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## **Biliteracy development : a case study.**

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<https://doi.org/10.7275/14755485> [https://scholarworks.umass.edu/dissertations\\_1/4849](https://scholarworks.umass.edu/dissertations_1/4849)

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312066008774196

BILITERACY DEVELOPMENT:

A CASE STUDY

A Dissertation Presented

by

ROCIO COSTA

Submitted to the Graduate School of the  
University of Massachusetts in partial fulfillment  
of the requirements for the degree of

DOCTOR OF EDUCATION

February 1992

School of Education

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BILITERACY DEVELOPMENT: A CASE STUDY


A Dissertation Presented

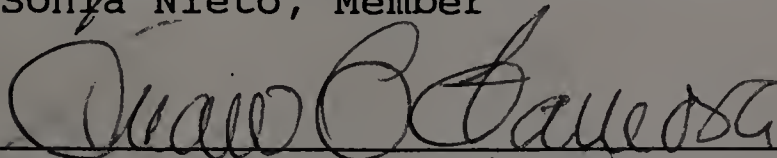
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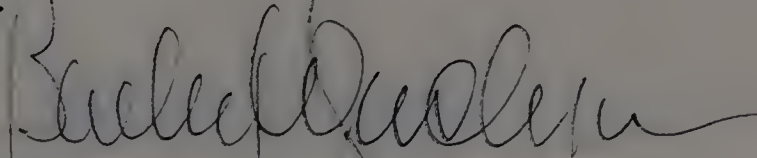
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## DEDICATION

For all of you  
who made this possible,  
specially Tito and Marcela...

## ACKNOWLEDGEMENTS

Ever since I started writing this dissertation I have been waiting for this moment! It meant that the time of writing drafts, giving them to Judy, correcting them, conferring with her and handing in another draft was over. The occasions when in the middle of daydreaming, I thought about writing this page have not been few. And I ask myself, "But why is this page so important?"

A fellow graduate student once told me: "... you have to be very careful when writing the acknowledgements. Never forget all of those people who helped you!...". And I add to his remark, "... because they are going to ask you to let them read the paper, not because they are extremely interested in your subject, (though some genuinely are) but to see their names in print!" I know. I have been there too. You feel so good when someone mentions you in a book. How great is the power of the printed word! It lasts as long as the paper does. You believe you are there for eternity!

So, along that same line, I have to thank all of you who are going to read this page looking for your name. Now seriously, I am extremely grateful to my colleague and friend, Mary Ginley, who permitted my intromission

into her classroom without ever complaining (at least not seriously), and with whom I had innumerable theoretical and practical conversations about the difficult act of teaching and about literacy acquisition. Her expertise in written English was also of great value for me. I also have to thank Dora Fuentes, my friend and principal of Anne McHugh School and Timothy Barrett, the Assistant Superintendent, for facilitating this study.

To my friends in Holyoke: Lillian Santiago, Angel García, Elyse Cann, Marie Cora, Nancy Horowitz, Nina Tepper and Billy Stewart, David and Patricia Scanlin and Nélide Ruiz, I am very grateful. Their constant encouragement and interest also had a part in the fulfillment of this effort.

Friends from Puerto Rico, with whom I travelled to Massachusetts, (because, as Lico once said, "We travel in herds, never alone") were also important in my academic and professional development. To Debra Sicilia, Miguel Figueroa, Edna Román and Carlos Pabón, thanks...

This dissertation would not have been completed without the patience, guidance and encouragement of my dissertation committee: Judith Solsken, Sonia Nieto and

Juan C. Zamora. I have to be specially grateful to the chairperson, Judith Solsken, for the hours spent reading draft after draft and for her invaluable guidance which contributed to make this project a reality.

I am also very grateful to my family in Puerto Rico: Titi Astrid, Tío Mizín, Alberto, Maritza, Rosa Luisa and Miguel. They were constantly encouraging me and offering their help so I could complete this process. To Mamá and Papá, part of what I am today I owe to them. The love for reading is part of their legacy...

And finally, last but not least, I have to thank Tito and Marcela. Of all the people I have mentioned, they are the most important in the completion of this process. Tito offered himself in every way he could: his love, his understanding and his partnership... Marcela, without her, this could not have been possible. She let me enter into her privacy with joy and spontaneity. She was only five years old but she respected and understood my need for privacy on Saturday mornings and encouraged me to finish "... so we can go back to Puerto Rico". Thanks...



ABSTRACT

BILITERACY DEVELOPMENT:

A CASE STUDY

FEBRUARY 1992

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Literacy as a process has been the object of study in different languages. Research has also been devoted to literacy development in bilingual settings both in native and second languages. Early bilingualism, where a child learns two languages at the same time before age five, has also been studied. However, the research in the area of biliteracy development, which is the development of reading and writing in two languages at the same time, is scarce.

This is the case study of a bilingual kindergarten child's journey through a year as she tries to accomplish biliteracy in a Western Massachusetts city. The data was gathered through participant observation at

home, where Spanish was spoken, and at school, where English was the language of instruction. Data was also collected through informal and formal interviews with the child, her classmates, her father and her teacher. Reading Miscue Inventories in English and Spanish were administered twice in the study.

Through this study it was found that it is possible for a bilingual child to achieve biliteracy even if formal literacy instruction is not provided in both languages. Parallels were found between the child's biliteracy development and the studies on literacy with monolingual children. Questions were raised regarding the use of grapho-phonetic clues when reading languages with a regular sound-symbol relationship and the relationship between learning and instruction. The child studied used decoding as an initial Spanish reading strategy in contrast to the use of more holistic English reading strategies. The findings suggested that this was possible because of an early exposure to a phonics approach to reading in English which she transferred to Spanish reading. When the child was exposed through instruction to other English reading strategies, she began to use these as well for reading in Spanish.

It was also learned that research findings in the area of bilingual language acquisition are congruent with the study of biliteracy development. Features such as language differentiation, influence of the environment over the language choice, audience sensitivity and the transfer of strategies from one language to another, common to both arenas, are present in this study. Finally, in terms of the implications for education the use of different theoretical approaches to literacy instruction, along with the need for maintenance programs of bilingual education where holistic theories of literacy instruction are practiced were raised in this study.



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## CHAPTER I

### INTRODUCTION

This is a case study of the biliteracy acquisition process a bilingual child experienced as she managed to develop reading and writing competencies in Spanish and English at the same time. Because her bilingual language acquisition started when she was a baby, the child can be characterized as an early bilingual. This study took place during the child's kindergarten year. The data was gathered mainly through participant observation and informal interviews at home, where Spanish was the language of communication, and at school, where she was enrolled in a mainstream monolingual English classroom.

#### Background to the Study

In 1988, in a Western Massachusetts city, where at that time 60% of the children enrolled at the elementary level were Hispanics, the Mayor declared that he was against the use of a language other than English, specifically Spanish, in the workplace. His statements caused discomfort among the Hispanic community. However, the traditional Anglo community of the city received them happily.



A year later because of budgetary problems the Mayor called for an override of Proposition 2 1/2. Before this proposition was implemented, local governments could increase property taxes as they thought fit, with no restrictions. Proposition 2 1/2 brought the cap of 2.5 property tax increase. To raise taxes more than the 2.5 the local governments had to win an override of the proposition through local elections. The override was defeated. The same traditional Anglo community that supported his position against the use of a language other than English in the workplace voted against raising their property taxes to avoid cuts in the city's education budget.

To get some understanding of the problems and situations regarding education in this city, one has to take into account the changes the city has been through in a short span of time. There has been a shift in the population over the last twenty years. The population has grown 120% since the last census. The 1990 census showed that 31% of the population of the city are Hispanics, the majority of them between the ages of 16 and 25 years old. Hispanics are the majority in the city's schools. Eighty percent of the city's school children are Hispanic. The majority of the Hispanic population are Puerto Rican. If this demographic trend

continues, Hispanics will make up 68% of the city's population by the year 2,000. In this city, the number of elderly people is growing fast among the Anglo population, while at the same time there is a steady increase in the young Hispanic population.

Twenty years ago, these young Hispanics came mainly from Puerto Rico; consequently, their sons and daughters rarely were able to speak English fluently. Since the United States invasion to Puerto Rico in 1898, English has been taught from first grade on, in the island's schools. However, the methods of teaching English along with the popular resistance to learn it, have left a heritage of people that somewhat understand English, but are unable to speak it fluently. In the early 70's a Bilingual Program was developed in this city's schools. The program was established with a transitional character. Its main goal was, and still is, to provide instruction for children in their native language while they learn English as a second language.

The ultimate goal of the city's Transitional Bilingual Program is to enable the Hispanic children --and a small number of Khmer and Polish speakers-- to make the transition to a monolingual classroom. The last subject taught in the child's native language

before she or he makes this transition, in the case of Hispanic children, is Spanish Language Arts. When the child leaves the bilingual classroom, he or she will never have courses in his native language again unless he or she enrolls in a Spanish as a Second Language course geared towards the English-speaking children who know no Spanish. These truly bilingual children, who know Spanish and English, are offered nothing in school to keep practicing their native language with the exception of talking with their peers. There is an exception at the High School where they could enroll in an elective course called Spanish for Native Speakers.

In recent years, the number of Hispanic children entering monolingual kindergarten classrooms has increased, mainly because the Hispanic city population has been here for more than 30 years. The schools have also received a growing number of second and third generation Hispanic families that have moved into this area from cities such as New York and Elizabeth (NJ) where their children learned to speak English. The school system offers nothing to these children to further develop their bilingualism. Consequently bilingual children must rely on their families to keep and develop their Spanish-speaking abilities. By the time these children finish elementary school most of



them do not know how to read or write in Spanish. Their ability to speak Spanish has decayed to the point of not feeling comfortable communicating in Spanish any more. They are able to understand a Spanish speaker but their responses will be primarily in English.

To make matters worse, speaking Spanish is not valued among the Anglo community. It has been argued that the majority's attitudes towards a minority language in a community are deeply related to the maintenance of that language by the minority group (Hakuta, 1986). If the minority group feels its language is not valued, they will eventually lose it.

It is almost impossible to separate language from its social milieu because language is a social activity. Cummins (1984) argues that there is model of bilingualism which is subtractive. In this model the first language is replaced by the second language (Hakuta, 1986). That has been the history of minority languages in this nation: almost every ethnic group that has come to the United States has eventually lost their language, with the exception of Hispanics. The results of this bilingual model are subtractive and devastating, because not only language is lost in the trade. An example of this process is Richard

Rodriguez's (1982) personal story in Hunger of Memory. Although Rodríguez has spoken against bilingual education, his account presents a case for an additive model. His experiences are the result of the prevailing negative view of bilingualism as negative. Although he probably did not realize it, his struggles for his self-esteem, for establishing his identity and sense of belonging were a testimony to the losses that occur when one trades one's own language for a second one.

I believe that a subtractive bilingual environment is present in the above-mentioned city where proficiency in the first language is not valued. This city and its schools tell the Hispanic children that keeping and developing their home language is not important, even though the pedagogical discourse of the School Department and its Bilingual Program is the opposite. In this city Bilingual Education is, in reality, compensatory education. The fact is that there is no language maintenance program. Only one course is offered in Spanish at the high school level for the Hispanic students who have made the transition to the "mainstream" program. There are no courses offered to further develop the bilingual literacy of Hispanic children who enter "mainstream" classrooms early in their school life. This shows to what extent the

compensatory model of bilingual education is working in this school system.

Some of the arguments used to justify this model are based on language deprivation theories and beliefs. Supporters of this model argue that minority children have no language or that they do not speak English or their home language, but a mixture (Williams, 1990) and therefore they are losing nothing by forgetting and not developing their language in favor of competence in English. However it is not true that these children have no language. Minority and low income families' languages are not the same as school language. When these children go to school, there is a gap between the language of home and the language of school (Gumperz, 1986; Wells, 1986). These children's language is going to be judged against a school language they have not mastered. Therefore they score very low in language proficiency tests and are believed to be language deprived (Edelsky, 1986).

There is yet another argument against bilingual education that is very "American". In 1908, a play presented an idealistic view of a race merge that led to the creation of a superman. Its name was "The Melting Pot" (Christian, 1976). Assimilation has been an ideal

for the dominant culture in the United States for many years. Values and social norms are passed from one generation to the next one through socialization. This process takes place primarily at home. A secondary socialization process takes place in school where the state or government is in charge. This secondary socialization process takes place in English. It has been argued that cultural and linguistic pluralism would make it difficult for the state to maintain its hegemony and authority (Christian, 1976). If literacy instruction is provided and developed in English or even in a bilingual compensatory program where children are viewed as culturally, linguistically, socially, economically and educationally deprived, where assimilation is the final objective, then the variety of "cultural pluralism" is limited and non-threatening.

The reality is that the "Melting Pot" concept has not been able to melt anybody except some portions of the white population. Historically the concept has been used to assimilate and repress cultural differences. Since the early years of colonization, when the Native Americans were left out of the "pot" (even though the concept itself did not exist at that time), the Melting Pot has meant the exclusivity of the white culture over the non-white cultures.



This dominant cultural and ethnic bias contradicts the democratic tradition of this country. True democracy means, as the Constitution states, full and equal participation in all affairs of society regardless of social, economic, racial and religious conditions. That necessarily requires tolerance and respect for people's differences. It is obvious that the homogenization of all members of society under one concept, Melting Pot, defined by one of the many groups that make up that society, goes against the concept of democracy as it has been already defined and therefore reduces the humanity of the rest of the groups that compose society.

I prefer the concept of "multiculturalism," portrayed by some as a salad bowl, because it builds in the very respect for difference, participation and democracy that the Melting Pot concept hides and demeans.

