MASTER IN ADVANCED ENGLISH STUDIES: LANGUAGES AND CULTURES IN CONTACT

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Final Master Thesis

Title: The Acquisition of English Morphological Markers in Language-Contact
Situations

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The Acquisition of English Morphological Markers in Language-Contact Situations

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Signature-

Abstract

The way in which children acquire languages and all their defining features has being one of the main research areas during the last centuries. A vast amount of work has been made in order to find out the processes and developmental stages that children undergo when acquiring their first language or languages. The present paper analyzes the speech of three English monolinguals and three Spanish-English bilinguals in order to examine their acquisition of three –s morphological markers (plural, possession and third person simple present tense). Given that the focus is on the acquisition process of the child, speech from the early stages of linguistic development has been analyzed in order compare the production of Spanish-English bilinguals and English monolinguals. The study shows that more similarities than differences characterize the monolingual and the bilingual acquisition of these morphological features of the English language.

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1. Introduction

"Language is so tightly woven into human experience that it is scarcely possible to imagine life without it."

(Pinker 1994, 17)

Language faculty is said to be one of the most human characteristics of mankind. Even though there are other animals who communicate with each other, humans use a system that is unique to our species. A vast amount of research has been carried out in order to explain the processes of acquisition that we undergo as children and quite a few theories have arisen as a consequence. Experts have become interested more recently in the acquisition of more than one language at a time, a topic which has also inspired numerous studies.

This study takes as a point of departure studies on the acquisition of one first language (L1) as well as those on the acquisition of two languages from birth (2L1) and aims to contribute to these with a further analysis of the acquisition process by focusing on the acquisition of particular morphological aspects of the English language.

The present study analyzes, in particular, the acquisition of the following English morphological markers: the nominal plural –*s* marker, the nominal possession – '*s* marker, and the verbal –*s* marker (third person simple present tense). A comparison of their acquisition in English monolinguals and Spanish-English bilinguals will be offered through the analysis of data – comparing adult-like and non-adult-like forms – from six children of an early age (three of them are monolingual and three are bilingual).

Before presenting the empirical work, an introduction of the different approaches and theories about first language acquisition in monolinguals and bilinguals will be offered in the first sections (focusing on specificities that form part of the acquisition of two languages in childhood such as language mixing, the effects of language transfer, or the dominance of one language over the other).

Section two will focus on the acquisition of morphological markers, as it is the part of language this study centers on, the developmental sequences that children (monolinguals and bilinguals) follow in the process of acquisition, as well as an overview of the previous studies related to the acquisition of morphological aspects of the English language.

Sections three, four and five include the empirical study carried out. The basis for the empirical study will be developed in section three through the presentation of certain objectives and hypotheses, an explanation about the selection of the participants; and the data selection and data classification. In section four, the results of the empirical study will be presented first separately for monolinguals and bilinguals and then followed by a comparison between the results obtained from both speaker groups. Section five deals with a discussion about results presented in the previous sections, and it offers a more detailed analysis of the data having in mind the initial hypotheses previously established.

Section six states the conclusion, in which a summary of the study and its results will be offered as well as some proposals for further research.

2. Theoretical and Empirical Background

In this section an overview of the main ideas discussed in language acquisition research will appear. First of all the main theories about first language acquisition will

be developed. Given that monolinguals and bilinguals undergo somehow different developmental stages and that they do not share the same linguistic environment, the next sub-section will focus on the effects of language transfer and other effects of the acquisition of two languages in childhood. Finally, the last sub-section will be centered on the acquisition of morphological markers, as it is the topic of the present study.

2.1 Monolingual and Bilingual First Language Acquisition

Language faculty is something thought to be exclusively human. This capacity has been investigated by researchers since the beginning of the past century and quite a few theories about its acquisition and nature have arisen since then.

In the 60's the study of language took researchers to the notion of Universal Grammar (UG) in order to explain the innate language acquisition device which makes humans biologically programmed for language, which became one of the first solid theories in the field. UG, therefore, may be regarded as "the genetically determined language faculty" (Chomsky 2004, 16). The innatist perspective regards language as a part of the human genetic endowment, and relies on their innate components for its acquisition. What is more, UG is seen as common to all speakers, regardless of the language they are exposed to and of any socio-economic conditions (Pinker 1984).

Other theories about language acquisition give more importance to the environment than to any neurological factors, as it is the case of connectionists. They believe that individuals learn through exposure to the language. According to them, learners analyze the input they receive in order to attain its acquisition, that is, they have to "figure language out" (Ellis 2002, 144).

Another theory about the process of acquisition emerged in the 1940s and 1950s in the United States headed by Skinner, and this was behaviorism. The behaviorist theory regarded language acquisition as a process based on imitation and practice.

All these theories were linked to many other hypotheses which appeared in the mid of the past century in order to explain language faculty.

Even if scholars disagree about the steps humans follow when acquiring language, and have supported different theories about the acquisition and learning processes, all approaches agree about how fascinating human capacity for communication is, being it innate, biological or acquired due to the environmental characteristics that surround us or through imitation.

Thus, and regardless of how we account for it, the fact is that every child exposed to language ends up acquiring it during the first years of his or her life. After a period in which children produce only spontaneous vocalization, they move towards a phase of differentiation of phonemes to one-word sentences, two-word sentences and the acquisition of more complicated grammatical features and structures (Piaget and Inhelder 2004).

This capacity of young children to acquire their first language is already puzzling enough and occupies a lot of the work of researchers; however, children are capable of much more. There are children who grow up exposed to more than one language, and they acquire them just as monolinguals do. They have to acquire two or more morphosyntactic systems, two or more sound systems, etc., and they manage to acquire them simultaneously. Bilinguals (2L1 bilinguals) start learning a second L1 from birth to the age of three (McLaughlin 1984) and they already master both L1s after that age.

Therefore, all children exposed to one or more languages from birth are capable of its or their acquisition during the first years of their lives.

2.2 The Effects of Language Transfer and Language Dominance

Therefore, monolinguals' language acquisition is in a way different from that of bilinguals', because of bilinguals' exposure to two languages from birth.

In the case of 2L1 bilingual acquisition, two issues have centered most of the debate: on the one hand, the nature of the initial stages of acquisition and its relation to code-switching and, on the other, the issue of dominance.

