

VERBAL ACQUISITION IN L2 SPANISH

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ABSTRACT

Jenna Lynn Mory: Verbal Acquisition in L2 Spanish
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This study was designed to evaluate verbal agreement in early and late L2 Spanish. The early L2 group included children from local immersion preschools who participated in an elicitation task and spontaneous speech recordings. The late L2 group, consisting of UNC-CH undergraduate students in beginning to intermediate Spanish, was asked to describe pictures in Spanish in a task similar to the child elicitation task. All eligible subject/verb pairs produced were evaluated for accuracy and when not accurate were given a specific code for the error type. The results obtained for the early L2 group lend support to the Morphological Underspecification Hypothesis, proposed by McCarthy (2007). However, contrary to McCarthy (2007), the adult data support the Missing Surface Inflection Hypothesis (Prévost & White (2000b)), rather than the MUSH. Additionally, the child group used significantly more 3rd person singular default forms (consistent with McCarthy (2007) and L1 Spanish) than the adult group.

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CHAPTER 1

INTRODUCTION

The purpose of this thesis is to look at the speech of children and adults learning Spanish compared with that of monolingual L1 Spanish-speaking children. Preschool-aged children who were enrolled in Spanish immersion schools participated in an elicitation experiment as well as spontaneous speech recordings. Adults enrolled in beginning to intermediate level Spanish at UNC-CH were also recruited to take part in an elicitation experiment. Each subject and verb pair produced by the children and adults during these tasks was analyzed for correct agreement. Agreement errors were then classified by type. In this way, typical errors produced by each group were evaluated in terms of the syntactic knowledge and structure necessary for producing the errors and then compared with typical error patterns attested in L1 Spanish.

In Chapter II, I will first take a look at monolingual L1 Spanish child grammar features and the theories explaining L1 Spanish. Then I will cover a few theories of Second Language Acquisition with respect to Universal Grammar and I will use this information to make predictions about what we would expect to see in the child and adult data of the present study.

Based on those theories, I expect to find evidence for the use of a default 3SG form in the child data consistent with the Morphological Underspecification Hypothesis (or MUSH) proposed by McCarthy (2007). I expect both groups to produce

quantitatively similar error rates across utterances because they both have full access to UG, but I do not expect the MUSH to be supported by the adult second language learners. This contradicts the McCarthy (2007) findings which center on a group of adult second language learners. Instead, the adult group should produce errors that appear more idiosyncratic giving support to the Missing Surface Inflection Hypothesis (Prévost & White (2000b)), which attributes these errors to performance errors and mapping difficulties.

In Chapter III a review of the data from the child Elicitation Experiment and Spontaneous Speech Recordings will be presented. This will be followed by the results of the adult Elicitation Experiment.

To conclude, in Chapter IV, the child and adult data will be analyzed side by side. Chapter IV provides a review of the data from Chapter III and discusses the conclusions that can be drawn from this original data.

CHAPTER 2

THEORIES OF FLA AND SLA AS THEY RELATE TO SPANISH

2.1 L1 Spanish Language

In order to investigate what Second Language Spanish looks like, first I must demonstrate how verb morphosyntax is acquired in Spanish as a first language. The general trends I will discuss as well as the representative percentages provided will serve as a basis for comparison in this paper.

To begin, Slobin (1985) asserts that it is normal for Spanish speaking children to regularize verbs based on the *-ar* conjugation paradigm, which is the first one that they acquire. The group of *-ar* infinitives is the most numerous in the language thus suggesting that this morphosyntactic information is readily available and particularly salient to the child learning Spanish. Generalizing or over-regularizing along this paradigm would mean that *-er* and *-ir* verbs (the other two verb classes) could be given the following endings in the present tense (the *-ar* endings).

(1) *Bailar* ‘to dance’

1SG *yo bailo* 1PL *nosotros bailamos*

2SG *tú bailas* 2PL *vosotros bailáis*

3SG *él baila* 3PL *ellos bailan*

The endings in bold above are the parts that would be generalized to a verb like *comer* ‘to eat-INF.’ That is, while the child should produce *él come* ‘he eats-3SGPRES’ instead he may produce *él coma*. The form *coma* is actually the 3SG form for the present subjunctive, because that mood is formed by using the opposite endings from the present tense. This means that when the child first produces a form like *coma*, it may in reality be a form that adult speakers would normally recognize as the subjunctive form, but should be taken to suggest that the child has produced the present indicative of a given verb using an *-ar* ending rather than the ending required for an *-er* (or *-ir*) verb. This suggestion is supported by the fact that the subjunctive mood does not typically emerge until six months after the present indicative (as noted by González (1978)) in L1 Spanish. As we will see, both groups in the present study produced these ‘mood’ errors (henceforth referred to as ‘verb class’ errors), but they did not always overregularize the *-ar* verb endings, but instead also substituted *-er/-ir* endings for *-ar* verbs, which would not be typical of L1 Spanish.

Slobin (1985) also suggests that because the 3SG verb form emerges before the 1SG form and the child often refers to himself initially using the 3SG form (and a null subject), there are frequent errors of person agreement starting at age 2. This suggests that the 3SG form should be the most commonly used especially when substituting for 1SG. The child data to follow exhibit this pattern, but the adult data do not show as strong of an inclination in this direction. Finally, Slobin (1985) concludes by saying that number errors are not as common as person errors in general, so we should expect the substitution of 3SG forms to occur more frequently with SG subjects of varying persons than with PL subjects of any type. When the child produces the 3SG default form with a

1SG referent, but also with a null subject (i.e. not *Pedro canta* but *(yo) canta*), those errors are taken to be person errors.

Along the same lines as Slobin (1985), Radford & Ploennig-Pacheco (1994) have also noted the tendency of L1 Spanish learners to substitute 3SG forms for other forms. According to their study, children were able to produce correct 3SG agreement 80% of the time, but the other 20% accounts for substitutions of the 3SG form for other forms.

Radford & Ploennig-Pacheco (1994 p.53) also suggest various reasons for this phenomenon, including the fact that “it seems likely that the default status of 3s forms correlates with the fact that they are early-acquired: this in turn may correlate with the fact that they are the most frequently occurring forms in the child’s speech input; moreover, since third person forms are also the forms most frequently used with overt subjects, these are the forms for which the child has most directly visible evidence of subject-verb agreement.” These findings concur with those of Slobin (1985), as well as Grinstead (2007), to suggest that the 3SG form in present tense does act as a default form in L1 acquisition of Spanish.

In addition to the information given about the accuracy of children to produce and substitute the 3SG form, Aguado-Orea (2004) found that in his study 28% of verbs that should be marked with plural endings were not. The study also showed that in producing 1SG, 8.4% of responses contained errors. This suggests once again that PL forms as well as other person forms (not 3SG) are produced with more errors than the 3SG form.

The Bedore & Leonard (2001) study of typically developing child Spanish speakers reports that the most common error of their 3-year old subjects was to produce these 3SG forms as substitutes for other forms. These errors constituted 35% of all

errors, the most numerous group of errors in the study. The group of 3 year-old subjects committed errors in roughly 15% of all utterances. In the 5 year-old group, the subjects committed errors only 4% of the time with 20% of those errors being 3SG substitutions (for other forms). Thus, the 3SG default form is also well attested as a common error in Bedore & Leonard (2001).

Gathercole, Sebastian & Soto (1999) found an overall error rate of 4.5% and again that children seemed to be most accurate when producing 3SG forms. Wexler (1998) noted similar results in that his subjects Juan and Lucia produced verbs with errors in only 4.4% and 4.5% of all present tense verbs, respectively. In the Wexler (1998) study, it was also found that 3PL and 2SG forms were the most difficult and resulted in the most errors of all forms. Serrat & Aparici (1999) document an overall error rate of 4.6% in their longitudinal study of 10 Spanish monolingual, Catalan monolingual or Spanish/Catalan bilingual children at ages 1;7 to 3;0. Additionally Torrens (1992) documents low error rates from .56% to 3.3% in Italian, Catalan, and Spanish speaking children (aged 1;7 to 3;0) in his longitudinal research.

These findings suggest that if second language acquisition is like first language acquisition, we should expect to see substitution errors of the 3SG forms for other forms and a reduced ability to produce correct agreement on 3PL subjects when compared with 3SG subjects. Additionally, if 3SG verbs were isolated we would expect to see approximately 80% used appropriately and 20% substituted for other verbs. We should expect to see relative weakness in producing correct verbal agreement in 3PL and 2SG forms and overall error rates ranging between 4.4% and 4.6%.

While this study cannot ignore the long-standing debate about Root Infinitives (non-finite verb forms used in finite verb contexts), RIs are not expected to occur in Spanish because it is a pro-drop language; RIs were not commonly produced by children or adults in this study. In the study discussed by Ezeizabarrena (2002) the total percentage of RIs produced by the two monolingual L1 Spanish children in the longitudinal study was 0.6% and 1.6% of all verbs. Bedore & Leonard (2001) showed that of all errors only 9% were RIs in the utterances produced by their 3-year old subjects. This is in keeping with the findings of this study since RIs were not one of the most common errors produced by either group.

2.2 Theories to explain L1 Spanish

Aguado-Orea (2004) set out to explain the way in which morphosyntactic acquisition takes place using two generativist theories (Wexler's Unique Checking Constraint (1998) and Radford & Ploennig-Pacheco's 3SG default form (1994)) and one constructivist account. It is the position of my paper that L1 Spanish learners do make use of Universal Grammar to acquire the language based on the poverty of the stimulus argument. However, since this paper is also focused on SLA I will review the arguments for each account in the event that SLA is completely different from FLA and must be explained using a constructivist framework.