Policy makers also argue that bilingualism and biliteracy are impossible to attain at an early age. Children cannot learn to read and write in two languages at the same time because this might confuse them and make them mix the two languages, resulting again in the "no language" situation. This argument will be the main

topic of this study. The question is: Is it possible for a bilingual child to develop biliteracy skills?

### Statement of Problem

This research studied the phenomenon of bilingual literacy using ethnographic research methodology. It was designed as a case study which focused on how one child enrolled in a monolingual kindergarten classroom learned to read and write in English at her school and to read and write in Spanish at home. The findings provide insights into the process of bilingual literacy acquisition and suggest implications for educational practice in bilingual education. The following questions guided the data collection and analysis:

1. What are the similarities and differences that appear in literacy development in English and Spanish when Spanish is the language of home and English is the language of school?
2. What characteristics of bilingual language acquisition and development are observed in biliteracy development?

### Significance of the study

The research on bilingual (Spanish-English) literacy development has studied children whose school environment promotes the acquisition of a second language through their first language. The literature has mainly been focused on Spanish-speaking children in bilingual classrooms where they are learning English literacy skills as a second language. Unfortunately, there is a lack of research with children who are simultaneously acquiring their bilingual literacy skills at an early age.

To understand biliteracy, one must take a closer look at the psycholinguistic research done with monolingual populations on reading and writing. Because there is not enough research in biliteracy, this research on monolingual literacy will provide a basis for understanding the process of learning to read and write in two languages at the same time. Harste, Woodward and Burke (1984) and Ferreiro and Teberosky (1979), among other researchers, found that children try to make sense out of the written word long before they enter school. The literature on learning reading and writing in bilingual settings points to the fact that monolingual Spanish-speaking children begin to read and write in

English before any formal instruction in this language (Edelsky, 1986). The literature provides us with evidence that when monolingual children are immersed in a print-rich environment, they begin to learn to read and write without formal instruction. Bilingual children coming to literacy can perform as well as their monolingual counterparts but in two languages. What the literature tells us is that children want to make sense out of the world that surrounds them regardless of the language or languages that surround them. They want to communicate and their way of learning to communicate is similar in a monolingual or in a bilingual setting.

Researchers like K. Goodman (1982, 1986), Smith (1982), Ferreiro and Teberosky (1979, 1982) and Harste, Woodward and Burke (1984) believe that learning to read and write is similar to the process of language acquisition, a process in which language is learned from interactions between children and adults. This means that language is primarily about communication. Children want to communicate regardless of the control they have over all the sounds of their home language. Similarly children who are learning to read and write do not need to know all of the sound-symbol relations of their language in order to be able to make sense of written language (Goodman, K., 1986).



Research by Barrera (1981), Hudelson (1977, 1981), Rivera-Viera (1978) and Edelsky (1986) shows that the process of learning to read and write in Spanish is the same as the process in English. Nevertheless, because of a history of research focused on teaching reading and writing from a code-breaking methodology (phonetic, alphabetic and whole word), the common belief has been that learning to read and write in Spanish is easier than in English because of its regular sound-letter correspondence. If learning reading and writing is a matter of encoding or decoding, then one would expect Spanish speaking children to master these methods earlier and more efficiently than their English speaking counterparts. However, Temple (1978) found that "... Spanish children commit spelling errors which are exactly comparable to those of kindergartners learning to spell English." If learning to read and write is a process, it does not matter in what language the process takes place. In addition to this, researchers who have studied bilingual language development have observed that "... bilingual children use the same acquisitional strategies as monolingual children..."(Genesse, 1988). Therefore, if learning to read and write is a similar process regardless of the language it takes place in, if it is comparable to the process of learning to talk, and

if there are no differences between bilingual and monolingual language development, then theoretically a bilingual child can learn to read and write in his/her two languages at the same time, just as s/he learned to speak both.

Theoretically, biliteracy acquisition is possible. There is also a small body of research that deals with this phenomenon and serves as practical evidence of its possibility (Andersson, 1977, 1978; Christian 1976, 1971; Lado 1977, 1980). However, this research limits itself to the use of Doman's (1971) methodology for teaching reading. Research that deals with biliteracy as a process, where we can observe the strategies used in one language and compare them to the other language is nonexistent. Understanding biliteracy as process would help us develop educational alternatives for a growing student population. Some of our nation's bilingual education programs would need a redefinition. This redefinition would help these programs overcome their stigma as remedial education programs.

#### Limitations of the Study

The primary limitation of this study was that I was observing bilingual literacy development in just one subject. This can keep the study from being

generalizable to bilingual literacy acquisition at large. However, the studies on bilingual language acquisition, which suffer from the same limitation, are also studies where the language acquisition process has been recorded most completely.

Literacy is a social activity and its development is socially rooted. The subject of this study does not represent the average five year old Hispanic child entering a kindergarten classroom in the Western Massachusetts city where she lives. She is a very mature child who has been exposed to a wide variety of experiences. We also have to take into account that her family does not represent the average Hispanic family of that city (socially, economically and politically). The subject's and her family's differences from the average Hispanic citizen can prevent the findings from being generalizable.

The major source of bias in the study is the fact that the subject is my daughter. However, I feel this does not diminish the findings because an in-depth study of this nature is only possible with the direct access that I had to the subject. This is especially true because reading and writing instruction in Spanish were

not provided at the school and Spanish literacy was acquired at home.

Additionally, to verify the findings of the study, the data was examined by different people in the educational field. The school data was examined and discussed with Marcela's teacher, Mary Ginley. From these discussions valuable insights into Marcela's literacy development flourished. Likewise the data generated at home was discussed with bilingual fellow graduate students of the School of Education: Debra Sicilia, Miguel Figueroa, Carmen Rivera and Roberto Otero.

Other limitations to this study have to do with the out-of-school circumstances surrounding it: the attitudes towards the Spanish language in the Anglo community, that I mentioned in the introduction, and the lack of environmental print in Spanish surrounding the subject may have affected the results. Finally, she did not have formal (school, academic) instruction in Spanish. Generally, these out-of-school circumstances could have led to a deficit in the development of the subject's literacy skills in her home language that is not indicative of her potential for biliteracy.



## Summary

This research is a case study designed to observe the development of biliteracy. The subject of the study was a bilingual inner city kindergarten child exposed to English and Spanish since she was five months old. Using qualitative research methodologies the child was observed at her home, where Spanish was the language of communication, and at school, where English was the dominant language.

The remainder of the chapters of this dissertation will describe the methodology and the findings of this study. Chapter II will summarize the research related to literacy acquisition, bilingual language acquisition and biliteracy. Chapter III will report on the methodology used to gather the data followed by a discussion on the findings in Chapter IV. Concluding this dissertation, Chapter V is a summary of the findings and their implications for educational practices and further research.

## CHAPTER II

### REVIEW OF THE LITERATURE

#### Introduction

Since the late 70's, research on early literacy has experienced a shift in its approach to literacy acquisition. According to Courtney (1987), the skills approach was the method of early literacy instruction before Clay (1975) and Harste, Woodward and Burke (1984) published their studies. These two pieces of work not only pointed to a change in the approach to literacy instruction, but also to shifts in research methodologies.

In her doctoral dissertation, Courtney (1987) provides the reader with a summary of earlier research on literacy which defined reading as a set of skills to be learned. The methods of assessment used in these studies tested these skills in isolation. Consequently the picture they presented of reading was a very fragmented one because they failed to present the whole process of a child becoming literate.

The research on reading in Spanish replicates the same pattern described above. It was in the late 70's and early 80's that holistic approaches to reading and

writing acquisition began to be used by researchers who work with Spanish-speaking children (Barrera, 1981; Hudelson, 1977, 1981; Rivera-Viera, 1978. The research done in Latin America before this occurred dealt mainly with the implementation of different methodologies for teaching reading. Regardless of the methodology, the perspective of these studies is one in which literacy is seen as a mechanical process. Reading becomes the decoding of written language while writing is its encoding.

An example of this kind of research is Rolando Mans' An Experimental Approach to the Teaching of Reading in Spanish at the Primary Level. Mans conducted a one-year study with Spanish-speaking second and third graders who were instructed to read with an adaptation of Dr. Laubach's "Syllabic, analytic, synthetic" method of teaching reading. Mans is aware of the high grapheme-phoneme correspondence of Spanish and, consequently, he thinks that a syllabic method would be the ideal one for learning to read. After a year, a test was given to the second and third graders in which they obtained high marks. The scores are the evidence Mans uses to support his successful adaptation of Dr. Laubach's method. But not everything is happiness in Mans' study. More than twice in his thesis he

recognizes the possibility of a lack of comprehension from the students due to the fact that there was too much emphasis on word elements. Mans points out that one of the problems of this method is the fact that over-emphasizing the word element may cause a lack of comprehension. He also acknowledges that both context and method were imposed by the teachers, and that no student input was considered.

Most of the studies done from this perspective on reading and writing can be described as a circular or carousel type of research. This research is characterized by posing a research question that is then analyzed with methods and materials that would confirm the original assumptions. Gloria De Jesús-Pérez (1968) did a study of this sort in Puerto Rico with the Head Start Program. After giving readiness and reading improvement tests, she found that the children who went to Head Start Programs during the summer had better marks than those who didn't attend the program. This is carousel type research; they test what they teach. The same thing occurs in Mans' study.

For the purpose of this research I will review the literature which approaches early literacy from a socio-psycholinguistic perspective because it offers a



framework for understanding biliteracy development as a process. Also, I will explore the research on bilingualism because of the connection between the processes of language acquisition and literacy development.

### Process-Oriented Reading Research

Kenneth Goodman defines reading as a psycholinguistic guessing game (1971). According to his theory, written text has certain characteristics. The reader transacts with the text using these characteristics. When a reader confronts a written piece, s/he uses these characteristics as cues to predict and confirm his/her hypotheses. S/he utilizes his/her knowledge about the orthography, phonology, syntax and semantics of his/her language in order to make sense of what is written. Reading always involves a combination of visual and non-visual information. It is an interaction between a reader and a text (Goodman, K., 1982). Other cues like context and world knowledge are used as well. The reader uses his/her previous experiences, prior knowledge, and world view when interpreting signs. While reading, there is a process of selection of cues occurring in which meaning is constructed. This is the core of the reading process. The reader does not read

letter-by-letter (Smith, 1982). This is why s/he makes decisions, selects, hypothesizes or predicts, infers, confirms and corrects using previous experiences and knowledge of the language.

This process, as described by K. Goodman (1982), is the same across languages, although it is flexible in order to accommodate itself to the specific rules and characteristics of each language. The essential purpose of reading is to create meaning. Therefore, the same strategies are used by readers of different languages; all readers have to select, predict, infer, and confirm or correct (Goodman, K., 1982).

The characteristics of the written word are themselves different in each language, but the reader knows its expectations and rules. The Spanish-speaking reader knows, for example, that generally the adjective goes after the noun and that a difference in meaning can be caused by a misplaced accent. The English-speaking reader predicts on the basis that adjectives precede nouns. Ideographic orthographies relate to phonology mainly through meaning, although some of the Chinese characters refer to a possible sound. Among alphabetic orthographies there is variation in the abstractness and the regularity of phonological correspondences.

Even though Spanish has highly regular sound-letter correspondences, Barrera (1981), Rivera-Viera (1978) and Hudelson (1977, 1981) have found that reading in Spanish is not only a matter of using grapho-phonetic information (associating letters with sounds). They strongly argue that the behaviors and processes that are described by K. Goodman (1982), Smith (1982) and others are also true in Spanish-speaking readers. For them, reading and writing are processes. The reader transacts with the text in order to construct meaning. Their research tries to explore and find out what the reader knows and what the reader brings to reading and writing. Barrera describes her study as follows:

It was prompted by research by López (1975), which provided evidence that in reading Spanish, young Spanish speakers are not cued by the grapho-phonetic information alone, but use contextual cues as well--findings which indicate that Spanish reading is not simply a process of associating letters and sounds (as has been assumed by some professionals) (Barrera, 1981, p. 1).

In a similar fashion, in her introduction, Hudelson (1981) writes that "...Spanish and Latin American Scholars have viewed the reading process as a mechanical one..." (Hudelson, 1981, p. 11) Further on she wonders whether Spanish-speaking children who read Spanish use the same strategies and exhibit the same behaviors as

the young English readers studied by Clay (1968, 1969), K. Goodman (1964), Y. Goodman (1967). Also, there is a previous study done by Hudelson (1977), in which she makes remarks similar to Barrera's (1981):

To maintain that Spanish speaking children use only their knowledge of letter sounds and syllable patterns when they read in Spanish oversimplifies the process (López-Hudelson, 1977, p. 736).

Comparable statements are also made by Rivera-Viera (1978) in her study.

Another common characteristic of three of these four different pieces of research is that their methods were applied first to English-speaking readers and later adapted by Spanish-speaking researchers to the Hispanic populations with which they were dealing. Barrera (1981) and Rivera-Viera (1978) both adapted Miscue Analysis in order to use it with Spanish-speaking children. Therefore their findings are strikingly similar, for example:

1. Proficient readers tend to rely more on the semantic and syntactic cues.
2. The number of syntactically and/or semantically acceptable miscues has a relationship with the comprehension scores.



3. There are no differences between the RMI (Reading Miscue Inventory) done with English and Spanish speaking populations.

In other words,

...reading in Spanish does not involve solely the processing of graphophonic cues, but also involves simultaneous application by readers of their language background and their knowledge of the material being read. The miscues in Spanish also indicate that young Spanish speaking readers do not merely process word by word, or letter by letter, but anticipate and predict their way through written text, sampling larger language/meaning units than the individual word (Barrera, 1981, p. 8).