On the one hand, some researchers argue that bilingual children mix both languages initially as if they were one, separating them into two different languages as their linguistic development proceeds – two different language systems – (Genesee 1989), while others argue that initially bilinguals create a third different system in which both languages appear mixed – one single language system – (Cook 1992). Language mixing and code-switching is very common in bilingual children in the earlier stages of acquisition and that has led some researchers to think that children do not distinguish between the two languages, i.e. that they mix them in one single system or in the so-called third grammar. However, the fact that 2L1 bilingual children mix just as 2L1 bilingual adults and use one language or another depending on the social context they are in, i.e. if they are surrounded by adults who only speak one language they adapt to that linguistic environment (Lanza 1997), means that children actually distinguish both languages and separate them in two different systems. Therefore, the theory of one single system appears to be unfounded and bilingual children actually create separate systems for each language from the initial stages of acquisition.

On the other hand, and taking into account the linguistic context, either social or family one, in which the child acquires the two L1s, usually one of the languages is predominant in the child's environment and this predominance may have its effects on the child's language acquisition. Even though children separate them into two different systems, one of the languages they acquire usually becomes the stronger one, or the dominant one. This can be due to external factors, such as the preference of the community children live in for one language over the other or to language-internal factors, such as the linguistic strength of specific features in either of the two languages. In any case, the stronger language may influence the weaker in such ways as the transfer of specific properties from the dominant one to the other one (Yip and Matthews 2007).

Therefore, bilingual children create two systems, one for each of their L1s, but their development needs not be totally balanced when comparing between their two L1s so that one of the languages could be developed sooner than the other.

Further research in this field provides more information about the influence of each language in the development of the child's linguistic abilities, taking into account the possible unbalanced input and the usual dominance of one language over the other. Hulk and Müller (2000), for example, argued that the influence of both languages one over the other has nothing to do with the child's proficiency in the two languages. Given that language influence occurs and that it is unrelated to the balanced or unbalanced knowledge that the child has of his or her two L1s, Paradis and Genesee (1996), established three forms in which language influence can occur:

1. Transfer: a grammatical property is incorporated into one language from the other.

- 2. Acceleration: a property emerges early in bilinguals as compared to monolinguals.
- 3. Delay: a property emerges late in bilinguals as compared to monolinguals.

Transfer refers to the interdependence of the two L1s and how one of the languages is used by the child as a guide for the other as regards certain grammatical properties. In this sense, we may think that the dominant language will always be the one from which the child will transfer to the weaker. However, certain types of language influence take place in a different direction, i.e. the other way round, which is from the weaker to the stronger language (Hulk and Müller 2001). Acceleration and delay, on the other hand, refer to the precocious or postponed development in one of the two languages taking as a reference monolingual development.

2.3 The Acquisition of Morphological Markers

The first works done on the nature of language acquisition provided future investigations with a base to work on. Those first studies inspired analyses about children's acquisition of specific grammar properties (like those of Berko (1958), Brown (1973), Ervin (1964), etc.), which demonstrated that from the end of the second year a gradual acquisition of grammatical structures follows (Piaget and Inhelder 2004). However, this acquisition is different for monolinguals and bilinguals because of the particularities that characterize bilingual acquisition (as seen in the previous section).

In what follows, we first provide an overview of the acquisition of morphological markers in general, and then we deal with comparing monolinguals and bilinguals.

Children's initial domain of morphology is the word (Clark 2009). They need time in order to learn how to use affixes and make a correct use of inflections. The first step is to start distinguishing word-classes and at this initial stage non-adult-like forms appear, too. Children start learning the regular rules, those that apply to a major number of cases, and overgeneralize them until they learn the irregular ones, as the following examples in (1) and (2) show for the formation of past tense and plural:

(1) Regularized irregular past tenses:

I *<u>catched</u> it. He *goed to the store.

(2) Regularized irregular nominal plural formations:

I can touch my *feets.
The cat runs after the *mouses.

Berko's (1958) work already provided evidence in this respect. The study analyzed children's knowledge of English morphological rules. In order to show that children were perfectly aware of the regular rules nonsense materials were used. A number of words were made up – like *gutch*, *wug*, *kazh*, *lun*, etc. In that experiment, and in relation to morphology, Berko demonstrated that children between four and seven years of age were able to operate with morphological rules which were clearly delimited (Berko 2004), and that there was no difference between boys and girls.

Thus, at the age of three children already manage the usage of the majority of regular morphological markers, whereas mastering the irregular ones takes more time and sometimes it is not completed until the school years (Lightbown and Spada 2006, 2-3).

Once research work established a more or less concrete age range for the acquisition of morphological markers, other studies focused on other aspects of the

acquisition of that area of language. For instance, Brown (1973 and 2004) analyzed data obtained from three English monolingual children in order to establish the order of acquisition of the different English morphological markers. He studied 14 morphemes and established the order that is shown in table 1:

Table 1. Order of acquisition of 14 morphemes (Brown 1973 and 2004)

- 1. Present progressive
- 2-3. *in*, *on*
- 4. Plural
- 5. Past irregular
- 6. Possessive
- 7. Uncontractible copula
- 8. Articles
- 9. Past regular
- 10. Third person regular
- 11. Third person irregular
- 12. Uncontractible auxiliary
- 13. Contractible copula
- 14. Contractible auxiliary

(Brown 2004, 277)

Table 1 shows the results from Brown's study of three English monolinguals, and it can be seen how the present progressive -ing marker is the first one to be acquired, whereas in, on, the plural -s marker, the possession -s marker and the third person regular -s marker appear later on the list.

Brown (1973) also linked the initial appearance of grammatical morphemes to the length of the utterances produced by the children, that is, the so-called MLU (Mean Length of Utterance), which measures the length of the utterance in terms of the number of morphemes. Brown proposed 5 stages of development according to the MLU values, so that a correlation was established in the case of L1 acquisition between the length of the utterance and the developmental stage of the child. Those initial stages of grammatical development also established a connection between MLU range and the initial appearance of grammatical morphemes (those started to appear in stage 2, where

the MLU range corresponded to 2.00-2.49) (Vainikka and Young-Scholten 2013, 586). That means that children between 20 and 28 months, that is, between one year and a half and two years of age, start using morphological inflections.

As argued before, children in general seem to acquire morphological markers among similar age ranges (and MLU ranges) and following similar developmental stages. However, should we expect bilinguals to follow the same developmental stages as monolinguals? How does the fact that they acquire two different languages influence their acquisition of morphology? Would the fact that they are acquiring two linguistic systems make their acquisition process slower if compared to monolinguals?

On the one hand, bilinguals are sensitive to structural differences between their two L1s from the start (Clark 2009, 348), and that may make us think that they follow the same developmental stages as monolinguals. On the other hand, even if they are sensitive to some differences, usually there is one of the two L1s which becomes dominant. Thus, even if bilingual children are aware of the differences between their two first languages, they are affected by issues such as language mixing and language transfer. All these factors may suggest that monolinguals and bilinguals do not actually follow the same developmental sequences, that is, that they may acquire the different grammatical morphemes studied by Brown in a different order. That difference in the order of acquisition may be due to issues such as the languages' morphosyntactic properties, the dominance of one language over the other, etc.