2.2.1 Wexler (1998) and the UCC

Wexler (1994): Tense Underspecification Account

In Wexler (1994) the Optional Infinitive stage is explained with the claim that tense is underdeveloped in young children. Wexler (1994 p.307) assumes a “UG-constrained maturation” or underspecification account which means that forms which are not legal within the grammar should not be produced. In other words, forms will not be inflected until they can be inflected correctly. Wexler (1994 p.339) thus makes the prediction that the optional infinitive stage will only go away when the past tense usage begins, because the “existence of past tense will require that the projection I have scope over the VP at LF, which will require that V raise to I (to be inflected), if it can, by economy.”

The Unique Checking Constraint (UCC)

Wexler (1998) proposes a new account for Root Infinitives, namely that RIs originate because children have three constraints that control their production. These are (1) a tense constraint, (2) a checking constraint-for subjects and (3) a uniqueness constraint (the UCC). The third constraint is not found in the adult grammar, but tells the children that they can check either T or Agr (satisfying constraint (1) or (2)) but not both. This means that they can either have tense (as in finite clauses) and violate uniqueness, or they can satisfy uniqueness producing a root infinitive. So for example in French, the presence of an overt subject triggers agreement and tense so we get a finite clause with an overt subject (which is the general pattern of finite clauses) violating the uniqueness constraint. Or if there is no overt subject to trigger agreement then the verb stays uninflected (nonfinite) and we get a root infinitive and a null subject.

As is noted by Aguado-Orea (2004), in the case of Spanish, if Wexler's UCC is to hold, there should be no agreement errors whatsoever in tensed verbs. Many studies, including those conducted by Grinstead (2007) and Radford & Ploennig-Pacheco (1994), demonstrate that while error rates are generally low in L1 Spanish, incorrect inflections are produced, which is inconsistent with Wexler (1998) and the UCC.

2.2.2 Radford & Ploennig-Pacheco (1994) and Grinstead (2007)

The argument put forth by Radford & Ploennig-Pacheco (1994) is one that assumes, not unlike Grinstead (2007), that there is something special and unmarked about 3SG forms. Pratt & Grinstead (2007) suggest that the 3SG form is a logical form for children to interpret as non-finite because this form appears in imperative and impersonal constructions which are 'semantically unspecified for tense' or 'impervious to agreement marking' respectively. For these bare forms, as well as RIs in general, the temporal reading must be attained via discourse since morphological information has not been overtly encoded. According to Aguado-Orea (2004) in order for this account to hold all persons must display the same proportion of default 3SG usage.

While the so-called 3SG default form appears to be the most common error noted in the spontaneous speech evidence cited by P&G (2007), the assumption that the 3SG form is the default for all persons equally is not borne out explicitly by the child data. This may simply be a result of not having all forms occur with equal frequency. For example, in the present study 2SG and 1PL forms were extremely limited across all participants making it hard to evaluate this hypothesis completely. This may mean that by the time all forms are produced spontaneously the child has already successfully acquired

them, consequently demonstrating that each person is marked with its own specific morphosyntax and the child therefore no longer finds it necessary to use a default form.

2.2.3 Constructivist Account

Gathercole et. al. (1999) suggest that verb morphosyntax in Spanish may occur on a verb by verb basis rather than as an across the board phenomenon. This constructivist account necessarily precludes the use of a UG device in solving the language acquisition problem. This could have relevance to the present study if we see the errors predicted by Aguado-Orea (2004) in terms of this framework. That is, acquisition should proceed with lots of errors on items that are infrequent in the input and few errors on more frequent items. For example, since 3SG forms occur with great frequency in the input they should be more correct overall than 3PL forms, which occur less often. This account fails to offer a convincing explanation for the 3SG default form.

2.2.4 Concluding remarks about the theories of FLA

Based on the theories above, which characterize FLA, the most relevant to child SLA of Spanish is that proposed by Radford & Ploennig (1994) and Grinstead (2007). The child group in my study does respect the default status of 3SG forms proposed by these two studies, but in §2.4.4 the 3SG default account will be further elaborated in the specific context of SLA. To explain the findings of the adult group, we must look elsewhere (see §2.4.3).

2.3 Notes about UG, the Critical Period and Parameter Resetting in SLA

Before addressing specifically how SLA can be explained, I must discuss how it is different from FLA. The critical period has been noted in many studies as the factor which results in imperfect acquisition of second (or in rare cases, first) languages for acquirers who begin their acquisition process after puberty. Research by McDonald (2000), among others, suggests that the age of L2 acquisition plays a critical role in the ultimate attainment of the language. Based on this information, I hope to show that there is an age effect which produces the L2 error patterns seen in adults. I propose that while adults have full access to UG, after L1 acquisition syntactic information may be underused by adults. This view makes the prediction that we should see a more monolingual-like development, in terms of errors committed in morphosyntactic acquisition, in the child L2 speakers compared with the adult L2 speakers.

As it is the intent of this research to account for the errors in inflectional morphology observed in the speech of child and adult L2 learners of Spanish, I have reviewed the current literature on the topic of L1 acquisition and will subsequently evaluate the theories specific to L2 acquisition. First, however, I will discuss my position with regard to access to UG in Second Language Acquisition and the resulting (in)availability of functional categories. The first question when one considers second language acquisition in general is whether or not speakers have access to the principles of Universal Grammar. Gass (1990) points out that adult learners seem to need negative evidence when acquiring a second language. Since L1 child learners do not need negative evidence to acquire language because they have full access to UG, one may think that L2 learners need negative evidence because UG is no longer accessible. The need for negative evidence in L2 acquisition doesn't necessarily imply that UG is not accessible; it

could instead be a result of having to reset certain language parameters. Resetting parameters that are restrictive, but need to be permissive, should be more difficult (assuming Full Transfer/Full Access) since changes in the grammar typically result from exposure to exclusively positive evidence, and negative evidence would be needed to change a parameter setting.

If L2 learners do have access to UG can we assume that they have full access or is their access somehow constrained by their L1 or their age? Is it possible that the parameter settings for the L1 could be transferred for use in acquisition of the L2? If so, this could require a re-parameterization of certain features depending on the first and second languages in play (as suggested above). Schwartz & Sprouse (1994, 1996) propose a model of Full Transfer/Full Access which suggests that given that a learner's L1 knowledge is available as a model for L2 acquisition, the UG principles upon which that language was acquired should likewise be available for L2 acquisition. This is the most liberal type of position that can be suggested, but is certainly not the only explanation.

The hypothesis known as the Rich Agreement Hypothesis (based on Rohrbacher 1994, 1999 and Vikner 1995, 1997, but named by Bobaljik (to appear)) assumes that morphological acquisition precedes syntactic acquisition and thus serves as a catalyst for syntactic acquisition. In this paper I assume a strong continuity approach to the acquisition of morphosyntax and implied initial stage of UG, and in so doing I assume that both child and adult SLA have full access to UG but that adult SLA may have other constraints on learning which is separate from UG access. These other constraints could be responsible for the differences between child and adult SLA. This approach also

means that functional categories are necessarily available to both child and adult L2 learners as a result of successful L1 acquisition.

2.4 Theories specific to L2 Spanish

The following theories have been created with specific reference to adult SLA and will be evaluated alongside the theories of FLA discussed above to evaluate the child and adult data in Chapter III. While my position remains that UG is fully accessible to second language learners, I will evaluate the arguments made about Partial and Limited Access to UG before getting to the Full Access hypotheses.

2.4.1 Partial Access to UG

The partial access stance indicated by Vainikka and Young-Scholten (1994) states that the initial L2 state lacks functional categories which eventually emerge with inflection after the L2 learner is exposed to input from the target language. This is a maturational account which allows the L2 learner to overcome the lack of UG; however, it does not address the problem of inflection in terms of the type of errors produced. It merely suggests that the L2 learner will eventually be able to acquire the appropriate morphosyntax for the language in question. This account lacks specificity.

2.4.2 Defective Access to UG

Clahsen (1988) & Meisel (1991) both assume that L2 learners are working with permanently defective UG. The fact that UG is not completely available to L2 learners under this framework assumes that the relationship between morphology and syntactic

structures cannot be learned by L2 learners. To support this type of hypothesis, L2 learners would not be able to acquire any functional morphosyntax, which is simply not the case.

2.4.3 Full Access to UG: The MSIH

Lardiere (1998a,b), Prévost and White (2000b) and Haznedar and Schwartz (1997) suggest that missing overt inflection does not mean that verb raising is missing or functional projections are somehow underspecified or absent. The Missing Surface Inflection Hypothesis (MSIH) was created to explain, first of all, the fact that L2 morphosyntax is learnable and, second, that missing surface inflections in L2 do not necessarily imply an underlying syntactic deficit. This type of position views absent inflections as performance errors.