Barrera (1981) states that her findings "...support and extend similar conclusions drawn by López (1975)" (Barrera, 1981, p. 1).

Hudelson's 1981 research is a Spanish version of a study done by Kenneth Goodman where she examined the oral reading behavior of Spanish-speaking children. A list of words from a basal reader was given to a group of children in isolation to be read orally; the second day the same words appeared in the context of a story they were supposed to read orally again. Her findings are similar to the ones K. Goodman found in English-speaking populations: when children read words in isolation, they tend to rely more on their decoding



skills and consequently make more errors than when they read the same words in context a day later. The errors they make while reading the words in context does not affect their comprehension (Hudelson, 1981). She found that children do not only pay attention to the graphophonic cues, but also use their prior knowledge of the language to select, predict, infer, confirm and correct.

... this study suggests that even in phonically regular languages, the reading process involves more than simply looking at the letters and transforming them into sounds. The reading process is a creative one, and the reader uses the graphophonic cues but is not limited to them (Hudelson, 1981. p. 20).

The findings are also congruent with Barrera's (1981) and Rivera-Viera's (1978) conclusions.

In terms of population and the aspect of dialect, Rivera-Viera (1978) is the only researcher who has dealt with the Puerto Rican dialect of Spanish from a psycholinguistic perspective. Her study was conducted in a school in Puerto Rico whose main population comes from a housing project in the Metropolitan Area of San Juan. Barrera (1981) and Hudelson (1977, 1981) have both worked with Mexican-American children. It is important to point out that although these researchers

have been involved with Spanish-speaking children of different dialects, their findings are very similar.

These studies show that reading is a similar process across languages. Similar conclusions are found in studies that deal with French and Hebrew language users (Goodman, K., Goodman, Y. & Flores, 1984). If literacy is a process which differs across languages in superficial aspects but not in the process itself, theoretically the differences between learning to read in two languages must then be at a superficial level. A bilingual child learning to read in two languages will use the same strategies as a monolingual child learning to read in one language. The bilingual child would have to be more flexible in terms of using the specific rules of each language, but in terms of purpose and process it would be the same.

#### Socio-Psycholinguistics and Early Literacy

It was also in the late 70's and early 80's that, as I mentioned before, the research of Clay (1975) and Harste, Woodward and Burke (1984) provided new perspectives on the phenomena of early literacy acquisition. These researchers "...see language as sociologically rooted and language learning as understandable only when viewed within its social

context" (Harste et al., 1984, p. 84). Longitudinal studies like that of Taylor (1983), who studied the process of how families socialize their children into literacy, contribute to this new perspective. Although the parents in Taylor's study stated that they did not try to teach their children to read, she establishes a link between the literacy activities of the families and the process of the children coming to literacy. This finding correlates to Teale's (1978) review of the factors associated with the environment that surrounds early readers. Among these is the availability and range of printed materials in the environment, and in Taylor's study the environment facilitated contact with paper and pencil.

Ferreiro and Teberosky's (1986) studies are also part of this perspective. Children are no longer seen as empty vessels that need to be filled by the teacher, instead they come with a great deal of knowledge about the printed world that surrounds them.

A los 4 años --para la mayoría de los niños-- hay un problema ya resuelto: la escritura es, no solamente un trazo o marca, sino también un objeto sustituto, una representación de algo

externo a la escritura como tal (Ferreiro & Teberosky, 1986, p. 332). <sup>1</sup>

The children in Ferreiro and Teberosky's (1986) research were active language users who were trying to make sense of reading and writing before they were formally introduced to literacy in school. They purposely conducted one of their studies with low income children because of their record of failure in school.

Los resultados de ésta investigación nos dieron dos indicios: por un lado que el proceso de aprendizaje del niño puede ir por vías insospechadas para el docente, y por otro que incluso éstos niños de clase baja, no comienzan desde 'cero' en primer grado. A los 6 años el niño posee ya toda una serie de concepciones sobre la escritura cuya génesis hay que buscar en edades tempranas. (Ferreiro & Teberosky, 1986, p. 44) <sup>2</sup>

These researchers also found that children were trying to understand writing in the same way they were trying to understand reading. Children were constantly

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<sup>1</sup> TRANSL. At four years of age --for the majority of children-- the first problem is already solved: writing is not only a mark on the page, but it is a substitute, a representation of something external to writing itself.

<sup>2</sup> TRANSL. The results of this study gave two insights: that the learning process of the child can follow unsuspected ways for his/her teacher and that children, including those who belong to a lower class, do not begin school from zero when they go to first grade. When the child is six years old he already has a big series of conceptions about writing whose roots have to be found among younger children.



between context and form, just to name a few. One of the most important findings of their study is the incredible amount of knowledge that young children possess who have not been introduced formally to reading and writing.

In Language Stories and Literacy Lessons (1984) Harste, Woodward and Burke studied "... the cognitive processes involved in learning to read and write among 3-, 4-, and 6- year olds" (Harste et al., 1984: ix). Harste et al. (1984) propose a dynamic way of looking at language development. Language is seen as a never-ending cycle. One never stops interacting with the written word. It is an ongoing learning process that never ends. This study is important not only because it shows children's knowledge about literacy before being in school, but also because of their finding of patterns which characterize all literacy learning. These are: organization, intentionality, generativeness, risk taking, social action, text, context and demonstrations. This research, along with previous ones by the authors, graduate students and follow-up studies done with different kinds of populations (multicultural settings in Hawaii, Texas, New Mexico and Alaska), served to confirm and reconfirm the validity of the patterns of literacy not only with middle class children (as the



early studies) but also with those children supposedly coming from less literate and fortunate environments.

An example of one of the patterns explained by Harste et al. (1984) is Demonstrations: an adult demonstrates how to read by reading, how to write by writing. It is through demonstrations that children learn some of the uses and purposes of written language. Language is learned from demonstrations by adults and peers. This social aspect of language and literacy learning permeates these patterns. We can also find examples of these patterns in other pieces of literature on literacy acquisition.

Vygotsky (1978) talks about the "Zone of Proximal Development" where a child who is not developmentally ready for a certain task can learn from peers who are able to perform it. This zone permits the child to reach out and master objectives that were not in his/her limits. It is through demonstrations from peers that children become capable of performing at higher levels. There is also a group of studies by Sulzby (1986) and Snow and Ninio (1986) of parent-child interaction where the effect of demonstrations can be observed in a child learning to read and write.

Harste, Woodward and Burke (1984) provide in their research a wide, comprehensive and inclusive perspective that helps us understand literacy acquisition. The social aspect of literacy acquisition is emphasized in their studies. Literacy is no longer seen in a vacuum. The social aspect is extremely important not only in what we learn, but in how and why we learn.

These researchers developed a new perspective on literacy acquisition. For them literacy learning is a process that does not start with learning sound-symbol relationships or word identification skills, but with the development of knowledge about print without any formal introduction to these. Children are now seen as active participants in their own learning. But because children belong to a group, a society, literacy is also seen as a social event.

Considering this social aspect of literacy, it is possible that social attitudes towards the two languages would be reflected in the literacy acquisition process of a bilingual child becoming literate in her/his two languages. It is also possible that if there is a marked social difference between the uses of the two languages, this is going to be reflected in language choice and use by the child. This social aspect of

marked social difference between the uses of the two languages, this is going to be reflected in language choice and use by the child. This social aspect of language learning is extremely important in order to understand the development of literacy in two languages at the same time.

### Bilingual Language Development and Reading

Harste et al. (1984) point to the fact that there are different ways to study language:

Linguistically, language is studied as a rule-governed system. Psycholinguistically, language is studied as a form of mediated, rule-governed behavior. Socio-psycholinguistically, language is studied as a form of mediated, rule-governed, social action (Harste et al., 1984, p. 145).

It is this last perspective that contains all the others. Language is a social activity. When people write, they presuppose an audience. When people talk, they presuppose an audience too. Language interactions are essential for language development. This holds true not only for the language processes of reading and writing, but for speaking and listening (Harste et al., 1984). Language interactions with people are essential for a child who is learning to speak, to communicate. "This position suggests that how one learns written

language is not different from how one learns oral language" (Harste et al., 1984, p. 145). If this is true, then bilingual language development would correlate to bilingual literacy development.

### Bilingual Language Acquisition

The body of literature that refers to bilingual language acquisition makes a differentiation between those bilinguals who have acquired both languages simultaneously before age three, and those who learned the second language after age three and are performing in the second language successfully. This age criterion was developed by McLaughlin (1985). There are not as many variations from individual to individual when considering the level of proficiency of simultaneous language learners with those of second language learners (Genesee, 1988). However comparative studies between those two groups of bilinguals indicate that "... late bilinguals are more inclined than early bilinguals to keep their two linguistic systems functionally distinctive and segregated" (Wallace, 1986, p. 18).

The majority of the information we have of bilingual children who acquired both languages simultaneously comes from diaries and observations done by their parents. These case studies have proven to be extremely



reported here, the findings of the case studies done in the area of simultaneous acquisition of two languages by children are pertinent.

One of the first case studies done in this area was by Leopold (Hakuta, 1986) of his daughter Hildegard who was brought up bilingually with the one parent-one language strategy. She learned English from her mother and German from her father. By age 2.9 Hildegard had awareness of the two languages. One of Leopold's findings that can be observed in other case studies is related to the social aspect of language learning; the environment was what determined Hildegard's language choice, and as a consequence, its development. When Hildegard spent half a year in Germany, German developed more than English. The opposite occurred when she returned to the United States. English was then the language that developed (Hakuta, 1986).

According to Grosjean,

"... a person can go in and out of bilingualism, can shift totally from one language to the other (in the sense of acquiring one language and forgetting the other totally), but will never depart (except in transitional periods of language learning or restructuring) from a necessary level of communicative competence needed by the environment" (Grosjean, 1985: 473).



needed by the environment" (Grosjean, 1985, p. 473).

As we can see this issue of the influence of the environment over the language choice of the bilingual is consistent through the literature.

Additionally we also find some other aspects of bilingual language development observed by Leopold in other children. Among these we can find the initial stage of mixing the languages, the influence of one language over the other when the environment favors one language, the separation of both languages' sounds and grammatical systems although the dominant language will influence the other in vocabulary and idioms (Grosjean, 1982).

In her dissertation, Merrill K. Swain (1972) raises the question of considering bilingualism as a first language. If a monolingual child's language is considered her or his "mother tongue," then bilingualism, for a child who acquired both languages simultaneously, should be considered his/her first language or "mother tongue" (Swain, 1972). In her dissertation Bilingualism as a First Language (1972), after studying the development of questions of four French-English bilingual children, Swain supports the

theory of a common storage model. The child acquiring two languages simultaneously would not store each language rule in a separate zone, differentiating between each language, but would store the common rules in a common zone. "The common storage model implied that a rule in common to the codes will be acquired only once. Further, a rule not in common to the codes may first be considered as a rule in common, later to be tagged as appropriate to a particular code through a process of differentiation" (Swain, 1972, p. 26).

Swain's (1972) position is consistent with Grosjean's (1985) argument towards the study of bilingualism using a holistic view. According to Grosjean (1985), the research on bilingualism uses monolingual situations to judge bilingualism. This represents a monolingual view of bilingualism. Grosjean (1985) believes that "... researchers studying language acquisition have too often concentrated solely on the development of the new language system and with some exceptions have paid no real attention to what happens concurrently to the first language as it restructures itself in contact with L2" (Grosjean, 1985, p. 470). For Grosjean the bilingual is an integrated whole, he or she is not the sum of two monolinguals but a different whole, and should be studied as such (Grosjean, 1985).

Krashen (in Edelsky, 1986) developed a theory regarding the issue of interference of one language with the other in bilingual situations. He argues for an application model where "... second language learners fall back on and use first language rules when their repertoires do not include the appropriate second language rule. That is, rather than being prevented from acquiring a rule in the second language because they already have one in the first language, they use the rule from the first language until they acquire the rule in the second" (Edelsky, 1986, p. 74).

It is important to understand that in terms of language development it does not matter if a child is bilingual or monolingual. There is no difference: the first words are spoken at the same time, sounds appear in their order of production difficulty, word meanings are over-extended and there is a slow increase in word utterance length, just to name a few (Grosjean, 1982). There is a natural order of difficulty independent of the teaching and the linguistic origin of the children (Van Naerssen, 1986). Bilingual language development differs from monolingual only in superficial ways. "The instances when bilingual learners have mixed elements from their two languages have been interpreted in terms

of processes that have been identified in one language acquisition" (Genesee, 1988, p. 77).

One of these elements that would seem to point out a mixture of the bilingual's two languages is the phenomenon of code switching and code mixing. There are different kinds of code switching:

1. Phonological- where the loan word blends words made up of phonemic segments of the two languages.
2. Morphological- the mixing of grammatical morphemes, ex. using the English possessive morpheme 's in Spanish utterances.
3. Lexical- the most frequently reported kind of mixing where content words and functors are mixed.
4. Phrasal- ex. "I ask him que yo voy a casa"
5. Syntactic- ex. "The house pink"
6. Semantic- ex. "¿Estás fuera de tu cabeza?"  
(Translation: Are you out of your mind?)

The difference between code mixing and code switching is that in the first one the mix occurs in the same



sentence and the second one occurs between sentences (Genesee, 1988).

Mistakenly, the general attitude towards these linguistic events has been one of rejection. In schools, children who code switch have been labeled by teachers as lacking in language abilities. Interestingly enough, the studies "... of code mixing in adults show it to be a sophisticated, rule-governed communicative device used by linguistically competent bilinguals to achieve a variety of communicative goals, such as conveying emphasis, role playing, establishing sociocultural identity" (Genesee, 1988, p. 69).