Brown's study provided researchers with a ground to work on and other studies about the acquisition of grammatical morphemes in different linguistic situations appeared. In fact, different cross-sectional studies, inspired by Brown's study, suggest

various possible stages and orders for the acquisition of different morphological markers, as shown in table 2 and table 3:

Table 2. Order of acquisition of morphemes: L1 versus L2

de Villiers and de Villiers (1973): L1	Dulay and Burt (1973, 1974): L2
Plural –s	Plural –s
Progressive –ing	Progressive –ing
Past irregular	Contractible copula – 's
Articles	Contractible auxiliary – 's
Contractible copula	Articles
Possessive – 's	Past irregular
3 rd Person sg –s	$3^{\rm rd}$ Person sg $-s$
Contractible auxiliary	Possessive – 's

(Vainikka and Young-Scholten 2013, 588)

Table 3. Order of acquisition of morphemes 2L1 (Padilla' 1978)

A (2;6-3;9)	B (4;3-4;11)	C (5;1-6;4)
		_
1.5	1	2
6	6	7
4	4	2
3	2	5
7	13	11
-	-	13
9	8	9
5	3	5
1.5	7	2
11	11	12
8	12	14
-	10	10
10	5	5
12	9	8
	1.5 6 4 3 7 - 9 5 1.5 11 8 -	1.5

(Padilla 1978, 167)

In table 2 two studies appear. On the one hand, the cross-sectional study of de Villiers and de Villiers (1973) presents the order of acquisition of 14 grammatical morphemes by 21 monolingual English-speaking children between 2;4 and 3;4 years of age. On the other hand, Dulay and Burt (1973, 1974) collected data from 211 Spanish-speaking and 55 Chinese-speaking children from 6 to 8 years of age, who were learning

English as their second language (L2), in order to find out the order of acquisition of the same 14 grammatical morphemes.

In table 3 Padilla's (1978) study of 18 Spanish-English bilingual children is shown. In this study Padilla attempted to follow the previous ones, separating the children in different groups according to their age and establishing an order of acquisition of the same 14 grammatical morphemes for each age group.

The comparison of the information depicted in table 2 and table 3 shows that differences in the order of acquisition of inflections appear in the case of children who learn one language, two languages at the same time and one language after their L1 (as in the case of the irregular past in 3rd, 6th, and 5th place respectively). However, there are also some similarities as regards certain markers which appear to be acquired more or less at the same time for each group (the progressive –*ing*, for example, appears in the first stages of linguistic development in all groups).

The present study focuses on three of the –s markers that appear in English and that refer to possession, plural and third person present simple tense. These morphemes occupy a different place in each of the tables above, showing that different learners acquire them in a different order and at a different stage of their linguistic development. In order to contribute to this debate on the order of acquisition of morphemes, the empirical study depicted in the sections below has been carried out.

3. The Empirical Study: Methodology

This section is divided into three parts. In the first one the objectives of the study as well as the hypotheses it seeks to test are outlined. In the second one the corpora and

participant selection is presented. Finally, the third part includes the data classification and its analysis, taking into account that in the case of the bilingual participants only English will be analyzed, leaving aside their other L1, since the language under study in the present research is English.

3.1 Objectives and Hypotheses

The aim of this study is to analyze the acquisition and usage of English morphological markers in the spontaneous production of English monolingual children and English bilingual children. The morphological markers that this study focuses on are the three –*s* markers that appear in the nominal and verbal morphology in English: possession ('s), regular plural (-s), and third person singular simple present (-s). Through the exploration of the spontaneous production of the participants, this study aims to offer a comparison between monolingual and bilingual acquisition, as well as an analysis of language transfer in bilinguals and its effects as regards the acquisition of the markers we are concerned with.

The study will address the issues outlined below and will attempt to prove the hypotheses that follow in each case. These refer, on the one hand, to the comparison between English monolinguals and English bilinguals and, on the other hand, to the possible individual differences among bilinguals.

With respect to the monolingual-bilingual dichotomy, the following three issues and their corresponding hypotheses will guide this research:

1. Age of acquisition. Section 2.3 above addressed the issue of when morphological markers are typically acquired in English. Given that bilinguals have to acquire two languages simultaneously, that is, two

grammatical systems, this could result in bilinguals suffering the effects of language influence which, according to Paradis and Genesee (1996), can appear in three different forms – language transfer, acceleration and delay – (as seen in section 2.2). Taking these three forms the following three hypotheses can be proposed:

Hypothesis 1. Transfer. If transfer takes place in the data from the English bilinguals, this means that they would incorporate some morphological properties from the other L1, Spanish, into English. This would result in bilinguals' English being different from monolinguals' English in their production of the three –*s* markers under consideration.

Hypothesis 2. Acceleration. If acceleration takes place, it would result in English bilinguals mastering some English morphological markers earlier than monolinguals. This could be due to the fact that bilinguals' other L1 is Spanish, which is a highly morphological language, and which enables them to be especially sensitive to morphology in their other L1, English.

Hypothesis 3. Delay. If delay takes place, English bilinguals would master some English morphological markers latter than monolinguals. Given that the age of acquisition of a particular structure is related to the amount of input a child receives, a difference between monolinguals and bilinguals could be expected since – bilinguals receive less input in English as they have to share it with the input from their other L1. Therefore, some aspects of adult-like grammar would appear later than in monolinguals.

2. Order of acquisition. As seen in section 2.3 the order of acquisition of the different morphological markers varies from English monolinguals to 2L1 English bilinguals, to L2 children learners of English, even though some markers seem to be acquired at similar stages. Given that the order of acquisition varies depending on the type of learner and the type of acquisition two hypotheses can be proposed:

Hypothesis 4. Different order of acquisition. As seen in previous studies (section 2.3) English monolinguals and English bilinguals are expected to present some differences in the order of acquisition of all or some of the three morphological markers.

Hypothesis 5. Similar order of acquisition. Given that the monolinguals and bilinguals under consideration in this study are all L1 speakers (as opposed to the L2 speakers discussed in section 2.3), English monolinguals and English bilinguals are expected to present similarities in the acquisition of the three morphological markers.