The MSIH is also by far the prevailing theory in SLA to explain the existence of Root Infinitives. This theory suggests that Second Language acquirers have the possibility to acquire underlying correct morphosyntax in L2, but that the underlying structure is not always overtly projected in performance. The MSIH as cited in White (2003) and suggested by Lardiere (2000) states that:

“The most coherent explanation for the L2 data is that...learners already have knowledge of functional categories and features via prior language knowledge...; the problem lies in figuring out how (and whether) to spell out morphologically the categories they already represent syntactically, i.e. the ‘mapping problem’.” (cited in White 2003 p.194)

Put simply by White (2003 p. 194), “the learner may fail to link an abstract [+past] feature to the particular /-ed/ in English, for example...Although the form has

been learned, the learner may be unable to retrieve it on a consistent basis.” This explains why on a given day one L2 speaker may commit a morphological error, but appear to spontaneously correct the error the next day. White (2003) calls this phenomenon the Separation Hypothesis, claiming that the underlying syntax and the surface forms produced by L2 speakers are often at odds. This hypothesis must be taken with a grain of salt, however, given that we must intuit some degree of competence from the performance of L2 speakers. It is the position of this paper that utterances do indicate at least some level of underlying syntactic structure and knowledge. The main problem with the MSIH is that it does not predict where errors should occur. We know that root infinitives occur infrequently in L1 Spanish (and in the case of this study also, RIs occur infrequently), but how can we determine where they do occur? Also, how can incorrectly inflected forms be explained? Is there any way to predict the forms which occur most often? These questions need to be answered if this theory is to hold.

2.4.4 Full Access: Distributed Morphology and the MUSH

Blom (2006) proposes a theory to explain why it is that L2 forms are produced in a non-target-like way. This hypothesis takes a Distributed Morphology stance claiming that L2 learners have a late Spell-out of morphemes so that the “insertion of vocabulary items is postsyntactic.” This theory takes for granted that all functional projections are available to the L2 learner, but that in the spell-out phase the grammar searches the lexicon for the most appropriate vocabulary item that will fit.

However, Blom (2006) also suggests that in the L2 learner, these vocabulary items may not be fully specified. This underspecification of lexical forms in combination with the late spell-out means that inappropriate forms will arise on the surface. The theory is similar to the Missing Surface Inflection Hypothesis, discussed above, but provides a better explanation than performance errors. This underspecification of forms also lends itself to the theory proposed by Grinstead (2007) that ‘default’ forms are used (at least by L1 learners). While this position does go against Poeppel & Wexler’s (1993) assumption that if morphosyntax is present then it is accurate, the use of a default 3SG form is evidenced not only in the early L2 learners in this study, but also (and more importantly) in L1 acquisition.

This underspecification of forms is also described by McCarthy (2007) and called the Morphological Underspecification Hypothesis (MUSH). McCarthy (2007) argues that underspecified forms are occasionally inserted rather than inserting fully-specified forms which would result in feature clash. The evidence from my study (of child L2 Spanish) supports the claim that morphological variability, when incorrect, is generally defaulted in Spanish to the 3SG form. The conception that a less-marked form would be inserted when there is underspecification implies that UG is still active enough to identify and insert a default type of form where the requisite fully specified form is unavailable. In the present study we will see that children exhibit this knowledge, whereas in adults access to UG (by means of determining and inserting an unmarked form) is not as obvious.

2.5 Predictions

The data to follow do not support the claims of either Vainikka and Young-Scholten (1994) or Clahsen (1988) and Meisel (1991) that UG is defective in the L2 learner, whether he is a child or an adult. Although I am suggesting that both child L2 learners and adult L2 learners have full access to UG, the learning process does not necessarily take place in the same fashion. While I predict a quantitatively similar error rate across groups, I expect to see a qualitative difference in the types of errors produced by each group. Because the children in the study have been exposed to and are learning Spanish before the critical period, I expect them to respect and make use of the 3SG default form seen in L1 acquisition and I predict that I will find evidence for the MUSH (McCarthy 2007). However, as a result of age of acquisition, I expect the adults to display a more varied pattern of agreement errors more consistent with the MSIH.

As noted by Liceras et al. (2006), the Truncation Hypothesis has been used to account for Spanish monolingual data with respect to RIs. Although this group of errors constitutes a tiny percentage of all utterances committed across groups (3.44% in the child data and 1.10% in the adult data), I will evaluate this hypothesis briefly in Chapter III after presenting the data. I will also note the percentage of null subjects that occurred in the elicitation task, since Liceras et al. (2006) predict that overt subjects should not occur with non-finite forms.

Another interesting assertion to investigate is the idea proposed by Blom (2006 p. 316) that “adult L2 learners underuse syntactic information as compared to child learners

because they lack the knowledge to do so.” This statement suggests that the child L2 subjects in this study should be better able to use syntactic information than the adults and therefore should be better able to develop their grammar, consequently producing utterances that look more like an L1 learner.

Most importantly, I expect to refute the claim made by Hakuta (1987) that there are more similarities between an adult and a 5-year-old second language learner than between a 5-year-old and a first language learner. I assume, as stated above and in accordance with Blom (2006), that because children are more in tune with the syntactic information in the input they receive, they will learn the L2 in a way that is more similar to that of an L1 learner. That being said, the most salient feature of the L2 child language that I expect to observe is the use of the 3SG form as a default. Chapter III will address the validity of these predictions.

CHAPTER 3

DATA

This chapter discusses the child and adult data collected and coded in this study (IRB #07-1451). The first section discusses the results from the elicitation task and spontaneous speech recordings with early SLA of Spanish and the second section discusses the data obtained from adult second language learners. The third section serves to briefly compare the two groups of data.

3.1 Child Data

After researching monolingual child Spanish speakers' data in terms of verbal agreement, I set to work investigating the capabilities of early second language learners of Spanish from local immersion preschools. I worked with sixteen different children from three different preschools in the Raleigh and Chapel Hill areas. Three 3-year-olds, nine 4-year-olds, three 5-year-olds, and one 6-year-old were included in the original group of sixteen test subjects. The subjects participated in an elicitation task (Experiment 1) and a spontaneous speech recording session.

Although an attempt was made to obtain a linguistically homogenous group of subjects, the children were at varying stages of second language development and came from varied language backgrounds. Two of the three preschools were immersion

preschools (all instruction given in the target language, Spanish) and at the other preschool children received periodic exposure to the target language. For this reason the six child subjects from the non-immersion preschool necessarily should be weaker in their development because they simply did not receive as much input. A criterion for inclusion in the study was that children come from non-Spanish speaking homes.

Because of low recruitment numbers, several children came from homes where they heard Spanish or another language besides English in the home. Among the other languages were German, Polish, and Italian. For this reason the language background for each child has been summarized in the section about Spontaneous Speech.

Those children who were exposed to Spanish in the home will be addressed directly. Based on parent response, none of the children heard more than 40% Spanish in the home. The child, [MR], who heard 30% Spanish at home refused to participate in the first experiment, but was included in the Spontaneous Speech portion of the study. The other children who heard Spanish in the home were included in both parts of the study.

With the exception of one child [MR], when children failed to participate in the elicitation task (Experiment 1) they were excluded from the spontaneous speech portion of the study.

3.1.1 Experiment 1

In the first task, the children were introduced to a Spanish speaking puppet (a turtle) and were shown a set of seven cards with pictures on them. The pictures included a beach scene, a man giving ice cream to some children, a group of girls drawing at a table, some children dancing, a baby crying, a girl with a birthday cake, and a boy

washing a dog. The children were told that the puppet wanted to ask them a few questions about the pictures, but that she only spoke Spanish so they had to tell her the answers in Spanish. When each new picture was presented the child was prompted to describe the picture with a simple question like ‘what is happening with the family?’ (*¿qué pasa con la familia?*) or ‘what is happening with the boy and the dog?’ (*¿qué pasa con el niño y el perro?*). In this way the subjects were prompted to respond using specified 3SG and 3PL subjects.

The children’s utterances were recorded with a Sony video camcorder and were coded based on the children’s ability to produce verb agreement with the subject that they were prompted to use. Responses from nine of the sixteen children tested were included in the results. The other seven subjects failed to produce any utterances when given the prompts.

Responses were evaluated for verb agreement based on the subject that the children were given during the prompt. Verb forms that agreed with the 3SG or 3PL subjects given were counted as correct responses. Other responses were coded as incorrect. Responses produced by the child that were not on task were not included in the analysis. See the summary Table 1 below.

Table 1 Percent correct on 3rd person singular and plural verb elicitation

Prompt Given	#correct responses/total	%correct responses
3 rd person singular subject	27/31	87.1%
3 rd person plural subject	19/28	67.85%

As is expected, following Slobin (1985), Experiment 1 shows that the children's production of 3PL forms was worse than 3SG forms. The overall percentages correct across verb types was 77.97% (46/59). The percentages in Table 1 do not include all possible responses. Not all subjects responded to every prompt. Responses using the verb '*gustar*' ('to like') were not counted, because none of them were produced correctly. This suggests that this type of verb, which takes a dative subject, has not yet been fully acquired.

Table 2 (below) shows the distribution of errors from the elicitation task. The most common error type was the substitution of the 3SG form for the 3PL form. All five errors involving infinitives were from one child. The error type 'Omission of S/E' means that the child produced an utterance consisting of only a participle (i.e. that they omitted the verb *ser* or *estar*, each meaning 'to be', from the utterance). For example, the child might say *jugando* ('playing') instead of *juega* ('he's playing') or *está jugando* ('he's playing'). There was only one instance where a child omitted an auxiliary verb, but that error was not included in the totals above because that is not an overt agreement error.

Additionally, one of the prompts asked what the family (*la familia*) was doing. Four responses were given that used a 3PL verb form to address this prompt, but these were counted as correct 3PL forms because all of these verb forms were produced with null subjects. This suggests that no overt discrepancy between subject and verb agreement was produced and that the children simply chose to replace the 3SG prompt with the 3PL pronoun 'they' rather than referring back to the 3SG 'family.' This type of subject change is typical in English as well (e.g. 'What is the Smith family doing?')