The studies of language development and code switching that linguists and researchers interested in fields such as psycho- and sociolinguistics have performed with bilinguals can be related to the few studies of biliteracy. Edelsky (1986) conducted a qualitative study over the course of a year with nine first-grade, nine second-grade, and nine third-grade bilingual children in which she studied several aspects of the children's writing development. In relation to biliteracy, Edelsky's finding is congruent with Krashen's (1980) position against interference. The data showed that rules in the first language did not



prevent the children from acquiring rules in the second language. They would apply the rule from the first to the second language until they internalized the new rule (Edelsky, 1986). This can be related to the strategy of overgeneralization that is present when children are learning their first language.

In relation to code switching and mixing, these were not as present in the children's writings as in their oral language. Edelsky (1986) points out that code switching was not necessarily an indication of the child's ignorance of the word in the other language. As with the oral code switching of adults explained earlier, one of the reasons for the child doing it was to communicate added meanings or for expressing emphasis.

### Biliteracy

In the literature, there are a few studies on biliteracy. Some are case studies done by the parents of bilingual children learning reading in English and Spanish (Andersson, 1978, 1981; Christian, 1977; Past, 1976).

Mariana is the daughter of Al and Kay Past, both of whom have published scholarly works on her biliteracy

acquisition process. Mariana's dominant language was English, the environmental language. She learned her second language, Spanish, when her parents spoke in Spanish to her for one hour to an hour and a half daily. Also, they tried to provide Mariana with play interactions with Spanish-speaking children where they lived in South Texas, and she watched bilingual television programs. Thinking to develop Mariana's Spanish, her parents decided to increase her exposure through reading her books in Spanish.

Her literacy development started when she was 1:5 when her parents started showing her word flashcards. Sometimes, when showed a Spanish-English word pair, she would read the card in the opposite language. According to her father she identified the words as wholes, relating them to their meaning (A. Past in Andersson, 1981). When Mariana was 3:8 her reading abilities were evaluated using informal reading inventories in English and a month later in Spanish. These showed that her literacy skills in English were slightly more developed than her Spanish ones. In English she was reading at the level of a first grader in the second semester of the year, in Spanish she was reading as a beginning first grader. When she was 4:11 Mariana was enrolled in a bilingual kindergarten where reading in Spanish and

English were encouraged. At the end of the kindergarten year an assessment of her reading skills showed the same imbalance of her reading skills: she was reading English at a fourth grade level and Spanish at a second grade level (Andersson, 1981). Although there is an imbalance in her English-Spanish reading abilities, K. Past found that there was no significant confusion on learning to read the two languages as with learning to speak them (Past, 1976).

Additionally, when Mariana was four years old, she began to take piano lessons. This process was an easy one for her. She learned to read music with unusual speed. There is a possible relationship between this and her reading abilities in terms of Mariana's ability to decipher two symbolic systems (Andersson, 1981).

Chester and Nancy Christian decided to educate both their children bilingually. To accomplish this, Spanish was the language of communication in their home although they lived in an English-speaking neighborhood. Consonant with this decision, they taught Raquel and Aurelio to read and write in Spanish before they went to kindergarten.

When Raquel was 18 months old she showed interest in the letters of the alphabet. She learned the names of

the letters and rapidly went on to read two letter combination words. When she was 2 years old, she could read words with up to four letters.

Aurelio's approach to reading was different. He was interested in reading whole words. His interest in the alphabet was developed later. When Aurelio was 2 years old, he had a reading vocabulary of at least 20 letters.

Christian (1977) believed that Raquel's approach to reading was more effective than Aurelio's. When Aurelio forgot a word, he had to re-learn it. On the other hand, if this happened to Raquel, she could sound-out the letters, strategy that helped her read words she did not know.

When Raquel and Aurelio entered school, they learned to read English quickly. However, the school's attitude towards Raquel's bilingualism was negative. On one occasion the school officials asked her parents to stop speaking Spanish at home because although it did not interfere with Raquel's learning of English, she thought that Spanish was a better language than English. Her parents refused to follow the school suggestion and from this experience Raquel learned to hide from her teachers her knowledge of Spanish. The following year she



decided not to tell her teachers she knew Spanish (Christian, 1977).

There is another case study of a bilingual child learning to read in English and Korean (Ok Ro Lee, 1977). Yuha was born in the United States and she learned Korean at home and English outside. Although Korean was her dominant language, she knew a little English. When she was two years old, her family moved to Korea where Korean became Yuha's dominant language. A year and a half later the family moved back to the United States and Yuha's parents found it necessary to teach her to read in English because she was going to be enrolled in a kindergarten.

Yuha was 4.7 when the study began. Her parents taught her to read using Lado's (1972) Early Reading English (in Andersson (1981)). The method, as in Past's (1976) study, consisted of using flashcards where words were written. The language of communication and instruction was Korean. Just before she started first grade Yuha learned to read and write in Korean through a special program in her elementary school. At the end of the one month course, her reading and writing abilities were better in Korean than in English. At this time she

showed awareness of her biliteracy by comparing her two languages (Andersson, 1981).

There is the existence of an environmental factor in Kupinsky's (1983) description of a English-Hebrew bilingual literacy program for kindergartners. The research took place in a Jewish day school in the Michigan area, during 9 months. In this school English instruction took place during the mornings and Hebrew instruction during the afternoons. The methods for teaching both languages, although different, emphasized learning the letters with their sounds. At the end of both programs, the students were able to read in Hebrew a variety of texts, the children having the necessary decoding skills for reading. In English the children were able to read from their letterbooks and had a list of decodable words. The standardized testing provided at the end of the school year showed that the students could read in both languages although at different levels. The average score in the English test was 86% compared to 71% on the test in Hebrew. The students' reading skills in the dominant language of the general nonschool environment were higher. This study not only provides evidence about the importance of the environment, but it shows that "... children will not be

confused by learning to read in two different scripts at the same time" (Saunders, 1988, p. 202).

The literature also points to the importance of reading daily to the children in their home language from the time they were very young (Andersson, 1978; Past, 1976). This has been reported in the literature on monolingual English and monolingual Spanish early readers as a very important part of the children's way of learning about literacy (Taylor, 1983; Teale, 1978).

Ok Ro Lee (1977) concludes that "... the subject's 'early bilingual reading facilitated, at least partially, her bilingual and bicultural adjustment'" (Andersson, 1978, p. 147). Similarly Past (1976) concludes that Mariana's bilingual reading abilities supported her development in oral bilingualism (Past, 1976). There is also the possibility that early reading could be beneficial in terms of language development (Montero, 1985 in Saunders, 1988).

Percilia Santos (1984 in Saunders, 1988) researched the reading achievement of low-income Spanish speaking children in an early bilingual reading program. These children performed average or above average in standardized testing and were more proficient in reading two languages than monolingual children reading one

language. Additionally, testing on language development showed that 94% were above average in their dominant language and 63% scored above their chronological age in their second language. Saunders concludes that "Since these children belong to a group normally found to be below the US national norms in English, it may well be that their higher speech development was caused by their early reading experience" (Saunders, 1988, p. 199).

Finally, the research shows that bilingual children who become literate in one language are able to transfer their reading strategies and skills to their other language (Andersson, 1981; Christian, 1977; Saunders, 1988). Saunders' (1988) daughter, Katrina, was taught by her father to read in German where she was very successful. When she was enrolled in an English kindergarten class, her reading abilities in German far exceeded the reading instruction of English at school. Katrina became impatient and "... took matters into her own hands, 'teaching' herself to read English by transferring the reading skills she had already acquired in German, quickly figuring out the different relationships between letters and sounds (Saunders, 1988, p. 205)." The same happened with Saunders' older sons, Thomas and Frank, who after being exposed to learning reading formally in school, were introduced to



reading in German by his father. Although the exposure to English reading was greater, "... it seems that the skill of reading, practiced constantly in English at school, transferred readily to his other language..." (Saunders, 1988, p. 201). According to Saunders (1988) because of German's regular correspondence between letter and sounds, in a short time, his son's ability to read in English was close to that of reading in German. Chester Christian's daughter and son, Raquel and Aurelio, quickly learned to read in English in school (Andersson, 1981).

The research on biliteracy and bilingualism consistently shows the relationship between language learning and the social environment in which the learning takes place. Language choice and development are determined by the social environment. We can establish a relationship between the social aspects of bilingual language development and the social aspects of biliteracy development. This comparison would show that findings on first and second language choice and development would correlate with first and second language literacy choice and development. Also, we would probably find that biliteracy development correlates to social attitudes and expectations towards the first and second language.

## Summary

For the purpose of this dissertation it is important to understand the research on literacy from a process-oriented perspective, as well as the research on bilingual language development, biliteracy and early literacy acquisition.

Reading and writing are defined in the process-oriented literature as processes which develop similarly, although not exactly equally, across languages. Different languages users utilize the same strategies when they engage in reading and writing activities. Consistent throughout the literature is the fact that meaning is the core of the reading process no matter which language this process takes place in. Readers across languages not only consistently pay attention to the grapho-phonemic cues, they also use their prior knowledge of the language along with strategies such as prediction, confirming and correcting.

The literature on early readers and the elements that contribute to this behavior show us the influence of the environment in children's reading and writing development. Parents, older siblings and peers are the first "teachers" of language that children have. Social

attitudes and expectations about literacy are communicated to and influence each child's development as a reader and writer. In the case of bilingual children, the attitudes also influence their language choice and self image. Language learning is a social event. Literacy is socially rooted.

This literature also explores the knowledge of children who have not been introduced formally to reading and writing and conceives of children as active participants of their own learning. Researchers believe that literacy development is comparable to language development. The reason behind a child learning to talk is the same reason behind a child learning to read and write: to communicate.

The literature on bilingualism points to the importance of language interactions which are essential for language learning. Consistently reported in the literature is the effect of the environment on language choice and development. Other important factors in bilingual language development are the initial stages of language mixing, the later separation of sounds and grammatical systems, and the influence of the dominant language in terms of vocabulary and idioms.

In the same way, we see the environment's influence on the development of biliteracy. In a bilingual situation, although the exposure to one language might be greater than to the other, the skills are transferred. With exposure to two languages, reading and writing skills in both languages could be comparable.

In terms of biliteracy, children are able to learn different codes simultaneously resulting in the development of this ability. Biliteracy has also been connected to an increase in oral language skills in both languages. The research also suggests that there could be a positive relation between biliteracy and the facility in learning other codes such as music.

If literacy development relates to language development, then biliteracy should relate to bilingualism. The findings of the studies on bilingualism and early literacy acquisition will give us a framework from which we can understand a child coming to biliteracy. It is one of my purposes to find through this dissertation if those relations can be established by describing the specific strategies and processes of the biliterate child. If process-oriented literacy research defines reading and writing as processes



similar across languages, we would also find, in the case of a bilingual child, a relation between the development of literacy in each of her languages and the findings of studies on early literacy acquisition.

## CHAPTER III

### METHODOLOGY

Language learning and literacy acquisition have been studied from different perspectives. As indicated in Chapter II, in recent years the social and cultural aspects of literacy acquisition and development have been the focus of research. Research findings "... demonstrate that literacy, viewed as a cultural phenomenon that interacts with certain social processes, is best studied by adopting an ethnographic perspective" (Shieffelin, 1986, p. viii).

Ethnography is part of the social sciences research methodologies. It is encompassed by a broader research category called qualitative research. Ethnographic research uses a naturalistic methodology. The naturalist paradigm "... is based on the assumption that reality is 'constructed': that is exists only in the minds of people, and that it is a holistic concept that cannot be fragmented without altering its meaning" (Guba, 1982, p. 7). In the same way, if we define literacy learning as a process where every part is needed in order to construct the whole, we can not study it by fragmenting its parts. Because language learning is a social and cultural activity, the researcher needs

to operate from a holistic concept. The naturalistic paradigm provides us the essential framework to understand literacy as a process.

This study was designed to research a child's biliteracy development. Integral parts of this process are the social and cultural environment. It is congruent with the participant principle of ethnography that the researcher is an integral part of the social environment of the child studied. "An ethnographic perspective assumes that all aspects of the context of situation, including the researcher, are an integral part of the process and integral part of the phenomena one is attempting to explain" (Harste, 1984, p. 89). Hence, ethnographic methods were particularly appropriate for this study.

After an explanation of the methodology, the participant and the setting will be described, followed by a description of the data gathering procedures.

### Ethnography in Education

According to Kantor, Kirby and Goetz (1981), important parallels between ethnographic research techniques and the process of language learning are: hypothesis generation, the importance of context, thick

description, participant observation and meaning making. These were particularly suited for this research because of the research's language related nature. Each of these parallels will be briefly described.

### Hypothesis Generation

The research on literacy acquisition characterizes children as active participants in their learning process. Children are immersed in a process of constant hypothesis generation and testing. Ethnography is also a process of discovery, a process in which questions, answers and solutions are generated. Although researchers may enter an environment with preconceptions, they sustain their alternatives until the amount of data determines a direction (Kantor et al., 1981).

### The Importance of Context

Language is not learned and developed in a vacuum. The social aspect of language has been acknowledged by different researchers in the area of literacy: "... we see language sociologically rooted and language learning as understandable only when viewed within its social context" (Harste, 1984, p. 84). The accent on the



importance of context is characteristic of ethnographic research. Ethnography views the interaction with the environment (physical, natural and socio-cultural) as a critical aspect that affects the understanding and explanation of the research.