3. Overgeneralization of forms. Overgeneralization of regular rules is part of the acquisition process every child undergoes when acquiring his or her L1 (as the examples in 3.3 show), thus we can propose the following hypothesis:

Hypothesis 6. Overgeneralization. Both English monolinguals and English bilinguals would overgeneralize the rules of English morphology that are subject to irregular forms; that is, overgeneralization is expected in the case of irregular plurals (e.g. *foots* or *feets* instead of *feet*) and in the case of irregular verbs (e.g. *writted* instead of *wrote*). In the case of the Saxon genitive –'s marker, overgeneralization is not an

issue given that only the -'s and -s' forms appear and these are not distinguished in oral data. These overgeneralized forms would also be restricted to the initial stages of acquisition.

With respect to the possible individual differences among Spanish-English bilinguals, these could be related to a series of issues. Even if the bilingual participants in this study share their two L1s – Spanish and English – they have been exposed to different varieties of Spanish (Peninsular versus Caribbean) and different varieties of English (American versus British). The fact that the Spanish-English bilinguals represent two varieties of Spanish does not influence the data obtained from them as regards the three –s markers that interest this study. Likewise, the fact that the three monolinguals selected represent North American English has nothing to do with their acquisition of the three –s markers since the North American and the British varieties of English do not differ with respect to the grammatical behavior of these three markers. However, these bilinguals differ in their social linguistic environment (monolingual English in the UK versus monolingual Spanish in Spain). The predominant language of their environment may influence their acquisition of the three morphological markers. Thus, some individual differences among the bilinguals may be expected, as proposed in the following hypothesis:

Hypothesis 7. Individual differences among bilinguals. Differences in the acquisition of the three -s markers are expected among the English bilinguals studied because of the differences that they present as regards environment and varieties of their two L1s. These bilinguals may differ from one another in the acquisition and the production of English morphological -s markers depending on the predominant L1of their environment (if it is Spanish or English), which influences their other L1

accelerating or delaying the acquisition of some of its features (as explained in section 2.2).

In order to address these issues and test these hypotheses, the data presented in the following section have been analyzed.

3.2 Corpora and Participants Selection

The data used in this analysis have been selected from the CHILDES project (MacWhinney 2000). The English monolingual child participants are Naomi (Sachs corpus), Ross (MacWhinney corpus), and Eve (Brown corpus). The Spanish-English bilinguals are Leo and Simon (FerFuLice corpus), and Manuela (Deuchar corpus). A description of these corpora as well as of the participants' linguistic profiles follows and this includes the information that is available in the manual section of the CHILDES project, both the one corresponding to North American English and the one corresponding to bilingual acquisition.

The Sachs corpus contains the longitudinal study of the university professor Jacqueline Sachs' daughter, Naomi. She is an English monolingual child born in a North American family in a monolingual-English context. The transcripts cover the age range from 1;1 to 5;1 years.

The MacWhinney corpus contains transcripts from MacWhinney's diary study of the development of his two sons, Ross and Mark, in the United States. Ross was born on December 25, 1977 and Mark was born on November 19, 1979. Ross was recorded between the ages of 0;6 and 8;0 and Mark was recorded between 0;7 and 5;6. For this study only Ross' data have been taken into account, as being the older brother he is the first one to appear in the transcript and the one who has more recordings.

The last English monolingual participant in this study is Eve from Brown's corpus. In the case of Eve, the number of recordings is lower but still useful because she was a linguistically precocious child, as Brown pointed out in the monolingual North-American English manual (MacWhinney 2000, 22). The study began when she was 1;6 and finished when she was 2;3. The Brown corpus includes data from two more children (Adam and Sarah). In the case of this corpus only one child has been chosen for the study, Eve, because of the age range that her recordings cover, i.e. the study will try to cover similar age ranges for each participant and in the case of this corpus only one child fitted.

The FerFuLice corpus contains data of English/Spanish first language acquisition in a monolingual-Spanish context. Leo and Simon are the pseudonyms used in the corpus for a set of identical twins. Their father is a native speaker of Peninsular Spanish and their mother is a native speaker of American English. The father always addresses the children in Spanish, whereas the mother speaks in English to them. The family lives in Spain and that is why they usually communicate in Spanish with each other, except on summers, when they travel to the United States for two months, and when a monolingual English speaker is present — as the maternal grandparents. The mother was the children's primary caretaker during the first year, as the father was present more on weekends and less on weekdays. The twins started going to day care at the age of 1;10 for three hours a day on weekdays. The language of the staff and the rest of the children there was Spanish. The data collected cover the age range from 1;01 to 6;11. In the case of this corpus both Leo and Simon will be used for the study as the age range that the study covers is also covered by their corpus.

The other Spanish-English bilingual child is Manuela from the Deuchar corpus.

This corpus comprises data from a bilingual girl born in Brighton, England. Manuela

lived in Brighton during the period under investigation. Her mother is the linguist Margaret Deuchar, the investigator. She is a native speaker of English and learned Spanish in early adulthood. The father of the child was born in Cuba and lived in the Dominican Republic and Panama after the age of seven. He was brought up by Cuban parents speaking Cuban Spanish, although his Spanish was also influenced by the one spoken in Panama. He learned English as a second language in secondary school. During the period of data collection, Manuela was exposed to Spanish from both parents at home and to English from caretakers in the crèche and from her maternal grandmother, who spent one day per week with her. At the age of 1;3 Manuela heard English 48% of the time and Spanish 52% of the time. The recordings were made weekly over a 2-year period from age 1;3 to 3;3.

In the selection of participants and corpora, the only restriction has been the age range, as the study of the acquisition of the three morphological markers requires an analysis of data from very young children.

3.3 Data Selection and Data Classification

From the 5 corpora described in section 3.2 above, data from 6 children have been selected. Given that the focus of the present study is the emergence and the process of acquisition of morphological markers, only the initial recordings have been considered in each case and these cover the age range between 1 and 3 years. The MLU has also been calculated for each participant in the age range selected. The information regarding MLU shows that children's data studied are within similar MLU ranges (between 1 and 3), except for Ross (between 1 and 6), and that the initial MLU is 1,

which involves the period in which morphological markers start being used¹. Specific details appear in table 4 below:

Table 4. Participants and Corpora

Corpus	Participants	Corpus Age Range	Age Range Selected	MLU range
Sachs	Naomi	1;1 – 5;1	1;1 – 3;5	1.3 – 3.6
MacWhinney	Ross	0;6 - 8;0	1;4 – 3	1.4 – 6.2
Brown	Eve	1;6 – 2;3	1;6 – 2;2	1.5 – 3.4
FerFuLice	Leo	1;01 – 6;11	1;5 – 3;1	1.1 – 2.9
FerFuLice	Simon	1;01 – 6;11	1;6 – 3;1	1.7 – 3.8
Deuchar	Manuela	1;3 – 3;3	1;3 – 3;3	1.3 – 3.2

Data from these 6 participants have been classified in terms of their use of the three -s makers: plural (-s), possession (`s), and third person simple present tense (-s). That is why, only the utterances containing those markers have been used for the study, taking into account only the cases of use and not those of omission - only cases in which whichever of the three -s markers appears have been considered. Given that only cases of production have been taken into account, commission errors have also been considered, i.e. those non-adult-like uses of an -s marker.