‘They’re going to the beach.’) It would be awkward in English (and impossible in Spanish) to say ‘it is going to the beach’ with ‘it’ referring to the ‘family.’

Table 2 Distribution of errors

Type of error	Number of errors
3 rd sing for 3 rd plural	50% (7/14)
3 rd plural for 3 rd sing	7.14% (1/14)
Infinitive for 3 rd sing	21.43% (3/14)
Infinitive for 3 rd plural	14.29% (2/14)
Omission of s/e	7.14% (1/14)

Before discussing the spontaneous speech recordings, I will evaluate an account that could explain the results obtained in the elicitation experiment, in particular, the seemingly high number of infinitives used to substitute for tensed forms. To address the validity of the Truncation Hypothesis (Rizzi (1993/1994)) in this case I have looked at the number of null subjects produced and the subsequent numbers of non-tensed verbs produced. As shown in Table 3 (below), out of 14 errors, twelve of those had null subjects and 100% of the INF errors had null subjects. This 85.71% (or 100%) null subject figure would lend support to the Truncation Hypothesis if the majority of the verbs had not in reality been produced as tensed. Only 5 of the 14 errors were INF errors and as mentioned above all five errors were produced by one child. The following spontaneous speech results show many more overt subjects than null subjects in overt agreement errors. The high percentage of null subjects obtained in Experiment 1 could

be a consequence of prompting the children with specific subjects. Because of the nature of the task the children did not feel it was necessary to reproduce the subject that they had just been given. This seems to be the case considering that null subjects were produced 80% (48/60) of the time across utterances. The low overall number of null subjects and the fact that the majority of the verbs produced by early second language learners of Spanish in this study are tensed effectively rules out the Truncation Hypothesis as a viable account for early second language Spanish.

Table 3 Number of Null subjects in errors

Type of error	# of utterances produced with null subjects of all errors of each type
3 rd sing substituted for 3 rd plural	5/7
3 rd plural substituted for 3 rd sing	1/1
Infinitive substituted for 3 rd sing	3/3
Infinitive substituted for 3 rd plural	2/2
Omission of S/E	1/1

A more plausible account than the Truncation Hypothesis is the MUSH (McCarthy 2007) since 50% of the errors in Experiment 1 involved using a default 3SG form to substitute for other forms. This hypothesis will be discussed below after the rest of the child data has been presented.

3.1.2 Spontaneous Speech

As another component to my study of verb development in child L2 Spanish, I took spontaneous speech recordings in the preschools with each child who was able to

produce verbal responses in Experiment 1. An additional child was included in the study who would produce Spanish verbs when talking with the investigator, but refused to participate in Experiment 1. Each of the ten children talked and played games for 10-45 minutes while being recorded on video. One of the ten children was excluded from the spontaneous speech portion of the study, because he failed to produce any utterances in Spanish during the course of the spontaneous speech recording session. All participants included in the spontaneous speech portion of the study attended immersion preschools. When the session was concluded, the video recording was transcribed and then coded according to the following guidelines.

Rules for exclusion of utterances:

(1) Command forms were not counted.

- a. The command form '*Mira!*' ('(you) look!') was produced by almost every child but was not included because it is a nonfinite form.

(2) Consecutive child utterances that were exactly repeated were counted only once.

(3) Child utterances that were exact duplications of the Investigator's previous utterance were not counted.

(4) Infinitives that were used in context were not counted as correct or incorrect forms of the verb.

- a. For example: INV: *¿qué les enseñas?* ('What do you teach them?')

CHI: *hablar español* ('to speak Spanish')

(5) Infinitives were only coded (as incorrect forms) when they stood for a main verb and were not used as part of an elided modal construction (or other grammatical infinitive construction).

- (6) When children made multiple attempts at producing a verb, the last form produced was the one coded.
- (7) Errors with the verb '*gustar*' were not counted, but spontaneously produced **correct** forms of this verb were coded as correct. This was done because '*gustar*' ('to like') behaves differently from any of the other verbs produced (i.e. it takes a Dative subject).
- a. *Me gustan los animales.* 'I like animals' or 'Animals please me.'
 - b. *Ella gusta el pastel.* 'She likes-3SG the cake.'
 - c. *A ella le gusta el pastel.* 'She likes the cake.' or 'To her, the cake is pleasing.'

Examples (a) and (c) above are grammatical in Spanish. Example (b), given by one of the children in Experiment 1, uses *gustar* like a regular verb by including a nominative subject and omitting the necessary reflexive pronoun.

- (8) Whole or partial utterances produced in English were not coded as anything. Spanish verbs in mixed utterances were coded.
- (9) The verb *hay* meaning 'there is' or 'there are' was not included in the totals because it is not marked differentially for SG and PL subjects.

In addition to these general rules, the coding system used separated the children's utterances into several groups. The two main groups were the 'correct' utterances and the 'other' or 'incorrect' utterances. The 'other' category was broken down into separate groups designating error type. Below is a list of the codes used for the utterances.

Correct: Child produces a verb that is correct in person, number, modality, tense, and mood.

3Sing: Child produces a verb in the 3rd person singular present form, but the subject does not agree (either in number or person).

(e.g. *yo tiene 5 años*. ‘I have-3SGPRES 5 years’)

3SingP: Child produces a verb in the 3rd person singular past tense form, but the subject does not agree (either in number or person)

(e.g. *yo hizo una carta*. ‘I made-3SGPAST a card.’)

INF: Child produces an inappropriate infinitive where a tensed verb is necessary.

(e.g. *yo comer una manzana*. ‘I eat-INF an apple.’)

S/E: Child fails to produce the auxiliary verb, producing a lone participle.

(e.g. *él jugando* ‘he (is) playing’)

Nonform (NON): Child produces a form that is not Spanish, but whose shape looks to be an attempt at Spanish. (e.g. ‘veno’ for *vino* 3SG-past form meaning ‘came’ from the verb *venir* ‘to come’)

Wrong Form (WF): Child produces a verb form without agreement between the subject and verb that is not a 3SG form or produces a verb class error. (e.g. *ella tengo* ‘she have-1SGPRES’).

Each of the children was recorded separately with just the investigator present with the exception of the last two children tested who were recorded in a group session.

Below is a summary of the utterances produced by each child categorized by code.

Preceding each summary table is a description of the child including their age at the time

of spontaneous speech recording and other relevant information about their language background.

HG.

At the time of the spontaneous speech recording HG was 4;6;20. Her first language is Polish with the second language being Spanish and her third language is English. Her exposure to Spanish and English is only through contact with the teachers and other students at the preschool which she has attended since she was two years old. Polish is spoken nearly 90% of the time she is at home.

Table 4 HG Summary

Error Type	Percentage and Count of all responses
Correct	57.14% (12/21)
3Sing	33.33% (7/21)
INF	9.52% (2/21)

IS.

IS was 4;4;2 at the time of the recording. She hears only English in the home and has been attending the same immersion preschool since 3 months of age.

Table 5 IS Summary

Error Type	Percentage and Count of all responses
Correct	80.0% (20/25)
3Sing	20.0% (5/25)

EM.

EM was 4;10;19 at the time of the recording. Her exposure to the Spanish language is almost completely limited to the hours she is at the immersion preschool. Her parents estimated that EM hears Spanish approximately 3% of the time she is at home. She has been attending the immersion preschool since 18 months of age.

Table 6 EM Summary

Error Type	Percentage and Count of all responses
Correct	83.33% (10/12)
3Sing	8.33% (1/12)
NON	8.33% (1/12)

CH.

CH was 4;10;14 at the time of the spontaneous speech recording. He is exposed to Spanish 25% of the time he is at home, because he is cared for by a Spanish speaking nanny. He has been attending the immersion preschool since 6 months of age.

Table 7 CH Summary

Error Type	Percentage and Count of all responses
Correct	83.33% (35/42)
3Sing	4.76% (2/42)
3SingP	2.38% (1/42)
NON	9.52% (3/42)
WF	2.38% (1/42)

LT.

LT was 4;8;28 at the time of the recording. She is exposed to very little Spanish in the home and has been attending the immersion preschool for two years.

Table 8 LT Summary

Error Type	Percentage and Count of all responses
Correct	90.24% (37/41)
3Sing	2.44% (1/41)
3SingP	4.88% (2/41)
NON	2.44% (1/41)

JC.

JC was 4;4;18 at the time of the recording. He does not hear any Spanish in the home and has been attending the immersion school for approximately three and a half years.

Table 9 JC Summary

Error Type	Percentage and Count of all responses
Correct	60.0% (6/10)
3Sing	20.0% (2/10)
S/E	20.0% (2/10)

If the errors of omission are ignored JC would have produced correct responses 75% of the time and errors only 25% of the time. The category of omission errors (S/E errors) will be discussed below.

IH. (1st session individual; 2nd session in group setting)

IH was 4;6;3 and 4;7;7 at the two recording sessions. She has been attending the immersion preschool for three and a half years. Her first language is German, her second language(s) are English and Spanish. She hears German nearly 100% of the time she is at home so her main exposure to Spanish is at the preschool.

Table 10 IH Summary

Error Type	Percentage and Count of all responses
Correct	79.41% (27/34)
INF	5.88% (2/34)
S/E	2.94% (1/34)
WF	11.76% (4/34)

EV.

EV was 4;4;22 at the time of the recording. She has been attending the immersion preschool for two and a half years. Her father is Spanish-speaking and so EV hears Spanish approximately 30% of the time she spends at home.

