some of the meanings or contrasts that can be expressed by the Preterite/Present Perfect contrast, if available.

Dialectal variation is also common with respect to the use of certain past-oriented adverbial complements in combination with the Spanish Present Perfect and Preterite tenses. The division of labour between these two forms rests primarily on the hodiernal/prehodiernal distinction, i.e., the distinction of past events located in a temporal span that includes the moment of speech versus those that do not. In some dialects of Spanish locative deictic adverbials complements such as hoy (“today”) and esta mañana (“this morning”), which express simultaneity to the moment of speech, are incompatible with the Present Perfect because of its differentiated meanings. Though in Rojo & Veiga’s (1999) terms the denotation of the Present Perfect is to express a past event that is anterior to a reference point that is simultaneous with the
moment of speech, in many Peninsular varieties the Present Perfect expresses pure anteriority and can combine felicitously with prehodiernal-level adverbials, such as *ayer* (“yesterday”), as illustrated in (53). In contrast, the Preterite is preferred in Latin American Spanish with prehodiernal-level adverbials, as in Mexico in (54).

(53) Ayer he comprado un aire acondicionado y me da calor.
yesterday have.PRES.1SG buy.PP an air conditioner and CL give.PRES.3SG heat

“These yesterday I bought an air conditioner and I’m getting heat from it.”

(Schwenter & Torres Cacoullos, 2008:2)

(54) Porque eso pasó el año pasado.
Because that happen.PRET.3SG the year last

“These because that happened last year.”

(Schwenter & Torres Cacoullos, 2008:16)

With this in mind, this study includes the bilingual children of native speakers of Spanish from varieties in which the Present Perfect/Preterite distinction is still maintained. Bilingual children whose parents’ speak Peninsular Spanish are not included primarily because the Present Perfect is the default past tense form in many Peninsular varieties. Appendix A illustrates the approximate geographic distribution of the different uses of the Spanish Present Perfect, of which uses have been re-classified according to the four prototypical uses discussed above.

### 3.2.7. Variation in the Romance Perfect

The Spanish Preterite and Present Perfect have antecedents in two different verbal paradigms from Latin. The Preterite, for example, is a direct descendant of the *fecri* paradigm from Classical Latin (Cartagena, 1999). The *fecri* paradigm was known as the ‘Perfect tense’ and had two temporal values: Present Perfect (i.e., a past with current relevance) and Preterite (i.e., completed past action). The Preterite value was the narrative tense *par excellence* and co-occurred with past time adverbials (Harris, 1982). The Spanish Present Perfect, on the other
hand, evolved from the later *habeo factum* compound paradigm of Vulgar Latin. This Romance creation expressed the result of a past and terminated action, one that remained a present state (Cartagena, 1999; Lenz, 1920). For example, the Spanish compound form possessed the same semantic values that resultative periphrastic expressions do today such as *tener* (“have”), *traer* (“bring”), *llevar* (“bring/carry/take”) plus Past Participle, and the Participle agreed in number and gender with the direct object complement, as in *Tengo escritos dos libros* versus *He escrito dos libros* (“I have-PRES two books written” versus “I have-PRES written-PP two books”) (Cartagena, 1999:2944). In its earliest forms, *habeo factum* was therefore a marker of possession and the Past Participle was adjectival.\(^8\)

Harris (1982) has proposed that periphrastic past constructions in Romance including the Spanish Present Perfect, as well as the French Passé Composé, which consists of the auxiliaries *avoir* or *être* plus the Past Participle, be described as belonging to one of four distinct diachronic stages. Each stage evolved from the Latin *feci/habeo factum* contrast, as illustrated in Table 3.2 (adapted from Fleischmann, 1983:195; Harris, 1982:49; Schwenter & Torres Cacoullos, 2008:7).

---

\(^8\) In Latin, the *habeo factum* paradigm eventually fell out of use with intransitive unaccusative verbs (e.g., *die, fall*), while the *esse + past participle* periphrasis expanded from expressing the passive to marking the perfect. This explains why in the French Passé Composé some verbs take *être* auxiliary, a descendent of *esse*, over the *avoir* auxiliary, a descendent of *habeo factum* (e.g., *il est mort*/*He died/has died*) (see Vincent, 1982).
Table 3.2. *Evolution of Simple Past and Present Perfect systems in Romance.*

<table>
<thead>
<tr>
<th>Stage</th>
<th>Simple Past</th>
<th>Present Perfect</th>
</tr>
</thead>
<tbody>
<tr>
<td>I Resulting state</td>
<td>All past functions</td>
<td>Present states resulting from past situations</td>
</tr>
<tr>
<td>(e.g., Calabrian, Sicilian)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>II Duration into speech time</td>
<td>Most past situations</td>
<td>Past situations still ongoing at present moment</td>
</tr>
<tr>
<td>(e.g., Galician, Portuguese, many Latin American varieties of Spanish)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>III Current relevance</td>
<td>Past situations lacking current relevance</td>
<td>Past situations with current relevance</td>
</tr>
<tr>
<td>(e.g., Catalan, Langue d’Oil, Occitan, Peninsular Spanish)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV Definite past</td>
<td>Restricted to formal registers and written language</td>
<td>All past situations (i.e., Preterite and Perfect meanings)</td>
</tr>
<tr>
<td>(e.g., French, Northern Italian, Romanian)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In Table 3.2, Stage I, the interpretation of the resulting state Present Perfect example from Calabrian, *Non m’a scrivutu* (“He hasn’t written to me”) is that “I have no news from him” at the present time (Harris, 1982:51). In Stage II, the Present Perfect in Portuguese, that is the *tenho feito* paradigm, is restricted to durative or iterative uses, as in *O que tens feito ultimamente?* (“What have you done lately?”) (Harris, 1982:53). Many varieties of Latin American Spanish, such as Mexican Spanish, also share this type of durative or iterative use of the Present Perfect, as in *Este mes he estudiado mucho* (“This month I have studied a lot”) (Lope Blanch, 1971:135). In this particular example the speaker continues to study up to and including the moment of speech, which is consistent with the universal perfect. In Stage III, the Present Perfect, as in certain dialects of Peninsular Spanish, exhibits a ‘current relevance’ or ‘recent past’ interpretation. Such interpretations are felicitous with adverbial complements that include the same temporal frame as the present moment, as well as those that express direct anteriority to the
moment of speech such as *hace cien años* ("one hundred years ago"), as in *Esto fue una zona–hace cien años ha cambiado el panorama y ahora las gentes apoderadas [...] se van a–la Torre Picasso* (“This was an area–one hundred years ago the panorama changed and now the high and mighty [...] go to the Torre Picasso” (Schwenter & Torres Cacoullos, 2008:24). In Stage IV, the ‘present relevance’ component of the compound form has become so broad that it now covers all past events within the domain of the Preterite (or Passé Simple), as in *Ce matin je me suis levé à sept heures* (“This morning I woke up at seven o’clock”) (Fleischmann, 1983:198), in which the Passé Composé is the only option in modern speech.

A close examination of these diachronic stages provides a better understanding of how the Spanish Present Perfect and Preterite tenses evolved, why they exhibit the meanings they do, and where and why dialectal variation is found in this contrast. This examination also accounts for the distinct developmental paths that both the Spanish and French Present Perfects have undergone, which are the two first languages of the Spanish heritage children studied here.

### 3.2.8. The French Passé Composé

French is a language that once maintained an opposition between three past tenses, including: the Passé Simple, Imparfait (Imperfect), and the resultative Passé Composé. In modern spoken French, however, only the Imparfait resultative/narrative Passe Composé contrast is maintained (Molendijk et al., 2004:298). The Imparfait is a morphologically simple form with one suffix on the main verb, as in (55). The Imperfect expresses an event that takes place in a portion of the past, but without seeing the end or the beginning of the event (Grevisse & Goosse, 2011). In contrast, the Passé Composé is a morphologically complex form that is composed of the Present tense inflected form of auxiliary *avoir* (“have”) or *être* (“be”) and the Past Participle, as illustrated in (56). Semantically, the French Passé Composé expresses a past event in relation
to the moment of speech, a past event that is considered to be complete (Grevisse & Goosse, 2011).

(55) **Imparfait**
    Il neigeait.
    it snow.IMP.3SG
    “It snowed.”

(56) **Resultative/narrative Passé Composé**
    Il a neigé hier lorsque je suis allée à l’ université.
    it have.PRES.3SG snow.PP yesterday when I be.PRES.1SG go.PP to the university
    “It snowed yesterday when I went to the university.”

In modern spoken and written French the Passé Simple has been replaced, or is in the process of being replaced, by the Passé Composé (Verkuyl et al., 2004:246). The semantic distribution between the Passé Simple and Passé Composé is therefore neutralized. The Passé Composé carries the meanings of completed past action and current relevance, as did the *feci* paradigm in Classical Latin (Harris, 1982). This distribution is in line with what Vet (1992) and Labelle et al. (2002) have proposed for the Passé Composé in that it has two meanings: a “true” Perfect (current relevance) and a Simple Past sense (completed past action). The feature geometry for features of Inflection in French as in Cowper & Hall (2003) is adopted here, as illustrated in Figure 3.5.

9 Cowper & Hall (2003) have proposed that the Passé Simple carries a marked Formal register feature, which makes this form unavailable in spoken French.
The feature geometry of features of Inflection for French in Figure 3.5 matches that of the feature geometry of features of Inflection for Spanish in Figure 3.2 above. Compositionally, Cowper and Hall (2003) have proposed that the Passé Composé is a monoclausal structure that consists of one Infl and spells out the features [Entirety] (and [Precedence] by entailment), as shown in Figure 3.6.

The temporal representation of the French Passé Composé in 3.6 aligns with that of the Spanish Preterite in Figure 3.3 above. This means that the French Passé Composé does not share the same biclausal properties as the Spanish Present Perfect.

Returning now to the prototypical uses of the Perfect, all four types are found in the French Passé Composé, as illustrated in (57) to (60). Certain interpretations, however, are limited.
(57) **Perfect of result**

a. Nos invités ont perdu notre adresse.
   our guests have.PRES.3SG lose.PP our address
   “Our guests lost our address.”

b. Ils sont arrivés tard.
   they be.PRES.3PL arrive.PP late
   “They have arrived/arrived late.”

(58) **Recent past perfect**

a. On vient de courir dix kilomètres.
   we come.PRES.3SG from run.INF ten kilometres
   “We have just run ten kilometres.”

b. (Ce matin) on a couru dix kilomètres.
   this morning we have.PRES.3SG run.PP ten kilometres
   “(This morning) we ran ten kilometres.”

(59) **Existential perfect**

Isa a vu ses parents cinq fois depuis 2012.
Isa have.PRES.1SG see.PP her parents five times since 2012
“Isa visited/has seen her parents five times since 2012.”

(60) **Universal (continuous) perfect**

a. *Ça fait trois ans qu’Huguette a habité à Londres.
   it make.PRES.3SG three years that Huguette have.PRES.3SG live.PP at London
   “Huguette has lived in London for three years.”

b. Ça fait trois ans qu’Huguette habite à Londres.
   it make.PRES.3SG three years that Huguette live.PRES.3SG at London
   “Huguette has lived in London for three years.”

c. Louis n’a pas encore visité Londres.
   Louis CL have.PRES.3SG not still visit.PP London
   “Louis has still not visited London.”

---

10 Alternatively, this sentence can be expressed with the expression *il y a* in the Present: *Il y a trois ans qu’Huguette habite à Londres* (“It has been three years since Huguette lived in London”).
Beginning with the perfect of result, the example with auxiliary *avoir* in (57a) asserts that the guests are in the resultant state of having lost the speaker’s home address. In French the *être* plus Past Participle construction, in particular, expresses a resultative interpretation (Vetters, 2010), as in (57b), which asserts that the guests have left and are therefore in a state of absence. With the recent past, French achieves this interpretation via the periphrastic *venir de* (“have just”) plus infinitive construction, as in (58a), and not the Passé Composé. The Passé Composé instead expresses a completed event with no relation to the moment of speech, as in (58b), and is the only option in this context. Recall that the existential perfect asserts that the subject undergoes a certain state or experience within a certain temporal span in his/her lifetime. The Passé Composé can express the existential interpretation with a *since*-adverbial (“depuis”), as in (59) which asserts that Isa has seen her parents five times since 2012, a past event that is not required to hold at the present moment. Finally, while the universal perfect expresses a continuative interpretation, this interpretation is infelicitous in the Passé Composé with certain expressions such as the *faire* (“do/make”) plus time interval plus *que* (“that”) construction, as in (60a).

Though this common Romance construction is used to express the duration of a state or activity, it requires that the matrix eventuality hold at the indicated reference time, which is not the case in (60a) since the eventuality of Huguette living in London took place in the past and no longer holds at the present moment. Alternatively, the French Present tense can combine with this time interval construction to denote the duration of a state or activity, as in (60b). A continuous interpretation is, however, achieved in the Passé Composé with negation, as in (59c) in which there is a continuous temporal span in which Louis has not visited. Negation also favours the Passé Composé, as in (60c).

Most verbs in the Passé Composé combine with auxiliary *avoir*. The Past Participle of *avoir* verbs agrees in number and gender with the direct object when the direct object precedes it,
as illustrated with the relative clause in (61b). No agreement, however, is required when
the direct object follows the Past Participle, as in (61a), or when the direct object is absent all
together, as in (61c). In the Passé Composé, pronominal verbs and unaccusative verbs (i.e., verbs
which have no thematic subject and whose only argument is a direct object such as verbs of
motion and change-of-state verbs), are conjugated with être, as in (62) (see Vincent, 1982).
Gender and number agreement are generally required between the Past Participle and subject
with être verbs in the Passé Composé. French disallows interpolated elements, such as point-in-
time adverbials, between the auxiliaries avoir/être and the Past Participle in the Passé Composé
(63). With respect to adverbial modification, the Passé Composé can combine with past-definite
adverbials, as in the narrative sequence in (64) from (Caudal, 2006:22).

(61) a. Diego a fini ses bandes dessinées.
    Diego have.PRES.3SG finish.PP his strips drawing
    “Diego finished/has finished his comics.”

    b. Lola a lu les bandes dessinées que son père lui a
    Lola have.PRES.3SG read.PP the strips drawings that her Dad CL have.PRES.3SG
    achetées.
    buy.PP
    “Lola read/has read the comics that her Dad bought for her.”

    c. Mon équipe a perdu Ø.
    my team have.PRES.3SG loss.PP
    “My team lost/has lost.”

(62) a. Les enfants se sont couchés tôt.
    the children CL be.PRES.3PL go to bed.PP early
    “The children went/have gone to bed early.”

    b. Flora est tombée.
    Flora be.PRES.3SG fall.PP
    “Flora fell.”

(63) a. As-tu dormi hier soir?
    have.PRES.2SG you sleep.PP yesterday night
    “Did you sleep last night?”
b. Oui, j’ai dormi hier soir.
   Yes I have.PRES.1SG sleep.PP yesterday night
   “Yes, I slept last night.”

c. *Oui, j’ai hier soir dormi.
   Yes I have.PRES.1SG yesterday night sleep.PP
   “Yes, I last night slept.”

(64) Le lion a mangé hier, il n’a pas faim.
    The lion have.PRES.3SG eat.PP yesterday he CL have.PRES.3SG not hunger
    “The lion ate yesterday, he’s not hungry.”

With these facts in mind about the French Passé Composé, as well as those from above
about the Spanish Present Perfect, Table 3.3 summarizes the Present Perfect characteristics
relevant to both languages. A contrastive analysis of the relevant features of Inflection follows in
Chapter 4.

Table 3.3. Summary of Present Perfect characteristics for French and Spanish.

<table>
<thead>
<tr>
<th></th>
<th>French</th>
<th>Spanish</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Auxiliary selection</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>2. Gender and number agreement between past participle and subject or object.</td>
<td>Some</td>
<td>No</td>
</tr>
<tr>
<td>3. Allowance of interpolated elements between auxiliary verb and Past Participle</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>3. Uses of Perfect types</td>
<td>Limited</td>
<td>Yes</td>
</tr>
<tr>
<td>4. Co-occurrence with definite-past adverbials</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>6. Use in sequenced narratives</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
Chapter 4: Feature reassembly: The case of Spanish and French in contact

4.1. Introduction

The goal of this chapter is to discuss available evidence of grammatical cross-linguistic influence in Spanish-French contact. This language pair allows us to examine the influence of cognate morphological forms and partially shared and/or overlapping semantic features. I investigate a range of phenomena from the domains of tense-aspect-mood, as well as copula selection, in Spanish, including the following meaning contrasts:

- Preterite/Present Perfect tenses;
- Preterite/Imperfect tenses;
- Indicative/Subjunctive moods; and,
- ‘be’ copulas ser/estar.

It is assumed here as in the Saussurean (1916) tradition that meaning depends on contrast. Spanish and French are congruent enough morphologically and semantically in each of the above domains to invite the bilingual child to select parallel formats. Recall from chapter 2 that Hulk & Müller’s (2000) model of cross-linguist influence predicts influence and quantitative differences in bilingual grammars when both languages exhibit surface structure overlap leading to ambiguity, i.e., if language A has one or more analyses for a given construction and language B contains evidence for one of these two analyses, as in (65), and an ‘interface’, such as the syntax-pragmatics interface, is involved.

(65) Language A          Language B
    X ← X
    Y

However, the notion of overlap as in Hulk & Müller (2000) and the possibility of qualitative transfer have been debated recently in other work (see Strik & Pérez-Leroux, 2011; Unsworth,
2003; Yip & Matthews, 2009). In this study I propose to extend the factors that affect cross-linguistic influence by investigating whether shared morphological forms and overlapping semantic features play a role. This opens up the possibility of investigating new relationships between language pairs, extends the empirical coverage in a systematic way, and offers a semantic contribution. I add a role for shared morphological forms and semantic features and propose that the notion of “analysis” refer to morphological forms and features of Inflection. Drawing from work on L2 acquisition, I assume as in Lardiere (2009) that a contrastive analysis of features provides an optimal characterization of the learning task of bilingual learners. I implement a feature geometry analysis for features of Inflection in Spanish and French as in Cowper (2003, 2005) and Cowper & Hall (2003), and adopt standard assumptions of a distributed morphology-inspired analysis (see Halle & Marantz, 1993). Under this view, features are assembled into lexical items in the lexicon, enter into syntactic computation, and then spelled out as vocabulary items in the morphology with a small degree of difference between the two languages. Superficially, Spanish and French are very similar in that they both have an abundance of morphemes that encode tense, aspect and mood. Both languages also make productive use of the periphrastic tense forms, and both languages generate a wide array of possible tenses. Spanish has a robust subjunctive, making use of the Present Subjunctive and two Past Subjunctive forms, while French makes variable use of these forms. The differences between Spanish and French “can be traced to a very small number of differences in the features chosen by each language and in the way these features are assembled into LIs” (see Cowper, 2005:19). The features of Inflection for Spanish and French, as per Figures 3.2 and 3.5 respectively, are given again in (66).
Following Cowper (2005) and Cowper & Hall (2003), the features of Inflection in (66) that are chosen from the universal set for each language are then bundled into the lexical items listed in (67). Some features, for example, are bundled as one lexical item while others are mapped onto separate lexical items (e.g., P-deixis and T-deixis).

The relevant vocabulary items, which are then spelled out post-syntactically by the morphology, are listed in (68) and (69) for the semantic contrasts examined here.

(66) a. Spanish   b. French
    Event         Event
    Entirety      Entirety
    Precedence    Precedence
    Irrealis      Irrealis
    P-deixis      P-deixis
    T-deixis      T-deixis
    Finite        Finite
    Proposition   Proposition

(67) a. Spanish   b. French
    Event         Event
    Entirety      Entirety
    Precedence    Precedence
    Irrealis      Irrealis
    P-deixis      P-deixis/T-deixis
    T-deixis + Finite      Finite
    Proposition   Proposition

(68) Spanish vocabulary items
a. Present Indicative: [P-deixis]
b. Imperfect: [Precedence]
c. Preterite: [Precedence]-[Entirety]
d. Present Perfect: [Deixis], [Precedence]-[Entirety]
e. Present Subjunctive: [T-deixis]
f. Imperfect Subjunctive: [T-deixis, Irrealis, Precedence]

(69) French vocabulary items
a. Present Indicative: [P-deixis]
b. Imperfect: [Precedence]
c. Passé Composé: [Precedence]-[Entirety]
d. Passé Composé: [Deixis], [Precedence]-[Entirety]
e. Present Subjunctive: [Finite]
f. Imperfect Subjunctive: [Finite, Precedence]
Bilingual learners face many challenges when constructing morpholexical items in each of their languages. One of these challenges is to determine whether forms are obligatory or optional, and what constitutes these types of contexts (Lardiere, 2009). Given two contrasting forms, a context is said to be an obligatory context if only one of the forms is acceptable in that context, while the other form generates ungrammaticality. The only possible form in that context is said to be ‘obligatory’ thus making the context categorical. One such example is the Preterite/Present Perfect contrast in which the Preterite, and not the Present Perfect, is obligatory in contexts with point-in-time adverbials in the past, as in (70). This is particularly the case for Latin American varieties of Spanish but less so for some varieties of Peninsular Spanish, which can instead employ the Present Perfect with point-in-time adverbials (i.e., Alicante, Madrid, Valencia) (Howe, 2013; Schwenter & Torres Cacoullos, 2008). The latter pattern, however, is a new trend and not very common.

(70) Ayer comieron/ *han comido pizza.
     Yesterday eat.PRET.3PL have.PRES.3PL eat_PP pizza
     “Yesterday they ate/*have eaten ate pizza.”

Given two contrasting forms, a context is said to be optional if both forms are possible: there is no difference in grammaticality, but there is a different in meaning/interpretation. In this case, each form is said to be ‘optional’. In this study such contexts are referred to as interpretable. One such case is the dual ‘be’ copula contrast in Spanish, as in ser/estar in combination with adjectival predicates as in (71), where both forms are possible, but entail semantic differences.

(71) Sara es/está alta.
     Sara be.PRES.3SG tall
     “Sara is tall.”

In this chapter I investigate whether a model of transfer should go beyond surface structure overlap by adding a role for cognate morphological forms and semantics. This opens up the possibility of investigating new relationships between language pairs. I therefore explore
potential predictions about the role of (i) form similarity (i.e., cognate morphological forms),
(ii) the degree of semantic feature overlap, and (iii) the obligatory and optional status of a given
contrast.

4.2. **Tense-Aspect-Mood**

4.2.1. **Preterite/Present Perfect contrast**

Recall from the previous chapter that, in Spanish, both the Preterite and Present Perfect
tenses express past events in relation to a reference point, as in (72) and (73) respectively, yet
they achieve this in different ways.

(72) Dormí bien (ayer).
    sleep.PRET.1SG well (yesterday)
    “I slept well yesterday.”

(73) He dormido bien (hoy).
    have.PRES.1SG sleep.PP well (today)
    “I have slept well (today).”

For instance, the Preterite expresses a past event or situation that is directly anterior to the
moment of speech (Bello, 1847; Rojo & Veiga, 1999), and consists of one inflection. In
particular, Cowper (2005) proposes that the Preterite spells out the feature [**Entirety**], a
dependent of [**Precedence**]. Recent studies in variation have proposed that distribution patterns
provide evidence that the Preterite is the default/neutral (unmarked) form of past reference in
many Latin American varieties of Spanish, including Argentina, Mexico, El Salvador and Peru
(Howe, 2013; Rodríguez Louro, 2009; Schwenter & Torres Cacoullos, 2008). In contrast, the
compound Present Perfect (‘**antepresente**’) expresses a past event or situation that is anterior to a
reference point that is simultaneous with the moment of speech, i.e., indirect reference to the
moment of speech (Bello, 1847; Rojo & Veiga, 1999). The Present Perfect entails the properties
of current relevance and persistence, consists of two inflections and therefore, according to
Cowper (2005), forms a biclusal structure. Compositionally, it is assumed here that the Present
form of the auxiliary *haber* is deictic to the moment of speech (Bel, 2002) and spells out [Deixis], while the Past Participle realizes [Entirety], a dependent of [Precedence] (Cowper, 2005). Recent studies in variation have proposed that distribution patterns provide evidence that the Present Perfect is the default/neutral (marked) form of past reference in certain varieties of Peninsular Spanish (e.g., Alicante, Madrid, Valenicia) (Howe, 2013; Schwenter & Torres Cacoullos, 2008). However, the Present Perfect is marked in certain contexts. This is particularly the case in combination with the left-bracket adverbial *desde*/*since* (e.g., *Desde la semana pasada ha estado enfermo dos veces*/*Since last week he’s been sick twice*), which sets an interval that starts in the past and extends to the present or the moment of speech (see Iatridou, 2003). Furthermore, it has been argued that there are actually two Present Perfects in Peninsular Spanish: one that expresses the “true” perfect, as in (74), and a second that expresses precedence (i.e., recent, indefinite past), as in (75) (see Rodríguez Louro, 2009; Schwenter & Torres Cacoullos, 2008).

(74) ¿Has visto esta mañana el atasco Extremadura?

have.PRES.2SG see.PP this morning the traffic jam Extremadura

“Did you see this morning the traffic jam in Extremadura?”

(CCON028A, Schwenter & Torres Cacoullos, 2008:17)

(75) yo lo que he decidido es yo me examino libre.

I it that have.PRES.1SG decide.PP be.PRES.3SG I me examine.PRES.1SG free

“What I decided is that I’m going to be tested on a work of my choice.”

(CCON022B, Schwenter & Torres Cacoullos, 2008:31)

A similar situation arises in French according to Labelle et al. (2002) and Vet (1992) who proposed that the French Passé Composé has two meanings: a “true” Perfect and a Simple Past sense. It is assumed here following Vet and Labelle et al. that the Passé Composé has two meanings. Recall that the Passé Composé is morphologically identical to the Spanish Present

11 These proposals, however, are not without criticism (e.g., see de Swart (2007) for arguments against polysemy).
Perfect in that it consists of an auxiliary verb (e.g., *avoir/être*) in the Present tense and the Past Participle of the main verb, as in (76a-b).

(76)  

a. Ils *ont* fait du canot (aujourd’hui/hier/ l’ année passée).

  they have.PRES.3PL do.PP some canoe (today/yesterday/the year past)

  “They did some canoeing (today/yesterday/last year).”

b. Élise *est* allée voir les tulipes (aujourd’hui/hier/ l’ année passée).

  Élise be.PRES.3SG go.PP see.INF the tulips (today/yesterday/the year past)

  “Élise went to see the tulips (today/yesterday/last year).”

In French, the Passé Composé (77) is therefore employed in Simple Past contexts that many Latin American varieties of Spanish obligatorily spell out with the Preterite (78).

(77)  

J’ *ai* gouté hier à soir su May là, tu sais…

  I have.PRES.1SG taste.PP yesterday at night at May there you know.

  “I tasted (that) last night at May’s, you know…”


(78)  

Porque eso pasó el año pasado.

  because this happen.PRET.3SG the year past

  “Because this happened last year.”

  (*MexCult, 179*, Schwenter & Torres Cacoullos, 2008:16)

As a result, the simple past meaning of the French Passé Composé does not share the same biclusal properties as the Spanish Present Perfect. The Passé Composé instead has one inflection and is a monoclusal structure. Following Labelle et al. (2002) and Vet (1992), the Passé Composé can express an event or situation that is anterior to the moment of speech (e.g., PC₁), or an event that is anterior to a reference point that is simultaneous to the moment of speech (e.g., PC₂). Compositionally, I propose that PC₁ spells out [Precedence]-[Entirety] with a Simple Past sense, whereas as PC₂ realizes [Deixis], [Precedence]-[Entirety] with a “true perfect” sense (Cowper, 2005; Cowper & Hall, 2003; Labelle et al., 2002).¹² The Passé Composé also yields existential uses and may co-occur with certain duration adverbials (*bien

¹² In Reichenbachian terms, PC₁ would be equivalent to E>R>S, and PC₂ to E>R=S.
*longtemps/*“for a long time”) (79a); however, only the Present is selected with left-bracket adverbials such as *depuis* (“since”) (79b) in French. Furthermore, the Passé Composé yields universal perfect uses and combines felicitously with negative polarity adverbials (*pas encore, pas toujours*/“not yet, not always”) (80).

(79) a. Mon petit garçon *a été* malade bien *longtemps*.
    my little boy PRES.3SG be PP sick good long time
    “My little boy was sick for a long time.”

    (XX:119:721, Leroux, 2005:122)

    b. Mon petit garçon *est malade depuis la semaine passée*.
    my little boy PRES.3SG sick since the week past
    “My little boy has been sick since last week.”

(80) Pierre n’ *a pas encore fini ses devoirs*.
    Pierre not have PRES.3SG not yet finish PP his homework
    “Pierre has not yet finished/did not yet finish his homework.”

The difference in meaning between Spanish and French follows from the fact that in Spanish the Present Perfect minimally contrasts with the Preterite, while in modern spoken French the Passé Composé does not contrast with the Passé Simple and instead has two meanings (e.g., PC₁ and PC₂). Within a model of cross-linguistic influence, which includes cognate morphological forms and semantics, the Spanish and French Present Perfects involve a case of overlap and similarity with respect to cognate morphological forms and semantic features. Additionally, the French Passé Composé exhibits ambiguity in that it corresponds to two different meanings (e.g., PC₁ and PC₂), one of which overlaps with the Spanish Present Perfect and the other with the Spanish Preterite. Table 4.1 summarizes these facts.
Table 4.1. Morphological overlap, shared features of Inflection and ambiguity in the Spanish and French Simple Past/Present Perfect tense contrast.

<table>
<thead>
<tr>
<th>Spanish</th>
<th>French</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morphological overlap and shared features of Inflection</td>
<td></td>
</tr>
<tr>
<td>Preterite</td>
<td>Passé Composé₁</td>
</tr>
<tr>
<td>[Precedence]-[Entirety]</td>
<td>[Precedence]-[Entirety]</td>
</tr>
<tr>
<td>Present Perfect</td>
<td>Passé Composé₂</td>
</tr>
<tr>
<td>[Deixis], [Precedence]-[Entirety]</td>
<td>[Deixis], [Precedence]-[Entirety]</td>
</tr>
<tr>
<td>Ambiguity</td>
<td>1 form each with one meaning</td>
</tr>
</tbody>
</table>

Thus, given the Simple Past/Present Perfect contrast in Spanish and French in the model of cross-linguistic influence proposed here, in (81) X represents the morphological form of the Preterite and its corresponding features of Inflection, while Y represents the morphological form of the Present Perfect and its features of Inflection. This configuration is illustrated in (81) in which the French Passé Composé₂ (Y) and the Spanish Present Perfect (Y) exhibit morphological and semantic overlap. However, the Passé Composé₁’s (X) features of Inflection overlap with a different form in Spanish, that is the Preterite (X). Given this ambiguity, this model would predict cross-linguistic influence from French to Spanish (i.e., use of the Spanish Present Perfect in contexts for which the Spanish Preterite is obligatory).

(81) Model of transfer for Simple Past/Present Perfect in Spanish and French

<table>
<thead>
<tr>
<th>Language B (French)</th>
<th>Language A (Spanish)</th>
</tr>
</thead>
<tbody>
<tr>
<td>X-Passé Composé₁</td>
<td>X-Preterite</td>
</tr>
<tr>
<td>[Precedence]-[Entirety]</td>
<td>[Precedence]-[Entirety]</td>
</tr>
<tr>
<td>Y-Passé Composé₂</td>
<td>Y-Present Perfect</td>
</tr>
<tr>
<td>[Deixis], [Precedence]-[Entirety]</td>
<td>[Deixis], [Precedence]-[Entirety]</td>
</tr>
</tbody>
</table>

What is the effect of bilingualism on the use of the Present Perfect? Though there is very little research on child bilingual acquisition of the Spanish Present Perfect, one study has shown that this tense is vulnerable to transfer in a language contact situation, and that it overextends to
Preterite-favouring contexts because of semantic feature reassembly (Sánchez, 2004). For example, Sánchez explored the possibility of transfer in the tense, aspect and evidentiality systems of Quechua-Spanish bilingual children using a story-retelling task in both languages. Sánchez proposed that in the semantic feature matrix associated with Tense, Spanish past tenses are linked to aspectual features related to foregrounding (e.g., Preterite), backgrounding (e.g. Imperfect) and mirativity, while in Quechua past tense features are linked to the evidentiality feature (e.g., reportative versus witnessed accounts). The Spanish input story consisted of the Imperfect, Preterite and Present tenses, while the narratives that both groups of bilingual children then produced included these three tenses, plus the Present Perfect and Pluperfect. For instance, a mismatch between the story input in the Preterite and an overextension of the Present Perfect in the retell output were reported for the bilinguals, as in (82).

(82) a. Input:  
Lo llevó a su casa.  
CL bring.PRET.3SG to her house

b. Output:  
Eh se ha lleva(d)o a su casa.  
Eh CL have.PRES.3SG bring.PP to her house  
“(She) took (it) to her house.”

(Sánchez, 2004:159)

Sánchez argued that this was because bilingual children use the Present Perfect to convey evidentiality (i.e., attested information), but with a foreground interpretation that is generally reserved for the Preterite. This type of use of the Spanish Present Perfect is also compatible with the perfect of recent past. Sánchez proposed that the representations for the Spanish Present Perfect, Pluperfect and Imperfect tenses produced by these bilingual children included evidentiality features from Quechua in their Tense matrix. This was the result of convergence with the semantic feature specification of the Quechua Tense matrix, which therefore led to a reassembly of partially overlapping features shared between the two languages. These findings are consistent with previous findings on tense use in adult Quechua-Spanish bilingual speech
(see Escobar, 1997; Klee & Ocampo, 1995) in which the Spanish Present Perfect was associated with foreground information and an attested evidential interpretation.

### 4.2.2. Preterite/Imperfect contrast

Past reference in Spanish can also be expressed by the Preterite and Imperfect tenses, as in (83) and (84), respectively.

(83) Corrí.
run.PRET.1SG
“I ran.”

(84) Corría.
run.IMP.1SG
“I ran.”