Given that three –*s* markers are analyzed and that both adult-like and non-adult-like forms (i.e. overgeneralizations) are considered for two of these markers (as in hypothesis 6 above), there are then five cases to be classified. These five variables and examples of each appear in table 5 below:

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¹ In the case of our study and for the production of the markers it is interested in, we need an MLU of at least 2, which means that on average children's utterances include 2 morphemes

Table 5. Examples of Adult-like and Non-adult-like forms for each -s marker

	Adult-like	Non-adult-like
Plural -s	There are two <u>cars</u> .	*Sheeps eat grass.
Possession -'s	<u>Toby's</u> bicycle is red.	-
Third Person –s	Jimmy <u>listens</u> to music.	They *listens to music.

4. The Empirical Study: Results

In this section the results from the study carried out will be presented. These offer a comparison between adult-like and non-adult like cases in the data from both English monolingual children and English bilingual children. Besides, a comparison between monolinguals and bilinguals' results and a presentation of the progression of adult-like forms in monolinguals and bilinguals is included.

This section has then been divided into three sub-sections. In the first one only the monolingual children and the results obtained from the analysis of their data appear divided into a table and a chart. The results of each participant will be placed in a table which will show the percentages of adult-like and non-adult-like cases for each marker and a chart will show the progressive increase of the amount of adult-like cases for each marker in the speech of each participant matched with their MLU range and their age. The second sub-section focuses on the bilingual children and their results, which will be shown in the exact same way as in the previous section, i.e. as the results obtained from English monolinguals. Finally, the third sub-section compares the results from monolinguals and bilinguals.

4.1 English Monolinguals

Firstly, English monolinguals will be analyzed, starting with Naomi (Sachs corpus). After analyzing all the utterances where an –*s* marker was used in the age range selected, the amount of adult-like cases and non-adult-like cases obtained was as follows in table 6:

Table 6. Naomi's –s markers (Monolingual English)

Marker	Adult-like cases	Non-adult-like cases	Total per marker
Plural –s	640 (99%)	7 (1%)	647 (100%)
Possession –'s	167 (98%)	4 (2%)	171 (100%)
Third Person –s	175 (98%)	2 (1%)	177 (100%)
Total (non) adult-like	986 (99%)	9 (1%)	995 (100%)
i otai (non) adult-like	980 (99%)	9 (170)	993 (100%)

As it can be seen in table 6 Naomi produces a great number of adult-like cases, whereas the non-adult-like cases present a really small percentage. However, they are equally important, especially because among them there are examples of overgeneralization which is also an important part of the present study (see hypothesis 6 above).

The non-adult-like cases as regards the -s plural marker are cases of overgeneralization – Naomi uses the -s marker where it is not necessary, i.e. where an irregular plural form is expected. She starts committing overgeneralization as regards the formation of the plural when she uses irregular plurals for the first time as we can see in examples (3) and (4):

- (3) CHI: my <u>feets</u> cold?
 - MOT: want me to help you up honey?
- (4) CHI: those are <u>peoples</u>. FAT: that's the only picture of people in the whole book.

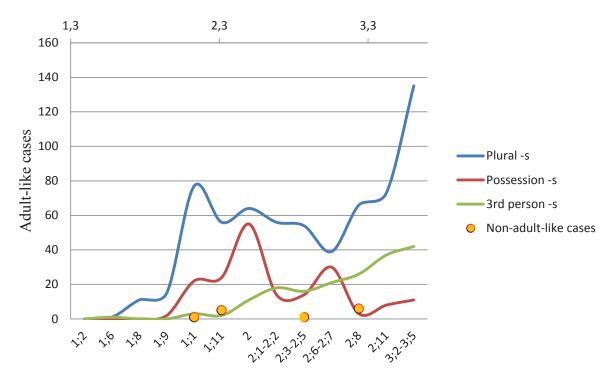


Chart 1. Naomi's -s markers (Monolingual English)

She also makes non-adult-like usage of the third person -s marker and the possession -s marker (even though the percentage of non-adult-like cases for those markers is smaller -2% and 1% respectively) as examples (5) and (6) show:

- (5) CHI: where's goes?
- (6) CHI: in my <u>Georgie's</u> room. CHI: room

On the other hand, chart 1 shows Naomi's progressive increase in the amount of adult-like cases for each marker and the number of non-adult-like cases, matched with her age and MLU range:

As seen above, Naomi does not master the usage of the three –*s* markers at the initial stages of her linguistic development (before the age of 2 and when Naomi's MLU range is lower than 2,3). Non-adult-like cases of the three –*s* markers appear until she is 2;8 (MLU 3,3). However, after that age there are no more non-adult-like cases as

regards any of the three -s markers and all the adult-like cases increase significantly as shown in the chart above.

The next English monolingual to be analyzed is Eve (Brown corpus). The analysis of the utterances in which the participant used the three -s markers we are interested in gave the following results presented in table 7:

Table 7. Eve's –*s* markers (Monolingual English)

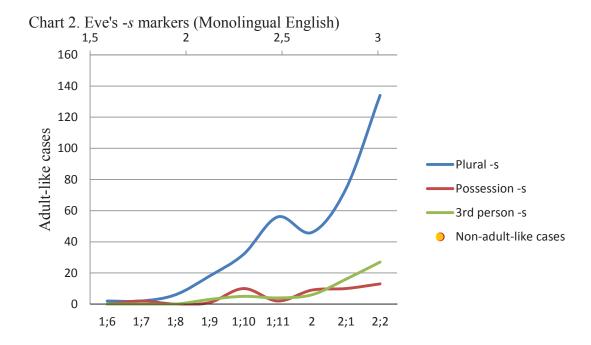
Adult-like cases	Non-adult-like cases	Total per marker
300 (100%)	0 (0%)	300 (100%)
47 (100%)	0 (0%)	47 (100%)
61 (100%)	0 (0%)	61 (100%)
408 (100%)	0 (0%)	408 (100%)
	300 (100%) 47 (100%) 61 (100%)	300 (100%) 0 (0%) 47 (100%) 0 (0%) 61 (100%) 0 (0%)

Eve produced a large amount of adult-like cases as regards each one of the three -s markers, however, the number of non-adult-like cases that she produced was very low. In fact, she did not produce any errors of commission for any of the three -s markers as it is shown in table 7^2 . On the other hand, the following chart 2 shows Eve's progressive increase in the adult-like usage of the three -s markers (age matched and MLU matched), showing how their number increases significantly after the age of 2, whereas there are no non-adult-like cases of commission in the age range analyzed:

² However, Eve did produce some omission errors as in the following examples:

⁽i) CHI: Mommy Mom carry Eve

⁽ii) CHI: because it have knot it + ... it have knot it



Eve produces a high amount of plural –*s* markers after the age of 1;11 (MLU 3), however, the possession –'*s* marker and the third person –*s* marker do not increase in number until Eve is 2;2 (MLU 3.1).