Table 11 EV Summary

Error Type	Percentage and Count of all responses
Correct	86.36% (38/44)
3Sing	6.82% (3/44)
INF	2.27% (1/44)
WF	4.54% (2/44)

It should be noted that 5 of the responses coded as correct had errors with *ser* or *estar* — using one verb meaning ‘to be’ in place of the other one required by the predicate. These responses were coded as correct if agreement was well-produced because the other lexical considerations are not within the scope of this project. Also, EM produced the utterance *quiere tiene* (‘he wants he has’) rather than (*quiere tener* ‘he wants to have’) which displays a tense error in the second verb, but was coded as a correct verb for the correct subject-verb agreement in the main verb *querer*.

MR.

MR was 5;5;6 at the time of the recording. She hears Spanish approximately 40% of the time she is at home, because her father is Spanish-speaking. She has been attending an immersion preschool for three years.

Table 12 MR Summary

Error Type	Percentage and Count of all responses
Correct	83.33% (5/6)
3Sing	16.67% (1/6)

Table 13 (below) is a summary of all of the errors produced by the nine subjects. Based on these results the children were accurate in terms of verb agreement 80.85% of the time across utterances. The most common error was to produce the ‘default’ 3rd person singular form for other persons, which occurred in 48.88% of all errors. This result concurs with the Grinstead (2007) findings. Nonfinite substitutions are minimal

(limited to 3.39% of all utterances). Table 14 combines the children's responses from the elicitation task (Experiment 1) with the spontaneous speech data.

Table 13 Breakdown of errors by type across subjects for SS Data

Error Type	Number of errors of total errors	% of total errors	% of total responses
3Sing	22/45	48.88%	9.36%
3SingP	3/45	6.66%	1.28%
INF	5/45	11.11%	2.13%
S/E	3/45	6.66%	1.28%
NON	5/45	11.11%	2.13%
WF	7/45	15.55%	2.98%
Total Incorrect	45/235	--	19.15%
Total Correct	190/235	--	80.85%

Table 14 Breakdown of errors by type across subjects from Experiment 1 and SS Data

Error Type	Number of errors of total errors	% of total errors	% of total responses
3Sing	29/59	49.15%	9.83%
3SingP	3/59	5.08%	1.02%
INF	10/59	16.95%	3.39%
S/E	4/59	6.78%	1.36%
NON	5/59	8.47%	1.69%
WF	8/59	13.56%	2.71%
Total Incorrect	59/295	--	20.0%
Total Correct	236/295	--	80.0%

3.2 Discussion of errors

According to Slobin (1985), Aguado-Orea (2004) and Grinstead (2007) the categories of errors which are expected of those which are found above are 3SING, 3SINGP, S/E and WF verb class errors (that consist of applying the *-ar* endings onto *-er/-ir* verbs (Slobin (1985)). Table 15, found below, shows the updated results with the S/E errors subtracted from the mix as well as the verb class error (see §3.2.6). The verb class error was subtracted because the child used the correct person and number agreement but simply substituted the opposite (*-ar*) ending for the *-er* verb ending. It is this revised table which will be compared with a revised table of the adult responses.

Table 15 Adjusted Summary Data (Child)

Error Type	Number of errors of total errors	% of total errors	% of total responses
3Sing	29/54	53.70%	9.97%
3SingP	3/54	5.56%	1.03%
INF	10/54	18.52%	3.44%
NON	5/54	9.26%	1.72%
WF	7/54	12.96%	2.41%
Total Incorrect	54/291	--	18.56%
Total Correct	237/291	--	81.44%

3.2.1 3SING

3Sing errors were the most numerous across all child responses. In the spontaneous speech portion of the study the (default) 3SG form replaced the 1Sg form in 21 out of 22 responses, consistent with the predictions in Slobin (1985). Some of these types of errors are shown below. In Experiment 1, the most common error was to substitute the 3SGPRES form for the 3PLPRES suggesting that the 3PL is indeed more marked and likely to be avoided by first as well as early second language learners of Spanish. (Examples (10)–(17) below show the errors where 3SG was substituted for 1SG. Examples (18)–(20) show 3SG being substituted for 3PL forms.)

(10) *Yo está en cama.* (HG) ‘I am-3SGPRES in bed’

(11) *Yo no tiene Spongebob.* (HG) ‘I don’t-3SGPRES have Spongebob’

(12) *[Yo] no tiene muchos hermanos.* (IS) ‘(I) don’t-3SGPRES have many brothers’

(13) *Yo mete adentro los [carros].* (EM) ‘I put-3SGPRES (myself) into the cars’

(14) *Yo puede ganar mi papá.* (CH) ‘I can-3SGPRES win-INF my dad’ (‘I can beat my dad’)

(15) *Yo va a hacer un ‘pancake.’* (JC) ‘I am-3SGPRES going to make-INF a pancake’

(16) *Yo dice esta.* (EV) ‘I say-3SGPRES this’

(17) *Yo tiene un perro.* (MR) ‘I have-3SGPRES a dog’

(18) *(Los niños) quiere helado.* (IS) ‘(The kids) want-3SGPRES ice cream’

(19) *(Los niños) está brincando.* (MR) ‘(The kids) are-3SGPRES skipping’

(20) *Las niñas está dibujando.* (Z) ‘The girls are-3SGPRES drawing.’

Another thing to consider is that the verb meaning ‘to know’ in Spanish (*saber*) has an irregular 1SG form. The 1SG form is *yo sé* rather than *yo sabo*. Nearly all the kids said *no sé* (‘I don’t know’) during the course of the spontaneous speech recording, but some produced the form *no sabe* also when asked *¿sabes jugar?* (‘do you know how to play?’) by the Investigator. This suggests that when the irregular (correct) form was used it may be unanalyzed and therefore not recognized as being related to the infinitive *saber*. Another factor leading to this suggestion is that *no sabe* was not produced by any of the children spontaneously; it was only produced after the Investigator used the 2SG to question the children as to whether or not they knew something.

Additionally the 3SG verbs *tiene*, *está*, *dice*, and *va* (shown above (10)-(17)) are substitutes for irregular 1SG forms. Given these errors, it appears that to the children, using the 3SG form is more innocuous than creating an irregular form that has not yet been entered into the lexicon.

3.2.2 3SINGP errors

While the 3SINGP form was mentioned in Grinstead (2007) as a possible error of L1 learners, there were only 3 total errors of this type across utterances. These errors were deemed acceptable by Grinstead (2007) because they are often the same word as 1SGPRES forms but with a distinct stress pattern (e.g. *bailo* ‘I dance-1SGPRES’ and *bailó* ‘he/she danced-3SGPAST’). However, both children in the present study produced the same 3SINGP form *hizo* meaning ‘he/she did or made’ which is irregular in and of itself and thus differs from the 1SG form (*hago* ‘I do or I make’) of the same verb *hacer* meaning ‘to do or to make.’ Therefore, the argument that the stress pattern is somehow

altered when these forms are produced doesn't hold for the following forms ((21)-(23)) in which the 3SGPAST form is irregular. However, the form the children used did make use of the 1SGPRES ending (-o) so perhaps these forms are somehow being marked for 1SG .

(21) *Yo hizo (el collar)*. (CH) 'I made-3SGPAST the necklace'

(22) *Cual yo hizo*. (LT) 'Which (one) I made-3SGPAST'

(23) *[Yo] hizo una carta*. (LT) '(I) made-3SGPAST a card'

3.2.3 INF errors

It is important to note that the INF figure is not actually as high as it seems. While 18.52% of all errors are listed as being of this type, seven of the ten forms (or 70%) were uttered by one child. Thus the argument for using the Truncation Hypothesis (Rizzi (1993/1994)) to account for nonfinite forms in the child's verb agreement development is effectively null considering that the majority of children do not produce nonfinite forms. Therefore, they probably do not have truncated structures.

3.2.4 S/E errors

Because this study is more interested in overt agreement errors, the child utterances that lacked a main verb and were produced only with participles were eliminated from the totals in the adjusted summary table (Table 15). This type of error was not very common in the first place considering that it only occurred in 4 out of 59 errors (or in 6.78% of errors). It is important to note that this type of error is also in keeping with the MUSH (McCarthy (2007)), in that errors of omission avoid the

possibility of ‘feature clash’ in favor of (in this case complete) underspecification of forms.

3.2.5 NON errors

The NON(Form) errors made up 9.26% of the errors (and 1.72% of all utterances) in the adjusted table. It should be noted that there were only 5 total errors and that two occurred on irregular past tense forms. The three others were attempts at irregular present tense forms which all had the proper ending *-o*, which marks 1SG, but lacked a necessary stem change. This suggests that the children do have some sort of across the board morphosyntactic knowledge, contrary to Gathercole et al. (1999).

3.2.6 WF errors

Only one of the wrong form errors was an error of verb class. This is in stark contrast to the 13 errors that will show up in the adult results. CH simply substituted the 3SG *-ar* ending for the necessary 3SG *-er* ending producing *pierda* (‘he/she loses-3SGPRES-subjunctive’) instead of *pierde* (‘he/she loses 3SGPRES’). This error is one of those predicted by Slobin (1985), because the *-ar* infinitives are more numerous in the language and subsequently the input. Thus these are treated more as a default ending.

Additionally one child produced the 1SG form *tengo* (‘I have-1SG’) for 3SG subjects four times in different utterances. This is strange considering that the 1SG form should be more marked than the form for the intended 3SG subject. However, since the children in this study are older than typical first language learners perhaps the ‘I’ form

(1SG) is more available for use because they have already developed a sense of self. Again, this error was only produced by 1 child.