For instance, the Preterite expresses a past event or situation that is directly anterior to the moment of speech. Following Cowper (2005), the Preterite explicitly spells out [Precedence]-[Entirety]. This means that the totality of moments of the event or situation precedes the moment of speech (Cowper, 2005). In contrast, the Imperfect (‘Present of the past’) expresses a past event or situation that is simultaneous to some past reference (Bello, 1847; Rojo & Veiga, 1999). The Imperfect realizes [Precedence] and is the least specified (default) form. According to Cowper (2005), the imperfect denotes that at least one moment associated with the event or situation precedes the moment of speech. Neither the Preterite nor the Imperfect encode aspect per se as both tenses may combine felicitously with stative and eventive predicates. It is assumed here that the difference in meaning between the Preterite/Imperfect contrast in (83) and (84) is temporal. Aspectual consequences such as those similar to grammatical aspect (i.e., ±perfective) can instead be attributed to the feature [Entirety] in the narrow tense system, a dependent of [Precedence] (Cowper, 2005:25). Thus, the Imperfect receives its aspectual force from the fact that it contrasts with the Preterite (Cowper, 2005:30).
In French, there are two morphological past tenses, the Passé Simple and the Imparfait; however, in modern spoken French past temporal reference is expressed by the Passé Composé/Imparfait alternation, as in (85) and (86), respectively.

(85) J’ai couru.
    I have.PRES.1SG run.PP
    “I ran.”

(86) Je courais.
    I run.IMP.1SG
    “I ran.”

As established in 4.2.1, one of the meanings of the Passé Composé (i.e., Passé Composé₁) is equivalent to the Spanish Preterite and spells out [Precedence]-[Entirety] (Cowper, 2005; Cowper & Hall, 2003; Labelle et al., 2002). The Imparfait realizes [Precedence] (Cowper, 2005; Cowper & Hall, 2003), as in the Spanish Imperfect. The Passé Composé₁, like the Spanish Preterite, is the most specified form with respect to features of Inflection, while the Imparait, like the Spanish Imperfect, is the least specified form. Anteriority and sequentiality are generally associated with the Passé Compose (and the Passé Simple), while simultaneity is largely tied to the Imparfait (Comeau et al., 2012:325). The Passé Composé/Imperfect alternation has been attested in sociolinguistic work on the speech of two different generations of adult native speakers of Quebec French in Gatineau (Leroux, 2005). ¹³ In the absence of the Passé Simple, Leroux observed a semantic trade-off between the Passé Composé and Imperfect from one generation to the next. For example, an increased use of the Passé Composé and a reduced use of the Imparfait were reported from the older to younger generation, the latter of which group produced both tenses almost equally.

¹³ Leroux’s (2005) data were collected from two different corpora: the Ottawa-Hull French Corpus (Poplack, 1989) and Récits du français québécois d’autrefois (Poplack & St-Amand, 2002).
The difference in meaning between the Simple Past/Imperfect tense alternations in Spanish and French follows from the fact that in Spanish the Preterite contrasts with the Imperfect, while in French the compound Passé Composé, and not the Passé Simple, contrasts with the Imparfait. Within a model of cross-linguistic influence that includes cognate morphological forms and semantics, it appears that the Spanish Preterite/Imperfect and French Passé Composé/Imparfait contrasts involve a case of overlap and similarity with respect to cognate morphological forms and semantic features. These contrasts also involve ambiguity since in French the Passé Composé corresponds to two different meanings, only one of which overlaps with the Spanish Preterite. Table 4.2 summarizes these conditions.

Table 4.2. Morphological overlap, shared features of Inflection and ambiguity in the Spanish and French Simple Past/Imperfect tense contrast.

<table>
<thead>
<tr>
<th></th>
<th>Spanish</th>
<th>French</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morphological overlap and shared features of Inflection</td>
<td>Imperfect [Precedence]</td>
<td>Imparfait [Precedence]</td>
</tr>
<tr>
<td></td>
<td>Preterite [Precedence]-[Entirety]</td>
<td>Passé Composé1 [Precedence]-[Entirety]</td>
</tr>
<tr>
<td></td>
<td>Present Perfect [Deixis], [Precedence]-[Entirety]</td>
<td>Passé Composé2 [Deixis], [Precedence]-[Entirety]</td>
</tr>
<tr>
<td>Ambiguity</td>
<td>1 form each with 1 meaning</td>
<td>1 Simple Past form with 2 meanings, one of which aligns with the Spanish Preterite</td>
</tr>
</tbody>
</table>

Thus, given the Simple Past/Imperfect contrast Spanish and French in the model of cross-linguistic influence argued for here, X represents the morphological form of the Simple Past and its features of Inflection, Y represents the morphological form of the Imperfect and its features of Inflection, and Z represents the Present Perfect. This configuration is illustrated in (87) in which the French and Spanish Imperfects (X) are morphologically and semantically congruent. The Simple Pasts, however, are incongruent since in French the Passé Composé (Y) has two
meanings, one of which corresponds to a morphologically different form in Spanish, that is the Present Perfect (Z), thus leading to ambiguity. Given this ambiguity, cross-linguistic influence from French to Spanish in this particular context may occur (i.e., the possible use of the Imperfect or the Present Perfect in contexts for which the episodic interpretation of the Preterite is the target tense, as indicated by the two arrows in (87)).

(87) \[
\begin{array}{ll}
\text{Language B (French)} & \text{Language A (Spanish)} \\
\text{X-Imperfect} & \text{X-Imperfect} \\
[\text{Precedence}] & [\text{Precedence}] \\
\text{Y-Passé Composé} & \text{Y-Preterite} \\
[\text{Precedence}]-[\text{Entirety}] & [\text{Precedence}]-[\text{Entirety}] \\
\text{Z-Passé Composé} & \text{Z-Present Perfect} \\
[\text{Deixis}],[\text{Precedence}]-[\text{Entirety}] & [\text{Deixis}], [\text{Precedence}]-[\text{Entirety}] \\
\end{array}
\]

Do we find evidence of the effects of bilingualism on the Spanish Preterite/Imperfect contrast? Recall from chapter 2 that the literature on adult heritage and L2 acquisition of Spanish in contact with English has shown that this contrast is vulnerable to transfer, and that neutralization and overextension occur (e.g., Cuza, 2008; Montrul, 2002a; Montrul & Slabakova, 2002, 2003). Some studies have focused on the aspectual distinction between the Preterite/Imperfect (i.e., ± perfective). For example, Montrul (2002) showed that in elicited production, adults who were late child L2 learners of Spanish did not discriminate the meaning differences between the Preterite and Imperfect tenses and thus neutralized the contrast by alternating the Preterite in Imperfect-favouring contexts and the Imperfect in the Preterite-favouring contexts. Silva-Corvalán (1994) confirmed similar findings for Spanish heritage adults in spontaneous production. In related work that instead used a truth-value judgment task, Montrul & Slabakova (2002) reported that L2 learners’ difficulties with the Preterite/Imperfect contrast resided in the acquisition of specific semantic properties, such as aspectual coercion. Aspectual coercion is a reinterpretation process that modifies the lexical semantics of predicates,
such as the case of some Spanish stative verbs which alternate between stative and eventive readings due to a change in the past tense form from Imperfect to Preterite or vice versa (i.e., *Conocía/Conocí* “I knew-IMP/I met-PRET”). Cuza (2008), on the other hand, focused on the acquisition of episodic (i.e., one-time bounded events in the past) versus characterizing (i.e. habitual or continuous events in the past) interpretations associated with the Preterite/Imperfect contrast in L2 Spanish adults and long-term Spanish-speaking immigrants. Using truth-value judgment, acceptability and elicited production tasks, Cuza tested these semantic interpretations with eventive and stative predicates. It was found that both groups overextended the Preterite to characterizing situations in which native speakers preferred the Imperfect. Cuza also reported evidence of an overextension of the Imperfect to eventive predicates in coercion contexts by long-term immigrants for which the Preterite should be preferred. Some participants also showed difficulty with the Imperfect in stative verb contexts. In recent work, Klassen & Cuervo (2014) analyzed the Spanish L2 acquisition of the Preterite/Imperfect contrast in terms of a featural contrast using a feature geometry approach. They asked whether L1 English/L2 Spanish-speaking adults acquire the contrast, overuse a default form, and if acquisition of the contrast is independent of lexical aspect. The contrast was tested in combination with all four lexical aspect classes (i.e., states, activities, achievements, accomplishments) in both comprehension (acceptability-preference task) and production (picture tasks and story retell) tasks. It was found that L2 speakers acquire the Preterite/Imperfect contrast, as well as the feature [Entirety]; however, in both production tasks intermediate-level speakers also overextended the Imperfect to Preterite contexts. This overextension increased significantly in non-prototypical contexts (e.g., Imperfect with accomplishment and achievement verbs). It was found that the Imperfect was the default form. This finding is consistent with the notion of underspecification with respect to the least specified form in terms of features of Inflection. The authors reported that even L1-
speakers’ use of the Imperfect is more flexible in meaning. This, however, was not the case for the Preterite.

Though most of the data on the effects of bilingualism on the Spanish Preterite/Imperfect contrast comes from adults, there are some studies on bilingual children that also agree that the Preterite/Imperfect contrast is vulnerable to transfer, and that it exhibits the redistribution of semantic features, semantic extension and neutralization. For example, in elicited production in Spanish, Sánchez (2004) showed that Quechua–Spanish bilingual children increased their use of past tenses (i.e., Imperfect, Pluperfect) associated with evidentiality, a feature that is absent from the Spanish tense system yet present in the Quechua system. The Spanish narratives of the bilingual children consisted of the following types of mismatches:

(i) use of the Imperfect or Pluperfect forms in the output when the story-retell input used the Preterite, as in (88).

(88) a. Input: Le dio de comer trigo, pan y agua. CL give.PRET.3SG of eat.INF wheat bread and water
b. Output: Daba de comer pan, trigo y agua. give.IMP.3SG of eat.INF wheat bread and water “(She) fed (it) wheat, bread and water.”

(Sánchez, 2004:159)

(ii) use of the Imperfect in the output when the input was in the Present, as in (89).

(89) a. Input: Y todos los días el pajarito canta para la viejita. and all the days the bird sing.PRES.3SG for the old lady “And every day the bird sings for the old lady.”
b. Output: Y pa(ra) la viejita dice cantaba todo el día. and for the old lady say.PRES.3SG sing.IMP.3SG all the day “And (it) sang every day for the old lady all day.”

(Sánchez, 2004:159)
Overall, it was found that bilingual children exhibited a higher frequency of Imperfect-for-
Preterite mismatches in Preterite-favouring contexts, as well as other mismatches such as
Imperfect-for-Present mismatches in Present-favouring contexts. In contrast, monolingual
children exhibited the inverse mismatch, i.e. Preterite-for-Imperfect even though the Imperfect
was used in the input story. Sánchez argued that the Spanish Imperfect morphology of the two
bilingual groups was associated with a strong reportative interpretation, one that matched the
Quechua past tense morpheme -sqa. Thus, it was proposed that Spanish Imperfect forms include
evidentiality features in their Tense matrix as a result of convergence with the feature
specification of the Quechua Tense matrix.

In other work, Miller & Cuza (2013) have reported that Spanish heritage children, along
with their L1 Spanish-speaking parents, show fluctuating use of the Preterite/Imperfect contrast
in episodic and characterizing contexts in elicited production, in a language contact situation
with English. For instance, though heritage children showed target production with age, younger
children overextended the Present tense to characterizing situations that required the Imperfect
(#De niña, Dora vive en México/“As a little girl, Dora lives-PRES in Mexico”), and to episodic
situations that required the Preterite (#Ayer, Dora juega al baloncesto/“Yesterday, Dora plays-
PRES basketball”) (Miller & Cuza, 2013:125). Middle-aged children drastically overextended the
Preterite to Imperfect contexts with characterizing properties such as de pequeña (“as a little
girl”) in combination with the durative adverb siempre (“always”) (#De pequeña, Dora siempre
caminó-PRET a la escuela/“As a little girl, Dora always walked to school”) (Miller & Cuza,
2013:125). Older children’s non-target interpretations were more evenly distributed, yet they
neutralized the Preterite/Imperfect contrast by alternating the Preterite for the Imperfect in
characterizing situations in the past, and the Imperfect for the Preterite in episodic contexts in the
past (#Ayer, Dora tenía-IMP cita con el dentista/“Yesterday, Dora had a dentist appointment”)

(Miller & Cuza, 2013:125). In sum, bilingual children are increasingly better with the Preterite/Imperfect contrast with age; however, their use of this contrast also exhibits patterns of neutralization and semantic extension.

4.2.3. Subjunctive/Indicative contrasts

I now turn to mood, a grammatical category that conveys the speaker’s attitude towards an event or situation. In Spanish, mood is expressed morphologically on the verb. Indicative mood, for example, is the default mood for assertions (90). Spanish Indicatives spell out [P-deixis], which entails [T-deixis] (Cowper, 2005). Recall from chapter 3 that the feature Deixis links the proposition denoted by the clause to the deictic centre of the utterance which has both temporal (moment of speech) and personal (speaker) properties (Cowper, 2005:27). In contrast, Subjunctive mood is generally used in subordinate clauses and may express desires, doubts, possibilities, commands, and personal evaluations (91). Spanish possesses a robust Subjunctive with both Present and Past forms. This is because Spanish Subjunctives are temporally deictic (Cowper, 2005:27), and Subjunctive clauses therefore exhibit the property sequence of tense. Spanish Subjunctives spell out [T-deixis], which entails [Finite] (Cowper, 2005). This means that the tense of the embedded Subjunctive clause must agree with the tense of the matrix clause, as in (92) in which use of the Imperfect Subjunctive is needed. The Imperfect Subjunctive spells out [T-deixis, Precedence] (Cowper, 2005).

(90) Juan Francisco dice que le gusta jugar al golf.
Juan Francisco say.PRES.3SG that CL like.PRES.3SG to play at golf
“Juan Francisco says he likes to play golf.”

(91) La maestra quiere que los alumnos lleguen a tiempo.
the teacher want.PRES.3SG that the students arrive.SUBJ.3PL at time
“The teacher wants the students to arrive on time.”
La maestra quería que los alumnos llegaran a tiempo.

“The teacher wanted the students to arrive on time.”

In Spanish, the Subjunctive is lexically selected by the main clause and categorically employed in embedded complements under factive verbs (e.g., sorprender/“surprise”) (93), verbs of ‘hope’ (e.g., esperar) (94), and irrealis expressions of hypothetical manner in the past (e.g., era como si.../“it was as if...”), as illustrated in (95). In addition to [T-deixis, Precedence], I also assume that, in the particular irrealis use of the Imperfect Subjunctive in (95), [Irrealis] is spelled out.

Le sorprende que tenga tantos gatos.

“It surprises her that he has so many cats.”

Espero que mis otros amigos vengan.

“I hope that my other friends come.”

Era como si fuera un súper héroe.

“It was like he was a super hero.”

In sum, Subjunctive forms in Spanish are finite and temporally deictic, yet they lack personal deixis, which means that a Past Subjunctive is needed (Cowper, 2005:28).

In French, the Indicative and Subjunctive moods are also expressed morphologically on the verb (96) to (97). Indicatives in French, like in Spanish, spell out [P-deixis], which entails [T-deixis] (Cowper, 2005). Use of the Subjunctive in French, however, is less robust than in

14 Spanish can also employ the Imperfect Indicative for some irrealis uses such as in children’s pretend play (e.g., dale que no era un monstruo/“come on that was-IMP not a monster”) and the retelling of dreams (e.g., y entonces yo llegaba a un puente y veía que.../“and then I arrived-IMP at a bridge and saw-IMP that...”). Dialectally, the Imperfect can also be used in contexts in which other dialects use the Subjunctive (e.g., si ellos tomaban café.../“if they had-IMP coffee...”).
Spanish. For example, unlike in Spanish, in French the Subjunctive no longer exhibits the property ‘sequence of tense’. Though the Imperfect Subjunctive paradigm exists in French and survives in formal writing, it has been replaced by the Present Subjunctive in spoken language (Grevisse & Goosse, 2011), as is illustrated in (98). This means that the Subjunctive in French is temporally relative and lacks temporal deixis (Cowper, 2005), eliminating the need for a Past Subjunctive. French Subjunctives thus spell out [Finite] (Cowper, 2005).

(96) Jean François dit qu’il aime jouer au golf.
    Jean François say.PRES.3SG that he like.PRES.3SG to play at the golf
    “Jean François says he likes to play golf.”

(97) Je veux qu’on rende la ville plus accessible.
    I want.PRES.1SG that we make.SUBJ.3SG the city more accessible
    “I want us to make the city more accessible.”

(98) Je voulais qu’on rende/*rendît la ville plus accessible.
    I want.IMP.1SG that we make.SUBJ.3SG/*IMP.SUBJ.3SG the city more accessible.
    “I wanted us to make the city more accessible.”

Recent work in variation has shown that use of the Subjunctive in embedded clauses in French, specifically the Gatineau, Quebec French of L1 adults, is reduced but stable (Poplack, Lealess, & Dion, 2013). For example, Poplack et al.’s corpus data showed that the Subjunctive is lexically selected by a limited number of verbs and non-verbal expressions in the matrix clause (e.g., falloir/“be necessary”, vouloir/“want”, aimer/“like”, pour que/“so that”), as in (99) to (102).

(99) Fallait que moi j’aillle espionner chez le voisin.
    have to.IMP.3SG that me I go.SUBJ.1SG spy.INF at the neighbour
    “I had to go spy on the neighbour.”
    (21.C.113.131, Poplack et al., 2013:170)

(100) Elle veut que j’aie une peine d’amour.
    she want.PRES.3SG that I have.SUBJ.1SG a pain of love
    “She wants me to have a broken heart.”
    (21.C.007.676, Poplack et al., 2013:170)
Bien, ils aiment mieux que je fasse du sport que je well they like.PRES.3PL better that I do.SUBJ.1SG some sport than I

fasse des niaiseries.
do.SUBJ.1SG some mischief

“Well, they prefer that I do sports than make mischief.”

(21C.116.325, Poplack et al., 2013:170)

J’attends à la fin d’année pour qu’ils soient toute en rabais.
I wait.PRES.1SG at the end of year so that they be.SUBJ.3PL all on discount

“I’m waiting until the end of the year so that they’ll all be on sale.”

(21C.101.117, Poplack et al., 2013:177)

Their data also show that the Subjunctive appears in embedded clauses to emotive factive verbs such as avoir peur (“be afraid”), and variably with other emotive factives such as être content (“be happy”). Some highly prescribed verbs, such as the verb of ‘hope’ espérer, selected other variants such as the Present Indicative. Negated sentence types also appeared to favour the Subjunctive, but only when embedded under pour que in the matrix clause.

The difference in meaning between the Spanish and French Subjunctives follows from the fact that in Spanish Subjunctives are temporally deictic, while in French Subjunctives are temporally relative. Cowper (2005) has argued that the difference between Spanish and French Subjunctives “can be captured if, at the point when LI’s [lexical items] are assembled from the features chosen by each language, French packages P-deixis and T-deixis into a single LI, while Spanish maps each feature to a separate LI” (28). Moreover, in Spanish the Subjunctive is used categorically in embedded clauses to emotive factive verbs, verbs of ‘hope’ and expressions of hypothetical manner in the past, while in French the use of the Subjunctive in embedded clauses to emotive factive verbs and verbs of ‘hope’ is variable, and non-obligatory with expressions of hypothetical manner. Within a model of cross-linguistic influence that includes cognate morphological forms and semantics, Present Subjunctive/Indicative contrast in Spanish and French involves a situation of overlap and similarity with respect to overlapping morphological
forms and partial shared features of Inflection. There is also ambiguity since in modern spoken French use of the Present Subjunctive is variable in embedded clauses under certain emotive factive verbs (e.g., *avoir peur*/*be afraid*, *être triste*/*be sad*, *ne pas aimer*/*not like*, *surprendre*/*surprise*) and the verb of ‘hope’ *espérer* and thus exhibits one or more “analyses” (i.e., forms) in these contexts. Additionally, in French the irrealis use of the Imperfect Subjunctive in contexts of hypothetical manner (*c’était comme si…*) has been replaced by the Imparfait (Imperfect) Indicative, which might mean that only its features of tense get spelled out morphologically by the Imperfect for [Precedence]. Table 4.3 summarizes these facts.

**Table 4.3. Morphological overlap, shared features of Inflection and ambiguity in the Spanish and French Subjunctive/Indicative mood contrast.**

<table>
<thead>
<tr>
<th>Morphological overlap and shared features of Inflection</th>
<th>Spanish</th>
<th>French</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present Indicative [P-deixis]-[T-deixis]</td>
<td>Present Indicative [P-deixis]-[T-deixis]</td>
<td></td>
</tr>
<tr>
<td>Present Subjunctive [T-deixis]</td>
<td>Present Subjunctive [Finite]</td>
<td></td>
</tr>
<tr>
<td>Imperfect Subjunctive [T-deixis, Irrealis, Precedence]</td>
<td>Imparfait (Indicative) [Finite, Irrealis, Precedence]</td>
<td></td>
</tr>
</tbody>
</table>

| Ambiguity                      | Spanish Subjunctive is deictic and productive. | The French Subjunctive is non-deictic and variable; Imperfect (Indicative) replaces Imperfective Subjunctive in spoken language. |

Thus, given the Subjunctive/Indicative mood contrast in Spanish and French in the model of cross-linguistic influence argued for here, X and Y represent morphological forms and/or the corresponding features of Inflection depending on the context, as illustrated in the configurations in (103) to (105). For example, in the Indicative context, that is contexts with embedded clauses under the verb of ‘saying’ *décir*, X represents the morphological form of the Present Indicative and its features of Inflection, as shown in (103). In this particular context the Indicative is obligatory in Spanish and French, and both languages are congruent morphologically and
semantically. In the absence of ambiguity, cross-linguistic influence from French to Spanish would therefore not be predicted in this context.

(103) Model of transfer for embedded clauses to verb of ‘saying’ decir.

\[
\text{Language B (French)} \quad = \quad \text{Language A (Spanish)}
\]

\[
\begin{array}{ll}
X\text{-Present Indicative} & X\text{-Present Indicative} \\
[P\text{-deixis}]-[T\text{-deixis}] & [P\text{-deixis}]-[T\text{-deixis}]
\end{array}
\]

Turning to contexts in Spanish with embedded clauses under emotive factive verbs and the verb of ‘hope’ esperar, X represents the morphological form of the Present Indicative and its features of Inflection, while Y represents that of the Present Subjunctive and its features of Inflection. This configuration is illustrated in (104) in which the Present Indicatives in Spanish and French overlap with respect to morphology and features of Inflection, however, use of the Present Indicative in Spanish is ungrammatical. Instead, use of the Subjunctive is obligatory. Though the Present Subjunctives overlap morphologically, they are incongruent with respect to their features of Inflection. Since use of the French Subjunctive is variable under certain emotive factive verbs, French presents two possible options (i.e., Present Indicative or Subjunctive each of which form has corresponding features of Inflection) in these contexts, while Spanish has only one option (i.e., the Present Subjunctive) in these contexts. Given this ambiguity, cross-linguistic influence from French to Spanish would be predicted (i.e., use of the Spanish Present Indicative in contexts in which the Present Subjunctive is obligatory).
Model of transfer for embedded clauses under emotive factive verbs (\emph{estar triste}/“be sad”, \emph{no gustar}/“not like”, \emph{sorprender}/“surprise”, \emph{tener miedo}/“be afraid”) and the verb of ‘hope’ \emph{esperar}.

Finally, given the Imperfect Subjunctive/Imperfect Indicative contrast in Spanish and French in the model of cross-linguistic influence proposed here, X represents the morphological form of the Imperfect (Indicative) and its features of Inflection, while Y represents the morphological form of the Imperfect Subjunctive and its features of Inflection. This configuration is illustrated in (105) in which the Imperfects (Indicative), X, exhibit morphological and semantic overlap; however, in Spanish the Imperfect (Indicative) is ungrammatical in this context. Instead, the Imperfect Subjunctive (Y) is required. This form, however, ceases to exist in modern spoken French. Given this ambiguity, cross-linguistic influence from French to Spanish in contexts of hypothetical manner in the past (\emph{era como si...}/“it was as if...”) would be predicted (i.e., use of the Spanish Imperfect (Indicative) in contexts for which the Imperfect Subjunctive is required).
Model of cross-linguistic influence for contexts of hypothetical manner in the past (*era como si...*)

<table>
<thead>
<tr>
<th>Language B (French)</th>
<th>Language A (Spanish)</th>
</tr>
</thead>
<tbody>
<tr>
<td>X-Imperfect (Indicative)</td>
<td>*X-Imperfect (Indicative)</td>
</tr>
<tr>
<td>[Precedence]</td>
<td>[Precedence]</td>
</tr>
<tr>
<td></td>
<td>Y-Imperfect Subjunctive</td>
</tr>
<tr>
<td></td>
<td>[T-deixis, Irrealis, Precedence]</td>
</tr>
</tbody>
</table>

What is the effect of bilingualism in the use of the Subjunctive in Spanish? Research on Spanish heritage acquisition in children and adults, as well as long-term L1 Spanish-speaking immigrants, has shown that use of the Subjunctive in Spanish is vulnerable to transfer under the influence of English (see Lynch, 1999; Montrul, 2009; Silva-Corvalán, 1994, 2003), and French (Cruz, 2013), the dominant community languages. Since there are so few studies on child bilinguals, I first turn to findings from adult bilingual populations. In production, Silva-Corvalán (1994) and Montrul (2009) have reported that adult heritage learners overextend the Present Indicative to contexts that require categorical use of the Subjunctive including embedded clauses to verbs of negation (e.g., *No creo que *es bueno para tu salud tomar tanto alcohol*/*I don’t think it is-PRES good for your health to drink so much alcohol*, subject #111, Montrul, 2009:239) and verbs of ‘hope’ (e.g., *Espero que el trabajo sea interesante y que eventualmente *puedo ir a otro países con este trabajo/*I hope that the job is-SUBJ interesting and that eventually I can-PRES go to other countries with this job*, subject #707, Montrul, 2009:239).15 In addition, both studies showed that adult heritage speakers of low proficiency produce few Subjunctive forms. In the spontaneous production of Spanish heritage children, Silva-Corvalán (2003) reported that children who spoke only Spanish at home used the Present Subjunctive like

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15 A recent corpus study on Spanish confirms that native speakers use the Indicative in certain contexts with negated *creer* (Harrington, 2015).
adult L1 speakers. In contrast, children growing up in Spanish-English and English-only homes did not produce the Subjunctive from age 5;5 on but had produced it from 3;0 to 3;3, a pattern which suggests attrition. Studies in Spanish L1 acquisition have shown that some Subjunctive morphology emerges before age 3;0 with commands (no bebas/“don’t drink”), temporal expressions (cuando/“when”) and purpose expressions (para que/“so that”), however, the full range of uses and subtleties of Subjunctive knowledge, including relative clauses, temporal clauses, and other complement expressions, is not acquired until after age 8;0 in both production and comprehension (e.g., Blake, 1983; Hernández Pina, 1984; López Ornat, 1994; Pérez-Leroux, Álvarez, & Battersby, 2010; Sánchez-Naranjo & Pérez-Leroux, 2010). In fact, Blake (1983) proposed that L1 acquisition of the Subjunctive follows a specific sequence: indirect commands > adverbial clauses > relative clauses > sentential complements. Blake showed that the last mood selection error for L1 Spanish children was the incorrect selection of the Indicative in complement clauses to factive emotive verbs (e.g., alegrarse/“be glad”). Use of the Spanish Subjunctive is obligatory in this context.

There is also some evidence that contact with French affects some irrealis uses of the Past Subjunctive in Spanish. For instance, in recent sociolinguistic work, Cruz (2013) has reported that L1 Spanish-speaking Cuban adults living in a long-term Francophone context in Montreal show evidence of influence from the French Imparfait in Spanish in contexts of hypothetical manner in the past (e.g., era como si...), as in (106a). In Spanish, this particular context is categorically spelled out with the Imperfect Subjunctive, as in (106b), whereas in French the Imparfait is employed, as in (107).
Thus, (106a) indicates an (over)extension of the Indicative in Subjunctive-favouring contexts in Spanish, the default (or less specified) form, due to long-term contact with French. These findings contrast with Lynch’s (1999) study on Subjunctive use in three generations of adult Spanish-speaking Cubans living in Miami, all of whom produced the Imperfect Subjunctive in similar hypothetical manner clauses (e.g., como si…).

4.3. **Copula selection**

4.3.1. **Ser/estar copula contrast**

Moving from tense-aspect-mood to copula selection, in Spanish we find a dual ‘be’ copula system, *ser* and *estar*. *Ser* and *estar* share overlapping but non-identical distributions (see Schmitt & Miller, 2007). The context of interest in this study is *ser*/*estar* in the Present tense plus adjectival predicates that can optionally appear with both copulas, as illustrated in (108) and (109).

(108) Los niños son traviesos (*hoy). the children be.PRES.3PL mischievous (today)
Both *ser* and *estar* can be used truthfully to express the children’s mischievous behaviour in (108) and (109), however, the semantic interpretations associated with each copula choice differ. It is assumed here, following a number of syntactic, semantic and pragmatic analyses (see Arche, 2007; Clements, 1988; Fernández-Leborans, 1999; Lema, 1995; Luján, 1981; Maienborn, 2005; Schmitt, 2005), that the difference in meaning between the two copulas in (108) and (109) is mainly aspectual. Luján (1981) proposed that *ser* lacks a temporal limit and is aspectually imperfective, whereas *estar* is temporally delimited and thus aspectually perfective. More recently, Luján’s approach has been reformulated by Schmitt (2005) who argues that *ser* is aspectually neutral and thus derives its aspectual interpretation from the type of predicate with which it combines such as individual-level predicates. These types of predicates describe individuals without referring to their temporal stages. *Estar*, on the other hand, is specified for aspect and thus combines with stage-level predicates, which describe a spacio-temporal slice or *stage* of an individual (Schmitt, 2005). This means that *ser* can be interpreted as either generic or specific, while *estar* can only be interpreted as specific. Thus, the interpretation of the subject of *ser* in (108) is of children in general, or of a specific group of children, who are acting mischievously. In fact, either copula could be used in (108), but generate different meanings. The adjectival predicate *travieso* (“mischievous”) is interpreted as behaviour. In contrast, the interpretation of the subject of *estar* in (109) is of a specific group of children who are mischievous during a specific stage or slice of time, such as today. *Estar* is therefore obligatorily required in this specific context; *ser* would produce ungrammaticality. *Ser* is the least specified copula, and *estar* the most specified copula, with respect to semantic properties of interpretation.
Copula selection is also facilitated by properties of the discourse context, such as the presence of temporal adverbials (e.g., *hoy*), also found in (108) and (109).

Unlike Spanish, French lacks the copula contrast and instead has a single ‘be’ copula verb, *être*, as in (110). The contrast is grammaticalized in Spanish but not in French. The French copula *être* is not defined for one or the other meaning (i.e., generic or specific). In other words, *être* does not express generic or specific. It is unspecified for [generic] or [specific] and yet compatible with both interpretations. It is instead other factors not found in the form that disambiguate these interpretations such as determiners and adverbials. Depending on contextual properties made available in the sentence or conversational context (i.e., presence of temporal adverbials such as *aujourd’hui*/*today*) and the intended interpretation, in French (110) can mean that (i) children in general, or a specific group of children, act mischievously with no reference to a temporal limit or sub-event, or that (ii) a specific group of children are mischievous for a delimited interval of time, as indicated.

(110) Les enfants sont espiègles (aujourd’hui).
the children be.PRES.3PL mischievous (today)
“The children are mischievous (today).”

Furthermore, the *être* third-person singular and plural forms of *être* (e.g., *est*, *sont*) are morphologically similar to that of the Spanish copula *ser* (e.g., *es*, *son*).

The difference in meaning between the Spanish and French ‘be’ copula systems follows from that fact that Spanish has a dual ‘be’ copula *ser/estar*, while French has a single copula *être*. Thus, Spanish has two ‘be’ copulas, each with one meaning depending on a given context, while French has one copula that is unspecified for either meaning and yet compatible with either. Within a model of cross-linguistic influence that includes cognate morphological forms and semantics, the Spanish and French ‘be’ copulas exhibit overlap and similarity with respect to partially shared morphological forms and overlapping semantic features. Additionally, there is
also ambiguity since in Spanish there are two forms each with one meaning while in French there is one form that is unspecified for, yet compatible, with either meaning. This compatibility, however, depends on other resources not found in the form. These facts are summarized in Table 4.4.

Table 4.4. Morphological overlap, shared semantic features and ambiguity in the Spanish and French copula be contrast with adjectival predicates.

<table>
<thead>
<tr>
<th></th>
<th>Spanish</th>
<th>French</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morphological overlap and shared semantic properties</td>
<td><em>ser</em> [generic], [specific]</td>
<td><em>Être</em> [generic]</td>
</tr>
<tr>
<td></td>
<td><em>estar</em> [specific]</td>
<td>[specific]</td>
</tr>
<tr>
<td>Ambiguity</td>
<td>2 forms each with one meaning</td>
<td>1 copula not specified for either [generic] or [specific] interpretations, yet compatible with either depending on other resources not found in the form.</td>
</tr>
</tbody>
</table>

Thus, in a given context with copula ‘be’ plus adjectival predicate in Spanish and French in a model of cross-linguistic influence proposed here, X and Y represent morphological forms and corresponding semantic features. This configuration is illustrated in (111) in which the French copula *être* (X) overlaps morphologically with the Spanish copula *ser* (X). Y represents the Spanish copula *estar* and its corresponding semantic interpretation. *Être* is unspecified for either meaning, but is semantically compatible with *ser* and *estar* in combination with other elements. Given this ambiguity, cross-linguistic influence from French to Spanish (i.e., the possible use of *ser* in contexts that require the obligatory use of *estar*) would be predicted.