The last English monolingual participant is Ross (MacWhinney corpus). The results from the analysis of the data obtained from Ross are shown in table 8:

Table 8. Ross's –s markers (Monolingual English)

Marker	Adult-like cases	Non-adult-like cases	Total per marker
Plural –s	568 (100%)	7 (1,2%)	575 (100%)
Possession -'s	129 (97%)	4 (3%)	133 (100%)
Third Person –s	153 (96%)	7 (4%)	160 (100%)
Total (non) adult-like	850 (99,8%)	18 (0,2%)	868 (100%)

Ross produces a large amount of cases for each –*s* marker. The number of non-adult-like cases of each marker, however, is quite low (it presents between 1% and 4% of the total amount in each case).

All the errors Ross commits as regards the -s plural marker are errors of overgeneralization as in the example $(7)^3$:

(7) CHI: I'm not cold (.) but sometimes my feets get cold on here.

The following chart 3, shows the progressive increase of the number of adultlike cases in Ross' speech in the age range and MLU range studied:

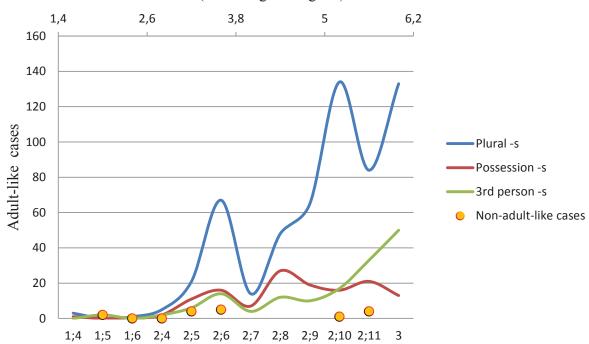


Chart 3. Ross's -s markers (Monolingual English)

(iii) CHI: he bite [*] it.

FAT: he bites the grass?

He also commits omission errors as regards the possession –s marker as shown in example (iv):

(iv) CHI: I eat kitty[*] hotdogs.

³ Ross also commits errors of omission in the case of the -s third person marker, though they do not appear in the table, as in the example (iii):

As seen in chart 3, Ross produces more non-adult-like cases of –*s* markers in the early stages of his linguistic development and they decrease after the age of 2;11 (MLU 5).

4.2 Spanish-English Bilinguals

The next step is to find out which were the results obtained from Spanish-English bilinguals' data.

The first Spanish-English bilingual participant is Leo (FerFuLice corpus). The results obtained from his data are shown in table 9 below:

Table 9. Leo's –*s* markers (English bilingual)

Marker	Adult-like cases	Non-adult-like cases	Total per marker
Plural –s	197 (99,5%)	1 (0,5%)	198 (100%)
Possession -'s	9 (75%)	3 (25%)	12 (100%)
Third Person –s	25 (100%)	0 (0%)	25 (100%)
Total (non) adult-like	231 (98,3%)	4 (1,7%)	235 (100%)

Leo produces a large amount of adult-like cases as regards the plural -s marker, but in comparison, he does not produce many adult-like possession -s and adult-like third person -s. Among the non-adult-like cases that Leo produces there are cases of overgeneralization. Leo overgeneralizes the usage of the plural -s marker as in the example (8):

(8) LEO: s(h)eeps.

MEL: what sweetie?

MEL: sheep.

MEL: it looks like sheep?

Leo also commits commission errors as regards the possession -s marker as shown in the following example⁴:

(9) LEO:<and the wolf eats> [/] and the wolf eats a [//] da [: the] two hands of da [: the] troll's okay?

However, there are no cases of commission errors as regards the third person -s marker, as shown in table 9.

The following chart shows the progressive increase in the number of adult-like cases in Leo's speech:

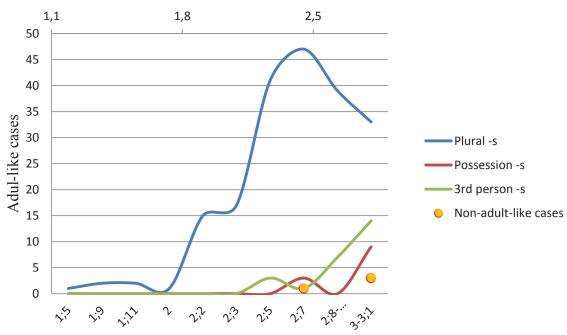


Chart 4. Leo's -s markers (English bilingual)

As seen in chart 4 there are very few non-adult-like cases in Leo's speech and they appear in the last stages studied in this paper. On the other hand, the adult-like

 $^{^4}$ There are also some omission errors as regards the possession -s marker as in example (v):

⁽v) LEO: L eats da [: the] troll [= troll's] head

177 (100%)

plural -s cases present a rise after the age of 2;2 (MLU 1,8) and the adult-like possession -s and third person -s increase after the age of 3 (MLU 2,9).

The next Spanish-English bilingual is Simon (FerFuLice corpus) and the results obtained from the analysis of the utterances where Simon produces the -s markers we are interested in are shown in table 10 below:

Marker	Adult-like cases	Non-adult-like cases	Total per marker
Plural –s	141 (100%)	0 (0%)	141 (100%)
Possession -'s	13 (100%)	0 (0%)	13 (100%)
Third Person –s	22 (96%)	1 (4%)	23 (100%)

1 (0,5%)

Table 10. Simon's –*s* markers (English bilingual)

176 (95,5%)

Total (non) adult-like

Simon produces a greater number of adult-like than of non-adult-like cases of each -s marker. The following example shows the commission error Simon makes as regards the third person -s marker:

(10) SIM: mommy, I wants [= want] a spoon for a sweet potato.⁵

The following chart shows the progressive increase in the number of adult-like cases as regards the -s markers in Simon's speech:

⁵ There are some omission errors that have not been counted in the table as shown in example (vi):

⁽vi) SIM: and [/] and they go to the wolf's house and they peet [?] to the t(r) oll and the wolf eat [= eats] abuela@s Chon .