### Thick Description

This is "...the concrete and careful account of particular events" (Kantor et al, 1981, p. 296). Good literature uses description that, as Macrorie (in Kantor et al, 1981) points out, "puts the reader there". The data of ethnography, using field notes, diaries, transcriptions of interviews, is a detailed and organized description of the world entered by the researcher. This detailed description helps us understand the process of literacy acquisition.

### Participant Observation

"The participant observer comes to a social situation with two purposes: to engage in activities appropriate to the situation and to observe the activities, people and physical aspects of the situation" (Spradley, 1986, p. 54). Some literary interpretation theories propose that as the reader interprets the piece of literature, he or she is recreating them according to her or his own

experience. There are also different points of view in responding to a literary piece. The reader is an active participant in the process. In the same way, the researcher who brings to the study his or her own opinions and expectations is an active participant in the research process. The researcher is part of the social entourage where the study takes place.

### Meaning Making

Children are meaning makers. They use language to order and make sense of their reality. Meaning making is both a topic of ethnography and a means. One of its purposes is to "... look at ways in which individuals construct their own realities and shared meanings" (Kantor et al, 1981, p. 298).

### Population and Setting

This was the case study of a bilingual child who was exposed to a second language when she was five months old at a day care situation. At the beginning of the study she was five years old and a kindergartner in a monolingual English classroom.

## General Background

Marcela came from a literate home where Spanish was spoken. Her parents were graduate students who came to live in a Massachusetts "university town" from Puerto Rico when she was five months old. At that age Marcela's exposure to English began at a day care center. The center was a very heterogeneous and multicultural setting with teachers and students coming from different countries and cultures. At this point Marcela's exposure to English was very limited because she spent only three and a half hours a day at the center. The language that Marcela used to communicate at home was Spanish from the beginning although she demonstrated an understanding of English at school. Her interest in books and her bilingual language development were noticed by her teachers in a 15 months evaluation, 10 months after she was first exposed to English (Wimbish, 1985). When she was two years old, the majority of her utterances were in Spanish. At this time she was at the two word stage in Spanish. On the other hand, when speaking English, Marcela used one word per utterance (Costa, 1985). At this point Marcela's Spanish language abilities were apparently more developed than in English.

Two years later, in the same day care situation, Marcela's assessments still showed her great interest in art and literacy activities. In terms of her bilingual language development her teachers characterized her as "very expressive in English and Spanish" (Cain, 1987). Interestingly enough, it was at this time that Marcela brought her Spanish to school. In various parts of the assessment, the use of Spanish was mentioned by her teachers (Cain, Jan. 1987 & May 1987). In this center although the main language for communicating was English, some of the teachers knew Spanish and used it with the Spanish-speaking children when they talked to them in Spanish. Language and cultural diversity were valued and encouraged in this setting. Although Marcela was spending more time at the day care, compared to when she was a baby, Spanish was still her dominant language. Spanish as Marcela's dominant language changed later.

In terms of literacy, since Marcela was a baby, she had been surrounded by books, papers, typewriters, pencils and crayons. Full access was given to all these materials and Marcela took advantage of this. Her parents started reading a story to her every night when she was a baby. The first picture books (where there is a picture with the name of it underneath), although in English, were "read" to her in Spanish. This was done



so that Marcela could develop vocabulary. Later, when her parents started reading story books to her, the distinction between a book written in English and a book written in Spanish was established. In terms of availability of age-appropriate reading materials for Marcela, the amount of books and magazines in English outnumbered that of Spanish in a four to one relationship. At the time of the study, this numerical relation had not changed.

Marcela's parents did not make any efforts to teach her letters or words in isolation. Rather they used a very holistic methodology. Since she was a baby she was encouraged to join in reading events with her parents (ex. from reading the traffic signs to a joined reading of a predictable book). Through these literacy events Marcela learned the left to right, top to bottom orientation, the distinction between a letter and a word, the concept of a story, author and illustrator, etc. Other literacy events related to writing included writing letters to grandparents and family in Puerto Rico, writing shopping lists, "I have to do" lists and reminders. If Marcela was writing and asked how to write a letter, her parents would occasionally provide the information requested, sometimes making a relation between the letter requested and an object (example:

the -R- as in <Rocío>). The first letters that she learned were those in her name. There was a ritual game that took place on her way to nursery school every day. This was the "name's letters finding game". Right in front of the nursery school there was a manhole that had written on it the word <water>. The first time Marcela looked at the manhole, really paid attention to what was written on it, she saw the letter -M- upside down saying "mira, Mamá, mi letra al revés" (look, Mamá, my letter upside down). Every day she stopped in front of the manhole to point to her letter. Later, when she was told that was not her letter, but the letter -W-, she played standing on the wrong side of the manhole saying "If I stand here, this looks like my letter, but it is not."

In 1987, when Marcela was three years old, because of a change in the employment situation of her parents, her family moved to a city in Western Massachusetts with a large and growing Hispanic population. They chose the daycare with the best reputation among their co-workers, who were teachers in the public school system of the city. The population of the day care came mainly from middle class English-speaking homes. The amount of time that Marcela spent in school also increased in this new environment. This day care, although academically

excellent, did not offer Marcela the same cultural and language diversity that the previous one had. In contrast with her previous day care situation, although the use of Spanish was not punished, it was not encouraged either. All her teachers were Anglo and throughout the two years that she spent there, Marcela only had one Hispanic classmate.

A year prior to the study, in this last preschool Marcela was enrolled in the classroom of the older preschoolers. Her classroom placement was decided by her teachers because of her maturity. Most of her classmates were older than her because of a decision on the part of their parents to keep them back a year. All her classmates were English speakers and so was the staff of the school.

Marcela's was a developmental classroom with a very similar set-up to a kindergarten. There were gross and fine motor areas, creative play areas, a reading corner, etc. They had a "morning meeting" where literacy skills were introduced and modeled. In addition to the story reading every morning, the teacher started using the "Alpha program" to introduce the letters of the alphabet beginning in November.

In this program a "letter person" is introduced each week through a song that describes "the person" using words that begin with its sound. This is a "teacher proof" program with detailed descriptions of the procedure for the introduction of each sound. The first letters introduced are the consonants. The name and sound of each "letter person" is emphasized, and extension activities include making art projects with objects that begin with the same letter. For example, when the students are studying Mr.N, they make "noodle necklaces."

#### Description of Kindergarten School

The school where Marcela was enrolled for kindergarten was part of a project by the city's school department to offer a developmental approach to learning. This was the third year of the project. The school was the only one in the city offering all day bilingual and mainstream kindergarten classrooms. There were also pre-school and special education classrooms in the building. Although the teachers had received training in developmental education and the whole language approach to literacy, the degree of implementation was left to each individual.



Depending on their level of comfort with the new approach, teachers made the move to more developmentally appropriate programs. There were differences among classrooms. These differences were more obvious between bilingual and mainstream classrooms. Bilingual teachers tended to be more conservative and less inclined to fully implement the new approach to learning. Although they started using more literature in the classroom, they used either a phonic or a syllabic approach to literacy instruction. Although mainstream teachers adapted better to the new theory for the most part, they conceived of whole language as a method, a set of techniques, not a different theory that eventually would alter their whole teaching. The majority of these mainstream teachers integrated whole language techniques with their previous literacy teaching scheme. They used children's literature, poems and charts, but the basic method was to introduce the letters of the alphabet and sounds associated with those letters through the use of thematic units. The administration of the school was aware of these differences and encouraged change but did not impose it.

The school's principal believed that each teacher was at a different developmental stage and that forcing the complete implementation of the new techniques would not

work. On the other hand she believed very firmly in multicultural education and did require teachers to make changes in this area. When the school opened she made clear she wanted an integrated school. Teachers were expected to team up to develop integrated activities. Each team was composed of a mainstream, a bilingual and a special education class that would meet together on a regular basis.

This school represented the best alternative among the city's schools for many reasons. Multicultural education was actively pursued, not just an item in the school's handbook. Parental interaction and input was also actively pursued. In addition, Hispanic and bilingual positive role models were present among the authority figures in the school. And in terms of literacy instruction, this was the pilot school in the establishment of a whole language model for literacy instruction. These were some of the reasons that made Marcela's parents choose this school for Marcela's kindergarten year. The fact that a mainstream classroom was chosen instead of a bilingual one, was a conscious decision. After much consideration the mainstream classroom was chosen because of the educational program an specific teacher provided. Marcela's teacher, Mrs. M. had a magnificent reputation among the kindergarten

teachers, parents and administrators. She was also one of the few providing read "whole language" literacy instruction. If there had been a teacher in the bilingual program providing this kind of instruction, Marcela would have been placed by parental request in that teacher's classroom. However, at the moment, that bilingual kindergarten classroom did not exist.

### Marcela's Classroom

Marcela's teacher, Mrs. M., was one of the pioneers in the school department to implement whole language. For a year she worked on a teacher resource team as part of a grant researching the literature on literacy learning. When the year was over, she decided she wanted to implement what she had learned and returned to the classroom. This was her third year of using whole language in the classroom.

In Marcela's classroom letters were not taught in isolation. Mrs. M. believed that children need a reason for learning, not simply because the teacher says it is important. There were different kinds of charts in the classroom. These were used for different purposes. Among these multipurpose charts, the ones with the names of the students were the most prominent and were used both by the teacher and the students. They were used to



establish the order that determined who was the leader of the day, to look for a friend's telephone number, to find someone's birthday so she or he could be honored for the day, or to be able to stand up in the song of the months of the year when your month was mentioned. The students learned the letters in relation to their own or their friend's name.

Purposes were very important in Mrs. M. classroom. For example, one of the skills a kindergartner needs to learn is to write his or her name. This was practiced daily in Marcela's classroom. However, it was practiced with a purpose other than to learn to write your name. Each morning, when the students arrived, they "signed in." A table and papers with each student's name was provided for this purpose. At the beginning the students copied from the model prepared by the teacher, but as the year went by, they did not need the model. These papers were used later in the day by the teacher to check for absentees.

Literacy learning played a very important role in this classroom. Mrs. M. used thematic units based on social studies, science, or the children's literature. During October, the students discussed the harvest and learned some of Jack Prelutsky's It's Halloween poems.



During January they studied China where they were read stories like Lon Po Po, Ming Lo Moves the Mountain, and Yeh Chen. During February, to celebrate Black History Month, the students had a unit on African-Americans and their literature. They also studied Martin Luther King's life and put on a play about Rosa Parks and the bus boycott.

In the morning, after signing their names, the students were expected to choose a book and read for about 15 minutes. This was considered a shared reading time. After this, the daily schedule called for a morning meeting where literacy skills were taught and the activities of the centers were explained. There were student and teacher directed centers. Some of the student directed centers like the family living or the block center were considered play by the children. Others like reading and writing were not. There were centers, that, although planned by the teacher, did not require her presence in the area for students to complete the activity. Other activities needed a teacher most of the time.

For example, each month the students were expected to finish a poetry and song book. These were copies of the songs and poems the children were using in the classroom

arranged in a booklet. Each child worked on different skills in these booklets. At the beginning, concepts like left to right, top to bottom progression and illustrating the poem or song were the ones emphasized. As the students progressed other skills like circling a letter or word were introduced.

These booklets helped the teacher individualize her teaching and also provided a concrete and constant assessment of the child's progress. At the same time, when the children took the booklet home, parents could use it as reading material and help the child at home with the literacy learning process.

After the morning centers, before lunch, the children had a reading meeting where Mrs. M. read to them and discussed a story related to the unit they were working on. Following lunch the students had rest time. At the beginning of the year, this was a long period of time that extended from 30 to 45 minutes. After waking up, the children took part in an afternoon meeting followed by center activities.

In January, the rest time was reduced to 15 minutes and the children could choose between resting or reading a book. Most of them chose reading. This was a silent

reading period. The writing workshop took place after this.

The writing workshop began with a mini-lesson modeled by the teacher. This usually took five to ten minutes of the whole 45 minute period. After the mini-lesson the children took their writing materials which consisted of papers stapled in the format of notebooks, pencils and crayons and went to the tables to write or draw. The teacher moved through the classroom helping, listening and commenting on the children's work. Children were encouraged to write but were not forced. Sometimes after talking about a drawing with a child Mrs. M. would write on the page what the child told her. Following the writing workshop, the students could choose between continuing writing or visiting the centers.

Mrs. M.'s classroom proved to be a great choice for Marcela's literacy, emotional and social development. Mrs. M. created a learning environment that helped children grow in every aspect. Each child was valued and was treated as a person. Teaching was individualized and learning was a joyful activity. Throughout the year Marcela learned not only to read and write, but to care for other children and their needs and to use her knowledge and skills to help those who needed her.

### Data Collection

I utilized some of the methodologies of ethnographic research. My primary method of data collection was participant observation (Hammersley & Atkinson, 1983; Spradley, 1980). The data was gathered through field notes at school biweekly during the first months of the study during Center Time, when the children choose an activity, and during Morning Circle where the formal language instruction was provided by the teacher. It was expected that during these times the probabilities of development of literacy events would be broader than in other periods of the school day.

When process writing time began in February, a tripod-held video camera was used in the classroom during Rest Time when the children were allowed to read a book of their choice and during process writing time. At home, field notes along with videotapes of the subject reading and writing in the language of her choice were used.

Informal interviewing of the subject was conducted in both settings. In addition to this a Reading Miscue Analysis (Goodman & Burke, 1972) on the child's reading of both languages was used twice in the study. All of the subject's written productions were saved.



## Field Notes

Two kinds of field notes, written and video, were taken in both the home and the school setting. The video tapes were logged and transcribed. The written notes were kept in notebooks using double space. At the end of the day I went through these and expanded on the entry. Personal notes about the observations were recorded with a different colored ink.