(111) Language B (French) Language A (Spanish)
X-*être* *X-ser* 
[generic] [generic], [specific]

[specific] Y-*estar* [specific]
What is the effect of bilingualism on the Spanish ‘be’ copula system? Since there are so few studies on child bilinguals, I first summarize findings from adult bilingual populations. Research from studies on adult heritage and L2 acquisition of the Spanish copulas has shown that this contrast is vulnerable to transfer (see Bruhn de Garavito & Valenzuela, 2008; Pérez-Leroux, Álvarez, & Battersby, 2010; Silva-Corvalán, 1986; VanPatten, 1987). In general, patterns of the overextension of *estar* are observed. For example, in spontaneous production, Silva-Corvalán (1994) found that Spanish heritage adults extend *estar* to contexts in which standard varieties of Spanish allow only *ser* (e.g., generic context, *Pero estoy inteligente y muy guapo y no te puedo tener todo* “But I’m intelligent and very handsome and I can’t have everything”, D36,m45,ELA43, Silva-Corvalán, 1994:93). Silva-Corvalán has thus argued that the copula system of Spanish heritage bilinguals becomes simplified with respect to the loss of semantic features. In L2 acquisition, in elicited production (grammaticality judgment and sentence selection tasks), Bruhn de Garavito & Valenzuela (2008) reported that L1 English/L2 Spanish adults discriminated between *ser/estar* and achieved a high degree of accuracy for copula choice when the context forced a generic or specific interpretation of the subject with adjective predicates (e.g., *Los niños son/están cariñosos* “The children are affectionate”); however, they failed to acquire the associated interpretive properties, particularly the lexical semantic properties of contexts with adjectivized participles (*El té es/está servido sin azucar* “The tea is served with sugar”). The authors proposed that genericity of the subject is linked to the aspeotual properties of each copula (Bruhn de Garavito & Valenzuela, 2008:102). Some studies on L2 acquisition have also suggested that the morphological closeness between *es* (i.e. third-person singular form of *ser*) and *is* makes *es* a likely candidate to extend to contexts where *está* (i.e., third-person singular *estar*) is required (Lafford & Colletine, 1987; VanPatten, 1985).
Though there are few studies on the child bilingual acquisition of the Spanish copulas *ser/estar*, one longitudinal study provides evidence of the overextension of both copulas, as well as a slight delay in the acquisition of *estar*. For example, using a functionalist lens and a usage-based account, Silva-Corvalán & Montanari (2008) examined the acquisition of the Spanish copulas in the spontaneous speech of one Spanish-English bilingual child to see whether cross-linguistic influence from the single English copula *be* occurred. The study considered the distributional frequencies of a wide range of copular constructions, including *ser* and *estar* with adjectival predicates. Approximately 100 predicate adjectives (classified into 52 adjective types) in combination with one of the two copulas were identified in the child’s data. Two types of copula mismatches were found and included the overextension of *ser* to *estar*-favouring contexts, as in (112), as well as the overextension of *estar* to *ser*-favouring contexts, as in (113).

(112)  #Es *mal*o el tractor [he remembers that his toy tractor is broken].
be.PRES.3SG bad the tractor
“The tractor is bad.”

(1;11.12, Silva-Corvalán & Montanari, 2008:354)

(113)  #El gato *estaba* malo [talking about Cinderella].
the cat be.IMP.3SG bad
“The cat was bad/sick.”

(2;7.16, Silva-Corvalán & Montanari, 2008:354)

The use of *ser* in (112) implies that the tractor is inherently broken instead of for a specific slice of time with target *estar*. In (113), the incorrect use of *estar* implies that the cat misbehaves for a specific period of time rather than a cat that misbehaves all of the time, which was the expected interpretation with *ser*. The child reportedly alternated between target and non-target selections of copula with the adjectives *malo* (“bad/sick”) and *grande* (“big”). He also committed selection errors with *estar* in combination with adjectives that can allow both copulas (e.g., *linda*/*pretty*, *negro*/*black*, *anaranjada*/*orange*), but in contexts that required an inherent interpretation with *ser*, and vice versa (i.e., the incorrect use of *ser* with corto (“short”) in a context that
required a specific interpretation with estar). While this study is limited by its sample and token size, and the context details in which ser and estar occurred, its findings do suggest that in bilingual acquisition Spanish copula selection varies between target and non-target forms and also shows evidence of cross-linguistic influence, specifically patterns of overextension.

4.4. Research questions and hypotheses
4.4.1. Research questions

The questions in this study pertain to bilingual children’s knowledge of tense-aspect-mood, as well as copula selection, in Spanish. Like L1 children, bilingual children must learn to associate a given form to the correct meaning, as in (114) and (115). Bilinguals face many challenges when constructing morpholexical items in each of their languages such as determining which forms are used categorically or optionally, and what constitutes these types of contexts (Lardiere, 2009).

(114) Luis se acostó muy tarde.
    Luis SE go to bed.PRET.3SG very late
    “Luis went to bed very late.”

(115) Luis se ha acostado muy tarde.
    Luis SE have.PRES.3SG go to bed.PP very late
    “Luis has gone to bed very late.”

Thus, in light of previous studies that have presented evidence of the effects of bilingualism, specifically cross-linguistic influence such as semantic extensions in tense-aspect-mood and copula selection in Spanish in Spanish bilingual children, and on studies that have probed the limits of the notion of overlap in a model of cross-linguistic influence for bilingual grammars (e.g., Strik & Pérez-Leroux, 2011; Sharon Unsworth, 2003; Yip & Matthews, 2009), I pursue the following questions:
i. *Is there an effect of bilingualism, that is, cross-linguistic influence in tense-aspect-mood and copula selection in bilingual children (in a contextualized preference-based elicitation task)?*

   a. *If so, does cross-linguistic influence only occur when two forms that are in semantic contrast in language A (e.g., Spanish) overlap morphologically with a form in language B (e.g., French) and/or share partially overlapping semantic features leading to ambiguity?*

ii. *Does the type of context (i.e., categorical or interpretable) also play a role in cross-linguistic influence? If so, what is the effect of categorical or interpretable contexts on the domains of tense-aspect-mood and copula selection in bilingual children?*

iii. *Do we find quantitative and/or qualitative differences between bilingual and monolingual children?*

iv. *Does length of exposure to the community language matter in cross-linguistic influence in younger and older bilingual children?*

### 4.4.2. Working hypotheses

Bilingual effects, specifically quantitative and qualitative transfer can occur in bilingual children, and sometimes be guided by form similarity (i.e., cognate morphological forms) and partially shared semantic features. Based on these considerations, I formulate the following specific hypotheses:
H1) No effects of bilingualism in any of the contrasts under study. This means no group differences are observed (null hypothesis).

H2) Bilingual effects, such as quantitative (i.e., changes in the distribution and/or frequency of a given form leaving to semantic extension and feature reassembly) and/or qualitative (i.e., introduction of new forms) differences, occur in heritage children in categorical contexts in which morphological forms and/or semantic features completely or partially overlap with the community language.

a. In the Spanish Preterite/Present Perfect contrast, bilingual children will overextend the Present Perfect to contexts that require categorical use of the Preterite (116), under the influence of the morphological cognate Passé Composé. One of the meanings of the Passé Composé also overlaps with the Spanish Present Perfect in terms of features of Inflection (e.g., [Deixis], [Precedence]-[Entirety]).

(116) *Ayer/ *anoche han comido pizza.
*yesterday/last night have.PRES.3PL eat.PP pizza
“*Yesterday/Last night they have eaten pizza.”

b. In the Spanish Present Subjunctive/Present Indicative contrast, bilingual children will produce the Subjunctive in embedded clauses under emotive factive verbs (e.g., estar triste/“be sad”, tener miedo/“be afraid that”), as in (117) and (118), that are congruent in French. This means that the Subjunctive is obligatory in such contexts in both Spanish and French. In contrast, bilingual children will overextend the Indicative to embedded clauses under emotive factive verbs (e.g., no gustar/“not like”, sorprender/“surprise”), as in (119) and (120), for which French employs the Indicative and Spanish obligatorily uses the Subjunctive. Bilingual children will also overextend the Indicative under the verb of ‘hope’ esperar, as in (121), for which French uses the Present Indicative (or a different variant) and Spanish requires the Subjunctive. In the Imperfect
Subjunctive/Imperfect Indicative contrast, bilingual children will overextend the Imperfect Indicative to contexts of hypothetical manner in the past (e.g., *era como si...*/*it was as if...*/) that require categorical use of the Imperfect Subjunctive (122), under the influence of French for which the Imperfect Subjunctive is no longer used in the spoken language. Finally, bilingual children will produce the Present Indicative in embedded clauses under the verb of ‘saying’ *decir* (123), a context in which both Spanish and French employ the Indicative.

(117) Están tristes de que no haya payasos en la fiesta.

“They are sad that there are no clowns at the party.”

(118) Tiene miedo de que no lleguen.

“He’s afraid (that) they won’t arrive.”

(119) *No le gusta que son desobedientes.*

“He doesn’t like it that they’re being disobedient.”

(120) *Le sorprende mucho que Dora tiene tantas mariposas.*

“She’s surprised that Dora has so many butterflies.”

(121) *Esperan que viene/ vendrá pronto con ayuda.*

“They hope that he comes soon with help.”

(122) *Era como si era un súper héroes.*

“It was as if he was a super hero.”

(123) Dice que puede pedir muchos helados.

“(She) says (that) he can order a lot of ice cream.”

c. In the Present tense *ser/estar* copula contrast plus adjectival predicate condition, bilingual children will overextend *ser* to contexts in which *estar* is obligatory required (specific interpretation), as in (124). *Ser* is less restricted than *estar* with respect to...
semantic features in that it can yield generic or specific interpretations, and thus be the default copula. *Ser* is also morphologically similar with the single French copula *être* in the Present tense (e.g., in the third person singular and plural forms: *es* versus *est, son* versus *sont*). *Être* is unspecified for generic or specific interpretations; however, it is compatible with either interpretation given other resources (i.e., determiners and adverbials) not found in the form.

(124) *(Hoy) los niños son tranquilos.*

Today the children be.PRES.3PL calm

“(Today) the children are calm.”

H3) Bilingual effects, such as quantitative (i.e., changes in the distribution and/or frequency of a given form leaving to semantic extension and feature reassembly) and/or qualitative (i.e., introduction of new forms or different developmental sequences) cross-linguistic influence, occur in bilingual children in interpretable (optional) contexts in which morphological and semantic feature overlap takes place with the community language.

a. In the Preterite/Present Perfect contrast, bilingual children will overextend the Present to contexts that optionally employ the existential use of the Present Perfect and the Preterite and, as in (125), due to influence from French. In this particular context French selects the Present. Furthermore, bilingual children will use the universal Present Perfect with greater frequency than the Preterite, as in (126) because of help from French, which also employs the compound form in this context.

(125) Desde la semana pasada *pierden* tres veces.

Since the week past lose.PRES.3PL three times

“Since last week they lose three times.”

(126) Su amiga todavía no *ha llegado*.

Her friend still no have.PRES.3SG arrive.PP

“Her friend has still not arrived.”
a. In the Preterite/Imperfect contrast plus eventive and stative predicates, bilingual children will produce the target Preterite in contexts that require an episodic interpretation, and the Imperfect in contexts that require a characterizing/habitual interpretation. They may, however, overextend the Imperfect to target Preterite contexts, as in (127), since the Imperfect is the less specified form in terms of features of Inflection in both Spanish and French. They may also overextend the Present Perfect to Preterite-favouring episodic contexts under the influence of the French Passé Composé, whose features of Inflection overlap with the Spanish Preterite. Both possibilities are illustrated in (127).

(127) #Se aburría/ #Se ha aburrido en el concierto.
    CL become bored.IMP.3SG/ CL have.PRES.3SG become bored.PP in the concert
    “He was bored at the concert.”

c. In the *ser/estar* copula contrast plus adjectival predicate contexts, bilingual children will produce *ser* in the target *ser* context (generic interpretation). The use of *estar* is also possible, but changes the desired interpretation. *Ser* is the least restricted copula.

(128) Las patas del elefante son/están así de grandes.
    the paws of the elephant be.PRES.3PL just like big
    “Elephants’ paws are just like this big.”

In sum, if the domains of tense-aspect-mood and copula selection in Spanish in bilingual children show an effect of bilingualism such as quantitative cross-linguistic influence, and this effect is determined by cognate morphological forms and overlapping semantics, then it could be argued that this model provides broader empirical coverage about what can be investigated in a systematic way between two languages in contact.
Chapter 5. Methods and study

5.1 Participants

The participants in this study included six groups of Spanish monolingual and heritage children and adults, as summarized in Table 5.1. A total of 84 participants were tested.

Table 5.1. Monolingual and heritage participants by age group.

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean age</th>
<th>SD</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monolingual</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Younger</td>
<td>16</td>
<td>5;3</td>
<td>6.45</td>
<td>4;2-6;2</td>
</tr>
<tr>
<td>Older</td>
<td>15</td>
<td>8;3</td>
<td>8.41</td>
<td>7;3-9;6</td>
</tr>
<tr>
<td>Adults</td>
<td>7</td>
<td>35;6</td>
<td>9.69</td>
<td>26;0-54;0</td>
</tr>
<tr>
<td>Heritage</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Younger</td>
<td>18</td>
<td>5;6</td>
<td>9.68</td>
<td>4;2-6;8</td>
</tr>
<tr>
<td>Older</td>
<td>17</td>
<td>8;9</td>
<td>14.79</td>
<td>7;3-11;4</td>
</tr>
<tr>
<td>Parents</td>
<td>11</td>
<td>40;0</td>
<td>3.10</td>
<td>37;0-45;0</td>
</tr>
</tbody>
</table>

Monolingual children were tested in Mexico City and recruited at or through Pipilo centro de investigación, a private arts-based primary school.\(^{16}\) Children were invited to participate in the study if: (i) their first language was Spanish, (ii) they had no history of language difficulties, and (iii) they did not speak any other language at home. The younger monolingual children had two to three hours of English class per week with a native English speaker, while the older children received English instruction approximately five hours per week with a non-native speaker of English.

Heritage children were tested in Ottawa-Gatineau and recruited from a local Saturday morning Spanish language school, Latin American cultural associations, church groups, day cares, and through social media. Ottawa-Gatineau is the officially English-French bilingual region located on the border of Ontario and Quebec and separated by the Ottawa River. These two cities form what is known as Canada’s National Capital Region. In Ottawa-Gatineau

\(^{16}\) All but three children from the monolingual sample attended Pipilo centro de investigación.
approximately 8.1% of the population (11,325 people) has reported that Spanish is their home language (Census Canada, 2006). Approximately 3% of Canada’s total Latin American population resides in Ottawa-Gatineau and represents 19 different nationalities (Census Canada, 2006). As a result of civil unrest in South and Central America since the early 1960s, migration to Ottawa-Gatineau has been ongoing since then. Ottawa-Gatineau therefore experienced large waves of arrivals from these Latin American regions throughout the 1980s and 1990s (Veronis & McAloney, 2010). Colombia, Mexico and El Salvador, for example, represent the highest numbers of Spanish-speaking residents in Ottawa-Gatineau (Census Canada, 2006). The countries of origin of the heritage children and their Spanish-speaking parents, who were also invited to participate in this study, included Argentina, Colombia, Mexico, Peru and Uruguay. Heritage children were invited to participate in the study if they met the following criteria:

(i) their chronological age was 4;0 and older;

(ii) they were simultaneous bilinguals (i.e., age of onset of acquisition of Spanish and French was from between birth and 4;0 years of age);

(iii) they attended day care or school in French in the Ottawa-Gatineau region;

(iv) they spoke any variety of Latin American Spanish; and,

(v) their parents were native speakers of Latin American Spanish, or one parent was Spanish-speaking and the other French-speaking.

Overall, heritage children’s mean age-of-onset of acquisition of Spanish was from birth. The age-of-onset of acquisition of French for younger children was 1;3 ($SD = 17.45$) and 2;5 ($SD = 20.38$) for older heritage children. Younger heritage children’s mean exposure to French was 4;2 years ($SD = 19.32$), while older heritage children’s was 6;2 years ($SD = 22.91$).
5.2. **Instruments and tasks**

In order to collect data on language acquisition the following five instruments and tasks were employed: (i) parental and adult language questionnaires (adapted from Pérez-Leroux, Cuza, & Thomas (2011)), (ii) *Test de Vocabulario en Imágenes* Peabody (TVIP) (Dunn, Padilla, Lugo, & Dunn, 1986), (iii) a sentence imitation task (Castilla & Pérez-Leroux, 2010), (iv) *Frog Story* re-tell tasks (Mayer, 1973; Mayer & Mayer, 1975); Systematic Analysis of Language Transcripts (SALT) software (Miller & Chapman, 1991), and (v) a contextualized preference-based elicitation task (adapted from Pirvulescu & Belzil (2009).

5.2.1. **Parental and adult language questionnaires**

Parental and adult questionnaires were used to collect specific information from parents about their child’s, as well as their own, language exposure, experience and history. These questionnaires were adapted from Pérez-Leroux et al., (2011). Parental language questionnaires are commonly used in studies on child bilingualism and act as independent measures of children’s language experience (see Gutiérrez-Clellen & Kreiter, 2003; Jia & Aaronson, 1999; Paradis, 2011; Unsworth, 2013). The parental questionnaire that was used in this study served to verify the nature of heritage children’s language experience, based on the following variables: (i) relative fluency in each languages (i.e, Spanish, French, other); (ii) linguistic environment over the last six months (i.e., at home, at school, outside of home or school, in other language classes, other activities); (iii) exposure (measured in approximate hours per week) to Spanish, French and other languages with respect to speaking and listening (i.e., at home, at school, outside of home or school, in other language classes, other activities); and, (iv) language history (i.e., age-of-onset-of-acquisition of Spanish and French, as well as cumulative language use from birth to present at home and at school). Additionally, the Spanish-speaking parent(s) of the heritage
children participants were invited to complete a questionnaire about the nature of their own language experience based on the following variables: (i) personal information, formal education and language use; (ii) present contact (measured in approximate hours per week) with Spanish, French, English and other languages with respect to listening and speaking (i.e., at home, work and school and in social situations), as well as questions about frequency of travel to the country of origin and/or other Spanish-speaking countries and contact with family and friends in Spanish; and, (iii) linguistic aptitude in each language with respect to reading, writing, speaking, and listening.

The questionnaires primarily consisted of scalar-rating questions for which participants were asked to rate a given statement (e.g., relative fluency in each of the child’s languages, exposure to Spanish at home, etc.) by circling an item on a corresponding scale. Heritage children’s proficiency scores in Spanish, for example, were calculated by subtracting the French language proficiency scores from the Spanish language proficiency scores. See Appendices B and C for the parental and adult questionnaires respectively.

5.2.2. Test de Vocabulario en Imágenes Peabody (TVIP) (Dunn et al., 1986)

The TVIP is a standardized measure of receptive vocabulary in Spanish-speaking children and a variant of the English Peabody Picture Vocabulary Test (PPVT) (Dunn & Dunn, 1997), a psychometric test that has been used widely in the speech and hearing sciences for language development assessment. In a large-scale study of monolingual and bilingual children aged 3;0 to 10;0 years, Bialystok, Luk, Peets, & Yang (2010) reported that bilinguals scored significantly lower on the PPVT than monolinguals. The authors suggested that bilingualism itself was the reason for the vocabulary difference and not the relation between the two languages. In this study the TVIP serves to verify whether receptive vocabulary performance in monolingual and heritage children is similar or different. Research has shown that bilingual
children have smaller vocabularies in one of their languages (see Bialystok et al., 2010) and that they score below monolingual norms in each of their languages (Cobo-Lewis, Pearson, Eilers, & Umbel, 2002; Hoff & Elledge, 2005; Oller & Pearson, 2002; Pearson et al., 1995; Pearson & Fernández, 1994; Pearson, Fernández, & Oller, 1993; Umbel, Pearson, Fernández, & Oller, 1992) I therefore ask whether monolingual and heritage children’s receptive vocabulary scores in Spanish are similar or different, and whether growth and development from younger to older heritage children is found. It is predicted that heritage children’s receptive vocabulary scores will be lower than monolingual children’s due to fluctuating input conditions.

In the TVIP, children were asked to identify certain words by pointing to a picture or saying the letter of a picture that correctly matched the stimulus word presented by the examiner in Spanish. Administration and scoring procedures, as outlined in the examiner’s manual, were carefully followed. Standardized norms for the TVIP were established by (Dunn & Dunn, 1997) by testing monolingual children in Mexico and Puerto Rico. Like most psychometric tests, the TVIP uses a mean standard score of 100 and a standard deviation of 1.5 (Dunn & Dunn, 1997). In this study, children’s raw scores were converted to the standard scores provided in the manual in order to see how heritage children’s lexical knowledge in Spanish compared to that of the monolingual children.

5.2.3. Sentence imitation task

The purpose of the sentence imitation (also called sentence repetition) task is to test children’s language ability by measuring how accurately they repeat a series of given sentences that vary in length and complexity. Sentence imitation tasks are considered excellent clinical tools for measuring linguistic development and are commonly employed in language assessment instruments (see Sturmer, Kunze, Funk, & Green, 1993; Wiig, Secord, & Memeh, 2009). The
effectiveness of the imitation task as a measure of language ability can be tested by comparing its scores with those from parental language questionnaires.

The imitation task that was employed in this study (from Castilla & Pérez-Leroux, 2010) consisted of 19 sentences in Spanish and was administered to both monolingual and heritage children. Children were asked to orally repeat the stimulus sentence presented by the examiner in Spanish. Each sentence was assigned a score depending on the number of words in the sentence. Each word, including functional and lexical, was counted as correct, and children were not penalized for word order, morphology or addition errors. I ask whether monolingual and heritage children’s sentence imitation scores in Spanish are similar or different, and whether growth and development from younger to older heritage children is found. It was predicted that heritage children’s sentence imitation scores would be lower than monolingual children’s due to fluctuating input conditions. See Appendix D for the list of Spanish sentences used in this imitation task.

5.2.4 Child narration story re-telling task

The purpose of the child narration story-retelling task is to collect a spontaneous yet controlled speech sample. Story re-telling tasks, such as the Frog Story book (Mayer, 1969) and Little Red Riding Hood, have been used widely in studies on first- and second-language acquisition (e.g., Montrul, 2002), on speakers with language impairments (e.g., Berman & Slobin, 1994), and on children living in a language contact situation (e.g., Sánchez, 2004). The story re-telling task is an excellent tool for obtaining rich yet controlled speech samples with speakers of different ages, linguistic and cultural backgrounds. This task is ideal for bilingual populations because it can capture intra-language utterances (e.g., code-switching). Using this task I asked whether there was evidence of cross-linguistic influence in the heritage children’s Spanish narratives. The stories used in this task included the wordless picture books “Frog on
His Own” (Mayer, 1973) and “One Frog Too Many” (Mayer & Mayer, 1975). Each picture book was also accompanied by a story script developed by Systematic Analysis of Language Transcripts (SALT) Software (Miller & Chapman, 1991), which was recorded by a native speaker of Spanish and specifically for the Frog Story collection.

Both adult and child participants were asked to listen to the SALT Spanish audio recording of each Frog Story on a laptop computer, while at the same time looking at the corresponding Frog Story picture book with the examiner. The examiner then asked participants to retell the story in Spanish, using their own words, by “reading” the wordless picture books. If children were shy or reluctant to start retelling the story, they were instead asked to describe or identify the characters in the first page of the book. Once the children did so, they were asked to retell the story from the beginning. If children took extra long pauses or struggled to continue, they were asked questions such as “¿Qué está pasando?” (“What’s happening?”) or encouraged with “¡Inténtalo!” (“Give it a try!”). The story retelling samples were used as a backup measure to validate the spontaneous production of any of the grammatical structures under analysis in the contextualized preference-based elicitation task and to also identify any instances of cross-linguistic influence, including language mixed utterances and/or qualitatively different utterances. Utterances were coded by target form and type of cross-linguistic influence. See Appendix E for the Spanish versions of the SALT Frog Story scripts used in this study.

5.2.5. Contextualized preference-based elicitation task

The goal of the contextualized preference-based elicitation task was to find out whether an effect of bilingualism, such as cross-linguistic influence, was found in the Spanish of heritage children living in a Francophone context in comparison to monolingual children growing up in Mexico City. This task specifically tested children’s grammatical knowledge of Spanish in the domains of tense-aspect-mood and copula selection. Recall from chapter 4 that these domains
have shown sensitivity to cross-linguistic influence in studies on Spanish heritage children and adults, as well as in second-language acquisition (e.g., Bruhn de Garavito & Valenzuela, 2008; Cruz, 2013; Cuza, 2008; Montrul, 2002a, 2009; Montrul & Slabakova, 2002, 2003; Sánchez, 2004; Silva-Corvalán, 1994). A contextualized preference-based elicitation task, adapted from Pirvulescu & Belzil (2008), was designed to test heritage children’s knowledge of these domains in Spanish. This task is well suited for testing contexts that probe semantics, particularly the domains such as tense-aspect-mood and copula, because it directly tests the acceptability or grammaticality of a given interpretation. In contrast, other elicited production tasks such as the truth-value judgment task can only test the truth-functionality of contexts, allowing many possibilities.

In total the task consisted of 66 items in Spanish (n=2 training items, n=48 test items, n=16 control items). In this study I examine 48 of the 64 test items that pertain specifically to the two domains of interest: tense-aspect-mood and copula selection. The stimuli for all 66 items, including target stimuli and distractors, are provided in Appendix F. Each item was presented and analyzed within the context of a tense-aspect-mood- or copula contrast, i.e. a minimal pair of sentences that differed only in meaning depending on the context (e.g., Porque la amiga todavía no llegó/ha llegado/“Because the friend did-PRET not arrive/has-PRES still not arrived-PP”).

Both in training and in testing, participants were invited to listen to a short audio-recorded story in Spanish that had been pre-recorded by a native speaker. The stories were presented on a laptop computer using PowerPoint and projected via a portable speaker. Each short story was accompanied by a colourful illustration. Participants were then presented the minimal pair of sentences by two different parrots (i.e., the audio-recorded voice of a second native speaker of Spanish). The examiner asked the participant, in Spanish, to answer the following question: ¿Cómo lo dirías tú? (“How would you say it?”). If the participant was unable to answer the
question, she was given a second trial at which time the examiner asked a follow-up question that rounded out each mini-story. An example of the contextualized preference-based elicitation task is given in (129), illustrating a Present Perfect target condition from the Preterite/Present Perfect contrast.

(129)  
Narrator:  
*El postre preferido de Luis son las galletas de chocolate, pero siempre come demasiadas. Ahora le duele el estómago y no quiere comer galletas. ¿Por qué le duele el estómago a Luis?*

“Luis’ favourite dessert is chocolate cookies, but he always eats too many. Now his stomach hurts and he doesn’t want to eat cookies. Why does Luis’ stomach hurt?”

Parrot 1:  
*Porque desde la semana pasada ha estado enfermo dos veces.*

“Because since last week he has-PRES been-PP sick two times.”

Parrot 2:  
*Porque desde la semana pasada estuvo enfermo dos veces.*

“Because since last week he was-PRET sick two times.”

Examiner to child:  
*Cómo lo dirías tú?*

“How would you say it?”

(¿*Por qué le duele el estómago a Luis?*)

(“Why does Luis’ stomach hurt?”)

The items were presented in a randomized order and counterbalanced for order of presentation across participants. Responses were coded for correct repetition and logical sequence, and by main characteristic (e.g., type of tense, mood, other).

5.2.5.1 Stimuli for tense-aspect-mood items in the contextualized preference-based elicitation task

The tense-aspect-mood contrasts examined in this task included the Preterite/Present Perfect, Preterite/Imperfect and Subjunctive/Indicative, as in (130) to (132), for a total of 40 test items. The Preterite/Present Perfect contrast stimuli included a mix of interpretable and categorical contexts. For example, the sentences in (130a) and (130b) in the Present Perfect condition were classified as interpretable contexts because use of the Present Perfect or Preterite
tense does not affect grammaticality of these contexts, but rather the semantic interpretation. In the Preterite condition, contexts (130c) and (130d) were considered categorical contexts because the Preterite is categorically used with point-in-time adverbials such as anoche (“last night”) and ayer (“yesterday”). The Preterite/Imperfect contrast items in (131), which were adapted from (Cuza (2008), were also treated as interpretable contexts; use of either tense with an eventive or stative predicate affects the semantic interpretation of the sentence but not the grammaticality. Finally, the Subjunctive/Indicative contrast items in (132) were classified as categorical contexts as the Spanish Subjunctive is obligatorily required in embedded clauses under emotive factive verbs, the verb of ‘hope’ esperar, and in contexts of hypothetical manner (era como si…/“if was as if…”) in the past, as in (132a) to (132c). The Indicative is obligatorily used is embedded clauses under the verb of ‘saying’ decir (e.g., indirect speech).

(130) Preterite/Present Perfect contrast (N=16)

Present Perfect+todavía no (“still not”) (n=4) (interpretable)
  a. Su amiga todavía no ha llegado. her friend still no have.PRES.3SG arrive.PP
     “Her friend still has not arrived.”

Present Perfect+desde la semana pasada (“since last week”) (n=4) (interpretable)
  b. Desde la semana pasada han perdido tres veces. since the week past have.PRES.3PL lose.PP three times
     “Since last week they have lost three times.”

Preterite+anoche (“last night”) (n=4) (categorical)
  c. Anoche Dora hizo la tarea. last night Dora do.PRET.3SG the homework
     “Last night Dora did homework.”

Preterite+ayer (“yesterday”) (n=4) (categorical)
  d. Ayer se pelearon. yesterday SE fight.PRET.3PL
     “Yesterday they fought.”
Preterit/Imperfect contrast (N=8)

Episodic interpretation (Preterite+eventive predicates) (n=2) (interpretable)

a. Pintó su cuadro en diez minutos.
   "He painted his painting in ten minutes."

Episodic interpretation (Preterite+stative predicates) (n=2) (interpretable)

b. Le gustó mucho la película.
   "She liked the movie a lot."

Generic interpretation (Imperfect+eventive predicates) (n=2) (interpretable)

c. De chico su mamá le daba cereales todos los días.
   "As a little boy his mom gave him cereal everyday."

Generic interpretation (Imperfect+stative predicates) (n=2) (interpretable)

d. Comía muchos chocolates (de niño).
   "He ate a lot of chocolates (as a child)."

Subjective/Indicative contrasts (N=16)

Embedded clauses in the Subjunctive under congruent emotive factive verbs (e.g., estar triste ("be sad"), tener miedo ("be afraid") (n=2) (categorical)

a. Le sorprende mucho que Dora tenga tantas mariposas.
   "It surprises her that Dora has so many butterflies."

Embedded clauses in the Subjunctive under incongruent emotive factive verbs (e.g., no gustar ("not like"), sorprender ("surprise") (n=2) (categorical)

b. No le gusta que los niños sean desobedientes.
   "He doesn’t like it that the children are disobedient."

Embedded clauses in the Subjunctive under the verb of ‘hope’ esperar (n=4) (categorical)

c. Espera que se porte bien en clase.
   "She hopes he behaves well in class."

Hypothetical manner in the past contexts (era como si.../"it was as if...") plus the Imperfect Subjunctive (n=4) (categorical)

d. Era como si fuera un súper héroe.
   "It was as if he was a superhero."
Embedded clauses in the Indicative under the verb of ‘saying’ decir (n=4) (categorical)
e. María dice que le gusta la pizza.
Mary says that her like.PRES.3SG the pizza
“Mary says she likes pizza.”

5.2.5.2. Stimuli for copula selection in the contextualized preference-based elicitation task

The copula selection items tested the ser/estar ‘be’ copula contrast in combination with adjectival predicates, as in (133). The context in (133a) is classified as an interpretable context since either copula can be used without altering the grammatically of the sentence. However, the target interpretation (i.e., charactering) can only be achieved with ser. In contrast, in (133b) the use of estar is classified as categorical because it is obligatorily required to express the target interpretation (i.e., specific), whereas the use of copula ser would change the grammatically of the sentence.

(133) Ser/estar contrast (N=8)
Ser plus adjectival predicate (target interpretation: characterizing) (n=4) (interpretable)
a. Los tiburones son peligrosos.
The sharks be.PRES.3PL dangerous
“Sharks are dangerous.”

Estar plus adjectival predicate (target interpretation: specific) (n=4) (categorical)
b. Los niños están/*son tranquilos (hoy).
the children be.PRES.3PL calm (today)
“The children are calm (today).”

Table 5.2 presents the stimuli by type of context (i.e., categorical or interpretable).
Table 5.2. *Stimuli for tense-aspect-mood and copula selection by type of context.*

<table>
<thead>
<tr>
<th>Condition ↓</th>
<th>Type of context ⇒ Target condition ↓</th>
<th>Categorical context</th>
<th>Interpretable context</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present Perfect/Preterite</td>
<td>Present Perfect + <em>todavía no</em> (“still not”)</td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>Present Perfect/Preterite</td>
<td>Present Perfect+<em>desde la semana pasada</em> (“since last week”)</td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>Present Perfect/Preterite</td>
<td>Present Perfect+<em>anoche</em> (“last night”)</td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>Present Perfect/Preterite</td>
<td>Present Perfect+<em>ayer</em> (“yesterday”)</td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>Preterite/Imperfect</td>
<td>Preterite+eventive and stative predicates (episodic interpretation)</td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>Preterite/Imperfect</td>
<td>Imperfect+eventive and stative predicates (characterizing/ habitual interpretation)</td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>Subjunctive/Indicative</td>
<td>Embedded clauses in the Subjunctive under emotive factive verbs (e.g., <em>estar triste</em>/<em>be sad</em>, <em>tener miedo</em>/<em>be afraid that</em>, <em>no gustar</em>/<em>not like</em>, <em>sorprender</em>/<em>surprise</em>)</td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>Subjunctive/Indicative</td>
<td>Embedded clauses in the Subjunctive under verb of ‘hope’ <em>esperar</em></td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>Subjunctive/Indicative</td>
<td>Hypothetical manner in the past (<em>era como si...</em>/<em>it was as if...</em>) contexts+Imperfect Subjunctive</td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>Subjunctive/Indicative</td>
<td>Embedded clauses in the Indicative under the verb of ‘saying’ <em>decir</em></td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>Ser/estar</td>
<td><em>Ser</em>+adjectival predicate (characterizing interpretation)</td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>Ser/estar</td>
<td><em>Estar</em>+adjectival predicate (specific interpretation)</td>
<td></td>
<td>√</td>
</tr>
</tbody>
</table>
5.2.6. Procedures

Before testing began with the monolingual child and adult control groups in Mexico City, the administrators and teachers at Pipiolo centro de investigación were consulted in order to explain the purpose of the study, obtain approval, and then inform parents about the study. Once the administrators approved the study, the homeroom teachers sent home the letter to parents and the parental consent forms with the children. These forms included the principal researcher’s contact information in case parents had questions or concerns about the study. Testing began as soon as children returned their signed forms to school. In Ottawa-Gatineau, the same procedure was followed but with individual parents. The principal investigator explained the nature of the study to interested families and then distributed the above-mentioned forms for approval, as well as the parental language questionnaire.

The study consisted of two sessions. At the beginning of session 1, the tasks were briefly explained to every participant. Children were then asked if they would like to proceed and participate in the study. Verbal assent was obtained from all 66 child participants. The monolingual control group was tested individually at school in a quiet but open space, except for five children who were tested at home. As for heritage children and their parents, all testing was conducted individually in a quiet room in their home or workplace. Regardless of the testing environment, a parent or teacher was always nearby. For children, testing was divided into two sessions and completed in approximately 40 to 50 minutes per session (depending on the child) for a total testing time of from 80 to 100 minutes. For adults, testing was generally divided into two sessions of 30 minutes each, though some adults opted to complete the study in one session of 60 minutes.