There were two strange past tense forms produced by EV in rapid succession suggesting that she got tongue-tied momentarily and switched the subjects and verbs. I suggest this reason because both of the forms are irregular past tense forms simply placed with the wrong subjects ((24) and (25)) and 2SG forms are noted (Aguado-Orea (2004)) to be more difficult to acquire. I would attribute these errors more to processing overload than anything else.

(24) *yo viste* ('I saw-2SGPAST')

(25) *tú hice* ('you did-1SGPAST')

The correct adult forms are *yo hice* 'I did-1SGPAST' and *tú viste* 'you saw-2SGPAST.'

3.2.7 Summary of child errors

Due to the high number of 'normal' errors, which make up the child data, the present assumption is that early SLA takes place much like FLA. The children made use of 3SG default forms for the majority of their errors (chiefly when referring to themselves), avoided the use of 3PL and 2SG forms and occasionally omitted auxiliary verbs in progressive constructions. All of these errors together suggest that the children retain the sense that 'feature clash' is worse than underspecification as suggested by McCarthy (2007) in her MUSH Hypothesis. In the errors that did involve feature clash only 2 children produced these 'strange' WF errors substituting 1SG forms for 3SG forms or not differentiating 1SG and 2SG past tense forms. Since past tense errors are not within the scope of this project, feature clash was only disobeyed by 1 child. Nonform

errors were limited to 1.68% of all child responses. The adult data below will now be evaluated to see if their errors pattern like those of the children.

3.3 Adult Data

In order to determine whether early second language acquisition and adult second language acquisition were truly two different things, I chose to run an elicitation experiment with beginning Spanish undergraduate students at UNC-CH. The following sections detail the experiment, summarize the results, and then compare the results obtained in the experiment with the results obtained above with the children.

3.3.1 Elicitation Experiment

This experiment was done to act as an adult second language control group for the early second language research described above. Fifteen undergraduate students and one graduate student control were recruited to participate in an elicitation task. Participants were shown a series of seven pictures and were given prompts in Spanish which asked them to describe what they were seeing. The group of adult subjects saw four of the pictures that the children saw during Experiment 1 and an additional three pictures showing a boy playing baseball, students in a classroom, and a few kids cooking over a campfire. The additional pictures were included because they were deemed more relevant to the adult age group and included vocabulary items typically taught in beginning and intermediate Spanish classes.

The pictures were used to elicit 3SG and 3PL verb forms from the subjects. Like the child participants, the adults were also prompted with the 3SG/3PL subjects from the

pictures they were seeing (e.g. *¿Qué pasa con el niño?* ‘What is happening with the boy?’). The utterances the subjects produced were evaluated based on the accuracy of subject-verb agreement. The pictures were presented in 1 of 2 set orders to the participants.

Either preceding or following the picture task, participants were asked three direct questions to elicit 1SG and 1PL forms as well as 2SG forms. The results of this experiment are described below.

The following tables show the counts and percentages by error type for the utterances produced by each participant. The same criterion that was used in coding the children’s spontaneous speech recordings was used to code the adult responses.

The age distribution for all participants included: one 17-year-old, four 18-year-olds, seven 19-year-olds, two 20-year-olds, and one 28-year-old. With the exception of one advanced undergraduate student and the graduate student, none of the adult participants had taken more than an intermediate level Spanish course and 53.33% of participants were enrolled in a beginning Spanish course when they participated in the study. The results from the graduate student control (P11) and the advanced undergraduate (P12) have been excluded, because the errors they produced were qualitatively different from the other participants in the study.

It should be noted that none of the fourteen participants were able to produce a 2nd person singular form when prompted. The prompt for this form was the question ‘What am I wearing?’ (*¿Qué llevo hoy?*). This prompt was created to elicit a response like ‘you are wearing jeans and a t-shirt.’ Since the goal of the experiment was to investigate the subjects’ ability to produce correct verb agreement, the subjects who produced a 1SG

response and described what they were wearing received a code for a correct response. This occurred in 62.5% of all participants. The other 37.5% of participants either produced no response or said they didn't know. This finding is consistent with Aguado-Orea (2004) who suggested that 2SG forms are among the hardest and latest forms acquired by children. It should also be noted that comprehension in this case also seems to be affected. The subjects were unable to analyze the investigator's question, which was produced with an overt subject, to respond appropriately. This result could also be attributed to the fact that the subjects were expecting all questions to refer to them, since they were participating in an experiment.

There were various errors where the wrong participles were used or tensed verbs were used in place of infinitives throughout the transcripts, but these errors were only coded as 'S/E errors' if the participles were used in place of a main verb. Other participle errors have been noted below. Dialogue with the interviewer and other forms that were spontaneously produced were coded as well. For example, if the student said *pienso que están en la playa* ('I think they are at the beach'), the verb *pienso* ('I think') was also coded for accuracy of agreement even though the subject was not prompted to produce a 1SG verb form.

Owing to the fact that the adult errors varied more across subjects than in the child data, each subject will be discussed separately rather than after all the data is presented. It is important to notice that even when verb agreement was correctly produced by subjects there were more extraneous factors which came into play than in the child data. Many subjects had problems with lexical items, selecting correct participles, and the correct verb class ending for producing an utterance. These errors

will be noted below and discussed further in the summary section to point out common trends. First I give the breakdown of errors for each individual participant.

3.3.2 Adult Subject Summaries

Table 16: P1 Summary

Error Type	Percentage and Count of all responses
Correct	68.18% (15/22)
3Sing	9.09% (2/22)
3SingP	4.55% (1/22)
S/E	4.55% (1/22)
NON	4.55% (1/22)
WF	9.09% (2/22)

One of the correct responses produced by P1 had an error of using the verb ‘to be.’ Both the verb *ser* and the verb *estar* mean ‘to be’ in Spanish, but the verb *estar* is used to form the present progressive tense. These types of errors will be noted throughout the results, but will not be counted as incorrect unless the agreement is incorrect. The error of choosing *ser* instead of *estar* is a lexical problem. In the spontaneous speech portion of the child responses only one of the children produced any *ser* versus *estar* errors. This one child produced only 3 errors of *ser* and *estar* and all of these forms displayed correct verb agreement. There was also one error of *ser* and *estar* in the elicitation task, but all other children differentiated *ser* and *estar* without problems. Eight of the fourteen adult subjects committed at least one error of this type. González (1978) indicated that *ser* and *estar* are used appropriately from the age of 2.0 in native Spanish

speaking children. The González (1978) finding could explain why the majority of the child subjects (aged 3-6 years) were able to differentiate these verbs, but the adults (aged 17-28) had more trouble, by linking lexical acquisition of *ser* and *estar* either to differences in input between the groups or age of acquisition.

Both 3SG errors were substitutions for 3PL forms and the 3SingP form was substituted for a 1SG form. The 3SingP substitution error noted in Grinstead (2007) occurs occasionally in L1 learners, because the forms are typically identical to the 1SG present tense forms, but the stress pattern is different. (See (26) below.)

(26) *Me relajó.* (form produced by P1)

- a. *Me* is the 1^{SG} reflexive pronoun
- b. *relajó* is the 3^{SG} past tense form for ‘to relax oneself’
- c. *me relajo* is the 1^{SG} present tense form for ‘I relax myself’

The NON error produced by P1 was actually inflected correctly for the subject, but the verb was invented. P1 said *se llava el perro* (‘?-3SGPRES-Reflexive the dog’), but the target utterance was *el chico lava el perro* (‘the boy washes-3SGPRES the dog’). Again, while agreement may be produced correctly, other errors abound in the adult utterances (i.e. as shown above P1 overuses the reflexive pronoun *se* and has a problem with lexical retrieval).

Here the WF errors were not expected within the L1 error predictions in that P1 produced a 1PL verb with a 3SG subject (e.g. *la familia estamos relajar.* ‘the family are-1PLPRES relax-INF’). This utterance has an error of agreement, a lack of reflexive pronoun, as well as a participle error. P1 should have said *la familia está relajándose* ‘the

familia is-3SGPRES relaxing-PROG themselves.’ Again, this adult has more than just agreement errors going on. This trend continues.

Table 17: P2 Summary

Error Type	Percentage and Count of all responses
Correct	100% (12 of 12)

This subject did not produce any errors.

Table 18: P3 Summary

Error Type	Percentage and Count of all responses
Correct	93.48% (43/46)
3Sing	2.17% (1/46)
INF	2.17% (1/46)
WF	2.17% (1/46)

The percentage of correct responses for this participant is potentially artificially high, because 14 of the responses coded as correct had the following errors: 6 past tense forms for present tense, 4 errors with the verbs *ser/estar*, and 4 participle errors. If these errors were placed into a separate error category of ‘other’ the percent correct would be 64.58%.

Again, the child subjects did not produce any of this type of participle error.

The WF error was also a problematic utterance because the subject used the verb ‘to be’ instead of the verb meaning ‘to exist.’ (See (27) below).

(27) ‘*Si estás un juego*’

- a. 'if (you) are-2SGPres a game' is the literal translation for this utterance.
- b. '*Si hay un partido*' is the attempted utterance meaning 'if there is a game...'

The 3SG error was a substitution for the 3PL form giving further credence to the difficulty of 3PL forms when compared with 3SG forms. Again, as the data from this participant suggests, the adults have other problems than just agreement that are simply unattested in the L2 child data.

Table 19: P4 Summary

Error Type	Percentage and Count of all responses
Correct	92.31% (12/13)
INF	7.69% (1/13)

Of the correct responses, six had errors of *ser* versus *estar* and one of those errors also had a participle error. So again, the percentage correct may be artificially high owing to the other problems that the subject has. The majority of the *ser* v. *estar* problems for P4 come from the malformation of the progressive tense by using *ser* instead of *estar*. Example (28) below shows an utterance produced by P4 that has an error that substitutes *ser* where *estar* should be used, and past participles where progressive participles should be used.