A journal was also kept about the personal questions and struggles during the data collection period. This served the purpose of providing a constant analysis of the struggle of discovering the patterns that emerged from the data.

## Informal Interviews

These consisted of informal conversations that took place in either the school or the home setting. The conversations took place with Marcela's teachers, her classmates, her father and other adult friends of the family.

The conversations with Marcela's teacher, Mrs. M., took place when I was in the classroom, during her lunch or after school. The fact that I was part of the school staff made the communication easier to coordinate. The

same happened with Marcela's classmates who, because of my position in the school, were comfortable talking with me any time they wanted to. However, most of the conversations with the children took place during reading or writing time.

The conversations with Marcela outnumbered the other ones. These usually took place in the morning on our way to the school, or in my office while I was preparing for the day. Because she was usually writing a piece at this time, it was normal for Marcela to start a conversation about literacy. The conversations outside the school day (although they may have taken place in the school building) were considered as home data.

Most of the conversations with Marcela's father were initiated by me. These were discussions about the process Marcela was going through. Most of the time they provided me with a different perspective and opinion about the process. They also proved to be useful because they accounted for literacy conversations with Marcela that took place between her and her father when I was not present.

## Written Material

I collected everything that Marcela produced during the time the study took place. Her journals, her monthly booklets prepared in the classroom, her notes, the writing workshop entries, the reading notebooks and the stories produced at home or in my office were collected. The latter were considered home data, as were the informal interviews that took place in the school building but outside of school hours. Letters produced at home or school were photocopied.

## Reading Miscue Inventory

In February and again at the end of May 1990, Reading Miscue Inventories were given to Marcela in English and Spanish. These were analyzed according to their methodology. There were problems with the selection of material for the February Inventories in the English version as well as with the Spanish one. Both selections contained vocabulary and language structures Marcela was not familiar with. The May selections proved to be more appropriate. The Inventories were given on different dates in the home setting and were recorded with a still video camera. Later a transfer was made to audio tapes in order to make the scoring easier.

## Data Analysis

Because of its ethnographic character, data was continually analyzed throughout the study through the use of the journal. The research questions along with the observations served as a basis for this analysis. Initially the criterion for organizing the data was the time of collection. For this purpose, a running record was used.

June 15, 1990, was the official date for termination of data collecting. At this point it was decided to reorganize the data using 4 X 6 index cards. These were categorized using the patterns and themes that arise in the data. Two colors of cards were used to indicate the context in which the data took place. Colored labels were used to differentiate the English from the Spanish data.

A tool that corroborated the data analysis was the Reading Miscue Inventory. This provided data about the strategies that Marcela was using in each of her languages and a way to compare her reading abilities and strategies in both languages.

While the data was being gathered it was observed that Marcela's writing and reading strategies and



hypotheses in both languages, although related, were different. It appeared necessary to organize the data on reading and writing separately. Under these two categories, in order to compare and possibly contrast English and Spanish, it was necessary to separate both languages. Also, in the writing data interesting choices were occurring in relation to spelling in English and Spanish. This led to a section on Marcela's grapho-phonetic organization patterns in each of her languages. Another category of data organization was Marcela's bilingualism. Her awareness, code-switching, school attitudes and audience were themes that emerged under the bilingualism theme. After a careful analysis, the data was divided into three major categories: Bilingualism, Writing and Reading. These categories provide the organization for Chapter IV, where each category is also divided into different sections that emerged from the data analysis.

### Summary

This research used ethnographic methodologies to study the development of biliteracy in an early bilingual enrolled in an inner city English mainstream kindergarten classroom. The data was gathered through participant observation as described by Hammersley and

Atkinson (1983) and Spradley (1980) in school, where English was the language of instruction and at home where Spanish was the dominant language.

Even though Spanish was the dominant language of the home, English was also available in the manner of adult and children's books and magazines. It was used in the home for story reading and to communicate with the English-speaking friends of the family. As a result, the child knew of her parent's knowledge of English. These conditions provided the subject with the possibility of using English in the home environment. As a result, there was no clear cut language division in the home data, where reading and writing took place in English and Spanish.

The data in this research consisted of written and video field notes, informal interviews with the subject, the subject's teacher and father, and written material the child produced during the study. Additionally, twice in the study, Reading Miscue Inventories were given to the child in English and Spanish. These were used as reading assessments and to compare the child's reading abilities in English and Spanish. At the same time, the Reading Miscue Inventories provided

information which helped confirm observations on the reading strategies the child was using.

Ethnographic methodologies require a continuous data analysis. Doing so, the patterns and themes that emerged from the data were the subject's bilingualism, her writing and reading strategies. Finally, the conditions of the research were compatible with ethnographic research methodologies in the definition of the researcher as part of the environment. Hence, ethnography proved to be the ideal methodology for gathering and analyzing the data.

## CHAPTER IV

### DATA ANALYSIS

#### Introduction

This study was designed to observe a bilingual child acquiring literacy in two languages at the same time. The research on bilingual language development was used as a framework because of the relationship that has been established in the reading and writing literature between the processes of language and literacy acquisition. This research demonstrates that from very early in their lives, children acquiring two languages simultaneously show awareness of both languages (Hakuta, 1986). Another element that appears consistently in the literature on bilingual language acquisition is the influence of the environment on the language choice of the child (Grosjean, 1982). Questions have been raised regarding the influence of one language over another in bilingual settings. Questions related to code-switching have been addressed in literature that deals with bilingual adults as well as the literature that deals with bilingual children. Edelsky (1986) found that rules learned in one language would not prevent the acquisition of rules of the second language. She noticed that written code-switching was not as



present as oral code-switching and that its use did not indicate ignorance of the word in the other language but was intended to add meanings or for expressing emphasis.

The intention of this researcher is to discover if these elements observed in bilingual language acquisition are present in biliteracy acquisition. I also intend to compare the development of reading and writing in each of Marcela's languages.

The comparative research on literacy acquisition across languages shows that children use the same strategies in all languages. It is my intention to find out if the biliterate child uses the same literacy acquisition strategies that we have observed in other literacy acquisition studies. For this purpose I will examine the development of reading and writing in each of Marcela's languages.

To understand processes, researchers sometimes have to separate the parts that work together to understand the wholeness. Thanks to modern technology, (that is in the eyes of some of us, still in the dark ages) today we can observe the workings of the human heart functioning right in front of our eyes. I sincerely hope that what follows is not the work of a medieval leech doctor, but

the work of a Dr. Cruscha of Star Trek. I aimed for the wholeness.

In order to establish Marcela's literacy skills prior to the beginning of this study, I have included in the data analysis information gathered from December 1988 to August 1989. This data has been analyzed using some of Harste, Woodward and Burke's (1984) patterns of early literacy.

The kindergarten data was divided into three sections: Bilingualism, Writing and Reading. The first one, Bilingualism, addresses one of the questions that motivates this study about the social aspect of the biliteracy development process of a bilingual child. Issues such as language awareness, the environmental influence on language choice and code-switching will be discussed in this section. In the Writing and Reading sections I will discuss biliteracy and compare the acquisition and development of literacy strategies in English and Spanish.

### Preschool Information

#### Introduction

To understand Marcela's development as an early reader and writer we have to take a look at Marcela's

productions before she began her kindergarten year. Some of the literacy behaviors that we will find later had their roots in the years of schooling prior to the beginning of this study.

As I said before, the information that follows was gathered in Marcela's home from December 1988 to August 1989. It was part of an informal journal that was started the year Marcela became 5 years old. There was no structure to the collection of this information and it should be considered as background information. I will describe Marcela's literacy development in Spanish using some of the patterns of early literacy (Harste, Woodward and Burke, 1984) and then comment on some aspects of her literacy development in English.

### Spanish Preschool Information

#### Risk Taking

Children have to take risks in order to learn. Risk-taking is essential for discovery and experimentation with reading and writing.

The thesis is developed that risk-taking is central to cognitive processing. In order to learn we must allow ourselves to be vulnerable to the situation, to other's perceptions, and to our own past experiences (Harste et al., 1984, p. 130)

It is through this process of risk-taking that language learning occurs. Without it, there would be no growth, there would be stagnation. For Harste, Woodward and Burke (1984) an overemphasis on the maintenance aspect of language would lead to non-experimentation with the generative aspect of it (Harste et al., 1984).

Even before this study started, Marcela had been a risk taker. Risk taking had been nurtured by her parents who recognized it as a necessary condition for literacy learning. When she was a baby and started to pick up books pretending she was reading, her parents defined those events as reading events and let her know she was considered a reader. In the same way, when she started making marks with pencils and crayons on paper, her parents' expectations that marks on paper are meaningful were communicated to her. From the beginning they let Marcela know she was writing or painting. In Marcela's home, there have been no risks in being a risk taker. This was part of the expected behavior. According to Harste, Woodward and Burke "... the vulnerability which a language user feels under the conditions of writing and oral reading is a 'learned' vulnerability, not something inherent in the process itself." (Harste et al., 1984, p. 134) This pattern permeates the whole study and its findings. Every time



that Marcela sat and read a book, a label, or a sign she was taking risks. Every time she wrote a story, a letter or a note, she was taking risks. If she never took risks, Marcela would not have bloomed into the writer and reader she is today.

### Generativeness

We have to realize that "... what a reader makes of a text is dependent upon his knowledge of, familiarity with, and interpretation of, available signs" (Harste et al, 1984, p. 122). For Harste, Woodward and Burke (1984), language is an open sign system. Two persons looking at the same piece of written language can find different things. When a Russian reads a sign saying "Coke" in Moscow it means a different thing than for an American reading the same sign. Written language can mean different things to the same person on different occasions. This characteristic of language is what Harste et al. (1984) call generativeness.

Generativeness, along with convention, is always part of a language encounter. The generative aspect of language does not disappear once convention is attained.

In March of 1989, Marcela explored this pattern in a story by developing different spellings for a word made up by her: "<Musufón>", who was a character of the

story. This word was spelled in three different ways throughout the story:

1. MUSUFN
2. MSFN
3. MSFNO

A constant among the three different ways to spell the word was the consonants. In that same piece words like "era" (was) and "una" (once) also had different spellings.

In May there was a literacy event that captured Marcela's sense of ownership. At the same time we can observe the generativeness pattern in Marcela's different spelling hypotheses. Marcela decided to write a letter to her grandmother who was sick, thanking her for some gifts she had sent to her. After she wrote the letter in invented spelling, I stopped her from mailing the letter right away because there were no spaces between words. I explained to her that this would impede her grandmother from understanding the letter and proceeded to divide the words with dashes. Marcela could not understand my intrusion and questioned my right to write in her letter. It was her letter and I had no rights. Finally she decided to rewrite the letter on the computer and my assistance was requested

to help her divide the words. It was interesting to note that when she composed on the computer it was easier to her to divide the words (Journal, May 1989).

The generativeness pattern of written language was explored here in relation to Marcela's grapho-phonemic organizational patterns. Attempting to spell words like "quiero" (want) and "que" (that) Marcela showed her experimentation with the usage of letters which have the same sound value in Spanish. The letters -k- and -c- are sometimes used to represent the same sound. For example, Marcela wrote "<ciero>" ("quiero"-want), "<ke>" ("que"-that) and later, a couple of lines below, used another spelling "<ce>" for "que" (that).

At this stage Marcela was sorting out different things in terms of writing. Each time she wrote a word, it was "new" to her. When she was writing she did not look at what she had already written in order to check on word spellings. She re-read what she had written to get the sense of the piece without paying attention to her spellings and continued writing. She did not think of finding a previous spelling attempt in the piece and copying it (Journal, May 1988).

## Social Action

Language is a sign system which is socially rooted. Children learn to talk because they want to be listened to, because they want to communicate with the rest of the speaking and listening world. People write because they want to be read. Interaction with other language users is an integral part of language and the language learning process (Harste et al., 1984). The children that Harste et al. (1984) observed knew from age three that writing is an "... accepted and important form of social behavior" (Harste et al., 1984, p. 147) When given paper and pencil and asked to write something, all of them made some kind of mark on the paper.

From the beginning of this study Marcela was aware of the social context in which language takes place. She understood the purpose and the uses of written language. We can observe this at the beginning of the study when she wrote letters to her family in Puerto Rico, or to Santa Claus, when she wrote "I love you" notes to her parents, when she wrote stories or when she "pretended" to read. This learning about the uses and intricacies of written language developed through the study.



## Text/Context

For Frank Smith, "Reading is less a matter of extracting sound from print than of bringing meaning to print" (Smith, 1982, p. 2). To accomplish the "bringing of meaning to print" there has to be what K. Goodman (1971) describes as a transaction. The reader transacts what he knows, his prior knowledge, with what he is seeing in the piece to be read. Text and context are integral parts of that transaction. Harste et al. (1984) define context as "... the linguistic, situational, and cultural milieu of language in use" (Harste et al., 1984, p. 155). In their study, children as young as three years old knew the difference between writing a story and writing a shopping list. The context determined the difference between the writings. These children also knew that the kind of text that you write varies according to the situation and to the context (Harste et al., 1984).

Marcela came to the study knowing what a book looks like and the conventions of different genres. When, in March, she wrote a story about a flower, she began with the Spanish version of once upon a time...; "Había una vez y dos son tres..." She had learned this convention from the oral language demonstrations that she had been

engaged in. She also knew that stories end with the classic "The End" and she used it. Another aspect of text/context knowledge was her use of "Illustrated by..." in one of her stories.

Marcela's pieces showed her knowledge of the differences between the textual conventions of a letter and a story book. Her letters either gave information, like her letter for her grandmother, or inquired, as the letter for Santa Claus. These two conventions of the letter genre were not in Marcela's stories.