In session 1, three tasks were administered to children: the “Frog on His Own” story retell task, the first half of the contextualized preference-based elicitation task, and the sentence
repetition task. In session 2, the remaining three tasks were completed in this order: the TVIP, the second half of the contextualized preference-based elicitation task, and the “One Frog Too Many” story retell task. Adults were only asked to complete the story retell and contextualized preference-based elicitation tasks. At the end of the study both children and adults received a picture book in Spanish for their participation in the study. See Appendix G for the letter to parents/parental consent form and the child assent script.

5.3. Results: Experimental study
5.3.1. Vocabulary measures

The goal of the Test de vocabulario en imágenes Peabody (TVIP) was to measure children’s receptive vocabulary in Spanish, and to find out whether there are differences between monolingual and heritage children’s vocabularies. In light of previous studies that have assessed bilingual children’s receptive vocabulary performance (e.g., (Bialystok et al., 2010), it was predicted that heritage children’s scores would be lower than monolingual children’s, but that heritage children would show vocabulary development.

Overall, younger and older monolingual children from Mexico perform similarly. Both groups have higher scores than heritage children, given the fluctuating input conditions of heritage children. Nonetheless, vocabulary development from younger to older heritage children is expected. Table 5.3 summarizes monolingual and heritage children’s vocabulary scores.17

17 Out of the 31 monolingual children that were initially tested, three children’s vocabulary scores were incomplete (1 younger, 2 older). These children were removed from this task, but are included in all further analyses.
Table 5.3. *Mean TVIP scores for monolingual and heritage children.*

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean raw score (/145)</th>
<th>SD</th>
<th>Range</th>
</tr>
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<tbody>
<tr>
<td>Monolingual</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Younger</td>
<td>15</td>
<td>128.81</td>
<td>20.22</td>
<td>65.00 - 145.00</td>
</tr>
<tr>
<td>Older</td>
<td>13</td>
<td>127.84</td>
<td>16.23</td>
<td>86.00 - 145.00</td>
</tr>
<tr>
<td>Total</td>
<td>28</td>
<td>128.38</td>
<td>18.23</td>
<td>65.00 - 145.00</td>
</tr>
<tr>
<td>Heritage</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Younger</td>
<td>18</td>
<td>100.39</td>
<td>22.26</td>
<td>65.00 - 127.00</td>
</tr>
<tr>
<td>Older</td>
<td>17</td>
<td>106.47</td>
<td>18.13</td>
<td>86.00 - 141.00</td>
</tr>
<tr>
<td>Total</td>
<td>35</td>
<td>103.34</td>
<td>20.30</td>
<td>65.00 - 141.00</td>
</tr>
</tbody>
</table>

A Shapiro-Wilk normality test confirmed that data were not normally distributed. The two sets of vocabulary scores were then compared using a Wilcoxon rank-sum test, which confirmed a significant difference between monolingual and heritage children’s scores (W = 857.5, p < 0.001). Using the same test the vocabulary development of younger and older heritage children was compared, but no differences were found between the two groups (W = 133, p = 0.519).

### 5.3.2. Sentence imitation task

The purpose of the sentence imitation task was to test children’s general language abilities in Spanish. In order to do so, a procedure was used to measure how accurately children repeated 19 sentences in Spanish, which varied in length and complexity, by counting the number of correctly repeated words. Children were not penalized for morphology, word order or insertion errors. I asked whether there are differences between monolingual and heritage children, and whether language growth is found in heritage children. Again, given the fluctuating input conditions of heritage children, they scored lower than monolingual children, but also showed development with age.

Overall, older monolingual children scored higher than younger monolingual children. Monolingual children performed ahead of heritage children, as expected. Older heritage children are more accurate than the younger the group, a finding that confirms language growth. Table 5.4 presents monolingual and heritage children’s sentence imitation scores.
Table 5.4. *Mean sentence imitation scores for monolingual and heritage children.*

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean raw score (153)</th>
<th>SD</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monolingual</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Younger</td>
<td>16</td>
<td>139.01</td>
<td>12.11</td>
<td>108.00 - 153.00</td>
</tr>
<tr>
<td>Older</td>
<td>15</td>
<td>151.17</td>
<td>3.41</td>
<td>141.00 - 153.00</td>
</tr>
<tr>
<td>Total</td>
<td>31</td>
<td>145.06</td>
<td>8.49</td>
<td>108.00 - 153.00</td>
</tr>
<tr>
<td>Heritage</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Younger</td>
<td>18</td>
<td>134.83</td>
<td>15.41</td>
<td>85.00 - 153.00</td>
</tr>
<tr>
<td>Older</td>
<td>17</td>
<td>146.59</td>
<td>5.43</td>
<td>135.00 - 153.00</td>
</tr>
<tr>
<td>Total</td>
<td>35</td>
<td>140.71</td>
<td>8.31</td>
<td>85.00 - 153.00</td>
</tr>
</tbody>
</table>

A Shapiro-Wilk normality test revealed that the data were not normally distributed. The two data sets were then compared using a Wilcoxon rank-sum test, which confirmed significant differences between monolingual and heritage children’s scores ($W = 715.5, p < 0.05$). Using the Kendall’s tau-b correlation test, a strong positive and significant correlation is found between age and correctly repeated words in monolingual children ($\tau = 0.47, p < 0.001$). Using the same test, a moderate positive and significant correlation is found between age and correctly repeated words in heritage children ($\tau = 0.39, p < 0.001$).

I also asked how the heritage children’s sentence imitation scores compared with their language proficiency in Spanish, as reported by parents in the parental language questionnaires. Recall that parents were asked to rate their children in Spanish and French on a scale from 0 to 2. Heritage children’s proficiency scores were calculated by subtracting the French language proficiency scores from the Spanish language proficiency scores. Heritage children’s language proficiency scores in Spanish fell between 1 and -2, which suggests that they were fairly well balanced bilinguals. In each of the two age groups, the mean proficiency score for heritage children was around 0 (younger: $0.1, SD = 0.67$; older: -0.2, $SD = 0.68$), slightly on the negative side of the scale, which indicates that they were a little more proficient in French. In fact, parents reported that heritage children were exposed to French approximately 40 plus hours per week (both age groups), Spanish 25-40 hours per week (both age groups), and English around 10 hours
per week (younger: 10-25 hours, older: less than 10 hours). Figures 5.1 and 5.2 compare younger and older heritage children’s language proficiency scores with the number of correctly repeated words from the sentence imitation task in Spanish.\(^\text{18}\)

**Figure 5.1.** *The relationship between younger heritage children's correctly repeated words and language proficiency in Spanish.*

Figure 5.1 reports a weak positive and non-significant correlation between language proficiency and correctly repeated words in Spanish for younger heritage children (\(\tau = 0.29, p = 0.07\)). The trend found in Figure 5.1 suggests that the more proficient a younger heritage child was in Spanish, the higher her word repetition score was in Spanish. In contrast, when a younger heritage child was more proficient in French, she was less accurate with word repetition in Spanish.

\(^{18}\) Out of the 35 heritage children that were initially tested, two questionnaires were incomplete (1 younger, 1 older). These children were removed from this task, but are included in all further analyses.
Figure 5.2. *The relationship between older heritage children’s correctly repeated words and language proficiency in Spanish.*

Figure 5.2 reports a moderate negative and non-significant correlation between language proficiency and correctly repeated words in Spanish in older heritage children (tau = -0.31, p = 0.93). The trend found in Figure 5.2 suggests that the more proficient an older heritage child was in French, the higher her word repetition score was in Spanish. When the older child was more proficient in Spanish, she correctly repeated a lower number of words in Spanish. So, whereas younger children’s proficiency in Spanish is linked to higher word repetition scores in Spanish, older heritage children’s proficiency in French is associated with higher word repetition scores in Spanish. These findings suggest that as heritage children age and become more exposed to French, their ability to correctly repeat words in Spanish continues to increase even though their input conditions in Spanish fluctuate and/or decrease overtime. This might have more to do with overall language development than cognitive development such as memory.
5.3.3. Contextualized preference-based elicitation task

5.3.3.1. Accuracy, age and language status across conditions

The goal of the contextualized preference-based elicitation task was to measure children’s knowledge of tense-aspect-mood and copula selection in Spanish. More importantly, this task was used to investigate whether these domains showed evidence of effects of bilingualism (e.g., accelerated/protracted development, cross-linguistic influence, incomplete acquisition, attrition) in heritage children under the influence of French, the community language. Recall that speakers were primed to use one of the two target tenses, moods or copulas for a given contrast depending on the condition. Tables 5.5 and 5.6 present the mean proportions of target responses across conditions for monolingual and heritage groups.
Table 5.5. Mean proportions (with standard deviations and ranges in parenthesis) of target responses by Preterite/Present Perfect and Preterite/Imperfect conditions produced by monolingual and heritage participants (N=84, tokens= 2,016).

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Type of context</th>
<th>Preterite/Present Perfect</th>
<th>Preterite/Imperfect</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Preterite</td>
<td>Present Perfect</td>
</tr>
<tr>
<td><strong>Target conditions</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monolingual</td>
<td>Categorical</td>
<td>0.76</td>
<td>0.36</td>
</tr>
<tr>
<td></td>
<td>Interpretible</td>
<td>(0.43)</td>
<td>(0.48)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.38-0.88)</td>
<td>(0-0.75)</td>
</tr>
<tr>
<td></td>
<td>Older</td>
<td>0.87</td>
<td>0.66</td>
</tr>
<tr>
<td></td>
<td>(n=15)</td>
<td>(0.34)</td>
<td>(0.48)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.63-1.00)</td>
<td>(0.38-0.75)</td>
</tr>
<tr>
<td></td>
<td>Adults</td>
<td>0.93</td>
<td>0.82</td>
</tr>
<tr>
<td></td>
<td>(n=7)</td>
<td>(0.26)</td>
<td>(0.39)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.75-1.00)</td>
<td>(0.50-1.00)</td>
</tr>
<tr>
<td>Heritage</td>
<td>Younger</td>
<td>0.66</td>
<td>0.24</td>
</tr>
<tr>
<td></td>
<td>(n=18)</td>
<td>(0.48)</td>
<td>(0.43)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.38-1.00)</td>
<td>(0-0.63)</td>
</tr>
<tr>
<td></td>
<td>Older</td>
<td>0.74</td>
<td>0.38</td>
</tr>
<tr>
<td></td>
<td>(n=17)</td>
<td>(0.44)</td>
<td>(0.49)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.25-1.00)</td>
<td>(0-0.75)</td>
</tr>
<tr>
<td></td>
<td>Parents</td>
<td>0.91</td>
<td>0.69</td>
</tr>
<tr>
<td></td>
<td>(n=11)</td>
<td>(0.29)</td>
<td>(0.46)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.63-1.00)</td>
<td>(0.13-1.00)</td>
</tr>
</tbody>
</table>
Table 5.6. Mean proportions (with standard deviations and ranges in parenthesis) of target responses by Subjunctive/Indicative and ser/estar conditions produced by monolingual and heritage participants (N=84, tokens=2,016).

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Type of context</th>
<th>Target conditions</th>
<th>Subjunctive/Indicative</th>
<th>Ser/estar</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Categorical</td>
<td>Categorical</td>
</tr>
<tr>
<td>Monolingual</td>
<td>Younger</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(n=16)</td>
<td></td>
<td>0.47 (0.50)</td>
<td>0.66 (0.48)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(0.17-1.00)</td>
<td>(0.25-1.00)</td>
</tr>
<tr>
<td></td>
<td>Older</td>
<td></td>
<td>0.91 (0.29)</td>
<td>0.77 (0.43)</td>
</tr>
<tr>
<td></td>
<td>(n=15)</td>
<td></td>
<td>(0.83-1.00)</td>
<td>(0.25-1.00)</td>
</tr>
<tr>
<td></td>
<td>Adults</td>
<td></td>
<td>0.87 (0.34)</td>
<td>0.86 (0.36)</td>
</tr>
<tr>
<td></td>
<td>(n=7)</td>
<td></td>
<td>(0.50-1.00)</td>
<td>(0.75-1.00)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.91 (0.91)</td>
<td>0.93 (0.26)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(0.75-1.00)</td>
<td>(0.75-1.00)</td>
</tr>
<tr>
<td>Heritage</td>
<td>Younger</td>
<td></td>
<td>0.25 (0.43)</td>
<td>0.53 (0.50)</td>
</tr>
<tr>
<td></td>
<td>(n=18)</td>
<td></td>
<td>(0-0.75)</td>
<td>(0-1.00)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.99 (0.12)</td>
<td>0.60 (0.49)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(0.75-1.00)</td>
<td>(0-1.00)</td>
</tr>
<tr>
<td></td>
<td>Older</td>
<td></td>
<td>0.43 (0.50)</td>
<td>0.81 (0.40)</td>
</tr>
<tr>
<td></td>
<td>(n=17)</td>
<td></td>
<td>(0.08-0.83)</td>
<td>(0.25-1.00)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.99 (0.12)</td>
<td>0.78 (0.42)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(0.75-1.00)</td>
<td>(0.25-1.00)</td>
</tr>
<tr>
<td></td>
<td>Parents</td>
<td></td>
<td>0.89 (0.31)</td>
<td>0.82 (0.39)</td>
</tr>
<tr>
<td></td>
<td>(n=11)</td>
<td></td>
<td>(0.25-1.00)</td>
<td>(0.25-1.00)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1.00 (0)</td>
<td>0.95 (0.21)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(1.00)</td>
<td>(0.75-1.00)</td>
</tr>
</tbody>
</table>

In Tables 5.5 and 5.6, beginning with monolingual children, older children are more accurate than younger children with respect to mean target responses across all conditions. Monolingual children are also more accurate than heritage children, except in the Subjunctive/Indicative and the ser/estar conditions where heritage children produce slightly more targets than monolinguals in the Indicative and the ser target condition. Older heritage children are more accurate than younger heritage children across all conditions, which indicates language growth and not attrition. In general, adults exhibit equal performance across all conditions, except in the
Preterite/Present Perfect and Preterite/Imperfect conditions. For instance, monolingual adults produce 13% more target responses in the Present Perfect target condition than heritage parents, which suggests the possibility of dialectal variation with respect to the interpretation of this compound tense. Furthermore, heritage parents produce more target responses in the Preterite and Imperfect target conditions (12% and 13% more, respectively) than monolingual adults, which again suggests interpretation differences due to dialectal variation between the two groups for this particular contrast.

Table 5.7 presents the fixed effect logistic regression results for monolingual and heritage children in the contextualized preference-based elicitation task. The purpose of this analysis was to find out whether monolingual and heritage children’s performance, that is overall accuracy with respect to target responses across each of the four linguistic conditions, was comparable. I was particularly interested in investigating the possible effect of factors such as language status (monolingual, heritage) and age (younger, older) on accuracy, and whether these factors interacted in any of the conditions. This data was modeled with the monolingual group as the comparison group. This means that the other child group (HERITAGE) shows development contrasted with monolingual children. This data was also modeled with the Preterite/Present Perfect condition as the comparison condition meaning that the other three conditions (Condition2, Condition3, Condition4) are contrasted with the Preterite/Present Perfect.
Table 5.7 (CHILDREN): Fixed effects logistic regression testing the effects of LANGUAGE STATUS (monolingual, heritage), AGE (younger, older) and LINGUISTIC CONDITION (Preterite/Present Perfect(Condition1), Preterite/Imperfect(Condition2), ser/estar(Condition3), Subjunctive/Indicative(Condition4)), and their interactions.

<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>Std. Error</th>
<th>z-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.221</td>
<td>0.122</td>
<td>1.85</td>
<td>0.069</td>
</tr>
<tr>
<td>LanguageStatusMono</td>
<td>0.944</td>
<td>0.195</td>
<td>4.854</td>
<td>1.21e-06***</td>
</tr>
<tr>
<td>AgeYounger</td>
<td>-0.417</td>
<td>0.170</td>
<td>-2.450</td>
<td>0.014   *</td>
</tr>
<tr>
<td>Condition2</td>
<td>0.654</td>
<td>0.224</td>
<td>2.916</td>
<td>0.004   **</td>
</tr>
<tr>
<td>Condition3</td>
<td>1.128</td>
<td>0.245</td>
<td>4.612</td>
<td>3.98e-06 ***</td>
</tr>
<tr>
<td>Condition4</td>
<td>0.448</td>
<td>0.173</td>
<td>0.259</td>
<td>0.796</td>
</tr>
<tr>
<td>LanguageStatusMono:AgeYounger</td>
<td>-0.514</td>
<td>0.260</td>
<td>-1.976</td>
<td>0.048   *</td>
</tr>
<tr>
<td>LanguageStatusMono:Condition2</td>
<td>-0.584</td>
<td>0.348</td>
<td>-1.677</td>
<td>0.094   .</td>
</tr>
<tr>
<td>LanguageStatusMono:Condition3</td>
<td>-0.624</td>
<td>0.381</td>
<td>-1.637</td>
<td>0.102</td>
</tr>
<tr>
<td>LanguageStatusMono:Condition4</td>
<td>1.242</td>
<td>0.332</td>
<td>3.747</td>
<td>0.0002  ***</td>
</tr>
<tr>
<td>AgeYounger:Condition2</td>
<td>-0.151</td>
<td>0.305</td>
<td>-0.496</td>
<td>0.620</td>
</tr>
<tr>
<td>AgeYounger:Condition3</td>
<td>-0.682</td>
<td>0.319</td>
<td>-2.135</td>
<td>0.033   *</td>
</tr>
<tr>
<td>AgeYounger:Condition4</td>
<td>-0.129</td>
<td>0.241</td>
<td>-0.537</td>
<td>0.591</td>
</tr>
<tr>
<td>LanguageStatusMono:AgeYounger:Condition2</td>
<td>0.225</td>
<td>0.460</td>
<td>0.488</td>
<td>0.625</td>
</tr>
<tr>
<td>LanguageStatusMono:AgeYounger:Condition3</td>
<td>0.520</td>
<td>0.487</td>
<td>1.068</td>
<td>0.285</td>
</tr>
<tr>
<td>LanguageStatusMono:AgeYounger:Condition4</td>
<td>-1.078</td>
<td>0.412</td>
<td>-2.615</td>
<td>0.009   *</td>
</tr>
</tbody>
</table>

The output in Table 5.7 confirms a positive and significant effect of age (YOUNGER), as well as a positive and significant effect of language status (MONO), on children’s overall accuracy with respect to the production of target responses in each of the four linguistic conditions. This suggests that older children are more accurate than younger children, and that monolingual children are more accurate than heritage children. However, the significant negative parameter for the interaction term LanguageStatusMono:AgeYounger suggests that, for monolingual children, the effect of producing target responses decreases in younger children. Overall, it was found that children’s accuracy in each of the four linguistic conditions proceeds as in (134), which shows that children are more accurate in the ser/estar condition, followed by the Preterite/Imperfect, Subjunctive/Indicative and Preterite/Present Perfect conditions. The output in Table 5.7 confirms a significant difference between the Preterite/Imperfect and Preterite/Present Perfect conditions,
and a significant difference between the *ser/estar* and Preterite/Present Perfect conditions. These differences across conditions are illustrated in (134).

\[(134) \quad *ser/estar > Preterite/Imperfect > Subjunctive/Indicative > Preterite/Present Perfect*

The negative parameter for the interaction term *AgeYounger:Condition3* shows a significant effect on the ability of producing target responses in the *ser/estar* condition. This means that younger children are less successful in this condition. The positive parameter for the interaction term *LanguageStatusMono:Condition4* increases the effect that was found for language status above, which indicates that being monolingual increases a child’s success in the Subjunctive/Indicative condition and has a significant effect on this outcome. The last significant effect that is observed is the interaction *LanguageStatusMono:AgeYounger:Condition4*. This negative parameter reverses, suggesting that younger monolingual children are the least successful in the Subjunctive/Indicative condition. They are particularly worse in the target Subjunctive condition.

Now, when each language group is examined separately, monolingual and heritage children’s trends for target productions follow different sequences. Table 5.8 presents the fixed logistic regression for monolingual children in the contextualized preference-based elicitation task.
Table 5.8 (MONOLINGUAL CHILDREN): Fixed effects logistic regression testing the effects of AGE (younger, older) and LINGUISTIC CONDITION (Preterite/Present Perfect(Condition1), Preterite/Imperfect(Condition2), ser/estar(Condition3), Subjunctive/Indicative(Condition4)), and their interactions.

<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>Std. Error</th>
<th>z-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>1.166</td>
<td>0.152</td>
<td>7.690</td>
<td>1.47e-14 ***</td>
</tr>
<tr>
<td>AgeYounger</td>
<td>-0.931</td>
<td>0.197</td>
<td>-4.723</td>
<td>2.32e-06 ***</td>
</tr>
<tr>
<td>Condition2</td>
<td>0.070</td>
<td>0.266</td>
<td>0.264</td>
<td>0.792</td>
</tr>
<tr>
<td>Condition3</td>
<td>0.504</td>
<td>0.292</td>
<td>1.724</td>
<td>0.085</td>
</tr>
<tr>
<td>Condition4</td>
<td>1.287</td>
<td>0.283</td>
<td>4.547</td>
<td>5.45e-06 ***</td>
</tr>
<tr>
<td>AgeYounger:Condition2</td>
<td>0.074</td>
<td>0.345</td>
<td>0.214</td>
<td>0.831</td>
</tr>
<tr>
<td>AgeYounger:Condition3</td>
<td>-0.162</td>
<td>0.369</td>
<td>-0.439</td>
<td>0.660</td>
</tr>
<tr>
<td>AgeYounger:Condition4</td>
<td>-1.207</td>
<td>0.335</td>
<td>-3.608</td>
<td>0.0003   ***</td>
</tr>
</tbody>
</table>

The output in Table 5.8 confirms that older monolingual children are more successful than younger monolingual children. The trend for monolingual children’s target responses across all four linguistic conditions proceeds as in the sequence in (135), which shows that monolingual children are most accurate in the Subjunctive/Indicative condition, followed by the ser/estar, Preterite/Imperfect and Preterite/Present Perfect conditions. From this trend, and from the output in Table 5.8, a significant difference between the Subjunctive/Indicative and Preterite/Present Perfect conditions is observed. A z-test also confirms a significant difference between the Subjunctive/Indicative and ser/estar conditions ($z = -2.66, p < 0.01$), as well as a significant difference between the Subjunctive/Indicative and the Preterite/Imperfect conditions ($z = -3.24, p < 0.001$). These differences across conditions are illustrated in (135).

(135) Subjunctive/Indicative > ser/estar > Preterite/Imperfect > Preterite/Present Perfect
The negative parameter for the interaction term AgeYounger:Condition4 has a significant effect on the production of target responses in the Subjunctive/Indicative condition. This indicates that younger monolingual children are less successful in this condition.

Table 5.9 presents the fixed logistic regression for heritage children in the contextualized preference-based elicitation task.

Table 5.9 (HERITAGE CHILDREN): Fixed effects logistic regression testing the effects of AGE (younger, older) and LINGUISTIC CONDITION (Preterite/Present Perfect (Condition1), Preterite/Imperfect (Condition2), ser/estar (Condition3), Subjunctive/Indicative (Condition4)), and their interactions.

<table>
<thead>
<tr>
<th>Estimate</th>
<th>Std. Error</th>
<th>z-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.221</td>
<td>0.122</td>
<td>1.815</td>
</tr>
<tr>
<td>AgeYounger</td>
<td>-0.417</td>
<td>0.170</td>
<td>-2.450</td>
</tr>
<tr>
<td>Condition2</td>
<td>0.654</td>
<td>0.224</td>
<td>2.916</td>
</tr>
<tr>
<td>Condition3</td>
<td>1.128</td>
<td>0.245</td>
<td>4.612</td>
</tr>
<tr>
<td>Condition4</td>
<td>0.045</td>
<td>0.173</td>
<td>0.259</td>
</tr>
<tr>
<td>AgeYounger:Condition2</td>
<td>-0.151</td>
<td>0.305</td>
<td>-0.496</td>
</tr>
<tr>
<td>AgeYounger:Condition3</td>
<td>-0.682</td>
<td>0.320</td>
<td>-2.135</td>
</tr>
<tr>
<td>AgeYounger:Condition4</td>
<td>-0.129</td>
<td>0.245</td>
<td>-0.537</td>
</tr>
</tbody>
</table>

The output in Table 5.9 confirms that older heritage children are more accurate than younger heritage children. The trend for heritage children’s target responses across all four linguistic conditions differs from monolingual children’s, as illustrated in the sequence in (136), which shows that heritage children are more accurate in the ser/estar condition, followed by the Preterite/Imperfect, Subjunctive/Indicative and Preterite/Present Perfect conditions. From this trend, and from the output in Table 5.9, a significant difference between the Subjunctive/Indicative and Preterite/Present Perfect conditions is observed. A z-test also confirms a significant difference between the ser/estar and Preterite/Imperfect conditions ($z = -2.74, p < 0.01$). These differences across conditions are illustrated in (136).
The negative parameter for the interaction term AgeYounger:Condition3 has a significant effect on producing target responses in the *ser/estar* condition. This means that younger heritage children are less successful in this condition.

In sum, the results of the logistic regression tests show that heritage children behave differently than monolingual children in their overall accuracy of target responses across conditions. It might be that they are more successful in the *ser/estar* and Preterite/Imperfect conditions because of morphological and semantic similarity with French. Their non-target-like behaviour in the Subjunctive/Indicative and Preterite/Imperfect conditions, however, might be attributed to protracted development, particularly in the case of the target Subjunctive and Present Perfect contexts for which forms they do not have full representations (with respect to meaning structure).

Tables 5.10 to 5.13 present target versus non-target responses across all four conditions by monolingual and heritage children, as well as adults. When we compare monolingual and heritage children’s target and non-target responses, monolinguals produce more target responses than heritage children in the Preterite/Present Perfect and the Subjunctive/Indicative conditions, as illustrated in Tables 5.10 and 5.11. The number of responses across groups was dependent on the number of participants and test items.
Table 5.10. *Target versus non-target responses in the Preterite/Present Perfect condition by children and adults.*

<table>
<thead>
<tr>
<th></th>
<th>Preterite/Present Perfect condition</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Monolingual children ((N=31))</td>
<td>Heritage children ((N=35))</td>
</tr>
<tr>
<td></td>
<td>Monolingual adults ((N=7))</td>
<td>Heritage parents ((N=11))</td>
</tr>
<tr>
<td>Target responses</td>
<td>326</td>
<td>281</td>
</tr>
<tr>
<td>Non-target responses</td>
<td>170</td>
<td>279</td>
</tr>
<tr>
<td>Total responses</td>
<td>496</td>
<td>560</td>
</tr>
</tbody>
</table>

Table 5.11. *Target versus non-target responses in the Subjunctive/Indicative condition by children and adults.*

<table>
<thead>
<tr>
<th></th>
<th>Subjunctive/Indicative condition</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Monolingual children ((N=31))</td>
<td>Heritage children ((N=35))</td>
</tr>
<tr>
<td></td>
<td>Monolingual adults ((N=7))</td>
<td>Heritage parents ((N=11))</td>
</tr>
<tr>
<td>Target responses</td>
<td>370</td>
<td>278</td>
</tr>
<tr>
<td>Non-target responses</td>
<td>126</td>
<td>282</td>
</tr>
<tr>
<td>Total responses</td>
<td>496</td>
<td>560</td>
</tr>
</tbody>
</table>

A Pearson’s chi-square test confirms that the difference between the two groups in these conditions is significant (Subjunctive/Indicative: \(\chi^2 = 69.08, p < 0.001\); Preterite/Present Perfect: \(\chi^2 = 26.01, p < 0.001\)). For adults, heritage parents produce more target responses in each of these conditions; however, no significant differences are found between the two groups (Subjunctive/Indicative: \(\chi^2 = 1.61, p = 0.20\); Preterite/Present Perfect: \(\chi^2 = 2.65, p = 0.10\)).

Heritage children produce slightly more target responses than monolingual children in the Preterite/Imperfect and *ser/estar* conditions, as illustrated in Tables 5.12 and 5.13

Table 5.12. *Target versus non-target responses in the Preterite/Imperfect condition by children and adults.*

<table>
<thead>
<tr>
<th></th>
<th>Preterite/Imperfect condition</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Monolingual children ((N=31))</td>
<td>Heritage children ((N=35))</td>
</tr>
<tr>
<td></td>
<td>Monolingual adults ((N=7))</td>
<td>Heritage parents ((N=11))</td>
</tr>
<tr>
<td>Target responses</td>
<td>169</td>
<td>179</td>
</tr>
<tr>
<td>Non-target responses</td>
<td>79</td>
<td>101</td>
</tr>
<tr>
<td>Total responses</td>
<td>248</td>
<td>280</td>
</tr>
</tbody>
</table>
A Pearson’s chi-square test confirms that no significant differences are found between the two groups (ser/estar: $\chi^2 = 2.50, p = 0.11$; Preterite/Imperfect: $\chi^2 = 1.04, p = 0.31$). In adults, heritage parents again produce more target response than monolingual adults; however, no significant differences are found between the two groups (ser/estar: $\chi^2 = 1.47, p = 0.22$; Preterite/Imperfect: $\chi^2 = 3.33, p = 0.07$).

Finally, Tables 5.14 to 5.17 present target versus non-target responses for younger and older heritage children across all four linguistic conditions. When we compare the two age groups, older heritage children produce more target responses in the Preterite/Present Perfect, ser/estar and Preterite/Imperfect conditions, as is shown in Tables 5.14 to 5.16.

Table 5.13. *Target versus non-target responses in the ser/estar condition by children and adults.*

<table>
<thead>
<tr>
<th></th>
<th>Monolingual children $(N=31)$</th>
<th>Heritage children $(N=35)$</th>
<th>Monolingual adults $(N=7)$</th>
<th>Heritage parents $(N=11)$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target responses</td>
<td>183</td>
<td>189</td>
<td>50</td>
<td>72</td>
</tr>
<tr>
<td>Non-target responses</td>
<td>65</td>
<td>91</td>
<td>6</td>
<td>16</td>
</tr>
<tr>
<td>Total responses</td>
<td>248</td>
<td>280</td>
<td>56</td>
<td>88</td>
</tr>
</tbody>
</table>

Table 5.14. *Target versus non-target responses in the Preterite/Present Perfect condition by younger and older heritage children.*

<table>
<thead>
<tr>
<th></th>
<th>Younger heritage children $(N=18)$</th>
<th>Older heritage children $(N=17)$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target responses</td>
<td>130</td>
<td>151</td>
</tr>
<tr>
<td>Non-target responses</td>
<td>158</td>
<td>121</td>
</tr>
<tr>
<td>Total responses</td>
<td>288</td>
<td>272</td>
</tr>
</tbody>
</table>

Table 5.15. *Target versus non-target responses in the Preterite/Imperfect condition by younger and older heritage children.*

<table>
<thead>
<tr>
<th></th>
<th>Younger heritage children $(N=18)$</th>
<th>Older heritage children $(N=17)$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target responses</td>
<td>83</td>
<td>96</td>
</tr>
<tr>
<td>Non-target responses</td>
<td>61</td>
<td>40</td>
</tr>
<tr>
<td>Total responses</td>
<td>144</td>
<td>136</td>
</tr>
</tbody>
</table>
Table 5.16. Target versus non-target responses in the ser/estar condition by younger and older heritage children.

<table>
<thead>
<tr>
<th></th>
<th>Younger heritage children (N=18)</th>
<th>Older heritage children (N=17)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target responses</td>
<td>81</td>
<td>108</td>
</tr>
<tr>
<td>Non-target responses</td>
<td>63</td>
<td>28</td>
</tr>
<tr>
<td>Total responses</td>
<td>144</td>
<td>136</td>
</tr>
</tbody>
</table>

A Pearson’s chi-square test suggests that the difference between the two age groups in these conditions is significant for the Preterite/Present Perfect condition (Preterite/Present Perfect: $\chi^2 = 13.46, p < 0.001$), and significant for the Preterite/Imperfect condition (Preterite/Imperfect: $\chi^2 = 5.09, p < 0.05$). No significant differences are found for the ser/estar condition (ser/estar: $\chi^2 = 0.13, p = 0.72$). Though younger heritage children produce slightly more targets than older children in the Subjunctive/Indicative condition, as shown in Table 5.17, no significant differences are found between the two groups (Subjunctive/Indicative: $\chi^2 = 0.002, p = 0.97$).

Table 5.17. Target versus non-target responses in the Subjunctive/Indicative condition by younger and older heritage children.

<table>
<thead>
<tr>
<th></th>
<th>Younger heritage children (N=18)</th>
<th>Older heritage children (N=17)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target responses</td>
<td>124</td>
<td>154</td>
</tr>
<tr>
<td>Non-target responses</td>
<td>164</td>
<td>118</td>
</tr>
<tr>
<td>Total responses</td>
<td>288</td>
<td>272</td>
</tr>
</tbody>
</table>

I now explore all four conditions in more detail.

5.3.3.2. Preterite and Present Perfect conditions

The Preterite/Present Perfect conditions are designed around the crucial interaction between tense and adverbial type and included the following contexts: Preterite plus anoché (Anoche Dora hizo la tarea/“Last night Dora did the homework”), Preterite plus ayer (Ayer se pelearon/“Yesterday they fought”), Present Perfect plus desde la semana pasada (Desde la
"semana pasada han perdido tres veces" ("Since last week they have lost three times") and Present Perfect plus "todavía no" ("Su amiga todavía no ha llegado" ("Her friend has still not arrived")). All response types were coded for Preterite, Present Perfect, Present, and ‘Other’. (The latter included the Imperfect, Conditional, Future, infinitival forms and hybrid forms which consisted of the auxiliary haber plus the Preterite (e.g., "han perdieron"). Figure 5.3 presents the mean target responses for the Preterite and Present Perfect conditions across groups.

Figure 5.3. Mean target responses for Preterite and Present Perfect conditions by monolingual and heritage groups.

Figure 5.3 shows that overall older monolingual children are more accurate than younger monolinguals in both conditions. Bigger differences in the Present Perfect condition are observed, however, and show that monolingual children produce few Present Perfect targets with "desde la semana pasada" context but do better with "todavía no. As for heritage children, overall older children are more accurate than younger children across both conditions, except with "anoche" in the Preterite condition for which both groups show equal performance. With "ayer", younger children produce fewer targets (64%), whereas older children are more successful
(79%). So, while the Preterite is the predominant response type in the Preterite condition, heritage children produce very few Present Perfect targets in the Present Perfect condition. This is particularly the case with \textit{desde la semana pasada} for which heritage children exhibit little knowledge of the Perfect Time Span. However, heritage children do better with the adverbial \textit{todavía no} and thus show sensitivity to the Present Perfect in this context, particularly the universal Perfect. Both groups of adults perform similarly in the Preterite condition and are most successful with the adverbial \textit{ayer}. In the Present Perfect condition, adults, like children, produce few target responses with the adverbial \textit{desde la semana pasada} and instead do better with the adverbial \textit{todavía no}.