(28) *ellos son bebido y comido*. (Literally this means 'they are-3PLPRES eaten-PastParticiple and drunk-PastParticiple')

The target utterance for P4 is *ellos están bebiendo y comiendo* 'they are-3PLPRES eating-PresParticiple and drinking-PresParticiple.'

The INF error occurred in response to the question *¿Qué hacen Uds. durante el fin de semana?* ('What do y'all do during the weekend?'). The participant responded *hablar por teléfono* 'talk-INF on the phone' instead of saying *hablamos por teléfono* 'talk-1PLPRES on the phone.' This is not a situation where an infinitive would be acceptable in the target language.

Table 20: P5 Summary

Error Type	Percentage and Count of all responses
Correct	45.45% (5/11)
3Sing	9.09% (1/11)
3SingP	9.09% (1/11)
WF	36.36% (4/11)

Both of the 3rd person singular forms (present and past) were substituted for 1st person responses. (See (29) and (30) below.)

(29) *No comprende* means 'He/she doesn't understand'

(30) *Durmió mucho* means 'He/she slept a lot'

For each of the two previous utterances the subject meant to say 'I don't understand' (31) and 'I sleep a lot' or 'I slept a lot' (32).

(31) *No comprendo*

(32) *Duermo mucho* or *Dormí mucho*

Three of the four WF errors all technically agreed in person but did not agree in terms of verb class. The utterance *[la] familia pase tiempo en la playa* 'the family spends-3SGSUBJ time at the beach' was used instead of *la familia pasa tiempo en la*

playa ‘the family spends-3SGPRES time at the beach.’ All of the verb class errors substituted *-er* endings onto *-ar* verbs, which is exactly opposite of what is expected according to Slobin (1985). As mentioned previously, regularization along the *-ar* verb paradigm occurs because *-ar* verbs are the most numerous of all verbs types. Since we see the opposite pattern in the adult errors, something else must be going on. The exact same pattern of substituting *-er* endings for *-ar* verbs (instead of substituting *-ar* for *-er* endings) is attested across all adult subjects.

The other WF error was the use of the 1SGPAST form ‘*jugué*’ (‘I played’) instead of the 3SGPRES form ‘*juega*’ (‘he/she plays’).

Table 21: P6 Summary

Error Type	Percentage and Count of all responses
Correct	65% (13/20)
3Sing	20% (4/20)
WF	15% (3/20)

Two of the WF errors were verb class errors (the present subjunctive forms were used instead of present indicative forms). Again, these verb class errors attached endings from the *-er* verb paradigm to *-ar* verb stems. The other WF error was a substitution of the 1SGPRES ‘*lavo*’ (‘I wash’) for the 3SGPRES ‘*lava*’ (‘he/she washes’). For this error P6 first said the correct form and then produced the incorrect form. Also, of the correct forms there were two *ser* v. *estar* errors and one participle error within a verb phrase (e.g. *están estudia* ‘(they) are-3PLPRES study-3SGPRES’).

Table 22: P7 Summary

Error Type	Percentage and Count of all responses
Correct	88.89% (16/18)
NON	5.56% (1/18)
WF	5.56% (1/18)

Of the correct responses, one had an error of *ser* v. *estar* and one substituted a past tense form for a present tense one. The WF error was a verb class error, again substituting the 3SG *-er* present tense ending for the *-ar* ending. The interesting thing about this form is that it was uttered as a perfectly correct subjunctive form even though an extra vowel (for the ending) must be inserted for pronunciation. That is, the 3SG ending for *-er* verbs in the present tense is *-e*, but the 3SG subjunctive form of verb *jugar* ‘to play’ is *juegue* ‘(he/she) plays-3SGsubjunctive’, with the extra ‘u’ added after the ‘g’ for pronunciation. The other error was on the same verb *jugar* ‘to play’, but was produced *juga* which has the correct *-ar* ending but is not a word in Spanish. The verb *jugar* ‘to play’ has a stem change in the present tense such that the 3SGPRES tense form is *juega* ‘(he/she) plays-3SGPRES.’ The nature of these errors is most definitely related to the irregular paradigm of the verb in question. Errors of this type were only produced by one child subject.

Table 23: P8 Summary

Error Type	Percentage and Count of all responses
Correct	80.77% (21/26)
INF	3.85% (1/26)
WF	15.38% (4/26)

Of the correct forms one had an error of *ser* v. *estar*. The WF errors consisted of two verb class errors and two substitutions of 1SGPRES forms for 3SGPRES forms. (See (33) and (34).)

(33) *El niño lavo* ‘the boy 1SGPRES-wash’

(34) *El niño quiero* ‘the boy 1SGPRES-want’

It should also be noted that P8 produced the INF error with an overt plural subject as seen in (35) below.

(35) *los dos padres beber una resfresca* ‘the two parents drink-INF a refreshment’

This example supports the MUSH (McCarthy 2007) in that infinitives are the least marked verb forms and the adult would rather produce an underspecified form than produce an incorrect one. However, more evidence is needed to see whether or not further support for this hypothesis is obtained across subjects.

Table 24: P9 Summary

Error Type	Percentage and Count of all responses
Correct	66.67% (8/12)
WF	33.33% (4/12)

Of the WF errors two were verb class errors and the other two errors were substitutions of 3PLPRES forms for 3SGPRES subjects. (See (36) and (37))

(36) *la familia están* ‘the family are-3PLPRES’

(37) *la familia comen* ‘the family eat-3PLPRES’

When 3PL forms like (36) and (37) were produced by the children in Experiment 1 to refer to ‘the family’ they were counted as correct when produced with a null subject (see

discussion above in §3.1.1). However, because there are overt subjects in these utterances P9 does not avoid ‘feature clash.’

Table 25: P10 Summary

Error Type	Percentage and Count of all responses
Correct	100% (13 of 13)

P10 committed one error of *ser* v. *estar*.

Table 26: P13 Summary

Error Type	Percentage and Count of all responses
Correct	92.0% (23/25)
WF	8.0% (2/25)

The WF errors are shown below.

(38) *Solo [un] niño tengo dinero* ‘only one boy have-1SGPRES money’

(39) *Mis amigas y yo pasaron tiempo en nuestras camas.* ‘my friends and I spent-3PLPAST time in our beds’

Again, these WF errors have overt ‘feature clash’ rather than a substitution of underspecified (default) forms.

Table 27: P14 Summary

Error Type	Percentage and Count of all responses
Correct	64.71% (11/17)
NON	17.65% (3/17)
WF	17.65% (3/17)

The three WF errors were verb class errors substituting 3SG (1) and 3PL (2) *-er* endings for *-ar* endings on the *-ar* verbs *jugar* ‘to play’ and *estudiar* ‘to study.’ The NON forms did have correct agreement, but did not show the correct stem change or used the invented ending *-in* rather than *-an* to mark a 3PLPRES verb.

Table 28: P15 Summary

Error Type	Percentage and Count of all responses
Correct	79.17% (19/24)
3Sing	4.17% (1/24)
WF	16.66% (4/24)

Of the correct responses two had participle errors and one had an error of *ser* v. *estar*. Three of the WF responses substituted the 3PLPRES form for a 3SGPRES subject and one substituted a 2SGPRES form for a 3PLPRES form. (See (40).)

(40) ‘*Las niñas tienes crayons*’

the girls 2SGPRES-have crayons

The error shown above (40) is particularly strange because 2SG forms are said to be among the last acquired and most difficult in L1 acquisition and thus are not expected to substitute or act as a default for other forms. Additionally P15 substitutes a 3PL form for a 3SG form which is strange in that the 3SG form is taken to be the first form acquired and a default form. We only see one substitution error of this type in the child data.

Table 29: P16 Summary

Error Type	Percentage and Count of all responses
Correct	88.88% (16/18)
S/E	5.56% (1/18)
WF	5.56% (1/18)

Of the correct responses one response had a participle error. The WF error was a substitution of the 3PLPRES for the 3SGPRES form. Again, this WF error is not expected to occur if adult SLA is like FLA.

The following table (30) shows a summary of all errors produced by the adult subjects. The table (32), to follow, contains the adjusted total errors with verb class errors that had the correct person/number agreement counted as correct and S/E omission errors deleted from the counts. The adjusted adult figures will serve as the basis for comparison with the adjusted child data.

Table 30: Summary of all adult responses

Error Type	Number of errors of total errors	% of total errors	% of total responses
3Sing	9/50	18.0%	2.35%
3SingP	2/50	4.0%	0.72%
INF	3/50	6.0%	1.08%
S/E	2/50	4.0%	0.72%
NON	5/50	10.0%	1.81%
WF	29/50	58.0%	10.47%
Total Incorrect	50/277	--	18.05%
Total Correct	227/277	--	81.95%

The table below shows what types of WF errors were produced. The errors have been divided into groups based on what occurred. There are verb class errors, errors of 3PLPRES for 3SGPRES subjects and then various seemingly idiosyncratic errors.