There were also textual differences between her cards and her signs. Although the message of both of them was the same: to express her love for her parents, even their physical outline or shape was different. The cards looked like cards and could be distinguished from the signs. All of these take us to the organizational decisions that Marcela made as a writer.

### Organization

The organizational decisions that children make when writing are sociologically rooted. Experience is an important factor here. There is evidence of the importance of the sociological aspects of writing and we can see it in Harste et al. (1984) research. Children

from Israel scribble differently than children from Saudi Arabia or from the United States. We can observe the written characteristics of the letters of each language in the scribbles these children write. Organizational decisions are contextually rooted.

Children establish an organizational difference between writing and drawing. Harste et al. (1984) found that there was a difference between the marks for writing and the marks for drawing that children make.

According to Harste et al. (1984), children's decisions are organized pragmatically, semantically, syntactically and graphophonemically. They also found that there are general organizational patterns which can be identified at each age level. Specific organizational patterns were found to be correlated with culture and experience.

Grapho-phonic organization patterns. In terms of Marcela's spellings she was, at the beginning of the study, at what Ferreiro & Teberosky (1982) would describe as a transitional stage between the syllabic and the alphabetic hypothesis. Some letter names like -T- and -B- had this as their assigned sound value. One can also observe some letter sounds borrowed from English: she used the letter -H- for the /h/ sound,

English: she used the letter -H- for the /h/ sound, which is represented by the letter -J- in Spanish; she used the letter -Y- for the /i/ sound, which is represented by the letter -I- in Spanish; she used the letter -J- for the /j/ sound, which is represented in Spanish by the letter -Y- when it is followed by a vowel. Something else that I believe she borrowed from the English language was her generalized use of the letter -K-, one which is rarely used in Spanish. <sup>1</sup>

Because Marcela was spelling the way it sounded, we can find spelling alternatives that reflect upon Puerto Rican Spanish pronunciation. She substitutes -L- for

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<sup>1</sup> In Puerto Rican Spanish there are some consonants that have different sounds depending on the vowel that follows. The letter -C- sounds like the English -C- (as in cat) when it is followed by a --, -O- or a -U-. When the -C- is followed by the vowels -E- or -I-, it sounds in Puerto Rican Spanish as the letter -S- (as in sound). In Castilian Spanish that -C- would sound like -Th- (as in think). The sound of the Spanish -Q- is like the -C- (in the English come). It is always followed by -UE- or -UI-, in which the -U- is silent (as in "querer" and "quiero"). The letter -Z- in Puerto Rican Spanish sounds as an -S-. The letter -K-, although very rare, sounds like the -C- as in cat. The letter -H- is always silent in Spanish and the sound of the English -H- (as in home) is represented by the letter -J-. The letter -Y- when used as a conjunction sounds like the English -I- in machine. When the letter -Y- stands next to a vowel or between two vowels, it sounds /j/ (as in James). There are also some letters in the Spanish alphabet not shared with English. These are -Ch- (as in much), -Ll- (as in yes), -ñ- (sometimes like -NI- in English onion) and -Rr- which is a strongly trilled -R- (Bantam New College Spanish & English Dictionary, 1981).



-R-: if she was writing "porque" (because), she would spelled it as "<polke>" or "enferma" (sick) would appear spelled "<enfelma>". Another characteristic common to the Puerto Rican speech pattern that reflected upon Marcela's spellings was the substitution of the letter -B- for a -V-: when Marcela wrote "voy" (I am going), she spelled it "<boi>". Finally she would substitute the -S- for the -C- as in when writing Rocío that appeared spelled as <Rosio>. These pronunciation paradigms of substituting /l/ for /r/, /s/ for /th/ and /b/ for /v/ are characteristic of our speech pattern.

There was an interesting conversation with Marcela about writing that took place in March 1989, Marcela wrote "<MRSLA>" on a piece of paper sounding out her name very slowly. Looking at the word she told me that this was the way her name was written in Spanish. I believe that her efforts to find a way to write her name in Spanish differently than in English had to do with Marcela's reflection on her learning experience. Because she associated literacy learning with school learning, and her schooling had been in English, it is reasonable to believe that she thought that the way in she wrote her name was in English. From this literacy event we can also conclude that Marcela had already

internalized that there is a difference between writing and reading in Spanish and in English.

Syntactic organization patterns. Marcela's syntactic patterns when she wrote stories in Spanish came from her experiences with written language. They sound like written language although her story starters came from the oral tradition. None of the stories of her books in Spanish started with "Había una vez y dos son tres...". This was a story starter that I learned from my mother and used when I told stories to Marcela.

In August, 1989, Marcela visited Puerto Rico and her abilities to read, write and speak in Spanish developed. When one asked Marcela to write, she consistently started each piece with the phrase "A mi me gusta ...". (I like ...). She had found an easy expository writing pattern. At this time when Marcela wrote, because she was not dividing the words, she found it difficult to understand what she had written and got frustrated with the process.

It was on this trip that I noticed that Marcela's Spanish oral syntax had some loans from the English syntax: "Eso es porque" (that is why) instead of "Por eso es que..." which would be the correct form. This relates to Grosjean's (1982) position that the dominant

language will influence the other in vocabulary and idioms.

### Metalinguistic Awareness

In a conversation with Marcela that took place in August, a few weeks before she began kindergarten, she reflected upon her learning to read and write. Although she did not remember how she learned the letters, she thought that she learned the sound-symbol association watching her parents:

- Rocío: ¿Cómo tú aprendiste a escribir?  
Marcela: ... Pues los sonidos de las letras...  
Rocío: ¿Alguien te enseñó los sonidos?  
Marcela: No... en mi cabeza...  
Rocío: ¿Cómo aprendiste la letra que vá con ése sonido?  
Marcela: Miré a papá y a mamá.  
Rocío: ¿Mirastes cuando ellos escribían?  
Marcela: ... y así mas o menos aprendí a escribir mi nombre y los letreros porque las letras las hacen grandes y no como los adultos escriben.  
Rocío: ¿Qué es más fácil, leer o escribir?  
Marcela: Cuando me lo leen mucho y me sé las palabras. <sup>2</sup>

- 
- <sup>2</sup> TRANSL. Rocío: How did you learn to write?  
Marcela: With the sounds of the letters.  
Rocío: Did someone teach you the sounds?  
Marcela: No... in my head.  
Rocío: How did you learn which letter goes with which sound?  
Marcela: I don't know... I watch my father and mother...  
Rocío: Did you watch them while they wrote?  
Marcela: ... and more or less I learned to write my name... and the signs (traffic) because the letter were

Not only had she learned from the demonstrations at home, but she also acknowledged the importance and connection between literacy learning and environmental print. Finally her confidence as a child capable of reading showed up in this interview.

### English Preschool Information

This data consists of pieces written in English that were produced during this period at home and in Marcela's pre-school. The production of the home-produced texts was observed; however, this was not the case with the texts produced at Marcela's school.

### Grapho-phonetic Organization

As in Spanish, in Marcela's early writing, one can find different attempts to spell the same word in the same piece: <My> could be spelled as 'MAI', 'M' and 'Mi'. The first spelling was an obvious influence from the Spanish phonetic patterns. There were other examples of the influence of Marcela's knowledge of Spanish phonics when she wrote in English: <I> was

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big not like the ones adults  
write...

Rocío: What is easier reading or  
writing?

Marcela: When they read to me a lot and I  
learn the words.



spelled 'Ai' and <You> was spelled 'iu'. These spellings came from pieces of data collected in March 1989. Two months later, in May, Marcela abandoned the hypothesis of using the letter -I- as in <my> and <I> and started using the letter -Y-:

Y LFZ U  
MAMA  
FZRY MH  
BYKAS YM YR  
DAR AD BYKS  
U R MY MAMY  
DYAD (May 1989). <sup>3</sup>

In terms of Marcela's hypothesis on spelling in English, Marcela spelled the way it sounded for the most part. At times, though, one could find some attempts at spelling the way it looks, like <RAiNBOO> (rainbow-March 1989).

### Text

During this period there was a profusion of "love letter" type writings. This trend started in February with the celebration of Valentine's Day. The demonstrations of this genre had occurred in school. It was in school where she learned to prepare holiday greeting cards.

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<sup>3</sup> TRANSL. I Love you Mama very much because I'm your daughter and because you are my mommy. The end.



of English and Spanish in the same piece. Her book about dinosaurs looked and sounded like a nonfiction book. Each page of the book had her illustration of a different dinosaur with information about it.

Reading was at this time a performance. Using the illustrations and her memory she pretended she was reading.

Marcela is reading the Paper Airplane, she looks at the illustrations as she constructs the text (February, 1989).

At the same time that Marcela showed her knowledge about the importance of the illustrations to bring meaning to a text, when she knew a book, she did not permit the text to be altered: "One day, as I was reading A Promise is a Promise, I skipped a line of text by mistake. Marcela stopped my reading of the book and told me the line I missed" (February, 1989). Marcela also showed her knowledge of the text/context relations when she read the environmental print around her.

As with the data in Spanish, when writing, Marcela demonstrated her knowledge about the textual differences of different genres. Her cards written in English looked and sounded like cards. Her books looked and sounded like books. However it is interesting to note

that her books written in English were nonfiction in contrast with her books in Spanish which were all fiction.

#### Information in English Gathered at the Preschool

There are some pieces of information that were gathered at Marcela's pre-school. Among these, there was one production which I think is particularly important because we are going to see the same kind of expository writing in the first months of kindergarten. In March, 1989, Marcela did a picture of a rainbow in her classroom and, prompted by her teacher's question, "What did you do?", Marcela wrote, "ZAs AZ A PECHCR AV A RAiNBOO" (This is a picture of a rainbow). Although Marcela brought to the home setting some writing conventions learned in school like the love cards, the formula "This is ..." would remain to be used at school.

#### Summary

This initial information gathered before Marcela's introduction to what is considered formal schooling, establishes her as an early reader and writer. In terms of her biliteracy, we observed that the only pattern that dictated her choice of language when writing was audience. If Marcela was writing a letter to her



Spanish dominant family or friends, she would do it in Spanish. If she knew the audience was bilingual, the letter or note would be written in English.

Through this initial data we have established that Marcela was a risk taker in the area of literacy acquisition with a great sense of ownership over her literacy production and learning process. She explored and grew, testing her hypotheses in every area of literacy: from text and genres to spelling. All of these made her a child capable of exploring biliteracy with great confidence in herself and her abilities.

### Kindergarten Data

#### Bilingualism

After examining the background preschool information, it can be concluded that English and Spanish co-exist harmoniously in Marcela. This evidence seems to point to the existence of what Grosjean (1985) describes as the holistic view of bilingualism.

The evidence points to the existence of a relation between the languages of the bilingual individual. Code-switching is an argument in favor of this position. If each language is kept separate with no relation between them, the bilingual individual would find it

impossible to code switch or to use in a second language a concept learned in the first language or vice-versa. Cummins and Swain (1986) refer to a similar theory regarding the relationship between the bilinguals use of two languages. They refer to the Common Underlying Proficiency (CUP) that postulates the existence of a common base. The common underlying proficiency, based on the linguistic interdependence principle, makes possible the transfer of cognitive skills across languages (Cummins & Swain, 1986).

Having this in mind, we will look at Marcela's bilingual awareness, her code-switching, her sense of audience and the school's attitudes towards her bilingualism.

### Awareness

After living in Puerto Rico for about a month during the summer, Marcela arrived at her school very aware of her bilingualism. The first day of school, she commented over the differences in pronunciation of the vowels in Spanish and English:

... aquí todo es alrevés... La -a- aquí es -e-, la -e- es la -i- y la -i- es la -y-... 5  
September, 1989.

A similar discussion over the differences between the two languages occurred in November 1989. One day she complained that although she had learned to write the word <the>, "... the correct way to write 'the' should be -d-, -e- (pronouncing the letters in Spanish)..." (Journal, Nov., 1989), using her Spanish phonetic knowledge. 6

Marcela was constantly reflecting on the differences between her two languages and trying to consciously master the intricacies of English spelling. Comments about the use of two -P-'s in the word happen and writing the personal pronoun I with an "... -i- grande" 7 (November, 1989) were very common during the first few months of the study. These incidents arose not only in relation to writing, but to reading also. What is even

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<sup>5</sup> TRANSL. ... here everything is the other way around; the "-a-" (pronounced in Spanish) is the -e- (pronounced in English), the "-e-" (pronounced in Spanish) is the -i- (pronounced in English) and the "-i-" (pronounced in Spanish) is the -y- (pronounced in English).

<sup>6</sup> The English sound produced by the letters 'th' as in the word 'the' has no parallel counterpart in Spanish. However it is very similar to the Spanish sound produced by the letter 'd'.

<sup>7</sup> TRANSL. ... with a big i.

more interesting is that they did not occur exclusively with the English language. In October, while reading a book in Spanish, she mentioned that "... las dos -l-'s son como la -J- (pronouncing it in English)." <sup>8</sup> When questioned about where she got this kind of information, how she learned it, she replied "... because I've seen it in words" or "I just know it" (November 1989). Her metalinguistic awareness was working bilingually.