Table 5.18 presents the distribution of response types for the Preterite condition, across groups.

\begin{table}[h]
\centering
\begin{tabular}{|c|cccc|cccc|}
\hline
& \textbf{Preterite (categorical context)} & & & & \textbf{Adverbial} & & \textbf{Adverbial} & \\
& & & & & \textit{anoche} (\textit{“last night”}) & & \textit{ayer} (\textit{“yesterday”}) & \\
& & & & & Preterite & Present & Present & Other & Preterite & Present & Present & Other \\
\hline
\textbf{Monolingual} & & & & & & & & \\
\textbf{Younger} & 69\% & 22\% & 8\% & 2\% & 83\% & 9\% & 6\% & 2\% \\
& (44/64) & (14/64) & (5/64) & (1/64) & (53/64) & (6/64) & (4/64) & (1/64) \\
\textbf{Older} & 87\% & 13\% & 0\% & 0\% & 87\% & 13\% & 0\% & 0\% \\
& (52/60) & (8/60) & (0/60) & (0/60) & (52/60) & (8/60) & (0/60) & (0/60) \\
\textbf{Adults} & 100\% & 0 \% & 0 \% & 0 \% & 86\% & 11\% & 4\% & 0\% \\
& (28/28) & (0/28) & (0/28) & (0/28) & (24/28) & (3/28) & (1/28) & (0/28) \\
\hline
\textbf{Heritage} & & & & & & & & \\
\textbf{Younger} & 68\% & 14\% & 11\% & 7\% & 64\% & 17\% & 14\% & 5\% \\
& (49/72) & (10/72) & (8/72) & (5/72) & (46/72) & (12/72) & (10/72) & (4/72) \\
\textbf{Older} & 68\% & 23\% & 3\% & 6\% & 79\% & 16\% & 0\% & 4\% \\
& (46/68) & (16/68) & (2/68) & (4/68) & (54/68) & (11/68) & (0/68) & (3/68) \\
\textbf{Parents} & 93\% & 7\% & 0\% & 0\% & 89\% & 9\% & 2\% & 0\% \\
& (41/44) & (3/44) & (0/44) & (0/44) & (39/44) & (4/44) & (1/44) & (0/44) \\
\hline
\end{tabular}
\caption{Distribution of response type per group for the Preterite condition.}
\end{table}

Beginning with monolingual children in the Preterite condition, Table 5.18 shows that the primary response type for younger children is the Preterite, yet they are more accurate with \textit{ayer} (83\%) than \textit{anoche} (69\%). With \textit{anoche}, younger children overextend the Present Perfect (22\%), as well as the Present (8\%). Older children are sensitive to the Preterite condition and show equal
accuracy (87%) with both Preterite adverbs; however, they also extend the Present Perfect equally (13%) in both contexts. With both Preterite adverbs, younger heritage children overextend the Present Perfect and Present tenses, which when combined comprise approximately 30% of their response types. This finding is consistent with younger monolingual children’s behaviour, but only with anoche. In older heritage children overextension of the Present Perfect with anoche (23%) is observed, but less so with ayer (16%). These findings suggest a possible influence from the French Passé Composé, particularly with anoche since older heritage children produce twice as many Present Perfects in this context than their monolingual peers. Though influence from the French Passé Composé should predict similar overextension with both adverbials, a different trend emerges, which suggests that heritage children are more sensitive to the temporal boundaries of ayer than anoche. Lastly, monolingual adults are slightly more successful than heritage parents with the adverbial anoche. Both groups perform similarly with ayer and produce less target Preterite responses than with anoche.

Table 5.19 presents the distribution of response types for Present Perfect condition, across groups.
Table 5.19. Distribution of response type per group for the Present Perfect condition.

<table>
<thead>
<tr>
<th>Present Perfect (interpretable context)</th>
<th>Present</th>
<th>Preterite</th>
<th>Present</th>
<th>Other</th>
<th>Present</th>
<th>Preterite</th>
<th>Present</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adverbial</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>desde la semana pasada</em> (“since last week”)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monolingual Younger</td>
<td>22%</td>
<td>52%</td>
<td>16%</td>
<td>11%</td>
<td>50%</td>
<td>31%</td>
<td>14%</td>
<td>5%</td>
</tr>
<tr>
<td>(14/64)</td>
<td>(33/64)</td>
<td>(10/64)</td>
<td>(7/64)</td>
<td></td>
<td>(32/64)</td>
<td>(20/64)</td>
<td>(9/64)</td>
<td>(3/64)</td>
</tr>
<tr>
<td>Older</td>
<td>38%</td>
<td>58%</td>
<td>3%</td>
<td>0%</td>
<td>93%</td>
<td>7%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>(23/60)</td>
<td>(35/60)</td>
<td>(2/60)</td>
<td>(0/60)</td>
<td></td>
<td>(56/60)</td>
<td>(4/60)</td>
<td>(0/60)</td>
<td>(0/60)</td>
</tr>
<tr>
<td>Adults</td>
<td>64%</td>
<td>36%</td>
<td>0%</td>
<td>0%</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>(18/28)</td>
<td>(10/28)</td>
<td>(0/28)</td>
<td>(0/28)</td>
<td></td>
<td>(28/28)</td>
<td>(0/28)</td>
<td>(0/28)</td>
<td>(0/28)</td>
</tr>
<tr>
<td>Heritage Younger</td>
<td>15%</td>
<td>60%</td>
<td>11%</td>
<td>14%</td>
<td>33%</td>
<td>46%</td>
<td>15%</td>
<td>6%</td>
</tr>
<tr>
<td>(11/72)</td>
<td>(43/72)</td>
<td>(8/72)</td>
<td>(10/72)</td>
<td></td>
<td>(24/72)</td>
<td>(33/72)</td>
<td>(11/72)</td>
<td>(4/72)</td>
</tr>
<tr>
<td>Older</td>
<td>21%</td>
<td>59%</td>
<td>7%</td>
<td>13%</td>
<td>54%</td>
<td>32%</td>
<td>10%</td>
<td>3%</td>
</tr>
<tr>
<td>(14/68)</td>
<td>(40/68)</td>
<td>(5/68)</td>
<td>(9/68)</td>
<td></td>
<td>(37/68)</td>
<td>(22/68)</td>
<td>(7/68)</td>
<td>(2/68)</td>
</tr>
<tr>
<td>Parents</td>
<td>59%</td>
<td>29%</td>
<td>7%</td>
<td>5%</td>
<td>80%</td>
<td>9%</td>
<td>11%</td>
<td>0%</td>
</tr>
<tr>
<td>(26/44)</td>
<td>(13/44)</td>
<td>(3/44)</td>
<td>(2/44)</td>
<td></td>
<td>(35/44)</td>
<td>(4/44)</td>
<td>(5/44)</td>
<td>(0/44)</td>
</tr>
</tbody>
</table>

Table 5.19 shows that both younger and older monolingual children produce few target Present Perfects with the left-bracket adverb *desde la semana pasada* and instead treat this context as a Preterite-favouring one. For example, in younger and older children this problematic adverb showed 22% and 38% responses in favour of the Present Perfect respectively, while the Preterite showed 52% and 58% respectively. An individual analysis showed that 10 out of 16 younger and 3 out of 15 older children produced target Present Perfects in this context; however, only 1 out of 16 younger and 3 out of 15 older children chose this tense as the primary response type (3 out of 4 responses). In addition, monolingual children shortened and reinterpreted *desde la semana pasada* to a point-in-time adverbial, such as *la semana pasada, en la semana pasada, de la semana pasada*, making it more felicitous with the Preterite. In the *todavía no* context, younger children preferred the Present Perfect at chance (50%), as well as the Preterite (31%). This inconsistency was resolved in older children who instead treated *todavía no* as a true Present Perfect and achieved 93% accuracy, which confirms sensitivity to its meaning properties.
As for heritage children in the Present Perfect condition, Table 5.19 shows that although heritage children produced few Present Perfect targets, evidence of growth between younger and older heritage children is found. Heritage children, like monolingual children, have difficulty with the left-bracket adverb desde la semana pasada and treat this context as a Preterite-favouring one. For example, in younger and older children desde la semana pasada showed 15% and 21% responses in favour of the Present Perfect respectively, while the Preterite showed 60% and 59% respectively. An individual analysis showed that 7 out of 18 younger and 8 out of 17 older children produced target Present Perfects in this context; however, none of the younger children and only 1 out of 17 older children chose this tense as the primary response type (3 out of 4 responses). Like monolingual children, heritage children also shorten and reinterpret desde la semana pasada to a point-in-time adverbial, such as la semana pasada, en la semana pasada, de la semana pasada, thus making it more felicitous with the Preterite. In the todavía no context, Spanish heritage children produce more target Present Perfects than in the previous context; however, their use of the target compound tense is still low compared to monolingual children. In younger and older heritage children todavía no showed 33% and 54% responses in favour of the Present Perfect respectively, while the Preterite, down from the desde la semana pasada context, still showed 46% and 32% respectively. An individual analysis showed that 14 out of 18 younger and 16 out of 17 older children produced target Present Perfects in this context; however, only 2 out of 18 younger children and 7 out of 17 older children chose this tense as the primary response type (3 out of 4). These results suggest that heritage children are not sensitive to either Present Perfect adverbial and, more importantly, to the meaning components of the Present Perfect tense.

In both the Preterite and Present Perfect conditions, Spanish heritage children’s ‘Other’ response types consisted of hybrid forms, such as auxiliary haber in the Present plus Preterite
(e.g., *han hizo*), or *haber* plus gerund (e.g., *han celebrando*), or *haber* plus Present (e.g., *he escribo*). These qualitatively different forms comprised less than 2% of heritage children’s overall response types across both conditions, and they occurred in both groups (5 older children, 1 younger child) and with both tenses (Preterite, *n=6*; Present Perfect, *n=4*). These forms, however, were not attested in monolingual children. Eight out of ten tokens consisted of the type *haber* in the Present plus Preterite and were also found in heritage children’s imitation task results in Spanish. Adults performed just above chance with the problematic left-bracket adverbial *desde la semana* (59% to 64%), but treated *todavía no* as a true Perfect adverbial with accuracy ranging from 80% to 100%.

In the Present Perfect target condition, specifically the *desde la semana pasada* (“since last week”) context, monolingual and heritage children produced few Present Perfect target responses and instead overextended the Preterite approximately 60%. In fact, heritage adults also treated this context as a Preterite one even though *desde* (“since”) is the quintessential Perfect-level adverbial. Overextension of the Preterite in heritage children and adults cannot therefore be attributed to cross-linguistic influence. It could be that neither monolingual nor heritage speakers have acquired the existential use of the Present Perfect in combination with the left-bracket adverbial *desde la semana pasada*. Dialectal variation may also be a possibility. For example, the Present Perfect plus *desde* may not be available in certain varieties (e.g., Argentina, Uruguay). In the Present Perfect plus *todavía no* (“still not”) context, younger heritage children produced twice as many Present Perfect targets than in the *desde la semana pasada* (“since last week”) context, but still performed well below chance. They also overextended the Preterite nearly 50%, and more frequently than younger monolingual children in the *todavía no* (“still not”) context. However, both younger monolingual and heritage children overextended the Present tense equally (15%). Like younger heritage children, older heritage children more than
doubled their Present Perfect targets with *todavía no* than in the *desde la semana pasada* context, yet they also overextended the Preterite and the Present more frequently than older monolingual children. Heritage parents’ showed a clear preference for the Present Perfect in this context, but also overextended the Preterite and Present while monolingual adults performed at ceiling. These findings suggest that younger and older heritage children know something about the Present Perfect expressing a past event whose reference is simultaneous with the moment of speech—as in Bello (1847), Iatridou (2003) and Rojo & Veiga (1999)—given that one half of their responses in the *todavía no* context consisted of the Present Perfect and Present. However, heritage children also showed robust overextension of the Preterite, which might be due to dialectal variation in that this particular universal Perfect construction is not available to speakers of non-Mexican varieties of Spanish.

With respect to language status, overall monolingual children produce more target responses than heritage children in both the Preterite and Present Perfect conditions, as is illustrated in Table 5.20.

<table>
<thead>
<tr>
<th>Target condition</th>
<th>Preterite</th>
<th>Present Perfect</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Monolingual children</td>
<td>Heritage children</td>
</tr>
<tr>
<td></td>
<td>(N=31)</td>
<td>(N=35)</td>
</tr>
<tr>
<td>Target responses</td>
<td>201</td>
<td>195</td>
</tr>
<tr>
<td>Non-target responses</td>
<td>47</td>
<td>85</td>
</tr>
<tr>
<td>Total responses</td>
<td>248</td>
<td>280</td>
</tr>
</tbody>
</table>

A Pearson’s chi-square test suggests that the difference between the two groups in each of the two conditions is significant (Preterite: \(\chi^2 = 9.12, df = 1, p < 0.01\); Present Perfect: \(\chi^2 = 21.25, df = 1, p < 0.001\)).
As for heritage children and age status, older heritage children produce more target responses than younger heritage children in both the Preterite and Present Perfect conditions, as shown in Table 5.21.

Table 5.21. Target versus non-target responses in the Preterite and Present Perfect target conditions for younger and older heritage children.

<table>
<thead>
<tr>
<th>Target condition</th>
<th>Preterite (N items=8)</th>
<th>Present Perfect (N items=8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>Younger heritage</td>
<td>Older heritage</td>
</tr>
<tr>
<td></td>
<td>(N=18)</td>
<td>(N=17)</td>
</tr>
<tr>
<td>Target responses</td>
<td>95</td>
<td>100</td>
</tr>
<tr>
<td>Non-target responses</td>
<td>49</td>
<td>36</td>
</tr>
<tr>
<td>Total responses</td>
<td>144</td>
<td>136</td>
</tr>
</tbody>
</table>

A Pearson’s chi-square test suggests that the difference between the two groups in the Present Perfect is significant ($\chi^2 = 56.34$, $df = 1$, $p < 0.0001$), while no significant differences are found in the Preterite condition ($\chi^2 = 1.89$, $df = 1$, $p = 0.17$).

### 5.3.3.3. Preterite and Imperfect conditions

The second contrast from tense-aspect-mood examined the Preterite (episodic interpretation) and Imperfect (habitual/characterizing interpretation) tenses in combination with stative and eventive predicates: (i) Preterite plus stative (*Le gustó mucho la película*/*She liked the movie a lot*) and eventive (*Pintó su cuadro en diez minutos*/*He painted his painting in ten minutes*) predicates, and (ii) Imperfect plus stative (*Estaba vestida de payaso*/*She was dressed like a clown*) and eventive (*De chico su mama le daba cereales todos los días*/*As a little boy his mom gave him cereal everyday*) predicates. All response types were coded for Preterite, Imperfect, and ‘Other’. (The latter included the Present, Present Perfect and Conditional tenses, as well as hybrid forms, i.e., auxiliary *haber* plus the Preterite (e.g., *ha hiciste*). Figure 5.4 presents the mean target responses for the Preterite and Imperfect conditions across monolingual and heritage groups.
Beginning with monolingual children, the data in Figure 5.4 show that overall older children are more accurate than younger children in both conditions. In the Preterite condition, older children produce slightly more targets than younger children with eventive predicates and their overall accuracy ranges from 75 to 83%. With stative predicates, younger children are less accurate (69%) than in the eventive context, while older children are more precise (90%). In the heritage group, Figure 5.4 shows that younger and older children’s accuracy is near identical across both conditions except with eventive predicates in the Imperfect condition. In the Preterite condition, for example, heritage children perform similarly with eventive predicates and choose the Preterite with 80% to 82% accuracy. Both groups, however, are less accurate with stative predicates (64% to 71%), but again produce the same number of Imperfect targets. Finally, for adults, heritage parents are more accurate than monolingual adults in both the Preterite and Imperfect conditions for both predicate types.

Tables 5.22 and 5.23 summarize the distribution of responses types in each of the Preterite and Imperfect conditions across groups.
Table 5.22. Distribution of response type per group for the Preterite condition.

<table>
<thead>
<tr>
<th></th>
<th>Eventive</th>
<th></th>
<th>Stative</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Preterite</td>
<td>Imperfect</td>
<td>Other</td>
<td>Preterite</td>
</tr>
<tr>
<td>Monolingual</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Younger</td>
<td>75%</td>
<td>6%</td>
<td>19%</td>
<td>69%</td>
</tr>
<tr>
<td>Older</td>
<td>83%</td>
<td>17%</td>
<td>0%</td>
<td>90%</td>
</tr>
<tr>
<td>(25/30)</td>
<td>(5/30)</td>
<td>(0/30)</td>
<td></td>
<td>(27/30)</td>
</tr>
<tr>
<td>Adults</td>
<td>86%</td>
<td>7%</td>
<td>7%</td>
<td>71%</td>
</tr>
<tr>
<td>(12/14)</td>
<td>(1/14)</td>
<td>(1/14)</td>
<td></td>
<td>(10/14)</td>
</tr>
<tr>
<td>Heritage</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Younger</td>
<td>80%</td>
<td>6%</td>
<td>14%</td>
<td>64%</td>
</tr>
<tr>
<td>Older</td>
<td>82%</td>
<td>6%</td>
<td>12%</td>
<td>71%</td>
</tr>
<tr>
<td>(28/34)</td>
<td>(2/34)</td>
<td>(4/34)</td>
<td></td>
<td>(24/34)</td>
</tr>
<tr>
<td>Parents</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
<td>82%</td>
</tr>
<tr>
<td>(22/22)</td>
<td>(0/22)</td>
<td>(0/22)</td>
<td></td>
<td>(18/22)</td>
</tr>
</tbody>
</table>

Table 5.22 shows that monolingual and bilingual children are quite accurate in the Preterite target condition in both eventive and stative predicate contexts, with target use of the Preterite ranging from 64% to 90%. In monolingual children an overextension of the Imperfect, primarily in older children with eventive predicates (17%), is found. This trend is also found in younger children with stative predicates (16%). Younger children also overextend ‘Other’ tenses with eventive (19%) and stative (16%) predicates, primarily the Present and Present Perfect. In heritage children, overextension is found in both groups with both predicate types. For instance, with eventive predicates younger and older heritage children overextend ‘Other’ responses (14%), including the illicit Present and Present Perfect tenses, which is also consistent with younger monolingual children in this context. With stative predicates, both groups of heritage children also show patterns of overextension with the Imperfect (22-26%), and younger children also overextend ‘Other’ responses (14%) such as the Present.

---

19 Under ‘Other’ responses in older heritage children, one hybrid form token was found (e.g., ha hisite) in the Preterite condition with eventive predicates.
Table 5.23. *Distribution of response type per group for the Imperfect condition*.

<table>
<thead>
<tr>
<th>Predicate type</th>
<th>Eventive</th>
<th>Stative</th>
<th>Eventive</th>
<th>Stative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imperfect</td>
<td>44%</td>
<td>50%</td>
<td>41%</td>
<td>31%</td>
</tr>
<tr>
<td>Other</td>
<td>16%</td>
<td>10%</td>
<td>3%</td>
<td>10%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group</th>
<th>Younger</th>
<th>Older</th>
<th>Adults</th>
<th>Younger</th>
<th>Older</th>
<th>Adults</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monolingual</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Imperfect</td>
<td>44%</td>
<td>83%</td>
<td>86%</td>
<td>36%</td>
<td>79%</td>
<td>95%</td>
</tr>
<tr>
<td>Preterite</td>
<td>41%</td>
<td>13%</td>
<td>7%</td>
<td>44%</td>
<td>18%</td>
<td>5%</td>
</tr>
<tr>
<td>Other</td>
<td>16%</td>
<td>3%</td>
<td>7%</td>
<td>19%</td>
<td>3%</td>
<td>0%</td>
</tr>
<tr>
<td>Heritage</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Imperfect</td>
<td>50%</td>
<td>50%</td>
<td>59%</td>
<td>50%</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>Preterite</td>
<td>31%</td>
<td>32%</td>
<td>27%</td>
<td>28%</td>
<td>32%</td>
<td>27%</td>
</tr>
<tr>
<td>Other</td>
<td>19%</td>
<td>18%</td>
<td>14%</td>
<td>22%</td>
<td>18%</td>
<td>3%</td>
</tr>
</tbody>
</table>

In Table 5.23, a different story emerges in the Imperfect condition where older monolingual children are nearly twice as accurate as younger children (83% versus 44%) with eventive predicates. In fact, younger children show little sensitivity to the Imperfect with eventive predicates and instead prefer the Preterite (41%) almost equally. With stative predicates, younger and older children perform at chance (50% to 53%) with the Imperfect, instead preferring the Preterite and ‘Other’ response types, exclusively the Present, at around 50%.

As for heritage children, Table 5.23 shows that older children are more accurate than younger children (79% versus 36%), producing twice as many Imperfect targets. Younger heritage children, like younger monolingual children, overextend the Preterite competitor (44%) with eventive predicates, which supports the Aspect First Hypothesis (i.e., children associate the Preterite with eventive verbs initially, or at least 50/50 in the case of these heritage children). As was observed in monolingual children, the Imperfect plus stative predicate is a problematic context for heritage children who also perform at chance (50%) and whose remaining responses also consist of the Preterite and Present tenses. Though it might appear that this chance level of use of the Imperfect in stative predicate contexts goes against the Aspect First Hypothesis, both Mexican adults and heritage parents also only achieved 50% to 59% accuracy in this context. In
fact, everyone overextended the Preterite in approximately one-third of their responses, and monolinguals did so more so than heritage. Since monolinguals also overextended the Preterite in this context, this trend cannot, therefore, be attributed to cross-linguistic influence in the child heritage groups. Alternatively, it may be due to a problem with the actual test items. Heritage parents did, however, produce nearly 20% more target Imperfect responses than monolingual adults in this context, which suggests the possibility of a positive influence from the cognate French Imparfait.

With respect to language status, overall heritage children produce more target responses than monolingual children in the Preterite and Imperfect conditions, as is illustrated in Table 5.24.

Table 5.24. Target versus non-target responses in the Preterite and Imperfect target conditions.

<table>
<thead>
<tr>
<th>Target condition</th>
<th>Preterite</th>
<th>Imperfect</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(N items=4)</td>
<td>(N items=4)</td>
</tr>
<tr>
<td>Group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monolingual</td>
<td>98</td>
<td>71</td>
</tr>
<tr>
<td>children (N=31)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heritage</td>
<td>104</td>
<td>75</td>
</tr>
<tr>
<td>children (N=35)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monolingual</td>
<td>26</td>
<td>53</td>
</tr>
<tr>
<td>children (N=31)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heritage</td>
<td>36</td>
<td>65</td>
</tr>
<tr>
<td>children (N=35)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Target responses</td>
<td>124</td>
<td>124</td>
</tr>
<tr>
<td>Non-target</td>
<td>140</td>
<td>140</td>
</tr>
<tr>
<td>responses</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A Pearson’s chi-square test, however, suggests that there are no significant differences between the two groups in either condition (Preterite: $\chi^2 = 0.82, df = 1, p = 0.36$; Imperfect: $\chi^2 = 0.36, df = 1, p = 0.55$).

As for heritage children and age status, both younger and older heritage children produce an equal number of target responses in the Preterite condition, while older heritage children produce more targets in the Imperfect condition, as illustrated in Table 5.25.
Table 5.25. *Target versus non-target responses in the Preterite and Imperfect target conditions for younger and older heritage children.*

<table>
<thead>
<tr>
<th>Target condition</th>
<th>Preterite</th>
<th>Imperfect</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Younger</td>
<td>Older</td>
</tr>
<tr>
<td></td>
<td>heritage</td>
<td>heritage</td>
</tr>
<tr>
<td></td>
<td><em>(N=18)</em></td>
<td><em>(N=17)</em></td>
</tr>
<tr>
<td>Target responses</td>
<td>52</td>
<td>52</td>
</tr>
<tr>
<td>Non-target responses</td>
<td>20</td>
<td>16</td>
</tr>
<tr>
<td>Total responses</td>
<td>72</td>
<td>68</td>
</tr>
</tbody>
</table>

A Pearson’s chi-square test indicates that there is a significant difference between the two groups in the Imperfect condition ($\chi^2 = 6.59, df = 1, p < 0.05$), yet no significant difference is found in the Preterite ($\chi^2 = 0.33, df = 1, p = 0.57$).

5.3.3.4. **Subjunctive and Indicative conditions**

The third and final contrast from tense-aspect-mood included the Spanish Subjunctive/Indicative moods in embedded clauses under a given type of verb or verbal expression in the following contexts: emotive factive verbs (e.g., *estar triste*/*be sad*, *no gustar*/*to not like*, *sorprender*/*surprise*, *tener miedo*/*be afraid*), the verb of ‘hope’ *esperar*, hypothetical manner in the past contexts (e.g., *era como si…*/*it was as if…*), and the verb of ‘saying’ *decir*. All responses types were coded for Indicative and Subjunctive mood. (Indicative responses included the Present, Present Progressive, Present Perfect, Future, Imperfect, Preterit and Conditional tenses. Subjunctive responses included the Present and Imperfect Subjunctives. ‘Other’ responses included the imperative and hybrid forms consisting of the auxiliary *haber* plus the Preterite. Figure 5.5 presents the mean target responses for the Subjunctive and Indicative conditions.
In Figure 5.5 beginning with monolingual children, it appears that in the Subjunctive condition younger children produce few target Subjunctive responses and perform below chance in emotive factive (congruent 41\%: *estar triste* (“be sad”) as in *Están triste de que no haya payasos en la fiesta*/*They’re sad that there won’t be any clowns at the party*); incongruent 34\%: *no gustar* (“not like”) as in *No le gusta que los niños son-PRES desobedientes*/*He doesn’t like it that the children are disobedient*”) and hypothetical manner in the past (*era como si…*) contexts (38\%). They are, however, nearly twice as successful in the verb of ‘hope’ *esperar* context (66\%). Overall, older monolingual children produce more target responses than younger children in the Subjunctive condition, and their predominant response type in this condition is in fact the Subjunctive (83\% to 97\%). Both groups are nearly at ceiling in the Indicative condition.²⁰

²⁰ In the Indicative condition, the Imperfect and some ‘Other’ Indicative responses types, including the Preterite, Future, Conditional and Present Perfect, were also considered target.
As for heritage children, Figure 5.5 shows that older heritage children produce more target responses than younger children in the Subjunctive condition; however, both groups produce very few target Subjunctives overall. This is particularly the case in the emotive factive and hypothetical manner contexts where heritage children’s target responses range from 22% to 38%. In the emotive factive contexts, younger and older heritage children exhibit a similar performance, one that is comparable to younger monolingual children. Both younger and older heritage children produce more Subjunctive targets with embedded verbs in the emotive factive context under verbs that are congruent with French (tener miedo/“be afraid”, estar triste/“be sad”) than in the incongruent context (sorprender/“be surprised”, no gustar/“not like”). At first glance their performance in the congruent emotive factive verb context suggests a possible positive influence or “help” from French; however, heritage children still produce less than 40% target Subjunctives in this context. This suggests that the “help” from French may be real, but is not enough to boost them above chance, similar to younger monolingual. Older heritage children produce twice as many Subjunctive targets as younger children in the verb of ‘hope’ esperar context (66% and 32% respectively), which is also their most successful context in the Subjunctive condition. Older children also produce twice as many targets in the hypothetical manner context than younger children (31% and 14% respectively). In both contexts older heritage children are on par with younger monolingual children. Thus, it appears that one of the possible effects of bilingualism on heritage children’s use of the Subjunctive is protracted development. Though heritage children produce less Subjunctive targets than their monolingual peers, some language growth from the younger to older groups is found across all Subjunctive contexts. In the Indicative condition heritage children perform at ceiling (99%) and slightly ahead of monolinguals. Lastly, monolingual adults and heritage parents perform similarly in the
Subjunctive and Indicative conditions, though heritage parents are more precise and produce more target responses across both conditions.

Table 5.26 reports the mean distribution and counts of response types for two contexts in the Subjunctive condition: congruent and incongruent emotive factive verb contexts. Recall from chapter 4 that use of the Subjunctive in embedded clauses under emotive factive verbs such as *estar triste* (“be sad”) and *tener miedo* (“be afraid that”) is congruent in that both languages obligatorily require this form. However, use of the Subjunctive in emotive factive verbs *no gustar* (“not like”) and *sorprender* (“be surprised”) is incongruent between both languages in that Spanish requires the Subjunctive while French uses the Indicative.

Table 5.26. Distribution of response type per group for emotive factive verb (congruent and incongruent) contexts in the Subjunctive condition.

<table>
<thead>
<tr>
<th>Type of embedded clause emotive factives (congruent with French)</th>
<th>Type of embedded clause emotive factives (incongruent with French)</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>estar triste</em> (“be sad”),</td>
<td><em>no gustar</em> (“not like”),</td>
</tr>
<tr>
<td><em>tener miedo</em> (“be afraid that”)</td>
<td><em>sorprender</em> (“be surprised”)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subjunctive (categorical context)</th>
<th>Subjunctive</th>
<th>Present Indicative</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monolingual</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Younger</td>
<td>41% (13/32)</td>
<td>41% (13/32)</td>
<td>19% (6/32)</td>
</tr>
<tr>
<td>Older</td>
<td>83% (25/30)</td>
<td>17% (5/30)</td>
<td>0% (0/30)</td>
</tr>
<tr>
<td>Adults</td>
<td>86% (12/14)</td>
<td>7% (1/14)</td>
<td>7% (1/14)</td>
</tr>
<tr>
<td>Heritage</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Younger</td>
<td>33% (12/36)</td>
<td>64% (23/36)</td>
<td>3% (1/36)</td>
</tr>
<tr>
<td>Older</td>
<td>38% (13/34)</td>
<td>59% (20/34)</td>
<td>3% (1/34)</td>
</tr>
<tr>
<td>Parents</td>
<td>77% (17/22)</td>
<td>18% (4/22)</td>
<td>5% (1/22)</td>
</tr>
<tr>
<td></td>
<td>34% (11/32)</td>
<td>63% (20/32)</td>
<td>3% (1/32)</td>
</tr>
<tr>
<td></td>
<td>83% (25/30)</td>
<td>17% (5/30)</td>
<td>0% (0/30)</td>
</tr>
<tr>
<td></td>
<td>79% (12/14)</td>
<td>14% (2/14)</td>
<td>7% (1/14)</td>
</tr>
<tr>
<td></td>
<td>22% (8/36)</td>
<td>75% (27/36)</td>
<td>3% (1/36)</td>
</tr>
<tr>
<td></td>
<td>24% (8/34)</td>
<td>77% (26/34)</td>
<td>0% (0/34)</td>
</tr>
<tr>
<td></td>
<td>86% (19/22)</td>
<td>10% (2/22)</td>
<td>5% (1/22)</td>
</tr>
</tbody>
</table>

Beginning with monolingual children, Table 5.26 shows that in the first emotive factive verb context (i.e., congruent context, which term is only relevant to heritage children), younger children prefer the Subjunctive and the Present Indicative equally but are not better than chance. In the second emotive factive verb context, younger children prefer the Present Indicative twice
as much as the target Subjunctive. Older monolingual children are more successful overall and exhibit equal performance in both emotive factive verb contexts. For example, they produce the Subjunctive 83%, in line with adults, but there is also noise from the Present tense, which they overextend nearly 20%. As for heritage children, younger and older children produce more target Subjunctives in the congruent emotive factive verb context (33% and 38% respectively) than in the incongruent emotive factive context (22% and 24% respectively). The Present Indicative is however their predominant response type in both contexts and accounts for between two-thirds and three-quarters of responses. These findings suggest overextension. Monolingual adults outperform the heritage adults in the congruent emotive factive context, which may suggest that, unlike heritage children, French does not actually help heritage parents’ Spanish. It may be that dialectal variation plays a role as heritage parents are more successful than monolingual adults in the incongruent emotive factive context. The adult results indicate that heritage parents’ use of and intuitions about the Subjunctive in such contexts are intact and that their contact variety of Spanish is unattrited (i.e., not overly influence by French).

Table 5.27 reports the mean distribution and counts of response types for the remaining two contexts in the Subjunctive condition: the verb of ‘hope’ esperar and the hypothetical manner in the past (era como si…/“it was as if…”) contexts. Recall from chapter 4 that use of the Subjunctive in embedded clauses under the verb of ‘hope’ is categorical in Spanish but variable in French. In addition, use of the Imperfect Subjunctive in contexts of hypothetical manner in the past is categorical in Spanish. This, however, is not the case in French as the Imperfect Subjunctive is temporally relative and has been replaced by the Imperfect Indicative in the modern spoken language.
Table 5.27. Distribution of response type per group for the verb of ‘hope’ esperar and the hypothetical manner (era como si…) contexts in the Subjunctive condition.

<table>
<thead>
<tr>
<th>Subjunctive (categorical context)</th>
<th>Type of embedded clause verb of ‘hope’ esperar</th>
<th>Type of embedded clause hypothetical manner (era como si…) / “it was as if…”</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Subjunctive</td>
<td>Present Indicative</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>-------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>Monolingual</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Younger</td>
<td>66% (42/64)</td>
<td>20% (13/64)</td>
</tr>
<tr>
<td>Older</td>
<td>97% (58/60)</td>
<td>3% (2/60)</td>
</tr>
<tr>
<td>Adults</td>
<td>93% (26/28)</td>
<td>0% (0/28)</td>
</tr>
<tr>
<td>Heritage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Younger</td>
<td>32% (23/72)</td>
<td>55% (40/72)</td>
</tr>
<tr>
<td>Older</td>
<td>66% (45/68)</td>
<td>24% (16/68)</td>
</tr>
<tr>
<td>Parents</td>
<td>98% (43/44)</td>
<td>2% (1/44)</td>
</tr>
</tbody>
</table>

Table 5.27 shows that younger monolingual children produce nearly twice as many target Subjunctives in the verb of ‘hope’ esperar context than Imperfect Subjunctive targets in the hypothetical manner in the past context. Younger children overextend the Present Indicative in both contexts, and one-third of their non-target responses in the hypothetical manner context consist of the Imperfect Indicative. It might be that younger monolingual children have not acquired these particular uses of the Subjunctive and instead default to the Present. Older monolingual children exhibit ceiling-like performance in both contexts. These findings suggest that in monolingual acquisition, the deictic properties of the Imperfect Subjunctive are acquired late and that sensitivity to them does not emerge until after 8;0 years of age. As for heritage children, younger and older children produce twice as many target Subjunctives in the verb of

---

21 In the verb of ‘hope’ esperar context, one younger monolingual child produced a hybrid form consisting of the auxiliary haber plus Preterite (e.g., han llegaron).
‘hope’ context than target Imperfect Subjunctives in the hypothetical manner context, but well below monolingual trends. Both groups also overextend the Present Indicative in the former context (32% and 66% respectively) and the Imperfect Indicative (58% and 53%) in the latter context, nearly twice as often as younger monolingual children. These findings suggest an overextension of the Present and Imperfect Indicatives based on the French grammatical model, as well as protracted development in the acquisition of these Subjunctive uses. Adults perform similarly in both contexts, but produce more Subjunctive targets in the verb of ‘hope’ context.