Table 31: Summary of WF errors by type

WF error type	# of errors
Verb Class error	13
3 rd plural pres for 3 rd sing pres	6
1 st sing pres for 3 rd sing pres	4
1 st plural pres for 3 rd sing pres	2
2 nd sing pres for 3 rd plural pres	1
1 st sing past for 3 rd sing pres	1
2nd sing pres for 3 rd sing pres	1
3 rd plural past for 1 st plural pres	1

If verb class errors are taken out of the mix, 3PLPRES for 3SGPRES errors occurred six times and 1SGPRES for 3SGPRES occurred 4 times. Neither of these types of errors are predicted by the literature on FLA. This suggests that the adult data displays a different type of language acquisition. While the L2 children did rely mostly on the 3SG default form, we see the adults using the 1SG and 3PL to substitute for other forms. This cannot be explained using the MUSH. Thus there must be something else going on in adult SLA. The summary table (33) below shows the adjusted percentages obtained for each error type across subjects and groups.

Table 32: Adjusted Summary of all adult responses

Error Type	Number of errors of total errors	% of total errors	% of total responses
3Sing	9/35	25.71%	3.27%
3SingP	2/35	5.71%	0.73%
INF	3/35	8.57%	1.10%
NON	5/35	14.29%	1.82%
WF	16/35	45.71%	5.82%
Total Incorrect	35/275	--	12.73%
Total Correct	240/275	--	87.27%

Table 33: Comparative Error Percentages (Child and Adult)

Error Type	% of Child errors	% of Child utterances	% of Adult errors	% of Adults utterances
3Sing	53.70% (29/54)	9.97% (29/291)	25.71% (9/35)	3.27% (9/275)
3SingP	5.56% (3/54)	1.03% (3/291)	5.71% (2/35)	0.73% (2/275)
INF	18.52% (10/54)	3.44% (10/291)	8.57% (3/35)	1.10% (3/275)
NON	9.26% (5/54)	1.72% (5/291)	14.29% (5/35)	1.82% (5/275)
WF	12.96% (7/54)	2.41% (7/291)	45.71% (16/35)	5.82% (16/275)
Total Incorrect	-----	18.56% (54/291)	-----	12.73% (35/275)
Total Correct	-----	81.44% (237/291)	-----	87.27% (240/275)

3.3.3 Discussion

From the results obtained, it appears that the adult subjects were slightly more accurate on agreement than the child subjects were. This figure may be misleading because there were a few subjects from the adults that produce no errors which artificially inflates the group's average for percent correct. Additionally the adults committed many other errors (participles, *ser* v. *estar*) that were not counted because the agreement was correct. However, the child data did not contain these other errors. If those errors were counted as incorrect forms the percentage correct for the adult data would drop to **78.18%** across forms making the quantitative difference in error rate between groups much smaller. These data are important facts to consider. This will be discussed further in Chapter IV.

Statistical analysis was performed on the compiled comparison data which modeled the probability that producing a 3sing error is a function of age group (adult v. child). This was investigated using logistic regression adjusting for multiple observations within subjects. The probability of the observed results under a null hypothesis of equal rate between groups is 0.0421. This suggests that the null hypothesis should be rejected and that there is a significant difference between groups with respect to their production of the 3Sing form as a default type of error. In other words, as a group, the children do make consistent use of the 3SG forms as a default form (just like the L1 learners) whereas the adult group does not. While statistical analysis was not obtained for the use of 3sg as a percentage of all errors, the comparison data across groups is still striking. Of all errors produced by the child group, 53.70% of those errors were 3sg errors, whereas 3sg errors constituted only 25.71% of all errors in the adult group.

CHAPTER 4

CONCLUSIONS

The purpose of this thesis was to test whether the errors produced by child and adult second language learners indicated that morphosyntax was acquired in a similar manner to first language acquirers of Spanish. If not, I wondered if the child and adult learners would demonstrate similar patterns to each other (but distinct from FLA) or if I would find three distinct types of acquisition. While this study was necessarily abbreviated because of constraints on time and resources, there are several important conclusions to be drawn from this research.

First of all, looking only at the comparative percentages in Table 33 it would appear that adult learners are better overall at producing proper agreement than the children are. However, one does not have to look very carefully to find out that the adult group produced error-ridden verb phrases. The adults had problems with lexical retrieval by not knowing how to differentiate *ser* from *estar* and did not display solid knowledge about verb modality (and if requisite participles should be past or present). These errors cannot be ignored, but neither can the fact that only 12.73% of the utterances produced by adults displayed overt agreement errors.

The adult learners in the study were quite successful (overall) at producing verbs that agreed with the intended subjects. The trouble for this analysis comes when we look at the errors that were produced. As shown in Table 33, the most common errors

produced by adults were WF (or wrong form) errors. This type of error constituted nearly half of all the errors committed and, as a group, are largely unpredicted based on how FLA typically proceeds. This is particularly true when we observe that the adults most often substituted 3PL forms for 3SG forms, which directly opposes the idea of the 3SG default form. The MUSH assumes that if the speaker doesn't know which form to place, an unmarked form (like 3SG) should be inserted rather than a more marked plural form.

While the previous finding was surprising from a FLA standpoint, I must make mention also of the verb class errors committed by the adults, which are even more surprising. Even though verb class errors (that displayed correct person/number agreement) were removed from the adjusted figures, the adults produced 13 of these errors. According to Slobin (1985), verb class errors do occur in FLA when children overgeneralize from the *-ar* paradigm to *-er* and *-ir* verbs in the present tense. This tends to occur because *-ar* verbs are the most numerous in Spanish, and thus *-ar* endings are taken by children to be somewhat of a default ending. Only one child produced an error of this type in the study and it followed the predicted pattern. The adults, on the other hand, produced many more errors of this type, but in the wrong direction. That is, every one of the 13 verb class errors was the result of *-er* endings being attached to *-ar* stems. These results are not expected, since the *-er* paradigm should not operate as the default morphology. We cannot assume that the groups necessarily have qualitatively equivalent input in terms of the percentage of verb types heard. This difference in input could offer one explanation as to why the adults might conceptualize 'default

morphology' in a different way than the children. The findings of Albright (2002) offer another possible explanation for these findings.

Albright (2002) conducted an experiment with Italian speakers in which he asked them to rate nonce verbs with endings from all of the Italian verb paradigms. Although *-are* verbs are the most common type of verb, nonce verb forms with *-ere* verb endings were accepted most reliably by all subjects as being possible derivatives of an *-ere* verb stems than any other verb type. This could be taken to mean that it is possible that *-er* endings in Spanish, though not supposed to be the default endings, are readily accepted by the adult participants as default endings for phonological or phonetic reasons.

In terms of the child errors, the most numerous are the 3Sing errors followed by the INF errors. The forms produced by the children did resemble in large part what would be expected from a group of L1 children. Accuracy on 3PL forms was indeed reduced when compared with 3SG forms (as shown in Experiment 1 and predicted by Slobin (1985)). Additionally, these findings support the MUSH proposed by McCarthy (2007) in that the children used default forms (3SG) most often to substitute for other forms. Because not all forms were produced with equal frequency, and some were not produced at all, it is impossible to evaluate the validity of Radford & Ploennig-Pacheco's (1994) claim that the use of a default 3SG form should occur equally across all subjects (1SG, 2SG, 1PL, 3PL). However, it is obvious that the children did prefer to insert underspecified (default) forms where the adults generally did not appear to recognize the need to avoid feature clash.

Since the main scope of this project was to look at early SLA, I am convinced that the preceding data demonstrate that early second language acquisition of Spanish is

related most closely to first language acquisition of Spanish and proceeds in a qualitatively different way from adult second language acquisition. It remains to be seen whether the excessive number of extra errors produced by the adults was unique to the subjects tested, a function of the elicitation task or whether it is simply characteristic of adult SLA of Spanish.

The quantitative similarity across groups lends further support to the argument that both early SLA and adult SLA have full access to UG. I say this because the morphosyntactic knowledge displayed by both the adults and the children suggests that both groups do in fact have functional second language syntax. The qualitative differences observed support the claim made by Blom (2006) that the adults do not use syntactic information as well as the children. Evidence for L1-like use of syntactic information comes from the fact that the children in this study appear to perform similarly to the 3 year-old participants in the Bedore & Leonard (2001) study in terms of general error rates (~15% from Bedore & Leonard (2001)) and their use of the 3SG default form (~35% of all errors in Bedore & Leonard (2001)) as the most frequent error across subjects.

As mentioned above, the adults did display morphosyntactic knowledge and were able to produce accurate forms consistently. These results lend support to the MSIH as described by Prévost & White (2000b) in that while there is some morphosyntactic competence in the L2, errors are produced, but rather unpredictably. This is certainly shown through the adult data discussed above. The fact that so many extra errors were produced by the adults also shows that they are somehow less in tune with all the syntactic properties that the children seem to absorb more easily. This seems to suggest

that there is an age effect which prohibits the adults from acquiring those syntactic structures implicitly. I would venture to say that this could be attributed to L1 interference and the need for more L2 input before certain parameters may be reset.

Overall, the data from the child group of second language learners in this study appear to give solid support for the MUSH (so named by McCarthy (2007)) in the use of the 3SG default form to substitute for other forms and in the general avoidance of ‘feature clash’ displayed by low WF error rates. The adult data best supports the MSIH as it is described in Prévost & White (2000b) in that the group displayed morphosyntactic accuracy in approximately 87% of all utterances, but produced less predictable errors which could be attributed to performance errors rather than underlying syntactic deficits. In further research, I would like to explain why the adult group had more extraneous errors than the child group and what could be responsible for those errors. I would like to see if these errors could be attributed to a deficit in comprehension by designing an appropriate comprehension task. Also, it remains to be seen what type of syntactic information, if any, the adults are disregarding when compared with the child group and if that could be the reason that they commit the ‘extra’ errors presented in this research.

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