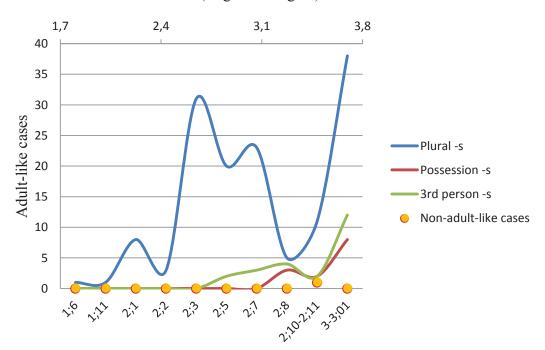


Chart 5.Simon's -s markers (English bilingual)

Chart 5 shows that the non-adult-like usage of the third person -s marker appears in the last year studied in this paper, when Simon is 2;10 years of age (MLU 3). The number of adult-like possession - 's cases increases later, at the age of 3 (MLU 3,8). On the other hand, the adult-like plural -s cases increase at the age of 2;2 (MLU 2).

The last Spanish-English bilingual is Manuela (Deuchar corpus), and the results obtained from the analysis of the utterances in which Manuela uses the three -s markers we are concerned with are shown in table 11 below:

Table 11. Manuela's –s markers (Monolingual English)

Marker	Adult-like cases	Non-adult-like cases	Total per marker
Plural –s	57 (100%)	0 (0%)	57 (100%)
Possession -'s	21 (100%)	0 (0%)	21 (100%)
Third Person –s	10 (100%)	0 (0%)	10 (100%)
Total (non) adult-like	88 (100%)	0 (0%)	88 (100%)

As seen in table 11. Manuela does not make any commission errors. The number of adult-like cases of each –s marker is lower compared with the rest of participants.

The following chart shows Manuela's progressive increase of adult-like usage of the three -s markers:

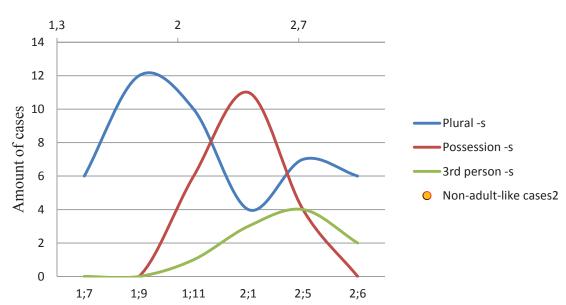


Chart 6 Manuela's -s markers (English bilingual)

As seen in chart 6, Manuela already present a high number of plural –*s* markers at age 1;7 (MLU 1,3), whereas the other markers do not appear in her speech until the age of 1;11 (MLU 1,4).

4.3 Comparison between Monolinguals and Bilinguals

The previous sub-sections show the results obtained from the analysis of the data taken from the corpora and the participants selected. There were certain differences as well as certain similarities as regards the results obtained from monolinguals and

bilinguals. That is why, in this sub-section a comparison of the results from English monolinguals and English bilinguals will be offered.

The following chart shows the progressive growth in the number of adult-like cases in the three English monolinguals that have been studied in the age range and MLU selected and the non-adult-like cases that they produce:

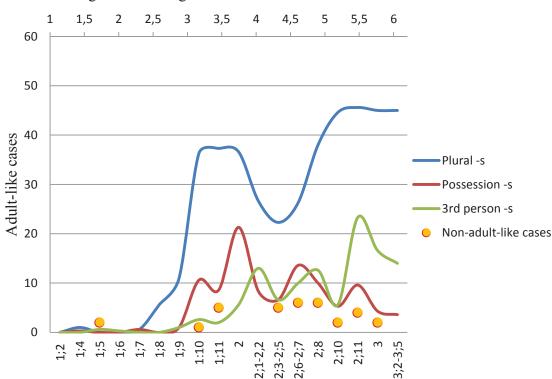


Chart 7. English Monolingual's -s markers

In chart 7 it can be seen that English monolinguals' early speech already contains a large amount of adult-like cases of the usage of the three –*s* markers, even though the plural –*s* is the one that presents sooner a higher number of adult-like cases – before the age of two –, whereas the adult-like possession –'*s* marker cases rise later – after the age of two – and the third person –*s* marker is the last one to increase – also after the age of two. On the other hand, the non-adult-like cases appear from age 1;5 until the age of 3, even though they do not present a large amount (the total number of

non-adult-like cases presents only around 1% for each participant as seen in subsections 4.1 and 4.2).

The next chart shows the progressive rise in the number of adult-like cases in the speech of the three English bilinguals as regards the three -s markers this study is interested in:

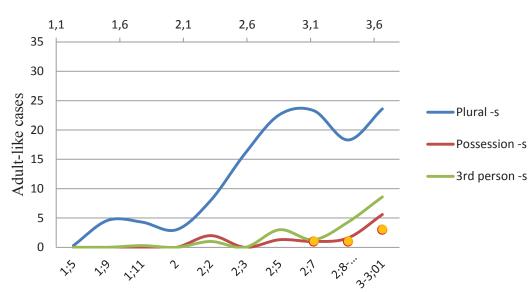


Chart 8. Spanish-English bilinguals' -s markers

As it can be seen in the chart, English bilinguals' speech presents a great number of adult-like plural -s cases around the age of two, whereas the number of adult-like cases of the other two -s markers increases later, around the age of three. In the case of the English bilinguals studied, the non-adult-like cases or errors of commission appear after the 2;5 years of age, whereas English monolinguals commit errors of commission as regards the three -s markers from the age of 1;5.

The analysis of the data presented shows that the production of both monolinguals and bilinguals is quite alike. Their adult-like forms clearly outnumber their non-adult-like forms even in the initial stages of the acquisition process. In addition, both present a greater amount of adult-like cases as regards the plural –*s*

marker in the earlier stages of their linguistic development (around the age of 2). The number of adult-like cases as regards the possession – 's marker and the third person -s marker increases around the age of three, which may mean that both monolinguals and bilinguals acquire the last two markers later. Thus, from the results we may conclude that English monolinguals and English bilinguals present more similarities than differences in the acquisition of the three -s markers.