An individual analysis for younger monolingual children revealed that in the congruent emotive factive verb context 10 out of 16 children produced a Subjunctive target response, in the incongruent emotive factive verb context 8 out of 16 children did, in the verb of ‘hope’ esperar context 15 out of 16 did, and in the hypothetical manner in the past (era como si…) context 12 out of 16 children did. A closer look at the data shows that of the younger children who chose the Subjunctive as a primary response (3 out of 4 contexts), 10 out of 16 children did so in the congruent emotive factive verb context, 8 out of 16 children in the incongruent emotive factive verb context, 9 out of 16 in the verb of ‘hope’ esperar context, and 4 out of 16 in the hypothetical manner context. A completely different picture emerges for older monolingual children in the Subjunctive condition. For example, an individual analysis confirmed that in each of the four contexts in the Subjunctive condition, 15 out of 15 older children produced target Subjunctive responses. A closer inspection of the data shows that of the older children who chose the Subjunctive as a primary response (3 out of 4), 10 out of 15 children did so in the congruent and incongruent emotive factive verb contexts and 14 out of 15 children did so in the verb of ‘hope’ esperar context and hypothetical manner contexts. These findings are consistent with previous studies on first language acquisition of Spanish, which have shown that the Subjunctive
is acquired late (see Blake, 1983; Hernández Pina, 1984; López Ornat, 1994; Pérez-Leroux, 1998; Sánchez-Naranjo & Pérez-Leroux, 2010).

With respect to heritage children, an individual analysis showed the following: in the congruent emotive factive verb context, 9 out of 18 younger and 8 out of 17 older children produced Subjunctive targets; in the incongruent emotive factive verb context, 7 out of 18 younger and 7 out of 17 younger children produced Subjunctive targets; in the hypothetical manner in the past context (*era como si…*), 6 out of 18 younger and 13 out of 17 older children produced Subjunctive targets; and, in the verb of ‘hope’ *esperar* context, 14 out of 18 younger and 15 out of 17 older chose target Subjunctives. In fact, of the children who chose the Subjunctive as a primary response (3 out of 4), it was found that: 3 out of 18 younger and 5 out of 17 older children did so in the congruent emotive factive verb context; 1 out of 18 younger and 1 out of 17 older did so in the incongruent emotive factive verb context; 1 out of 18 younger and 2 out of 17 older children did in the hypothetical manner in the past context (*era como si…*); and, 3 out of 16 younger and 10 out of 17 older did in the verb of ‘hope’ *esperar* context. Overall these findings confirm that use of the Subjunctive in heritage children is scarce. Older heritage children produce twice as many Subjunctive targets than younger heritage children in the verb of ‘hope’ *esperar* context; however, they do so with less success than monolingual children. In fact, in the verb of ‘hope’ and hypothetical manner contexts older monolingual children produce nearly three times as many target Present Subjunctive and Imperfect Subjunctive responses, respectively, than older heritage children. Older heritage children’s performance instead mirrors younger monolingual children. Overall, these patterns suggest a monolingual advantage, as well as an effect of bilingualism, that is, overextension of the Indicative from French in the incongruent emotive factive verb, verb of ‘hope’ and hypothetical manner contexts, as predicted. In French, use of the Subjunctive is not categorical in these contexts.
Turning now to the Indicative condition, Table 5.28 presents the mean distribution and count of response types for the verb of ‘saying’ *decir* context. Recall that both Present Indicative and ‘Other Indicative’ responses (i.e. Future, Preterite, Imperfect Conditional and Present Perfect) were counted as target.

Table 5.28. *Distribution of response type per group for the verb of ‘saying’ decir in the Indicative condition.*

<table>
<thead>
<tr>
<th>Indicative (categorical context)</th>
<th>Type of embedded clause verb of ‘saying’ decir</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Present Indicative</td>
<td>Other Indicative</td>
<td>Subjunctive</td>
</tr>
<tr>
<td>Monolingual</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Younger</td>
<td>69% (44/64)</td>
<td>22% (14/64)</td>
<td>9% (6/64)</td>
</tr>
<tr>
<td>Older</td>
<td>80% (48/60)</td>
<td>17% (10/60)</td>
<td>3% (2/60)</td>
</tr>
<tr>
<td>Adults</td>
<td>75% (21/28)</td>
<td>14% (4/28)</td>
<td>11% (3/28)</td>
</tr>
<tr>
<td>Heritage</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Younger</td>
<td>88% (63/72)</td>
<td>11% (8/72)</td>
<td>1% (1/72)</td>
</tr>
<tr>
<td>Older</td>
<td>88% (60/68)</td>
<td>10% (7/68)</td>
<td>1% (1/68)</td>
</tr>
<tr>
<td>Parents</td>
<td>93% (41/44)</td>
<td>7% (3/44)</td>
<td>0% (0/44)</td>
</tr>
</tbody>
</table>

Table 5.28 shows that when younger and older monolingual children’s Present Indicative and Other Indicative responses are combined, older children are slightly more successful than the younger ones (97% and 91% respectively). When younger and older heritage children’s Present Indicative and Other Indicative responses are combined, both groups perform at ceiling (99%) and slightly ahead of monolingual children. As for adults, heritage parents are more successful than monolingual adults in this context.

With respect to language status, overall monolingual children produce more target responses in the Subjunctive condition than heritage children, as shown in Table 5.29.
Table 5.29. Target versus non-target responses in the Subjunctive and Indicative target conditions.

<table>
<thead>
<tr>
<th>Target condition</th>
<th>Subjunctive (N\text{ items}=12)</th>
<th>Indicative (N\text{ items}=4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>Monolingual children (N=31)</td>
<td>Heritage children (N=35)</td>
</tr>
<tr>
<td></td>
<td>Monolingual children (N=31)</td>
<td>Heritage children (N=35)</td>
</tr>
<tr>
<td>Target responses</td>
<td>254</td>
<td>140</td>
</tr>
<tr>
<td>Non-target responses</td>
<td>118</td>
<td>280</td>
</tr>
<tr>
<td>Total responses</td>
<td>372</td>
<td>420</td>
</tr>
</tbody>
</table>

A Pearson’s chi-square test suggests that the difference between the two groups in the Subjunctive is significant ($\chi^2 = 96.37, \text{ df}= 1, p < 0.001$). In the Indicative condition, Spanish heritage children produce more target responses than monolingual children and the difference between the two groups is also significant ($\chi^2 = 4.55, \text{ df}= 1, p < 0.05$).

As for heritage children and age status, overall older heritage children produce more target responses than younger heritage children in Subjunctive condition while both groups produce an equal number in the Indicative condition, as is illustrated in Table 5.30.

Table 5.30. Target versus non-target responses in the Subjunctive and Indicative target conditions for younger and older heritage children.

<table>
<thead>
<tr>
<th>Target condition</th>
<th>Subjunctive (N\text{ items}=12)</th>
<th>Indicative (N\text{ items}=4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>Younger heritage (N=18)</td>
<td>Older heritage (N=17)</td>
</tr>
<tr>
<td></td>
<td>Younger heritage (N=18)</td>
<td>Older heritage (N=17)</td>
</tr>
<tr>
<td>Target responses</td>
<td>53</td>
<td>87</td>
</tr>
<tr>
<td>Non-target responses</td>
<td>163</td>
<td>117</td>
</tr>
<tr>
<td>Total responses</td>
<td>216</td>
<td>204</td>
</tr>
</tbody>
</table>

A Pearson’s chi-square test suggests that the difference between the two groups in the Subjunctive condition is significant ($\chi^2 = 15.84, \text{ df}= 1, p < 0.0001$), whereas no significant difference is found in the Indicative condition ($\chi^2 = 0.0002, \text{ df}= 1, p = 0.97$).
5.3.3.5. *Ser and estar* conditions

Finally, I report the results of the fourth contrast, which includes the Spanish copulas *ser/estar* in combination with adjectival predicates, which entail semantic differences in interpretation. Two different interpretations were therefore tested: (i) generic interpretation (interpretable context): *Los tiburones son-SER peligrosos*/*Sharks are dangerous*; (ii) episodic interpretation (categorical context): *Los niños están-ESTAR tranquilos (hoy)*/*The children are calm (today)*). All responses types were coded for *ser* and *estar* plus adjectival predicate, and ‘Other’. (Other responses included lack of copula plus adjectival predicate, and copula *estar* plus gerund.) Figure 5.6 presents the mean target responses for the *ser* and *estar* conditions across monolingual and heritage groups.

Figure 5.6. *Mean target responses for ser and estar conditions by monolingual and heritage groups.*

An inspection of the data in Figure 5.6 shows that older monolingual children outperform younger children in both conditions. As for the Spanish heritage group, overall older children are more successful than younger children. This suggests language growth and not attrition. In adults, overall both groups exhibit similar performance for each of the copulas. In the *ser*
condition with the target generic interpretation, monolingual adults are slightly more precise than heritage parents, while in the *estar* condition with the target specific interpretation heritage parents are just ahead of their monolingual peers.

Table 5.31 summarizes the distribution of responses types per group in both copula conditions.

<table>
<thead>
<tr>
<th>Copula selection</th>
<th>Ser</th>
<th>Estar</th>
<th>Other</th>
<th>Estar</th>
<th>Ser</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Monolingual</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Younger</td>
<td>66%</td>
<td>27%</td>
<td>8%</td>
<td>63%</td>
<td>28%</td>
<td>9%</td>
</tr>
<tr>
<td></td>
<td>(42/64)</td>
<td>(17/64)</td>
<td>(5/64)</td>
<td>(40/64)</td>
<td>(18/64)</td>
<td>(6/64)</td>
</tr>
<tr>
<td>Older</td>
<td>77%</td>
<td>22%</td>
<td>1%</td>
<td>92%</td>
<td>7%</td>
<td>1%</td>
</tr>
<tr>
<td></td>
<td>(46/60)</td>
<td>(13/60)</td>
<td>(1/60)</td>
<td>(55/60)</td>
<td>(4/60)</td>
<td>(1/60)</td>
</tr>
<tr>
<td>Adults</td>
<td>86%</td>
<td>11%</td>
<td>3%</td>
<td>93%</td>
<td>7%</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Heritage</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Younger</td>
<td>53%</td>
<td>35%</td>
<td>12%</td>
<td>60%</td>
<td>31%</td>
<td>9%</td>
</tr>
<tr>
<td></td>
<td>(38/72)</td>
<td>(25/72)</td>
<td>(9/72)</td>
<td>(43/72)</td>
<td>(22/72)</td>
<td>(7/72)</td>
</tr>
<tr>
<td>Older</td>
<td>81%</td>
<td>10%</td>
<td>9%</td>
<td>78%</td>
<td>21%</td>
<td>1%</td>
</tr>
<tr>
<td></td>
<td>(55/68)</td>
<td>(7/68)</td>
<td>(6/68)</td>
<td>(53/68)</td>
<td>(14/68)</td>
<td>(1/68)</td>
</tr>
<tr>
<td>Parents</td>
<td>82%</td>
<td>11%</td>
<td>7%</td>
<td>96%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td></td>
<td>(36/44)</td>
<td>(5/44)</td>
<td>(3/44)</td>
<td>(42/44)</td>
<td>(1/44)</td>
<td>(1/44)</td>
</tr>
</tbody>
</table>

Table 5.31 shows that in the *ser* condition, younger and older monolingual children produce a similar number of *ser* targets and their accuracy ranges from 66% to 77%. Both groups also produce a similar number of non-target *estar* responses in this context, which comprise nearly 25% of their responses. This overextension might reflect innovative uses of *estar* in monolingual children. In the *estar* condition, younger children are slightly less accurate than with *ser*, whereas older children’s accuracy increases to 92%. One third of younger children’s responses also include *estar*; this number decreases sharply in older children.

As for heritage children, in Table 5.31 for the *ser* condition, younger children’s accuracy is around chance (53%). They also overextend *estar* in this condition with the same frequency as younger monolingual children. This suggests that younger heritage children have not yet
acquired the target generic interpretation. In contrast, older children reach 81% accuracy with *ser* and are more accurate than older monolingual children. Older heritage children show less overextension with *estar* than do younger heritage and monolingual children. In the *estar* condition, younger heritage children are more precise than before; however, they also overextend *ser* (31%) to these contexts, as do younger monolingual children. Older heritage children are slightly less accurate with *estar* than *ser*, and overextend *ser* (21%). This finding, coupled with the fact that older heritage children produce more *ser* targets than *estar* targets with adjectival predicates, suggests that heritage children default to *ser*, which is the less specified copula and also aligns morphologically with the French copula *être*.

With respect to language status, overall heritage children produce more target responses than monolingual children in both the *ser* and *estar* conditions, as is shown in Table 5.32.

<table>
<thead>
<tr>
<th>Target condition</th>
<th><em>ser</em> (N items=4)</th>
<th><em>estar</em> (N items=4)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Group</strong></td>
<td>Monolingual children</td>
<td>Heritage children</td>
</tr>
<tr>
<td>Target responses</td>
<td>(N=31)</td>
<td>(N=35)</td>
</tr>
<tr>
<td></td>
<td>88</td>
<td>93</td>
</tr>
<tr>
<td>Non-target responses</td>
<td>36</td>
<td>47</td>
</tr>
<tr>
<td>Total responses</td>
<td>124</td>
<td>140</td>
</tr>
</tbody>
</table>

A Pearson’s chi-square test suggests, however, that there are no significant differences between the two groups in either copula condition (*ser*: $\chi^2 = 0.63$, df = 1, $p = 0.43$; *estar*: $\chi^2 = 2.13$, df = 1, $p = 0.15$).

As for heritage children and age status, overall older heritage children produce more target responses than younger heritage children in both the *ser* and *estar* conditions, as is shown in Table 5.33.
Table 5.33. Target versus non-target responses in the ser and estar target conditions for younger and older heritage children.

<table>
<thead>
<tr>
<th>Target condition</th>
<th>ser ( (N,\text{items}=4) )</th>
<th>estar ( (N,\text{items}=4) )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>Younger heritage ( (N=18) )</td>
<td>Older heritage ( (N=17) )</td>
</tr>
<tr>
<td>Target responses</td>
<td>38</td>
<td>55</td>
</tr>
<tr>
<td>Non-target responses</td>
<td>34</td>
<td>13</td>
</tr>
<tr>
<td>Total responses</td>
<td>72</td>
<td>68</td>
</tr>
</tbody>
</table>

A Pearson’s chi-square test confirms that there is a significant difference between the two age groups in the ser condition \( (\chi^2 = 12.39, \, df = 1, \, p < 0.01) \) and a significant difference in the estar condition \( (\chi^2 = 5.39, \, df = 1, \, p < 0.05) \).

5.4. Discussion

From these results I return to the research questions as follows:

(i) *Is there an effect of bilingualism, that is, cross-linguistic influence in tense-aspect-mood and copula selection in bilingual children (in a contextually preference-based elicitation task)*?

The main findings from this study show evidence of effects of bilingualism in tense-aspect-mood and copula selection in heritage children. These effects primarily involve:

- overextension of certain forms and meanings; and,
- protracted development.

Monolingual children outperformed heritage children in all four conditions. At first glance this suggests a monolingual advantage, yet there is also evidence of an effect of age within heritage children. For instance, older heritage children produced more target responses than younger heritage children in almost every condition. They also showed language growth and development in Spanish despite more prolonged contact with French, the community language. In fact, there were only two conditions in which growth and development were not found. First, in the
Preterite/Present Perfect condition, in particular the Preterite plus adverbial *anoche* (“last night”) context, younger and older heritage children exhibited an equally stable use of the target Preterite (68%), which might indicate a brief plateau in development, but not attrition. Nonetheless, older heritage children showed improvement in the Preterite plus *ayer* (“yesterday”) context. Second, in the Subjunctive/Indicative condition, specifically the embedded clauses under emotive factive verbs, heritage children exhibited an equally low use of the target Subjunctive in contexts that were congruent (33% younger, 38% older) and incongruent (22% younger, 24% older) with French. These findings once again suggest a plateau in development, but not attrition. Heritage children did, however, improve their production of the Subjunctive from younger to older groups in the verb of ‘hope’ *esperar* and the hypothetical manner in the past (*era como si…*/“it was as if…”) contexts, though in the latter context they performed well below chance. In sum, it appears that older heritage children have an advantage over younger heritage children in all four conditions.

*ii.* Does cross-linguistic influence only occur when two forms that are in semantic contrast in language A (e.g., Spanish) overlap morphologically with a form in language B (e.g., French) and/or share partially overlapping semantic features leading to ambiguity?

The results show that cross-linguistic influence occurs when two forms that are in semantic contrast in Spanish, overlap morphologically with a form in French and/or share partially overlapping semantic features leading to ambiguity. In Spanish, it appears that some French-congruent forms (or morpheme(s)) overextend to other semantic spaces and therefore increase in frequency and shift the related semantic features, as in Weinreich (1968). Evidence of overextension in heritage children is found in all four conditions.
In the Preterite/Present Perfect target condition, it was found that younger heritage children overextended the Present Perfect and Present tenses almost equally in the Preterite plus "anoche" ("last night") and the Preterite plus "ayer" ("yesterday") contexts. However, in the Preterite plus "anoche" ("last night") context, younger monolinguals produced the Present Perfect more frequently than younger heritage children. The Present Perfect overextension that is found in monolingual and heritage groups cannot therefore be attributed to cross-linguistic influence, nor can it be attributed to a task effect (i.e., noise from the non-target Present Perfect prime) since in the Preterite plus "ayer" ("yesterday") context monolingual children increased their target Preterite responses and reduced their Present Perfect overextension. Instead, it might be that younger monolingual and heritage children treat the point-in-time adverbial "anoche" ("last night") as a Perfect-level adverbial since it modifies past events that are more closely situated to the moment of speech on the temporal axis than, for example, "ayer" ("yesterday").

Older heritage children, on the other hand, show evidence of:

- overextension of the Present Perfect in the Preterite plus "anoche" ("last night") contexts nearly twice as much as older monolingual children, and perform slightly ahead of monolinguals in the Preterite plus "ayer" ("yesterday") context.

This suggests cross-linguistic influence from the morphologically cognate French Passé Composé and, in particular, Passé Composé1. Passé Composé1 has a Simple Past sense and spells out the same features of Inflection as the monoclausal Spanish Preterite (e.g., [Precedence]-[Entirety]). Heritage parents showed some overextension of the Present Perfect in both Preterite contexts, but less so than monolingual adults in the Preterite plus "ayer" ("yesterday") context.

Evidence of protracted development in heritage children is also found in the Preterite/Present Perfect context. For example, older heritage children paralleled younger
monolinguals in both Preterite target conditions (i.e., with adverbial anoche/“last night” and ayer/“yesterday”). Older heritage children also resembled younger monolinguals in both of the Present Perfect target conditions (i.e., with adverbials desde la semana pasada/“since last week” and todavía no/“still not”). Younger monolingual and older heritage children are sensitive to the fact that Present Perfect scenarios involve reference to the past, but opt to use the compound form less and instead default to the Preterite, as was reported in Markle LaMontagne and Pérez-Leroux (In press).

In the Preterite/Imperfect condition, evidence of the following effects of bilingualism are found in heritage children:

- overextension of the Imperfect in the target Preterite (episodic interpretation) condition, primarily in the stative predicate context; and,
- protracted development in the same context in that their mean proportion of target responses was lower than that of older monolinguals.

Younger and older heritage children produced the Preterite as their predominant response type (64% and 71% respectively). These findings indicate that they have acquired the feature [Entirety], yet, unlike monolinguals, approximately one quarter of heritage children’s responses also included the Imperfect. In fact, older heritage children used the Imperfect almost three times more than older monolingual children. The Imperfect is the less specified past tense form in the Simple Past/Imperfect semantic contrast in terms of features of Inflection (e.g., [Precedence]) in both Spanish and French, and is also the default in these children. Similar patterns of Imperfect overextension have also been reported in Spanish heritage children growing up in English (e.g., Miller & Cuza, 2013), and in L1 English/L2 Spanish adults (e.g., Klassen & Cuervo, 2014).

In the Subjunctive/Indicative condition, robust evidence of overextension of the Indicative was found in all three Subjunctive contexts in heritage children. For example, in the
first Subjunctive context, that is, embedded clauses under emotive factive verbs that are congruent in French (e.g., *estar triste*/*be sad*, *tener miedo*/*be afraid that*), it was shown that:

- younger and older heritage overextended the non-target Present Indicative, producing it more frequently than monolingual children.

Heritage parents also overextended the Present Indicative more frequently than monolingual adults. Even with “help” from lexically congruent emotive factive verbs under which the French Subjunctive generally uses and spells out similar features of Inflection as the Spanish Subjunctive, heritage children still default to the Present Indicative in Spanish.

In the second Subjunctive context, that is, embedded clauses under emotive factive verbs that are lexically incongruent in French (e.g., *no gustar*/*not like*, *sorprender*/*surprise*) overextension and protracted development are also found. (Recall that the Spanish Subjunctive is obligatorily required here whereas the French Subjunctive is not.) For example, younger and older heritage children:

- produced even less target Subjunctive responses than in the previous congruent emotive factive verb context and overextended the non-target Present Indicative more often than monolinguals children.

Heritage parents, on the other hand, showed less Present Indicative overextension than in the previous congruent context.

In the third Subjunctive context, which included embedded clauses under the verb of ‘hope’ *esperar*, heritage children:

- increased their target Subjunctive responses and decreased their non-target Present Indicative responses from the previous incongruent emotive factive verb context, but they still overextended the Indicative more frequently than monolinguals.
In light of the findings from the previous two contexts, as well as the incongruent verb of ‘hope’ *esperar* context, it seems that heritage children’s patterns of Present Indicative overextension in these contexts are a result of cross-linguistic influence. In French, the Indicative is generally employed and not the Subjunctive.

In the fourth and final Subjunctive context, that is, the hypothetical manner in the past (*era como si* “it was as if…”) context in which Spanish requires obligatory use of the Imperfect Subjunctive while French employs the Imperfective (Indicative), heritage children:

- produced few Imperfect Subjunctive targets and instead overextended the Present and Imperfect Indicative (e.g., younger 77%; older 62%) in this context.

Heritage parents also overextended the Imperfect Indicative slightly more than monolingual adults in this context. Heritage children have very little knowledge of this irrealis use of the Imperfect Subjunctive and that their featural representation of it instead spells out, and converges on, the French features of Inflection (e.g., [Finite], [Precedence]), as predicted, and not on the Spanish features of Inflection (e.g., [Finite/T-deixis, Irrealis], [Precedence]. This could mean that due to the variable status of the Subjunctive in Quebec French, the absence of a certain form entails the absence of a certain feature (i.e., [Irrealis]).

In sum, cross-linguistic influence, specifically overextension of the Present and Imperfect Indicatives from French, is highly prevalent in the Spanish Subjunctive of heritage children. Furthermore, the findings from all four Subjunctive contexts are consistent with previous studies on L1 acquisition of Spanish, which have shown that use of the Subjunctive in certain contexts is acquired late, not until after 8:0 (see Blake, 1983; Hernández Pina, 1984; López Ornat, 1994; Pérez-Leroux, 1998; Sánchez-Naranjo & Pérez-Leroux, 2010). However, in the case of heritage children, the Subjunctive is acquired even later than monolinguals, not until at least after age 9:0.

Finally, in the *ser/estar* ‘be’ copula condition, the results show that:
• younger heritage children overextended *ser* more often than younger monolingual children in the *estar* plus adjectival predicate target condition; and,

• older heritage children overextended *ser* less often than younger heritage but more so than older monolingual children.

It seems that cross-linguistic influence from the morphologically congruent French *être* explains the overextended use of copula *ser* in older heritage children. Heritage parents performed at ceiling in this context and did not show evidence of influence.

Taken together these findings suggest that heritage children’s underlying representations of the four semantic contrasts studied here differ from monolingual children’s given the evidence of cross-linguistic influence, such as overextension leading to feature reassembly, found in all conditions.

iii. *Does the type of context (i.e., categorical or interpretable) also play a role in cross-linguistic influence? If so, what is the effect of categorical or interpretable contexts on the domains of tense-aspect-mood and copula selection in bilingual children?*

The results show that the type of context (i.e., categorical or interpretable) might play a role in cross-linguistic influence in the Spanish of heritage children studied here, but that other factors such as the developmental timetable of a given phenomenon, as well as morphological and semantic feature overlap with French, should also be considered. Table 5.34 summarizes the findings of cross-linguistic influence by type of context.
Table 5.34. Evidence of cross-linguistic influence by type of context in heritage children.

<table>
<thead>
<tr>
<th>Type of Context</th>
<th>Target Condition</th>
<th>Context</th>
<th>Overextension of</th>
</tr>
</thead>
<tbody>
<tr>
<td>Categorical</td>
<td>Preterite/Present Perfect</td>
<td>Preterite + <em>ayer</em> (“yesterday”)</td>
<td>Present Perfect</td>
</tr>
<tr>
<td></td>
<td>Subjunctive/Indicative</td>
<td>embedded clauses under (French-)congruent emotive factive verbs</td>
<td>Present Indicative</td>
</tr>
<tr>
<td></td>
<td></td>
<td>embedded clauses under (French-)incongruent emotive factive verbs</td>
<td>Present Indicative</td>
</tr>
<tr>
<td></td>
<td></td>
<td>embedded clauses under verb of ‘hope’ <em>esperar</em></td>
<td>Present Indicative</td>
</tr>
<tr>
<td></td>
<td></td>
<td>hypothetical manner in the past (<em>era como si</em> “it was as if…”)</td>
<td>Present, Imperfect (Indicative)</td>
</tr>
<tr>
<td></td>
<td><em>ser/estar</em></td>
<td><em>estar</em> (specific interpretation) + adjectival predicate</td>
<td>copula <em>ser</em></td>
</tr>
<tr>
<td>Interpretable</td>
<td>Preterite/Imperfect</td>
<td>Preterite (specific interpretation) plus stative contexts</td>
<td>Imperfect</td>
</tr>
</tbody>
</table>

Table 5.34 shows that there is more overextension in categorical contexts (i.e., Preterite/Present Perfect, Subjunctive/Indicative and *ser/estar* conditions) than in interpretable contexts (i.e., Preterite/Imperfect). (Recall from section 5.2.5.2, Table 5.2, that two of the four conditions studied here included categorical and interpretable contexts, i.e., the Preterite/Present Perfect and *ser/estar* conditions), and that the stimuli comprised a total of seven categorical contexts and five interpretable ones. Overall, the results show that overextension occurs in 6 out of 7 categorical contexts (i.e., Preterite plus adverbial *ayer*; embedded clauses under emotive factive verbs that are congruent and incongruent with French, embedded clauses under the verb of ‘hope’ *esperar*, and hypothetical manner in the past contexts (“*era como si* “it was as if”); and, *estar* (specific interpretation) plus adjectival predicate) and in 1 out of 5 interpretable contexts (i.e., Preterite (specific interpretation) plus stative predicates). These findings indicate that categorical contexts,
in which given a certain contrast one form is used obligatorily while the other generates ungrammaticality, are more difficult for heritage children to master than interpretable contexts, in which given two contrasting forms both forms are possible. This is interesting given that the acquisition of categorical contexts is generally easier for learners to acquire than that of interpretable contexts.

The one and only interpretable context that showed evidence of overextension, that is, extended use of the non-target Imperfect in the Preterite (specific interpretation) plus stative predicates context, is not surprising given that the Spanish and French Imperfects are morphologically similar. They are also the least specified past tense forms in terms of features of Inflection in this particular contrast. The categorical contexts that showed patterns of overextension are not necessary harder to learn, but in the case of the Subjunctive, for example, involve phenomena that are acquired late in monolingual children. In the case of the heritage children in this study, acquisition of the Subjunctive comes even later than monolinguals (e.g., after 9;0). Their robust patterns of overextension of the non-target Indicative in categorical contexts might therefore be linked to developmental timetable trends, in addition to morphological and/or semantic feature similarity with French, leading to ambiguity.

With respect to the remaining two categorical contexts that showed cross-linguistic influence, that is overextension of the Present Perfect in the Preterite plus *ayer* contexts and overextension of the ‘be’ copula *ser* in the *estar* (specific interpretation) plus adjectival predicate context, morphological and/or semantic feature overlap with French seem to be better indicators than the type of context itself. For instance, in the former context the Spanish and French Present Perfects are morphologically similar yet semantically different in that in French one of the uses of Present Perfect in modern spoken speech is to express events in the past that are complete. In Spanish, however, such events are expressed by the Preterite, the Simple Past. In categorical
contexts that require the Spanish Preterite plus adverbial *ayer*, heritage children carve semantic space for the compound variant they are constantly exposed to in French. Finally, in the categorical *estar* (specific interpretation) plus adjectival predicate context, heritage children overextended copula *ser*, the default. *Ser* and the single French copula *être* are morphologically similar. *Étre* can also be semantically compatible with *ser* with respect to a generic interpretation. Morphological similarity and semantic compatibility offer a more adequate account for patterns of overextension than the type of context. In sum, without further research on other categorical and interpretable contexts, it is not entirely clear whether categorical contexts are directly linked to cross-influence in heritage grammars, though they are more prevalent than interpretable ones in the data presented here. What the results do suggest is that other factors, such as the developmental timetable of a given phenomenon and the morphological and/or semantic feature overlap between languages, also be considered.

iv. *Do we find quantitative and/or qualitative differences between bilingual and monolingual children?*

The results show that there are quantitative differences between heritage and monolingual children, and that these differences primarily include:

- differences in the mean proportion of target responses across conditions;
- differences in the trend for overall target responses by condition; and,
- differences in the distribution of response type (% counts) within conditions.

Monolingual children’s mean proportion of target responses across conditions was generally higher than heritage children’s. There are, however, three instances in which heritage children’s mean proportion of target responses was higher than monolinguals. For example, in the Preterite/Imperfect condition, specifically in the Preterite (episodic interpretation) target condition with stative predicates, younger heritage children produced a higher mean proportion
of Preterite targets than younger monolinguals. In addition, in the Subjunctive/Indicative condition, in particular in the embedded clause to the verb of ‘saying’ decir context, both younger and older heritage children’s mean proportion of target Indicative responses was near ceiling slightly higher than monolingual children’s. Finally, in the ser/estar condition, older heritage children’s mean proportion of target ser responses in the ser plus adjectival predicate surpassed older monolingual children’s, which might be because of “help” from the morphologically and semantically similar French copula être.

With respect to the differences in trends for overall target responses by condition, the logistic regression model showed that monolingual children’s order of success patterned one way (e.g., Subjunctive/Indicative > ser/estar > Preterite/Imperfect > Preterite/Present Perfect), while heritage children’s patterned another (e.g., ser/estar > Preterite/Imperfect > Subjunctive/Indicative > Preterite/Present Perfect). These findings suggest a qualitative difference in that monolingual and bilingual children’s developmental steps differ. This is left for future work. It could be that heritage children deviated from the monolingual trend because of cross-linguistic influence from French, as well as protracted development. For example, heritage children were most successful in the ser/estar and Preterite/Imperfect conditions for which copula ser and the Preterite and Imperfect tenses are morphologically and semantically (w.r.t. features) similar to French, and acquired on monolingual timing. It could be that heritage children are less successful in the Subjunctive/Indicative as a result of cross-linguistic influence from the highly variable French Subjunctive and of late acquisition also observed in monolingual children. This may also be the case for the Preterite/Present Perfect, the condition for which heritage children showed the lowest accuracy, perhaps due in part to cross-linguistic influence from the cognate Present Perfect in the Preterite target context ayer (“yesterday”). It might also be because some uses of the Present Perfect are acquired late, the compound form that is
morphologically, syntactically and semantically complex. Overall, monolingual children produced more counts of target responses in the Subjunctive/Indicative and the Preterite/Present Perfect conditions, whereas heritage children did so in the Preterite/Imperfect and the *ser/estar* conditions. The differences that are found between language groups in the distribution of response type (%) within conditions can also be attributed to cross-linguistic influence and protracted development in heritage children.

As for qualitative differences, some evidence of qualitatively different forms is found between monolingual and heritage children. For instance, in the Preterite/Present Perfect condition six different heritage children (e.g., one younger and five older) produced hybrid forms that consisted of the auxiliary *haber* plus the Preterite (e.g., *ha hizo* for *ha hecho*), whereas only one token of this type was found in the monolingual data. These findings suggest that some heritage children have not yet mastered the Past Participle of certain verbs and instead default to the Preterite.

iv. *Does length of exposure to the community language matter in cross-linguistic influence in younger and older bilingual children?*

Younger heritage children’s mean length of exposure to French was 4;2 years and older children’s was 6;2 years. Despite more prolonged contact with French, the results show that generally older heritage children produced more target responses than younger heritage children in 3 of the 4 conditions: Preterite/Present Perfect, Preterite/Imperfect and *ser/estar* conditions. In the Subjunctive/Indicative condition, older heritage children produced more targets in the Subjunctive contexts, while younger heritage children produced slightly more target responses in the Indicative context, but the difference between the two groups was not significant. Though older heritage children have two more years of exposure to French than younger children, they are more successful across conditions and mostly show growth and development in Spanish, and
not attrition. These results suggest that length of exposure to French does not impede language growth and development in Spanish in heritage children.
Chapter 6. Conclusions

This study examined the bilingual acquisition of meanings of verbal forms in Spanish heritage children growing up in French in the officially bilingual and unexplored region of Ottawa-Gatineau, Canada. Specifically, it explored new dimensions of the role of form similarity in a model of language influence by expanding the notion of overlap to also include cognate morphological forms and semantics. The main goal was to investigate whether bilingual effects such as language influence occur in tense-aspect-mood and ‘be’ copula selection in Spanish, specifically in the four semantic contrasts studied here (i.e., Preterite/Present Perfect, Preterite/Imperfect, Subjunctive/Indicative, and the copulas ser/estar). Drawing on assumptions from the Minimalist model (Chomsky, 2000, 2001) and the distributed morphology framework (Halle & Marantz, 1993), a contrastive analysis as in Cowper’s (2005) feature geometry for features of Inflection was implemented for the first three contrasts. I also investigated whether obligatory and/or interpretable contexts play a role in language influence. Lastly, I was interested in finding out whether monolingual and bilingual children show quantitative and/or qualitative differences, and if exposure to French, the community language, matters in language influence in younger and older bilingual children.