However, there are certain differences in the appearance of adult-like cases in the speech of monolinguals and bilinguals. On the one hand, monolinguals' speech presents a great number of adult-like cases of the plural -s marker before and between 2;0 and 2;6 years of age. In fact, their speech presents almost no non-adult-like cases as regards the plural -s marker. This means that among the three -s markers we are concerned with, monolinguals acquire or master the usage of the plural -s marker first. Around the age of two they also increase the number of adult-like cases of the possession -s marker in their speech. Nonetheless, the third person -s marker seems to require more time as the number of adult-like cases starts increasing only around the age of three. This involves the order of acquisition that appears in (11):

(11) plural
$$-s$$
 > possession $-s$ > third person $-s$

As regards bilinguals the rise in the number of adult-like cases of the plural -s marker also appears before the age of two. However, the number of adult-like cases as regards the other two -s markers is significantly smaller in comparison to that of English monolinguals. In addition, in chart 8 we can see that apparently the number of adult-like third person -s cases is higher than that of possession -s even around the age of three. Bilinguals' order of acquisition of these three markers appears in (12):

(12) plural
$$-s$$
 > third person $-s$ > possession $-s$

When comparing (11) and (12), we see the major difference between the English monolinguals and English bilinguals as regards the acquisition of the three –*s* markers we are concerned with in this study. They seem to acquire the three markers in a different order.

5. The Empirical Study: Discussion

The present study was designed to compare the English production of English monolinguals and English bilinguals with regards to three -s markers, as well as to determine whether differences among the bilinguals' production appear.

With respect to the monolingual-bilingual dichotomy, the following discussion focuses on the order of acquisition, the age of acquisition and the overgeneralization mechanism.

Thus, from the comparison established in 4.3 and with respect to the age of acquisition, we may say that there is an acceleration in the acquisition of the third person –s marker as compared to monolinguals – bilinguals master this particular morphological feature of the English language earlier than monolinguals –, and that there is delay in the acquisition of the possession –'s marker as compared to monolinguals – bilinguals master this particular morphological feature of the English language later than monolinguals. This affirmation confirms hypothesis 2 and hypothesis 3. On the other hand, hypothesis 1, which deals with language transfer, can only be confirmed in the case of the plural –s marker. As regards the plural –s marker bilinguals may experiment certain transfer because of the morphological similarities of their two L1s in this respect – in both Spanish and English the plural is made through the addition of an –s or –es to the singular stem. This similar formation of the plural in

English bilinguals' two L1s explains why they do not present as many problems as with the rest of –*s* markers when acquiring the plural -*s*, given that similarities in the grammatical structures enable bilinguals to acquire certain features easier. Then, because of the special characteristics that bilinguals have, their acquisition of the three – *s* markers this study is concerned with presents certain differences compared to monolinguals. These differences have to do with language influence, which makes bilinguals' acquisition to present transfer, acceleration and delay. This involves that for the first set of hypotheses presented, the three phenomena discussed by Paradis and Genesee (1996), as seen in section 2.2, need not exclude each other so that depending on the marker we focus on, acceleration or delay takes place when comparing bilinguals and monolinguals. In the case of acceleration this could be linked to transfer – positive transfer – from their other L1.

The second issue as regards the monolingual-bilingual dichotomy has to do with the order of acquisition. The order in which the three morphological markers are acquired may be altered because of language transfer, language mixing, etc. The fact that the order of acquisition may be altered because of language influence takes us to the confirmation of hypothesis 4 and to refute the hypothesis 5, given that the order of acquisition seems to be slightly different for monolinguals and bilinguals, as regards the possession and third person –*s* markers (as seen in section 4.3). This is seen in the different acquisition order that (11) and (12) showed and that are repeated here:

- (11) Monolinguals: plural -s > possession s > third person -s
- (12) Bilinguals: plural -s > third person -s > possession -s

The last issue as regards the monolinguals and bilinguals comparison was overgeneralization. When acquiring morphological markers children learn certain rules through which they add affixes to the stems they have already acquired. These rules can

be regular or irregular. Children tend to acquire the regular rules first as they are used in a greater number of cases, and because of that they apply those rules even to words which follow other irregular rules. Hypothesis 6 foresaw both English monolinguals and English bilinguals would produce overgeneralizations cases in their initial stages of acquisition. This hypothesis also receives confirmation as the errors, especially in the usage of the plural –*s* marker, were errors of overgeneralization (the examples in section 4.1 and 4.2 confirm this hypothesis). The amount of overgeneralization cases, and its percentage, is very low – as seen in sections 4.1 and 4.2 –, however, they are equally important as they show the internalization of the English language's rules. Children abstract regular rules which they apply first to all of the cases before they are aware of the irregularities. Thus, even if its incidence is low, both monolinguals and bilinguals produce overgeneralization.

The last issue to be discussed has to do with the bilinguals' particularities. Given that the three English bilingual participants in this study present certain differences as regards the variety of their two L1s and the dominant language of their environment, certain differences may exist among the acquisition of the three –s markers. Leo and Simon (FerFuLice corpus), on the one hand, live in Spain and their environment's language is Peninsular Spanish. Then, probably the dominant language for them is Spanish. Manuela (Deuchar corpus), on the other hand, lives in England and the language of her environment is English, which means that English is probably the dominant language for her. The differences that exist in the analysis of the data from these three English bilinguals (section 4.2) have to do with the errors or non-adult-like cases that they produce and the order of acquisition. On the one hand, Leo and Simon produce errors of commission and Manuela does not. On the other hand, Manuela's acquisition of the morphological markers presents more similarities with the English

monolinguals analyzed than with the rest of the English bilinguals. Her speech incorporates adult-like possession – 's and third person – s cases around the age of 2 (possession – 's at the age of 2;1 and third person – s at the age of 2;5), whereas Leo's and Simon's speech start incorporating adult-like cases of these two – s markers later (possession – 's at the age of 2;7 and third person – s at the age of 2;5). Given that there are individual differences between the English bilingual participants in this study hypothesis 7 is confirmed.

6. Conclusion

The present study has compared English monolinguals and Spanish-English bilinguals' acquisition of three English morphological markers through the analysis of the spontaneous speech of three monolinguals and three bilinguals taken from their early stages of linguistic development. The analysis has shown that there are similarities (both acquire the plural –*s* marker first and both commit overgeneralization) as well as differences (the acquisition of the possession –'*s* marker and the third person –*s* marker occur in a different order) between monolinguals and bilinguals' acquisition as regards the order of acquisition of the morphological markers due to the effects of language influence.

The study has focused on the commission errors of the participants and further analysis of the omission errors that the children make would complement this study with additional information about the characteristics of their acquisition processes. The analysis of the data opens the door for other studies, and therefore, further analysis could be developed. This study shows that monolinguals and bilinguals may undergo different developmental stages in their linguistic growth due to the language influence

between their two L1s. However, further research is needed in order to examine those differences in detail in order to state whether other bilinguals and monolinguals show the same order whether other grammatical areas are also subject to the same results.

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