Overall, the results from the contextualized preference-based elicitation task showed that language influence from French to Spanish occurs in all four conditions and primarily affects the meaning (signified), rather than introduce new forms (signifiers). This finding is in line with previous research from the structuralist tradition (Weinreich, 1968). The overlapping form (or morpheme(s)) overextends to a new semantic space and therefore shifts its existing use(s), meaning(s) and/or related semantic features. In fact, semantic overextension is the most prevalent type of bilingual effect found here, as well as some evidence of protracted development, the latter of which has also been attested in Spanish heritage children in recent
work by Cuza and Miller (2015) and in long-term Spanish-speaking adult immigrants living in the United States (Cuza, 2008, 2010). However, there is no effect of form similarity, that is, there is no support for a cognate boost that pushes heritage children above monolingual children. This raises an interesting question about why evidence of language influence was observed in heritage children, but not a cognate effect. An individual analysis helped to determine what was influence from French versus changes that occur from being bilingual (i.e., protracted development, lower/higher rates of production).

Evidence of semantic overextension was found in each of the four linguistic conditions tested here, however, it was limited to 6 out of 7 categorical contexts that required the obligatory use of a given form and to 1 out of 5 interpretable contexts in which two given forms were possible. This is an interesting and important finding because categorical contexts are generally easier to acquire than interpretable contexts and, yet, the opposite is true for heritage children. Semantic overextensions mainly resulted in quantitative differences such as differences in rates of target responses, in patterns of accuracy, and in the distribution of response types across conditions between monolingual and bilingual children. This type of language influence also led to qualitatively different featural representations in bilingual children as a consequence of feature reassembly. Some qualitatively different forms in the bilingual children were also observed. With a larger sample size, however, it might be possible to make inferences about the few hybrid tense form (i.e., Present plus Preterite constructions) that were observed in Preterite/Present Perfect condition.

The seven cases of overextension found here suggest that complementary and, more importantly, opposing predictions to Hulk and Müller’s (2000) model of language influence can be made. For example, in this study it was predicted that language influence would occur when a cognate form in one language takes the space of two meanings in the other language, leading to
ambiguity. This configuration complements Hulk and Müller’s (2000) canonical prediction for language influence, which was borne out in the Preterite/Present Perfect condition. For example, evidence of semantic overextension of the Present Perfect in contexts that obligatorily require the Preterite (e.g., Preterite + anoche “last night”) was found in older heritage children; however, older monolingual children also showed the same patterns of overextension. Production of the Perfect is scarce in target contexts in both groups. These findings, therefore, rule out the possibility of influence from the morphologically similar French Passé Composé and instead suggest that monolingual and heritage children’s have a simple meaning structure for the Present Perfect (i.e., [Precedence]-[Entirety] instead of a complex one [Deixis], [Precedence]-[Entirety]). This is in line with what was observed for L1 Peninsular Spanish and L1 Mexican Spanish children’s Present Perfect uses in Cuervo & Markle LaMontagne (2014).

There are other consequences of including morphological and semantic cognates in the model. For instance, the results also suggest that predictions about language influence can be made when two forms that are in semantic contrast in one language take the space of two forms in the other language, only of which forms is a morphological and semantic cognate. This prediction was realized in the Preterite/Imperfect condition in that overextension of the less-specified Imperfect was found in interpretable Preterite (specific interpretation) plus stative predicates contexts in older heritage children more often than monolingual children due to influence from the French Imparfait, the Spanish Imperfect’s morphological and semantic cognate. Bilingual children overextend the less-specified Imperfect form, which indicates that only the feature [Precedence], and not [Precedence]-[Entirety], is spelled out.

Furthermore, it appears that language influence can be predicted when there are two forms in semantic contrast in one language, one of which overlaps with a form that exhibits variation (i.e., its features are packaged differently) or is absent, leading to ambiguity. This
prediction was borne out in the Subjunctive/Indicative condition in which younger and older heritage children overextended the Spanish Indicative to all four obligatory Subjunctive contexts—even in French congruent contexts—due to influence from the variable status of French Subjunctive. These results suggest that heritage children converge on the French grammatical model (i.e., [Finite], [Precedence]). It appears that absence of certain features (i.e., [T-deixis] in Present Subjunctive and [Irrealis] in the case of the Imperfect Indicative) also entails absence of certain forms.

Finally, it appears that language influence can be predicted when a non-contrasting, yet morphologically similar, form in one language can be semantically compatible with a semantic contrast in the other language, leading to ambiguity. This prediction was realized in the *ser/estar* copula condition in that overextension of *ser* in the target *estar* (episodic interpretation) plus adjectival predicate context was found in both younger and older heritage children, due to influence from the French copula *être*. *Être* is morphologically similar to *ser*, and can also be semantically compatible with it.

In sum, by expanding the notion of overlap, I have argued for the inclusion of cognate morphological forms and semantic features, an exploration of new relationships between languages, and to extend the empirical coverage in a systematic way. In turn, I have shown that cognate morphological forms and semantics are indeed determinants of language influence, and that by including them the findings from this study also offers a semantic contribution to the model of language influence. The patterns of semantic overextension found here suggest that this is a possible, but not necessary, outcome of language influence in bilingual populations, including heritage children. The findings from this study are consistent with the acquisition of the four meaning contrasts studied here, but with a simple meaning in bilingual children, which can be attributed to a reassembly of similar semantic features as in Lardiere (2009) and Sánchez
(2004), and to a preference for the least specified form with respect to semantic features. This study also provides support for acquisition theories that suggest that bilingual children attend to cues from semantically similar constructions (Nicoladis, 2002), and for frequency-based learnability theories, such as Yang (2002, 2010), which incorporate a role for frequency in grammar acquisition. Testing bilingual children in both of their languages may, however, offer a more complete picture of the bilingual experience, provide a more accurate depiction of their overall grammatical knowledge, and offer important insights on the possibility of bi-directional cross-linguistic influence. This exploration is left for future work.

Overall, this research contributes new data on the bilingual experience of first-generation heritage speakers and, at the same time, supports official bilingualism and multilingualism in Canada. This study investigates bilingualism under the condition of proximity by examining closely related languages. Overall, the results from this study show that monolingual children outperformed heritage children in the receptive vocabulary, sentence imitation, and contextualized preference-based elicitation tasks in Spanish. These findings are not surprising given the dynamic and often deficient input conditions in which heritage children grow up. However, older heritage children outperformed younger heritage children and showed growth and development across all three tasks despite more prolonged contact with French, the community language. This is an important finding for Spanish and may offer insights into the acquisition, use and preservation of less commonly spoken indigenous and immigrant minority languages by families in this particular region, and in other urban centres across Canada.

These findings therefore contrast with previous research as in Rothman (2007) that has claimed that first language attrition throughout the life span of the bilingual child accounts for heritage speakers’ difficulties. Though attrition is always a possibility in heritage language acquisition, there is no evidence of it in the community studied here. Parents behaved at ceiling
or close to it across all conditions. Therefore, the difficulties that heritage children have in the four conditions that were tested during the short period of this study cannot be attributed to an already attrited input from their parents. The results found here instead show, as in Flores (2014), that while input in the heritage language is in constant flux, heritage language development proceeds in the direction of monolingual development and is a unique instance of it. The semantic overextensions that are found in younger bilingual children, for example, seem to be temporary effects as older children show growth and development in the direction of monolingual development across all conditions. The inclusion of an older “teenage” group might shed even more light on this. This study also supports preliminary work by (Slavkov, 2015), which has shown that in the case of heritage children from different language backgrounds growing up in the Ottawa-Gatineau region, schooling in French increases the chance of becoming bilingual (e.g., maintaining the heritage language) and multilingual (e.g., adding to the child’s linguistic repertoire).
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### Appendix A

An approximate geographic distribution of the Spanish Present Perfect (adapted from *Nueva gramática de la lengua española, Real Academia Española (RAE) 2009:1735-1736*).

<table>
<thead>
<tr>
<th>Uses of the Present Perfect</th>
<th>Example</th>
<th>Geographic area</th>
<th>Comments (from RAE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Perfect of result</td>
<td>¡Cómo han subido los precios! (&quot;How the prices have risen!&quot;)</td>
<td>All.</td>
<td>Obtains resultant state interpretation (‘Los precios están muy altos’/&quot;The prices are very high&quot;) while at the same time highlights the novelty or surprise of what was just realized.</td>
</tr>
<tr>
<td>(ii) Perfect of recent past</td>
<td>Luisa ha llegado hace un rato. (&quot;Luisa has arrived a little while ago.&quot;)</td>
<td>A large part of Spain, Peru, Bolivia, Paraguay, northeast Argentina; also in parts of Central America.</td>
<td>The situation described takes place at some point before the moment of speech, but on the day the utterance was made.</td>
</tr>
<tr>
<td></td>
<td>Ha sido caro (tras conocer el precio de una mercancía). (&quot;It has been expensive&quot; after finding out the price of a product)</td>
<td>Part of the Andean region.</td>
<td>Does not denote a Preterite event or a change of state.</td>
</tr>
<tr>
<td>(iii) Existential perfect</td>
<td>Ha viajado muchas veces a Europa. (&quot;S/he has travelled many times to Europe&quot;)</td>
<td>All.</td>
<td>The action can occur one or more times in a conventionally delimited period or during a person’s lifetime.</td>
</tr>
<tr>
<td></td>
<td>Luisa me ha regalado este vestido. (&quot;Luisa has given me this dress&quot;)</td>
<td>A large part of Spain, Peru, Bolivia, Paraguay, northeast Argentina; also in parts of Central America.</td>
<td>The speaker understands that the action occurred in an extended present.</td>
</tr>
<tr>
<td></td>
<td>Luisa ha llegado a</td>
<td>Bolivia, Peruvian</td>
<td>With past-definite</td>
</tr>
</tbody>
</table>

The translations that appear in the columns ‘Uses of the Present Perfect’, ‘Geographic Area’, and ‘Comments’ are my own.
<table>
<thead>
<tr>
<th>(iv) Universal perfect (with stative and activity predicates)</th>
<th><strong>He vivido aquí treinta años</strong> (en el sentido de ‘Sigo viviendo aquí’). (‘I have lived here thirty years’ in the sense that ‘I continue living here’)</th>
<th>All, but the inference to what is referred to as Sigo viviendo aquí (‘I continue living here’) is optional in Peninsular Spanish and in countries in the Andean region. This meaning, however, is almost forced in all other areas.</th>
<th>The situation described remains open and can follow after the moment of speech.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(negation+telic predicates)</td>
<td><strong>Luisa no ha llegado. Esperémosla.</strong> (‘Luisa has not arrived. Let’s wait for her.’)</td>
<td>All, but the interpretation of an open action is more marked in Latin American Spanish than Peninsular Spanish.</td>
<td>The situation does not end at the moment of speech.</td>
</tr>
</tbody>
</table>
Appendix B
Parental questionnaire (Spanish version)

Cuestionario sobre la experiencia de lenguaje que tiene su hijo

Título del estudio: Desarrollo del lenguaje bilingüe español-francés

Fecha de hoy: ________________________________________________________________

1. Nombre de su hijo: ________________________________________________________

2. Fecha de nacimiento de su hijo (día-mes-año): ______________________________

3. Año escolar actual: _______________________________________________________

4. Lugar de nacimiento de su hijo (ciudad, país): ______________________________

5. Si su hijo no nació en Canadá, ¿qué edad tenía cuando llegó a Canadá? _________

6. ¿Qué es el nivel de educación más alto alcanzado por la madre? Primaria__ Secundaria__ Colegio técnico__ Universidad__ Maestría__ Doctorado__

7. ¿Ha recibido su hijo terapia del habla o del lenguaje? Sí____ No____

8. ¿Está su hijo recibiendo terapia del habla o del lenguaje? Sí____ No____

9. Si la respuesta es Sí a la pregunta 7 o 8, por favor escriba la razón por la que su hijo está recibiendo o recibió terapia del habla o del lenguaje: _______________________

___________________________________________________________________________

Parte A. La fluidez relativa de su hijo en los diferentes idiomas para su edad. (Encierre la respuesta adecuada en un círculo.)

i. Español

<table>
<thead>
<tr>
<th>Habla totalmente</th>
<th>Habla bastante fluido</th>
<th>Habla con algo de fluidez</th>
<th>No habla con fluidez</th>
<th>Sólo entiende</th>
</tr>
</thead>
</table>

ii. Francés

<table>
<thead>
<tr>
<th>Habla totalmente</th>
<th>Habla bastante fluido</th>
<th>Habla con algo de fluidez</th>
<th>No habla con fluidez</th>
<th>Sólo entiende</th>
</tr>
</thead>
</table>

iii. Otro idioma:

<table>
<thead>
<tr>
<th>Habla totalmente</th>
<th>Habla bastante fluido</th>
<th>Habla con algo de fluidez</th>
<th>No habla con fluidez</th>
<th>Sólo entiende</th>
</tr>
</thead>
</table>

Parte B. El ambiente lingüístico de su hijo durante los últimos seis meses. (Encierre la respuesta adecuada en un círculo.)

i. En casa

<table>
<thead>
<tr>
<th>Solamente español</th>
<th>Sobre todo español</th>
<th>Tanto español como francés</th>
<th>Sobre todo francés</th>
<th>Solamente francés</th>
</tr>
</thead>
</table>
ii. En la escuela

<table>
<thead>
<tr>
<th>Solamente español</th>
<th>Sobre todo español</th>
<th>Tanto español como francés</th>
<th>Sobre todo francés</th>
<th>Solamente francés</th>
</tr>
</thead>
</table>

iii. Jugando fuera de la casa y de la escuela

<table>
<thead>
<tr>
<th>Solamente español</th>
<th>Sobre todo español</th>
<th>Tanto español como francés</th>
<th>Sobre todo francés</th>
<th>Solamente francés</th>
</tr>
</thead>
</table>

iv. En otra escuela/ otras clases de lengua (si corresponde)

<table>
<thead>
<tr>
<th>Solamente español</th>
<th>Sobre todo español</th>
<th>Tanto español como francés</th>
<th>Sobre todo francés</th>
<th>Solamente francés</th>
</tr>
</thead>
</table>

v. Otras actividades

<table>
<thead>
<tr>
<th>Solamente español</th>
<th>Sobre todo español</th>
<th>Tanto español como francés</th>
<th>Sobre todo francés</th>
<th>Solamente francés</th>
</tr>
</thead>
</table>

Parte C-1. La exposición de su hijo a los diferentes idiomas: español. (Marque la respuesta adecuada con √).

1. Aproximadamente ¿cuántas horas en la semana habla su hijo el español?
   - [ ] menos de 10 horas  
   - [ ] 10-25 horas  
   - [ ] 25-40 horas  
   - [ ] más de 40 horas

<table>
<thead>
<tr>
<th></th>
<th>Hablar</th>
<th>Escuchar</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>En casa</strong></td>
<td>□ Nunca</td>
<td>□ Nunca</td>
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<td>□ Raramente</td>
<td>□ Raramente</td>
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<td>□ Más de una vez en la semana</td>
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<td>□ Diario</td>
<td>□ Diario</td>
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<tr>
<td><strong>En la guardería o la escuela</strong></td>
<td>□ Nunca</td>
<td>□ Nunca</td>
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<td>□ Raramente</td>
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<td>□ Diario</td>
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<tr>
<td><strong>Jugando fuera de la casa y de la escuela</strong></td>
<td>□ Nunca</td>
<td>□ Nunca</td>
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<td>□ Raramente</td>
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<td>□ Más de una vez en la semana</td>
<td>□ Más de una vez en la semana</td>
</tr>
</tbody>
</table>
Clases de español suplementarias (si corresponde)  
☐ Nunca  ☐ Raramente  ☐ Una vez en la semana  ☐ Más de una vez en la semana  ☐ Diario  
☐ Nunca  ☐ Raramente  ☐ Una vez en la semana  ☐ Más de una vez en la semana  ☐ Diario

Otras actividades  
__________________  __________________  __________________  
☐ Nunca  ☐ Raramente  ☐ Una vez en la semana  ☐ Más de una vez en la semana  ☐ Diario  
☐ Nunca  ☐ Raramente  ☐ Una vez en la semana  ☐ Más de una vez en la semana  ☐ Diario

**Comentarios suplementarios. (Por favor añada cualquier otra información que le parezca relevante en cuanto a la exposición al español.)**

____________________________________________________________

Parte C-2. La exposición de su hijo a los diferentes idiomas: francés. (Marque la respuesta adecuada con √).

1. Aproximadamente ¿cuántas horas en la semana habla su hijo el francés? 
☐ menos de 10 horas  ☐ 10-25 horas  ☐ 25-40 horas  ☐ más de 40 horas

<table>
<thead>
<tr>
<th></th>
<th>Hablar</th>
<th>Escuchar</th>
</tr>
</thead>
<tbody>
<tr>
<td>En casa</td>
<td>☐ Nunca  ☐ Raramente  ☐ Una vez en la semana  ☐ Más de una vez en la semana  ☐ Diario</td>
<td>☐ Nunca  ☐ Raramente  ☐ Una vez en la semana  ☐ Más de una vez en la semana  ☐ Diario</td>
</tr>
<tr>
<td>En la guardería o la escuela</td>
<td>☐ Nunca  ☐ Raramente  ☐ Una vez en la semana  ☐ Más de una vez en la semana  ☐ Diario</td>
<td>☐ Nunca  ☐ Raramente  ☐ Una vez en la semana  ☐ Más de una vez en la semana  ☐ Diario</td>
</tr>
<tr>
<td>Jugando fuera de la casa y de la escuela</td>
<td>☐ Nunca  ☐ Raramente  ☐ Una vez en la semana  ☐ Más de una vez en la semana  ☐ Diario</td>
<td>☐ Nunca  ☐ Raramente  ☐ Una vez en la semana  ☐ Más de una vez en la semana  ☐ Diario</td>
</tr>
<tr>
<td>Clases de francés suplementarias (si corresponde)</td>
<td>☐ Nunca  ☐ Raramente  ☐ Una vez en la semana  ☐ Más de una vez en la semana  ☐ Diario</td>
<td>☐ Nunca  ☐ Raramente  ☐ Una vez en la semana  ☐ Más de una vez en la semana  ☐ Diario</td>
</tr>
<tr>
<td>Otras actividades</td>
<td>____________________  ____________________  ____________________</td>
<td>____________________  ____________________  ____________________</td>
</tr>
</tbody>
</table>
**Comentarios suplementarios.** (Por favor añada cualquier otra información que le parezca relevante en cuanto a la exposición al francés.)

---

**Parte C-3. La exposición de su hijo a los diferentes idiomas: otro idioma.** (Marque la respuesta adecuada con √).

1. Aproximadamente ¿cuántas horas en la semana habla su hijo el otro idioma?
☐ menos de 10 horas    ☐ 10-25 horas    ☐ 25-40 horas    ☐ más de 40 horas

<table>
<thead>
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<th></th>
<th>Hablar</th>
<th>Escuchar</th>
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<tbody>
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<td>□ Nunca</td>
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<td>□ Raramente</td>
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<td>En la guardería o la escuela</td>
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<td>□ Diario</td>
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<td>Jugando fuera de la casa y de la escuela</td>
<td>□ Nunca</td>
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<td>□ Diario</td>
<td>□ Diario</td>
</tr>
<tr>
<td>Clases del otro idioma suplementarias (si corresponde)</td>
<td>□ Nunca</td>
<td>□ Nunca</td>
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<td>□ Diario</td>
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<tr>
<td>Otras actividades</td>
<td>□ Nunca</td>
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<td>□ Diario</td>
<td>□ Diario</td>
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</tbody>
</table>

**Comentarios suplementarios.** (Por favor añada cualquier otra información que le parezca relevante en cuanto a la exposición al otro idioma.)

---
Parte D. Historia lingüística de su hijo.
1. ¿A qué edad empezó su hijo a aprender español? (años-meses) ______________
2. ¿A qué edad empezó su hijo a hablar español? (años-meses) ________________
3. ¿A qué edad empezó su hijo a aprender francés? (años-meses)?_____________
4. ¿A qué edad empezó su hijo a hablar francés? (años-meses)________________

<table>
<thead>
<tr>
<th>Cuando su hijo tenía ...</th>
<th>Idioma(s) usado(s) alrededor de su hijo durante el día / programa escolar</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Encierre la respuesta adecuada en un círculo)</td>
</tr>
<tr>
<td>0 a 2 años</td>
<td>☐ casa</td>
</tr>
<tr>
<td></td>
<td>☐ guardería</td>
</tr>
<tr>
<td></td>
<td>y/o</td>
</tr>
<tr>
<td></td>
<td>Solamente       Sobre todo       Tanto español   Sobre todo       Solamente</td>
</tr>
</tbody>
</table>

2 a 3 años
| ☐ casa                   | y/o                                                                      |
| ☐ guardería              | Solamente       Sobre todo       Tanto español   Sobre todo       Solamente       |

3 a 4 años
<p>| ☐ casa                   | y/o                                                                      |
| ☐ guardería              | ☐ guardería o escuela                                                    |
|                          | Solamente       Sobre todo       Tanto español   Sobre todo       Solamente       |</p>
<table>
<thead>
<tr>
<th>Edad</th>
<th>Casa</th>
<th>Guardería o Escuela</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>4 a 5 años</strong></td>
<td><img src="solamente.png" alt="Solamente Sobre todo Tanto español Sobre todo Solamente" /></td>
<td><img src="solamente.png" alt="Solamente Sobre todo Tanto español Sobre todo Solamente" /></td>
</tr>
<tr>
<td><strong>5 a 6 años</strong></td>
<td><img src="solamente.png" alt="Solamente Sobre todo Tanto español Sobre todo Solamente" /></td>
<td><img src="solamente.png" alt="Solamente Sobre todo Tanto español Sobre todo Solamente" /></td>
</tr>
<tr>
<td><strong>6 a 7 años</strong></td>
<td><img src="solamente.png" alt="Solamente Sobre todo Tanto español Sobre todo Solamente" /></td>
<td><img src="solamente.png" alt="Solamente Sobre todo Tanto español Sobre todo Solamente" /></td>
</tr>
<tr>
<td><strong>7 a 8 años</strong></td>
<td><img src="solamente.png" alt="Solamente Sobre todo Tanto español Sobre todo Solamente" /></td>
<td><img src="solamente.png" alt="Solamente Sobre todo Tanto español Sobre todo Solamente" /></td>
</tr>
</tbody>
</table>
**Comentarios suplementarios.** *(Por favor añada cualquier otra información que le parezca relevante en cuanto al desarrollo lingüístico de su hijo (esto es, dificultades aprendiendo idiomas, dificultades de audición, etcétera)).

<table>
<thead>
<tr>
<th>8 a 9 años</th>
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</tr>
</thead>
<tbody>
<tr>
<td>□ casa</td>
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<td></td>
<td></td>
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<tr>
<td>y</td>
<td>Solamente</td>
<td>Sobre todo</td>
<td>Tanto español</td>
<td>Sobre todo</td>
</tr>
<tr>
<td>□ guardería o escuela</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Solamente</td>
<td>Sobre todo</td>
<td>Tanto español</td>
<td>Sobre todo</td>
</tr>
</tbody>
</table>
Appendix C
Adult questionnaire (Spanish version)

Cuestionario sobre su experiencia de lenguaje

Título del estudio: Desarrollo del lenguaje bilingüe español-francés
Fecha de hoy: ________________________________________________________

Parte A. Datos personales, educación formal y uso de idiomas
1. Sexo: ☐ Mujer ☐ Varón
2. Fecha de nacimiento: _____________________________________________
3. País de nacimiento: _____________________________________________
4. Ocupación: _____________________________________________________
5. Nivel de educación más alto (marque la respuesta adecuada con ✓):
   Primaria ✓ Secundaria✓ Colegio técnico✓ Universidad✓ Maestría✓ Doctorado✓
6. Edad de llegada a Canadá o a Estados Unidos __________________________
7. Duración de la residencia en Canadá o en Estados Unidos ________________
8. Duración de la residencia en Ottawa o en Gatineau ______________________
9. ¿Cuál es su primer idioma? ______________________________
   a. ¿Cuál es/fue el primer idioma de: su madre? ______ su padre? ______
   b. ¿Aprendió Ud. su primer idioma desde que nació? Sí✓ No___
   c. ¿Qué idioma(s) hablaba de niño en casa? ____________________________
   d. ¿En qué idioma se siente más cómodo ahora? Español✓ Francés✓ Inglés✓ Otro✓
   e. ¿En qué idioma(s) recibió su educación formal y en qué país(es)?
   Primaria: Idioma(s) __________________ País: ___________________________
   Secundaria: Idioma(s) __________________ País: ___________________________
   Técnico: Idioma(s) __________________ País: _____________________________
   Universidad: Idioma(s) ________________ País: ___________________________
Parte B. Contacto actual con español, francés, inglés y/u otro idioma. (Marque la respuesta adecuada con √).

1. ¿Aproximadamente cuántas horas en la semana habla español?
   □ menos de 10 horas   □ 10-25 horas   □ 25-40 horas   □ más de 40 horas

<table>
<thead>
<tr>
<th></th>
<th>Hablar</th>
<th>Escuchar</th>
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<tbody>
<tr>
<td>En casa</td>
<td>□ Nunca</td>
<td>□ Nunca</td>
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<td>□ Raramente</td>
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<tr>
<td>En el trabajo (si corresponde)</td>
<td>□ Nunca</td>
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<td>□ Diario</td>
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<tr>
<td>En la escuela (si corresponde)</td>
<td>□ Nunca</td>
<td>□ Nunca</td>
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<td>□ Raramente</td>
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<td>□ Diario</td>
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<tr>
<td>En situaciones sociales</td>
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<td>□ Nunca</td>
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<td>□ Raramente</td>
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<td>□ Diario</td>
<td>□ Diario</td>
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</tbody>
</table>

**Comentarios suplementarios.** (Por favor añada cualquier otra información que le parezca relevante en cuanto a su contacto actual con el español.)

________________________________________________________________________________________
________________________________________________________________________________________

2. ¿Aproximadamente cuántas horas en la semana habla francés?
   □ menos de 10 horas   □ 10-25 horas   □ 25-40 horas   □ más de 40 horas

<table>
<thead>
<tr>
<th></th>
<th>Hablar</th>
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<tbody>
<tr>
<td>En casa</td>
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<td>En el trabajo (si corresponde)</td>
<td>□ Nunca</td>
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<td>En la escuela (si corresponde)</td>
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**Comentarios suplementarios.** (Por favor añada cualquier otra información que le parezca relevante en cuanto a su contacto actual con el francés.)

________________________________________________________________________________________
________________________________________________________________________________________
**Comentarios suplementarios. (Por favor añada cualquier otra información que le parezca relevante en cuanto a su contacto actual con el francés.)

3. ¿Aproximadamente cuántas horas en la semana habla inglés?
☐ menos de 10 horas  ☐ 10-25 horas  ☐ 25-40 horas  ☐ más de 40 horas

<table>
<thead>
<tr>
<th>Hablar</th>
<th>Escuchar</th>
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</table>
| En casa | ☐ Nunca  
☐ Raramente  
☐ Una vez en la semana  
☐ Más de una vez en la semana  
☐ Diario | ☐ Nunca  
☐ Raramente  
☐ Una vez en la semana  
☐ Más de una vez en la semana  
☐ Diario |
| En el trabajo (si corresponde) | ☐ Nunca  
☐ Raramente  
☐ Una vez en la semana  
☐ Más de una vez en la semana  
☐ Diario | ☐ Nunca  
☐ Raramente  
☐ Una vez en la semana  
☐ Más de una vez en la semana  
☐ Diario |
| En la escuela (si corresponde) | ☐ Nunca  
☐ Raramente  
☐ Una vez en la semana  
☐ Más de una vez en la semana  
☐ Diario | ☐ Nunca  
☐ Raramente  
☐ Una vez en la semana  
☐ Más de una vez en la semana  
☐ Diario |
| En situaciones sociales | ☐ Nunca  
☐ Raramente  
☐ Una vez en la semana  
☐ Más de una vez en la semana  
☐ Diario | ☐ Nunca  
☐ Raramente  
☐ Una vez en la semana  
☐ Más de una vez en la semana  
☐ Diario |

**Comentarios suplementarios. (Por favor añada cualquier otra información que le parezca relevante en cuanto a su contacto actual con el inglés.)

____________________________________________

______________________________________________________________________________

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4. ¿Aproximadamente cuántas horas en la semana habla **otro idioma** (si corresponde)?
☐ menos de 10 horas  ☐ 10-25 horas  ☐ 25-40 horas  ☐ más de 40 horas

<table>
<thead>
<tr>
<th></th>
<th>Hablar</th>
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<td>☐ Diario</td>
<td>☐ Diario</td>
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</tbody>
</table>

**Comentarios suplementarios.** *(Por favor añada cualquier otra información que le parezca relevante en cuanto a su contacto actual con otro idioma.)*

________________________________________________________________________
________________________________________________________________________

5. ¿Con qué frecuencia visita países hispanohablantes incluyendo su país y durante cuánto tiempo?
________________________________________________________________________

________________________________________________________________________

6. ¿Con qué frecuencia llama a su familia y/o a sus amigos en su país?
Diario ___  Cada semana ___  Cada mes ___  Raramente ___  Nunca ___

7. ¿Con qué frecuencia ve la televisión en español?
Diario _____ Más de una vez en la semana _____ Una vez en la semana _____ Raramente _____
Nunca ______
**Parte C. Aptitud lingüística**

1. Por favor, evalúe su aptitud lingüística en cada uno de sus idiomas segundos en las siguientes áreas. Marque la respuesta adecuada con √.

<table>
<thead>
<tr>
<th></th>
<th>Básico/Limitado</th>
<th>Intermediado/Adecuado</th>
<th>Avanzado/Fluido</th>
<th>Casi nativo/Excelente</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LEER</strong></td>
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</tr>
<tr>
<td>Francés</td>
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<tr>
<td>Inglés</td>
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<td>Otro idioma</td>
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<td><strong>ESCRIBIR</strong></td>
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<td>Francés</td>
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<td>Inglés</td>
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<td>Otro idioma</td>
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<td>Francés</td>
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<td>Inglés</td>
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<tr>
<td>Otro idioma</td>
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</tbody>
</table>

2. ¿Sabe otro(s) idioma(s)? Por favor, precíselo(s) : ____________________________________________
Appendix D
Sentence imitation task test sentences (Spanish version) (Castilla & Pérez-Leroux, 2010)

1. El niño no llora.
2. Ayer la abuela llamó.
3. El gato blanco tomó leche.
4. María puso manzanas allí.
5. ¿Quién apagó la luz roja?
6. ¿Cuándo le dio mamá dulces a José?
7. Juana no puede jugar con su primo.
8. Mañana la abuela quiere cortar las flores.
9. La niña le pidió a su mamá que le comprara unos patines.
10. Hoy mamá dijo que no las puede llevar.
11. El abuelo que tiene una camisa roja abrió la caja.
12. El bebé que llora mucho le dio el juguete a su mamá.
13. Papá preguntó por qué los niños no habían hecho la tarea.
14. La mamá preguntó a los niños quién quería comer uvas verdes.
15. Aquí no se lava ropa sucia.
16. En la fiesta de Ana se comió mucho helado.
17. Después de que el niño comió, el papá le dio un dulce de leche.
18. La familia fue al parque antes de que lloviera.
19. La hija quiere que la mamá la peine.
### Appendix E

*Story retell task scripts (SALT, Miller & Chapman, 1991)*

### La rana solitaria

*Por Mercer Mayer*

<table>
<thead>
<tr>
<th>Página</th>
<th>Papel</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Un día un niño caminaba en el parque con su perro, llevando a su rana y la tortuga en un balde.</td>
</tr>
<tr>
<td>2</td>
<td>Después de haber llegado al parque, la rana saltó del balde.</td>
</tr>
<tr>
<td>3</td>
<td>La rana le dijo adiós a sus amigos mientras ellos se iban. Ella quería explorar el parque sola.</td>
</tr>
<tr>
<td>4</td>
<td>La rana encontró unas flores. Las miró de cerca.</td>
</tr>
<tr>
<td>5</td>
<td>De repente, metió la lengua en las flores.</td>
</tr>
<tr>
<td>6</td>
<td>Capturó un insecto grande y sabroso para el almuerzo.</td>
</tr>
<tr>
<td>7</td>
<td>Puso el insecto en su boca y se dio cuenta de que era un gran error.</td>
</tr>
<tr>
<td>8</td>
<td>El insecto era una abeja; y le picó la lengua a la rana. Y por eso a la pobre rana le dolía la lengua.</td>
</tr>
<tr>
<td>9</td>
<td>Después de un rato, la rana vio a un hombre y una mujer que estaban de día de campo.</td>
</tr>
<tr>
<td>10</td>
<td>La mujer metió la mano en la canasta de comida. Ella no sabía que al mismo tiempo la rana entró en la canasta.</td>
</tr>
<tr>
<td>11</td>
<td>Cuando la mujer intentó buscar algo para comer, sintió algo extraño.</td>
</tr>
<tr>
<td>12</td>
<td>Rápidamente sacó su mano de la canasta y descubrió a la rana colgando de su brazo. El hombre se asustó tanto que hasta tiró su taza de café y se le cayeron los lentes.</td>
</tr>
<tr>
<td>13</td>
<td>La rana se fue corriendo alejándose de la pareja. La mujer arrojaba una taza de café a la rana y le gritó: “¡Odiosa ranita nunca regreses aquí!” El hombre estaba en el cesped riéndose de forma histérica.</td>
</tr>
<tr>
<td>14-15</td>
<td>La rana brincó hasta un pequeño estanque donde vio a un niñito jugando con su barco de vela.</td>
</tr>
<tr>
<td>16</td>
<td>La rana curiosa quería saber si podía navegar en el barco. Saltó…</td>
</tr>
<tr>
<td>17</td>
<td>y terminó salpicado encima del barco de vela.</td>
</tr>
<tr>
<td>18</td>
<td>La rana era demasiado grande y el barco de vela se hundió. El niñito empezó a llorar y su madre vino a sacar el barco hundido fuera del agua.</td>
</tr>
<tr>
<td>19</td>
<td>La rana cruzó nadando el pequeño estanque y salió al otro lado. Vio a otra mujer sentada en un banco meciendo el cochecito de un bebé. Su gato estaba dormido al lado del cochecito.</td>
</tr>
<tr>
<td>20</td>
<td>La rana curiosa quería saber qué había en el cochecito. Así que saltó con fuerza hacia el cochecito.</td>
</tr>
<tr>
<td>21</td>
<td>La rana aterrizó en las rodillas del bebé y el bebé se sentó y miró a la rana. Ya era hora de que el bebé comiera, así que mientras la madre leía su revista le dio el tetero al bebé.</td>
</tr>
<tr>
<td>22</td>
<td>Y como la madre estaba entretenida leyendo, la rana trató de tomarse la leche del bebé.</td>
</tr>
</tbody>
</table>
| 23 | El bebé empezó a llorar porque quería su tetero. El gato molesto subió el cochecito para tratar de capturar a la rana. La madre se dio cuenta de lo que...
estaba pasando y se asustó mucho.

| 24-25 | Levantó a su bebé mientras el gato perseguía a la rana. |
| 26    | La rana saltó saltando lo más rápido posible, pero el gato la atrapó por la pierna. |
| 27    | El gato luchó con la rana y ella terminó en el suelo. La rana tenía mucho miedo. |
| 28-29 | Afortunadamente, llegó el niño con su perro y su tortuga. El perro le ladró al gato y el niño gritó: “¡Deja de molestar a mi rana!” Esto asustó al gato y lo hizo salir corriendo. |
| 30    | El niño levantó a su rana y empezó el camino de regreso a la casa. La rana se acostó en los brazos del niño, muy cansada por todas sus aventuras. Estaba contenta de estar con sus amigos de nuevo. |

**Una Rana De Más**  
*Por Mercer y Marianna Mayer*

<table>
<thead>
<tr>
<th>Página</th>
<th>Papel</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Había un niño que tenía tres animales; un perro, una rana y una tortuga. Un día vio una caja envuelta con papel regalo. La tarjeta de la caja decía que era un regalo para él.</td>
</tr>
<tr>
<td>2</td>
<td>Abrió la caja y se emocionó cuando vio lo que había adentro.</td>
</tr>
<tr>
<td>3</td>
<td>Había una ranita. Al niño, al perro y a la tortuga les gustó la ranita. Pero a la otra rana grande no le gustó. La rana grande quería seguir siendo la rana favorita del niño. Se puso celosa.</td>
</tr>
<tr>
<td>4</td>
<td>El niño puso la ranita al lado de sus otras mascotas y dijo: “Esta es mi nueva ranita, ¡dile hola a todos!”</td>
</tr>
<tr>
<td>5</td>
<td>La rana grande le dijo: “Yo soy la rana más vieja y grande, ¡No me agradas!”</td>
</tr>
<tr>
<td>6</td>
<td>Entonces la rana le mordió la pata a la ranita. La ranita lloró… “¡Ay, ay!” El niño no creía que la rana grande le hizo algo así a la pobre ranita chiquita.</td>
</tr>
<tr>
<td>7</td>
<td>El niño levantó a la ranita y regañó a la rana grande: “Fue muy malo lo que hiciste. ¡Tienes que tratar bien a la ranita nueva!”</td>
</tr>
<tr>
<td>8</td>
<td>Las mascotas del niño lo seguían fuera para jugar. Las dos ranas se montaron en la tortuga, pero a la rana grande todavía no le agradaba la ranita.</td>
</tr>
<tr>
<td>9</td>
<td>El niño, disfrazado como pirata, iba primero en la fila.</td>
</tr>
<tr>
<td>10</td>
<td>Mientras tanto, la rana grande pateó a la ranita y la tumbó de la tortuga.</td>
</tr>
<tr>
<td>11</td>
<td>Pero cuando los demás oyeron a la ranita llorando, se dieron cuenta de lo que había pasado. Todos estaban enojados con la rana por ser tan mala con la ranita.</td>
</tr>
<tr>
<td>12–</td>
<td>El niño llegó con todos sus animales a un estanque donde había una balsa. El niño no dejó entrar en la balsa a la rana grande. Pero a ella no le gustó que la dejaran sola en la orilla del estanque.</td>
</tr>
</tbody>
</table>
| 13     | Así que no le hizo caso al niño y brincó a la balsa. Solamente la ranita se dio cuenta de que la rana había brincado en la balsa. La rana miró
a la ranita con una cara muy feroz.

<p>| | |</p>
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>16</td>
<td>Entonces la rana grande pateó a la ranita y la tumbó de la balsa.</td>
</tr>
<tr>
<td>17</td>
<td>La rana le sacó la lengua a la ranita y pensó: “Eso le enseñaré”.</td>
</tr>
<tr>
<td>18</td>
<td>La rana grande estaba contenta. Ahora era la única rana del niño – como solía ser antes, pero la tortuga le tocó la pierna al niño para avisarle lo que había pasado.</td>
</tr>
<tr>
<td>19</td>
<td>Cuando el niño se volteó, se asombró de lo que vio. “¿Cómo llegó la rana grande hasta la balsa? ¿y dónde está la ranita?”</td>
</tr>
<tr>
<td>20 – 21</td>
<td>El niño y sus mascotas se bajaron de la balsa y buscaron a la ranita. Miraron por todas partes y dijeron: “Ranita, ¿Dónde estás?”</td>
</tr>
<tr>
<td>22 – 23</td>
<td>Pero no pudieron encontrarla. Durante el camino de vuelta, el niño estaba triste y empezó a llorar. La rana grande se arrepintió de lo que había hecho.</td>
</tr>
<tr>
<td>24</td>
<td>Cuando llegó a su casa, el niño se acostó en su cama y se puso a llorar. Sus mascotas también estaban tristes. Hasta la rana grande estaba triste.</td>
</tr>
<tr>
<td>25</td>
<td>Entonces, oyeron algo fuera de la ventana. Era el sonido de una ranita.</td>
</tr>
<tr>
<td>26</td>
<td>De repente, la ranita brincó por la ventana abierta. Todos estuvieron muy emocionados de ver a la ranita. Ellos creían que no la verían de nuevo, pero allí estaba.</td>
</tr>
<tr>
<td>27</td>
<td>La ranita brincó a la cabeza de la rana grande y se rió.</td>
</tr>
<tr>
<td>28</td>
<td>La rana grande decidió ser buena con la ranita desde ahora en adelante. Todos estaban muy felices.</td>
</tr>
</tbody>
</table>
### Appendix F-Stimuli for contextualized preference-based elicitation task (N=66 items)

<table>
<thead>
<tr>
<th>Training items (n=2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. La madre le da un vaso de jugo al niño. ¿Qué puede hacer el niño con el jugo?</td>
</tr>
<tr>
<td>Beberlo.</td>
</tr>
<tr>
<td>Lo beber.</td>
</tr>
<tr>
<td>2. María y sus compañeros de clase están tocando el piano. Uno de los niños comienza a hablar. El profesor dice —¡Silencio! ¿Por qué los calla el profesor?</td>
</tr>
<tr>
<td>Porque está no contento.</td>
</tr>
<tr>
<td>Porque no está contento.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tense-aspect-mood target items (n=48)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present Perfect+todavía no (“still not”) contexts (n=4)</td>
</tr>
<tr>
<td>3. Estos niños van a ir al acuario con su maestro de la escuela. Todos están muy contentos, pero después de un rato empiezan a aburrirse. ¿Por qué se aburren los niños?</td>
</tr>
<tr>
<td>Porque el maestro todavía no ha llegado.</td>
</tr>
<tr>
<td>Porque el maestro todavía no llegó.</td>
</tr>
<tr>
<td>4. Todas las mañanas Ana abre el buzón porque espera una carta de su abuela, que siempre le escribe, pero ¿por qué está preocupada Ana?</td>
</tr>
<tr>
<td>Porque la abuela todavía no le escribió.</td>
</tr>
<tr>
<td>Porque la abuela todavía no le ha escrito.</td>
</tr>
<tr>
<td>5. María espera a su amiga en el cine. La película está a punto de empezar y su amiga no llega. María llama a su amiga varias veces, pero no la encuentra. ¿Por qué está preocupada María?</td>
</tr>
<tr>
<td>Porque su amiga todavía no llegó.</td>
</tr>
<tr>
<td>Porque su amiga todavía no ha llegado.</td>
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<tr>
<td><strong>6.</strong> Todas las tardes la mamá de Dora va a buscarla a la escuela, pero hoy Dora está esperándola con cara triste. ¿Por qué está triste Dora?</td>
</tr>
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<td></td>
</tr>
<tr>
<td><strong>Porque su mamá todavía no ha venido a buscarla.</strong></td>
</tr>
<tr>
<td><strong>Porque su mamá todavía no vino a buscarla.</strong></td>
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<td></td>
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<tr>
<td><strong>Present Perfect+desde la semana</strong> (&quot;since last week&quot;) pasada contexts (<em>n=4</em>)</td>
</tr>
<tr>
<td><strong>7.</strong> El postre preferido de Luis son las galletas de chocolate, pero siempre come demasiadas. Ahora le duele el estómago y no quiere comer galletas. ¿Por qué le duele el estómago a Luis?</td>
</tr>
<tr>
<td></td>
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<tr>
<td><strong>Porque desde la semana pasada ha estado enfermo dos veces.</strong></td>
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<tr>
<td><strong>Porque desde la semana pasada estuvo enfermo dos veces.</strong></td>
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<tr>
<td><strong>8.</strong> Hoy en la escuela los niños están pintando. El cuadro de Ana está casi listo. ¿Por qué está casi listo el cuadro de Ana?</td>
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<tr>
<td></td>
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<tr>
<td><strong>Porque desde la semana pasada ella vino a pintar cuatro veces.</strong></td>
</tr>
<tr>
<td><strong>Porque desde la semana pasada ella ha venido a pintar cuatro veces.</strong></td>
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<tr>
<td><strong>9.</strong> Cuando Juan recoge sus juguetes, su papá le da un premio. Hoy el papá está contento y le va a dar un chocolate. ¿Por qué está contento el papá?</td>
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<td></td>
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<tr>
<td><strong>Porque desde la semana pasada Juan ayudó muchas veces en casa.</strong></td>
</tr>
<tr>
<td><strong>Porque desde la semana pasada Juan ha ayudado muchas veces en casa.</strong></td>
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<tr>
<td><strong>10.</strong> Últimamente, Dora y su equipo de fútbol no juegan bien. Si pierden un juego más este verano, van a ser eliminados de la liga. ¿Por qué está preocupada Dora?</td>
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<tr>
<td><strong>Porque desde la semana pasada han perdido tres veces.</strong></td>
</tr>
<tr>
<td><strong>Porque desde la semana pasada perdieron tres veces.</strong></td>
</tr>
</tbody>
</table>
| Preterite+ anoche (“last night”) contexts \( (n=4) \) | 11. Dora nunca hace la tarea y por eso nunca levanta la mano en clase, pero hoy quiere darle una sorpresa al maestro. ¿Por qué quiere darle una sorpresa al maestro?  
Porque anoche Dora hizo la tarea.  
Porque anoche Dora ha hecho la tarea. |
|---|---|
| 12. Hoy David está cansado en la escuela y no puede pensar bien. ¿Por qué está cansado David?  
Porque anoche se acostó muy tarde.  
Porque anoche se ha acostado muy tarde. |
| 13. Es la hora de dormir pero Luis no quiere irse a la cama y le dice a su papá que tiene mucho miedo. ¿Por qué tiene tanto miedo Luis?  
Porque anoche soñó con fantasmas.  
Porque anoche ha soñado con fantasmas. |
| 14. Felipe siempre pone el despertador antes de acostarse, pero a veces se olvida de hacerlo. Esta mañana su mamá entra en su cuarto y le grita —¡Felipe, despiértate! ¿Por qué le grita esto la mamá?  
Porque anoche Felipe no puso el despertador.  
Porque anoche Felipe no ha puesto el despertador. |
| Preterite+ ayer (“yesterday”) contexts \( (n=4) \) | 15. Hoy hay carreras en la escuela. Todos los niños van a correr, pero David no puede. ¿Por qué no puede correr David?  
Porque ayer se ha lastimado la pierna.  
Porque ayer se lastimó pierna. |
| 16. Dos hermanas están sentadas en el sofá y parece que están enojadas. ¿Por qué no se hablan las hermanas?  
Porque ayer se han peleado.  
Porque ayer se pelearon. |
<p>| | |</p>
<table>
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<tr>
<td><strong>17.</strong> Juan llega a la casa de su amigo y ve que quedan una piñata y también muchos globos en el jardín. ¿Por qué hay tantas cosas de fiesta?</td>
<td><img src="411x611_to_559x694" alt="Image" /></td>
</tr>
</tbody>
</table>
|   | Porque ayer han celebrado el cumpleaños de la hermanita.  
Porque ayer celebraron el cumpleaños de la hermanita. |
| **18.** Los niños quieren cenar pizza, pero la mamá les dice que no. ¿Por qué no les quiere dar pizza la mamá? | ![Image](411x409_to_559x489) |
|   | Porque ayer comieron pizza.  
Porque ayer han comido pizza. |
| **19.** Todos los veranos Raquel va a la playa y le gusta mucho jugar en la arena. Hoy su familia está muy impresionada con ella. ¿Por qué está tan impresionada su familia? | ![Image](411x287_to_559x371) |
| Preterite+eventive predicates (episodic interpretation) contexts \( n=2 \) |   |
|   | Porque Ana hizo un castillo de arena en una hora.  
Porque Ana hacía un castillo de arena en una hora. |
| **20.** Hoy en la escuela hay un concurso de arte que trata de rapidez y precisión. Cada niño va a pintar su animal favorito y tiene toda la tarde para hacerlo. El dibujo de Pepito es el mejor. ¿Por qué gana el concurso Pepito? | ![Image](411x179_to_558x270) |
| Preterite+stative predicate (episodic interpretation) contexts \( n=2 \) |   |
|   | Porque pintó su cuadro en diez minutos.  
Porque pintaba su cuadro en diez minutos. |
| **21.** Tomasito acaba de escaparse del concierto de piano de su hermana y no está contento. —¡Qué largo!” dice Tomasito. ¿Por qué no está contento Tomasito? | ![Image](424x97_to_548x176) |
|   | Porque se aburrió mucho en el concierto.  
Porque se aburría mucho en el concierto. |
| **22.** Hace poco María vio la nueva película de Disney en el cine y ya quiere volver a verla. ¿Por qué quiere volver a verla? | ![Image](544x746) |
|   | Porque le gustó mucho la película.  
Porque le gustaba mucho la película. |
| Imperfect+ eventive predicates (characterizing/habitual interpretation) contexts \( (n=2) \) | 23. Ahora Juan es muy delgado pero de niño no te imaginas qué tan gordo era. ¿Por qué era tan gordo de niño Juan?  
Porque comía muchos chocolates.  
Porque comió muchos chocolates. |
|---|---|
| 24. A Juan le gustan mucho los cereales. Aún de adulto es su desayuno favorito. ¿Por qué le gustan tanto los cereales a Juan?  
Porque de chico su mamá le daba cereales todos los días.  
Porque de chico su mamá le dio cereales todos los días. |
| Imperfect+ stative predicates (characterizing/habitual interpretation) contexts \( (n=2) \) | 25. Las amigas están viendo fotos de cuando eran niñas. Todas sacan sus fotos y se ríen.  
—Marta, ¡esa no eres tú! —Sí, soy yo. ¿Por qué no creen que es Marta?  
Porque estaba vestida de payaso.  
Porque estuvo vestida de payaso. |
| 26. Esta maestra no está contenta porque este niño de 10 años se porta como si fuera un bebé. ¿Por qué se porta mal el niño?  
Porque era el más chiquito de su familia.  
Porque fue el más chiquito de su familia. |
| Embedded clauses in the Subjunctive under emotive factive verbs (congruent contexts) \( (n=2) \) | 27. Hoy es el cumpleaños de Paquito y sus papás le han organizado una fiesta sorpresa. Todo está listo—el pastel, las decoraciones, los regalos—salvo los payasos que acaban de cancelar, pero ¿por qué no le quieren decir esto sus papás a Paquito?  
Porque están tristes que no haya payasos en la fiesta.  
Porque están tristes que no hay payasos en la fiesta. |
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<tr>
<td>28. Normalmente Juan llega tarde al fútbol, pero hoy no. El juego comienza en dos minutos, pero sus compañeros de equipo no están. —¡Qué raro! dice Juan. ¿Por qué está preocupado Juan?</td>
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<tr>
<td></td>
<td>Porque tiene miedo de que no lleguen. Porque tiene miedo de que no llegan.</td>
</tr>
<tr>
<td>Embedded clauses in the Subjunctive under emotive factive verbs (incongruent contexts) $(n=2)$</td>
<td>29. Cuando el papá llega a casa, ve que sus niños están viendo la televisión y que la casa está sucia. Apaga la tele y les grita, —¡A limpiar ya!, pero los niños no se mueven. ¿Por qué no está contento el papá?</td>
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<td></td>
<td>Porque no le gusta que los niños sean desobedientes. Porque no le gusta que los niños son desobedientes.</td>
</tr>
<tr>
<td>30. A Dora le encantan las mariposas, pero su amiga no lo sabe. Cuando entra al cuarto de Dora, grita. —¡Ay! ¿Por qué grita la amiga?</td>
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<td></td>
<td>Porque le sorprende mucho que Dora tenga tantas mariposas. Porque le sorprende mucho que Dora tiene tantas mariposas.</td>
</tr>
<tr>
<td>Embedded clauses in the Subjunctive under the verb of ‘hope’ esperar $(n=4)$</td>
<td>31. Hoy es la fiesta de cumpleaños de Anita, pero ya cancelaron cinco de sus amigos porque están enfermos. ¿Por qué está preocupada Anita?</td>
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<td></td>
<td>Porque espera que sus otros amigos vengan. Porque espera que sus otros amigos vengan.</td>
</tr>
<tr>
<td>32. Esta familia ha perdido las llaves del carro. Uno de los hijos se va a buscar a un mecánico mientras los demás se quedan. ¿Por qué está nerviosa la familia?</td>
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<td></td>
<td>Porque espera que el hijo vuelva pronto con ayuda. Porque espera que el hijo vuelva pronto con ayuda.</td>
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<td>33. Este niño es muy travieso y nunca escucha a sus papás. Hoy es el primer día de escuela y su mamá está muy nerviosa. ¿Por qué está tan nerviosa su mamá?</td>
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<tr>
<td></td>
<td>Porque espera que se porte bien en clase.</td>
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<td></td>
<td>Porque espera que se porta bien en clase.</td>
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<tr>
<td></td>
<td>34. Raquel no encuentra a su perrito, pero cuando el papá sale en su carro a buscarlo Raquel se alegra. ¿Por qué se alegra Raquel?</td>
</tr>
<tr>
<td></td>
<td>Porque espera que su papá lo encuentre pronto.</td>
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<tr>
<td></td>
<td>Porque espera que su papá lo encuentre pronto.</td>
</tr>
<tr>
<td>Hypothetical manner in the past contexts (era como si/“it was as if”)+ Imperfect Subjunctive (n=4)</td>
<td>35. De niño, Marco era fuerte y flexible. Saltaba de árbol en árbol y de casa en casa rescatando a gente y a animales. Todos decían que tenía poderes especiales. ¿Por qué decían esto?</td>
</tr>
<tr>
<td></td>
<td>Porque era como si fuera un súper héroe.</td>
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<td></td>
<td>Porque era como si era un súper héroe.</td>
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<td></td>
<td>36. Esta mamá siempre quería tener muchos hijos, pero al final solo tuvo dos. Cuando los dos sobrinos vinieron a casa el verano pasado, la mamá estaba muy contenta. ¿Por qué estaba tan contenta la mamá?</td>
</tr>
<tr>
<td></td>
<td>Porque era como si fuera mamá de muchos niños.</td>
</tr>
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<td></td>
<td>Porque era como si era mamá de muchos niños.</td>
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<td></td>
<td>37. Dicen que esta casa está embrujada, pero María no lo cree y entra. Inmediatamente, ve una sombra. Es sólo un gatito negro, pero María se pone pálida y nerviosa. ¿Por qué se pone pálida y nerviosa María?</td>
</tr>
<tr>
<td></td>
<td>Porque era como si viera a un fantasma.</td>
</tr>
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<td>Porque era como si veía a un fantasma.</td>
</tr>
<tr>
<td>Sentence</td>
<td>Image</td>
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<tr>
<td>38. Es la hora de dormir y Pepito oye un ruido debajo de la cama. Al asomarse, ve a sus perritos, pero ¿por qué asusta este ruido a Pepito? Porque era como si los perritos hablan. Porque era como si los perritos hablaban.</td>
<td><img src="image1.png" alt="Image" /></td>
</tr>
<tr>
<td>Embedded clauses in the Indicative under the verb of ‘saying’ decir ($n=4$)</td>
<td>39. Mañana es el cumpleaños de Ana y sus papás le van a hacer una fiesta. Casi todos los amigos de Ana vienen pero, ¿por qué está triste? Porque la mejor amiga dice que no viene. Porque la mejor amiga dice que no venga.</td>
</tr>
<tr>
<td>40. A Felipe le encantan los perros. Hoy se para frente a la tienda de mascotas y le dice a su papá, de nuevo, que quiere uno. ¿Por qué se sorprende Felipe? Porque su papá le dice que puede escoger uno. Porque su papá le dice que pueda escoger uno.</td>
<td><img src="image3.png" alt="Image" /></td>
</tr>
<tr>
<td>41. María odia el brócoli, pero sus papas se lo dan de todos modos. ¿Por qué le sirven una pizza de brócoli para la cena? Porque María dice que le gusta la pizza. Porque María dice que le guste la pizza.</td>
<td><img src="image4.png" alt="Image" /></td>
</tr>
<tr>
<td>42. Hoy es el cumpleaños de Diego y está celebrando en la heladería con su familia. Diego ya se comió dos helados, pero ¿por qué pide otro helado más? Porque su mamá le dice que puede pedir muchos helados. Porque su mamá le dice que pueda pedir muchos helados.</td>
<td><img src="image5.png" alt="Image" /></td>
</tr>
<tr>
<td>Copula selection</td>
<td>43. Luis y su papá están de pesca en el mar. Cuando Luis se va a parar en el bote su papá le grita, ‘¡Ten cuidado y no te caigas al agua que te van a comer los tiburones!’ ¿Por qué dice esto el papá? Porque los tiburones son peligrosos. Porque los tiburones están peligrosos.</td>
</tr>
<tr>
<td>44.</td>
<td>Estos niños están jugando en el campo y ven unas huellas enormes. ‘¡Mira!’ grita uno, —¡huellas de elefante! —¡Sí! grita el otro. ¿Por qué piensan que son las huellas de unos elefantes?</td>
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</table>
| Porque las patas de elefante son así de grandes.  
Porque las patas de elefante están así de grandes. |
<table>
<thead>
<tr>
<th>45.</th>
<th>A estos niños les gusta subir árboles y montañas, pero al papá no porque le da mareo y miedo. ¿Por qué le da mareo y miedo subir al papá?</th>
</tr>
</thead>
</table>
| Porque los árboles y montañas son altos.  
Porque los árboles y montañas están altos. |
<table>
<thead>
<tr>
<th>46.</th>
<th>Esta niña quiere una bici. Todavía no tiene suficiente dinero, pero ha ahorrado por mucho tiempo. ¿Por qué necesita hacerlo?</th>
</tr>
</thead>
</table>
| Porque las bicicletas son muy caras.  
Porque las bicicletas están muy caras. |
<table>
<thead>
<tr>
<th>47.</th>
<th>Hoy en la guardería los niños se portan bien. Normalmente son muy inquietos. ¿Por qué no hay ruido hoy?</th>
</tr>
</thead>
</table>
| Porque los niños están tranquilos.  
Porque los niños son tranquilos. |
<table>
<thead>
<tr>
<th>48.</th>
<th>Estos niños van de compras al mercado con su mamá. Siempre corren por todas partes y ella los regaña. Hoy también se portan mal, pero la mamá no dice nada. ¿Por qué no dice nada la mamá?</th>
</tr>
</thead>
</table>
| Porque está distraída.  
Porque es distraída. |
<table>
<thead>
<tr>
<th>49.</th>
<th>Esta niña se cayó en un charco y ahora su papá le dice que no entre a la casa. ¿Por qué no la deja entrar el papá?</th>
</tr>
</thead>
</table>
| Porque ella está muy sucia.  
Porque ella es muy sucia. |
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<thead>
<tr>
<th>Núm.</th>
<th>Texto</th>
<th>Imagen</th>
</tr>
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</table>
| 50. | Normalmente la maestra quiere mucho a los niños, pero hoy les grita. ¿Por qué les grita la maestra?  
Porque están muy inquietos.  
Porque son muy inquietos. | ![Imagen de una maestra y niños] |
| Distractor items | 51. Esta niña trata de bajar una caja de juguetes muy pesada del clóset sin consultar a su mamá. ¿Qué le dice la mamá?  
Que la niña no tiene permiso.  
Que la niña no tengo permiso. | ![Imagen de una niña y una caja] |
| 52. | Estos niños nunca riegan las flores, por eso están secas. ¿Qué les dicen los papás?  
Que los niños no son responsables.  
Que los niños no somos responsables | ![Imagen de plantas secas] |
| 53. | Dos hermanitos llamados David y Ana hacen la tarea. David termina primero y quiere salir. Le dice algo a su hermanita. ¿Qué le dice a ella?  
—¡Anda vamos al parque, Ana!  
—¡Anda van al parque, Ana! | ![Imagen de niños haciendo tarea] |
| 54. | Luis juega con su amigo en su casa. El amigo ve una repisa llena de trofeos y le pregunta —¿son tuyos, los trofeos?—. ¿Qué contesta Luis?  
—Yo siempre gano las competencias.  
—Yo siempre gana las competencias. | ![Imagen de Luis y su amigo] |
| 55. | Este perro y esta gata no se caen bien. Siempre compiten por la comida. Cuando se cae una hamburguesa, el perro llega primero. ¿Por qué es más rápido el perro que la gata?  
Porque la gata es muy gorda.  
Porque la gata es muy gordo. | ![Imagen de perro y gata] |
| 56. | A este cocodrilo no le gusta su fama de malo. Cuando ve un pato en el agua, lo deja pasar sin atacarlo. ¿Por qué no se comió el cocodrilo el pato?  
Porque el cocodrilo es bueno.  
Porque el cocodrilo es buena. | ![Imagen de cocodrilo y pato] |
<table>
<thead>
<tr>
<th>57. Hay una carrera entre la tortuga y la liebre y la tortuga gana. ¿Por qué se sorprende el niño de que la tortuga gane?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Porque la liebre es más rápida. Porque la liebre es más rápido.</td>
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<tr>
<th>58. Se cruzan un conejo y un tigre. El conejo no le tiene miedo a este tigre porque come zanahorias en lugar de carne. ¿Por qué come zanahorias este tigre y otros no?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Porque este tigre es vegetariano. Porque este tigre es vegetariana.</td>
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<p>| Noun-adjective word order contexts (n=4) |</p>
<table>
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<tr>
<th>59. Estos papás preparan comida de distintos países para la cena todos los días. Hoy sirven un plato muy rico típico de Italia, pero ¿por qué no lo come el niño?</th>
</tr>
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<tbody>
<tr>
<td>Porque no le gusta la comida italiana. Porque no le gusta la italiana comida.</td>
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<tr>
<th>60. Los abuelos de Ana le regalaron una bicicleta verde en su cumpleaños, pero no le gusta. ¿Por qué no le gusta a Ana?</th>
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<tbody>
<tr>
<td>Porque quería una bicicleta roja. Porque quería una roja bicicleta.</td>
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<tr>
<th>61. Este niño quiere que su mamá le compre otro animalito, pero la mamá ya no quiere más gatos. ¿Por qué le dice eso la mamá?</th>
</tr>
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<tbody>
<tr>
<td>Porque ya tienen muchos gatos peludos. Porque ya tienen muchos peludos gatos.</td>
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<tr>
<th>62. A Pablito le encanta la película Toy Story y la ve con frecuencia. ¿Por qué le gusta tanto a Pablito?</th>
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</thead>
<tbody>
<tr>
<td>Porque es una película divertida. Porque es una divertida película.</td>
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<p>| Definite article+subject contexts (n=4) |</p>
<table>
<thead>
<tr>
<th>63. Mario acaba de llegar a casa y abrir unos nuevos juguetes, pero mira, está enojado. ¿Por qué está enojado con sus juguetes?</th>
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<tbody>
<tr>
<td>Porque los camiones no funcionan. Porque camiones no funcionan.</td>
</tr>
<tr>
<td>64. Juan está en una tienda probándose ropa. No se compra ropa, pero se lleva un sombrero. ¿Por qué no escoge ropa?</td>
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<tr>
<td>65. En clase de música los niños van a tocar instrumentos musicales, pero Sofía tiene un problema. ¿Qué problema tiene Sofía?</td>
</tr>
<tr>
<td>66. Este niño quiere sembrar flores en el jardín, pero hay muchas piedras grandes. ¿Por qué le pide al papá que las mueva?</td>
</tr>
</tbody>
</table>
Appendix G
Consent forms and assent script (Spanish versions)

**Carta para los padres y formulario de consentimiento de los padres**

_Título del estudio:_ Desarrollo del lenguaje bilingüe español-francés

Estimados padres o tutores:

Estoy llevando a cabo un estudio sobre el desarrollo del lenguaje en niños de habla española, y me gustaría invitar a su hijo a participar. Yo, Joanne Markle LaMontagne, candidata al doctorado en el Departamento de español y portugués de la Universidad de Toronto (Toronto, Ontario, Canadá), estoy llevando a cabo esta investigación bajo la supervisión de la profesora Ana Teresa Pérez-Leroux, del Departamento de español y portugués de la Universidad de Toronto.

Por favor tenga en cuenta que no se trata de una evaluación educativa, sino que mi objetivo es comparar y contrastar el desarrollo de los tiempos verbales en español por niños bilingües de habla española en Canadá, específicamente en un contexto francófono. Para llevar a cabo este estudio necesito programar una visita a su hijo en su hogar (o en la escuela), y a la madre o al padre hispanohablante si también está disponible para participar. El estudio se realiza en dos sesiones y cada sesión será de 40 a 50 minutos por niño (y dos sesiones de 30 minutos por los adultos hispanohablantes). Antes de que tengan lugar las sesiones, le pido que usted complete un cuestionario sobre la experiencia de lenguaje que tiene su hijo. Esta investigación incluye tres actividades de lenguaje con su hijo, más una tarea de repetición. Por ejemplo, voy a leer historias cortas con su hijo, le haré preguntas sobre las historias y también haré un ejercicio de vocabulario. Estas actividades, junto con la observación de la habilidad de su hijo para el lenguaje, se llevarán a cabo con la supervisión de la maestra o de los padres. Además, voy a solicitar grabar a su hijo (y a la madre o al padre hispanohablante), pero sólo su voz, y luego lo invitaré a que me cuente una historia basada en un libro de ilustraciones sin palabras. Voy a transcribir toda la información, y a usar la transcripción para analizar el lenguaje de su hijo.

En agradecimiento a su hijo (y a usted) por su participación en el estudio, le ofreceré un libro de cuentos para como gesto de aprecio.

No se conocen riesgos asociados con la participación en este estudio, ya que el procedimiento es muy similar a las actividades comunes de narrar cuentos. La información sobre su hijo y su cuestionario de lenguaje se mantendrán confidenciales. Como protección contra una violación de la confidencialidad, toda la información será identificada con un código, no con nombre. Los nombres y los números nunca aparecerán juntos en una sola lista, y no se usarán nombres en ninguno de los informes sobre los hallazgos de la investigación. Las grabaciones de la sesión serán guardadas en una computadora segura alrededor de seis meses, y sólo las personas que participan directamente en la investigación tendrán acceso a las mismas. Luego de haber transcripto las grabaciones, borraré los archivos de audio. Voy a eliminar de las transcripciones toda información identificadora para preservar la privacidad de su familia.
Usted tiene la libertad de retirar a su hijo del estudio en cualquier momento sin ningún tipo de sanción. Asimismo, yo voy a detener las sesiones en cualquier momento si su hijo no se siente cómodo con las actividades.

Una vez que el estudio se haya concluido, voy a poner a disposición de quien lo solicite un resumen de los hallazgos. Pienso publicar los resultados en revistas de investigación para que otros puedan aprender y beneficiarse de los mismos. Si usted tiene preguntas sobre el estudio, este formulario, o las sesiones de prueba, o si usted querría recibir más información sobre la investigación, puede contactarme directamente al 613-408-5743 o por correo electrónico a joannemarkle.lamontagne@mail.utoronto.ca. Para más información sobre esta investigación, por favor contacte a mi supervisora de tesis, Profesora Ana Teresa Pérez-Leroux, al 416-585-4439 o por correo electrónico a at.perez.leroux@utoronto.ca. Para cualquier duda relacionada con los derechos de su hijo como participante de una investigación, por favor contacte a la oficina del Comité de ética (Ethics Review Office) al 416-946-3273 o a ethics.review@utoronto.ca.

Agradezco sinceramente su cooperación. Sólo a través de la ayuda de padres como ustedes pueden los investigadores saber más sobre el desarrollo del lenguaje de los niños.

Muchísimas gracias,

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FORMULARIO DE CONSENTIMIENTO DE LOS PADRES

He leído y entendido la carta que describe el estudio propuesto como *Desarrollo del lenguaje bilingüe español-francés*. Entiendo que puedo retirar a mi hijo de la participación en el estudio en cualquier momento sin ningún tipo de sanción, y que las sesiones se detendrán en cualquier momento si mi hijo no se siente cómodo. Mi hijo recibirá un libro de cuentos por su tiempo.

☐ Doy consentimiento para que la investigadora lleve a cabo el estudio con mi hijo.
☐ Doy consentimiento para que la investigadora lleve a cabo el estudio conmigo.

<table>
<thead>
<tr>
<th>Nombre de uno de los padres o tutores</th>
<th>Firma</th>
<th>Fecha</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Nombre del niño</th>
<th>Fecha de nacimiento del niño (año-mes-día)</th>
</tr>
</thead>
</table>

Correo electrónico y teléfono de uno de los padres:
Asentimiento del niño

Título del estudio: “Desarrollo del lenguaje bilingüe español-francés”

Hola, mi nombre es Joanne Markle LaMontagne. Estoy haciendo un trabajo sobre cómo hablan los niños. Tu mamá dijo que estaba bien que yo trabajara contigo, siempre y cuando tú estés de acuerdo. Vamos a leer historias juntos en la computadora y también te tocará el turno de contarme un cuento.

¿Te gustaría trabajar conmigo?

Este es mi grabador digital. ¿Podemos prenderlo?

Primero, me gustaría mostrarte mi computadora. ¿Te gustaría escuchar historias con muchas ilustraciones de colores?

Ahora, voy a mostrarte un libro con ilustraciones. ¿Puedes escucharlo y luego leérmelo?