### Code-switching

There are a couple of instances where I found Marcela using her two languages in one piece. Although her oral code-switching was very common, this did not often translate into her written language. In November, she wrote:

A M ME GUSTA HUGLL  
soKR  
Y ME  
GUSTA TANVYN  
LA STORS <sup>9</sup>

What Marcela switched was only one word, <stories> for "<cuentos>". This type of intra-sentential code-

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<sup>8</sup> TRANSL. ... the two -l-'s (pronouncing in English) are like the -J- (pronouncing in English)"

<sup>9</sup> Correct spelling: A mí me gusta jugar soccer y me gustan también las "stories". Translation: I like to play soccer and I like stories too.



switching, in the same clause, was found again in May where, after a trip to Boston, while writing about the trip in Spanish, she wrote "Museum of Science" in English. In June there was another instance of code-switching, while writing a letter to a younger friend, Marcela wrote the heading in English "Dear Daniela" and the rest of the letter in Spanish. This example could be related to the fact that in her classroom there was a daily letter written by the teacher and Marcela was more familiarized with English letter headings. When writing, Marcela code-switched from Spanish to English to get the word that she needed. However, this did not mean that she did not have the word in her Spanish vocabulary. The same words she used in English in these examples, she had used in Spanish in previous written pieces and in conversations.

Another interesting literacy event regarding codes-switching took place in March, 1990. As I was dictating a shopping list in Spanish to Marcela, she wrote all the items in English except for "PAPEL TOAJA" (paper towels). I believe this is an example of the relationship between the two codes, Spanish and English, in Marcela. If both codes were kept separate, she would not have been able to code-switch at all.

## Audience

I observed Marcela's sense of her bilingual audience twice in the study. In December she wrote two letters: one for Santa Claus and the other for Three Wise Men. In the Puerto Rican tradition, the eve of January 6, "the three kings" bring gifts to the children while they are asleep. Marcela wrote both letters the same day, one in English for Santa and one in Spanish, for the three kings, stating that it had to be that way, otherwise they would not be able to understand what she wanted:

QuEDRiDos REyES:

Yo QUIERo  
PALETA DE PiNtAR i  
ACRiLiCOS i UN CABALLEtE i  
iENSos

GRASiAS tE-  
KiERE MarCELa 10

Her letter to Santa was written in school with the assistance of the paraprofessional who helped her spell the words:

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<sup>10</sup> Correct spelling: Queridos Reyes: Yo quiero paleta de pintar y acrílicos y un caballete y lienzos. Gracias, te quiere Marcela. Translation: Dear Kings: I want a painting palette and acrylics and an easel and canvases. Thanks, love, Marcela.

Dear Santa:

I would LiKe A  
BARBiE GLAMOUR HoME.  
I have been good.  
I help MY Mother  
Put the cAt iN Her ROOM.  
Love  
MarceLa

In June Marcela took this one step further. In the Puerto Rican tradition instead of a tooth fairy, we have a mouse. After swallowing her first loose tooth, Marcela wrote a letter of apology to the mouse. This letter was written in English and Spanish "... because I don't know if he understands English".

### School Attitudes

There were two instances at the beginning of this study that point to Marcela's past school experiences with her bilingualism and the acceptance of these abilities by the school as an institution.

Although Marcela felt confident of her literacy abilities in Spanish, she doubted the institutional acceptance of those abilities by the school. The first day of school Marcela said she probably would not write in school because she wrote in Spanish (Field Notes, September, 1989). Her school experience so far did not promote biliteracy. Another possible explanation for

this behavior was Marcela's acute sense of audience. She probably knew that her teacher could not understand if she spoke or wrote in Spanish.

Contrasting with this, a couple of days later, Marcela expressed her concerns about the Spanish-speaking abilities of a Puerto Rican friend in school. She decided she would speak in Spanish to her, "... because I don't want her to forget her Spanish" (Field Notes, September, 1989).

In Marcela's perception of reality it was all right to use her bilingual speaking abilities in school among her friends, but not for formal learning. Apparently Marcela perceived a clear barrier between these two. Finally, this last example serves a double purpose, for it also shows Marcela's internalization of her parent's efforts to preserve her Spanish abilities.

### Language choice

Spanish was, for Marcela, the language of communication with the family. It was the language used for letter writing. This attitude changed by the end of the school year. Conversations about a trip to Mexico and the differences between Mexican and Puerto-Rican Spanish sparked Marcela's interest. We observed a



switch in June towards using Spanish at a more personal level. Marcela started using Spanish to write notes to herself:

Rocío BA A ser uNA oBrA De  
teAt- ro se JaMa La BoLsa De  
PAPeL. Des  
Pues Bam- os A KoM- eR i Des  
Pues Des- o BaMos A uN taJeR  
De teAtro <sup>11</sup>

During this period Marcela's family was hosting two friends from Puerto Rico. The amount of Spanish input that she received during this period increased with her participation in a theater workshop with a group of Spanish-speaking adults with whom she felt extremely comfortable. She was the youngest member of the group and participated as an equal during the games and improvisations and during the costume creation sessions.

The idea that Marcela's language choice was based on the input that she received is not new. Before the formal data gathering started, during the Summer of 1989, while Marcela was in Puerto Rico, there was evidence of Marcela's preference for Spanish over English.

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<sup>11</sup> TRANSL. Rocío is going to do a Play named The Paper Bag Princess. After we are going to eat and then we are going to a theater workshop.

## Summary

If we believe that wholeness is what best describes the literacy acquisition process, we could also believe that we find this same quality in the development of Marcela's bilingualism and biliteracy.

We found at the beginning of this study that Marcela was aware of her bilingualism, not only in relation to the oral aspect of it, but the literacy aspect as well. She was constantly comparing, pointing out and trying to sort out the similarities and differences between her two languages. As with the children in Andersson (1978) there is an environmental factor which regulates Marcela's language choice. Her sense of audience determined her use of English or Spanish.

The production of pieces written in Spanish increased with the increase in exposure to meaningful conversation among Spanish-speaking people or with the thrill over a trip to Mexico. Spanish also became the language of communicating with her Spanish-speaking family.

Edelsky (1986) observed the audience sensitivity of Spanish-speaking children enrolled in a bilingual program in the Southwestern United States. In most of the studies done on bilingualism "... the main

determinant of language selection by bilingual children is seen to be the interlocutor" (De Houwer, 1990, p. 90). In the same way the issue of language exposure has been mentioned by different researchers who study bilingualism from Leopold (in Hakuta, 1986) to De Houwer (1990).

On the other hand the research done by Saunders (1988) mentioned the exposure issue in relation to biliteracy. His sons did most of their creative writing in English, the language of schooling. And as with Marcela, they used their other language, German, to communicate with the German-speaking family and parent (Saunders, 1988).

Finally, because of Marcela's previous school experience, she felt that it was inappropriate to use Spanish at school. This was the only instance of a contradiction between Marcela's environments. Nevertheless she felt free to bring English (oral and written) into the home environment; she knew that both her parents were bilingual and were part of the school world. She was aware that schooling was done in English. Although she could use oral Spanish with her friends and in some school work, in bilingual songs for

example, she knew Spanish could not be used in the school's literacy activities.

To summarize, Marcela is a bilingual child whose two worlds, Home and School-English and Spanish, intersect and sometimes get mixed. She showed aspects of bilingual behaviors observed in bilingual language development and biliteracy such as bilingual awareness, environmental influence on language choice and code-switching (Andersson, 1978; Edelsky, 1986; Genesse, 1988; Grosjean, 1982; Hakuta, 1986; Saunders, 1988).

### Writing

What are the strategies a child uses when he or she is a monolingual beginning writer? Will we find the same strategies in the writing development of a bilingual child? Will the strategies be used across languages? One thing we know for sure is that the selection of themes and the purposes for writing have to come from each individual. In order to understand the purposes of a child's writing productions, one has to understand the child's view of himself and his world (Bissex, 1980).

Having this in mind, one of the questions that guided this research was related to the possibility of



establishing a positive relationship between the literacy acquisition research done with monolingual children and biliteracy. It was my intention to find if a parallel could be established.

The initial preschool information portrayed Marcela as a child who already had basic knowledge about writing. Marcela began this study writing left to right, top to bottom. She knew about the need for purpose in writing and had a strong sense of ownership.

In the sections that follow, the writing strategies developed and used by Marcela in Spanish and English will be described separately. Then I will take a look at the grapho-phonetic organization patterns of Marcela's writing productions. This will be followed by a discussion on text and Marcela's explorations with literary genres.

### Spanish Writing Strategies

In October, 1989, Marcela started leaving spaces between words. She was also observed rereading what she had written and fixing up errors. When she was writing she could be heard sounding out the letters very slowly. The confusion between -K-, -C- and -Qu- (see footnote #1) still existed and she was conscious of it. Every

time she was writing and needed to write a word that had one of the sounds she had trouble with, she asked an adult. One of the characteristics of Marcela's early writings in this study was that she wrote in Puerto Rican Spanish, substituting the -L-'s for -R-'s (see page 14):

Date	Marcela's spelling	Correct spelling	English transl.	Subs.
10/89	"escribilme"	escribirme	write me	-L- for -R-
11/89	"HUGLL"	jugar	to play	-L- for -R-
4/90	"asukal"	azúcar	sugar	-L- for -R-

In terms of the text and her strategies to develop a story line, Marcela had the initial "Había una vez..." (Once upon a time), but she did not have the whole idea for the story. She usually had the beginning or the main character and she developed the story as she wrote it. As a consequence her story lines were incomplete. There were always missing elements that she did not convey to the reader.

NADiE SABiA UNA  
 COSA MUY EMPORtAtE  
 QUE SOLO SABiA UN  
 MAGO LA COSA ERA ERA  
 QUE EL MONStRO ERA

We can observe in this piece that in January, 1990, Marcela had already mastered in Spanish the use of -Qu- in the word "<que>". She no longer needed to ask an adult. The word "<que>" had become part of her writing vocabulary. However the confusion between the -K- and the -C- (see footnote #1) remained until the end of the study:

LA ROSA

UeLE COME ASuKAL  
rojo COMO UN BONE BONE  
i COMO EKL SOMBRERO DE SANTA CLOSE.  
LAS ESPINAS SON COMO UN CUCHeLLO  
AFiLADO.  
i LOS PetALOS SON tAN FRAHiLes  
Que el BiEntO Los Puede soPLAr LeHos  
(April, 1990) 13

English Writing Strategies

Since the beginning of this study Marcela showed an awareness of the elements of writing. Whenever she did not know, or was not sure how to represent the sound of certain word, she asked an adult: "¿Cómo se hace la \_\_\_\_

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12 TRANSL. Nobody knew something very important that only a wizard knew the thing was was that the monster was air

13 TRANSL. The Rose  
Smells like sugar red as candy and like Santa Claus' hat  
It's spines are sharp as a knife and her petals are so fragile that the wind can blow them far away.

(sound) of \_\_\_\_\_ (word)?" (How do you make the \_\_\_\_\_ of \_\_\_\_\_?). Having characterized Marcela as a risk taker, I do not believe this should be interpreted as a sign of insecurity. At this point Marcela is using the adults around to help her distinguish or categorize the codes.

After observing her productions during the first months of school, one saw that she followed the same strategies learned in preschool. All her journal entries started either "This is a ..." or "I like ...". This labeling strategy continued until February. Although there was an attempt in December to write a story about the Three Kings, Marcela did not finish it. She lacked the continuity needed to develop a story during different days. Labeling, as a strategy, did not require this. Marcela had good story starters but when the time was over, the story was over, too.

IN tHe FORESt LiVED A GERLE  
SHe WAS'Nt HAPPi BECOS SHe  
DEDONT HAVE ENithiG to WER BUT  
A MAJEC BUTER-flAi MEiD HER  
SOM CLOtHis (March, 1990) <sup>14</sup>

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<sup>14</sup> Correct spelling: In the forest lived a girl  
She wasn't happy because she didn't have anything to  
wear but a magic butterfly made her some clothes.



In February Marcela wrote a poem during her writing workshop time.

A PoMe

I like  
chees AND  
the Bees  
SoDA is A  
theng that  
I Like 15

From this moment on her entries were different. She started using this time of the day to write about the things she had done: her trip to Washington, her new diary or the time she met the creators of the Teenage Mutant Ninja Turtles:

the DAY BefoRe YesteRe DAY I  
WeNt too an ERtH DAY SELa  
BeRASHoNe AND tHe PePoLe Hue  
iNVeNe teDe the teNAGE MutANT  
NiNJA tuRtLe WeRe tHeRe.  
(April, 1990) 16

Since the beginning of the study, Marcela sounded the words slowly when she was writing. Occasionally she copied a word she needed from a chart, but this was not her major writing strategy. Even when she copied from a chart, Marcela was not consistent. Pieces of data were

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<sup>15</sup> Correct spelling: A poem I like cheese and the bees Soda is a thing that I like.

<sup>16</sup> The day before yesterday I went to an Earth Day Celebration and the people who invented the Teenage Mutant Ninja Turtles were there.

found where she copied the word the first time she used it, after which she wrote it again using invented spelling.

WoNs OPONAtieM ZRUOs A FeALD  
of chrisMAS tres WAN SODANTLe  
thR KAeM A coR AND thAe tok A  
KRS MAS tre AND POt Et eN the  
CAR AND toK Et HOM to DAKR  
RAet FOR chisMAS... <sup>17</sup>  
(December, 1989)

Summary. Throughout this study Marcela developed a sense of ownership and a need for privacy when writing. Although she was observed getting upset when her classmates copied what she had written (Field Notes, March, 1990), when children asked for different spellings during the Writing Workshop, she helped them (Field Notes, December, 1989).

Marcela's major writing strategy consisted of sounding aloud the text she was writing. This strategy was used in English and Spanish pieces alike. Some of her strategies, such as copying words from the environment, were used in English only. This was probably due to the imbalance in the amount of environmental print in Spanish versus English. Another

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<sup>17</sup> Correct spelling: Once upon a time there was a field of Christmas trees when suddenly there came a car and they took a Christmas tree and put it in the car and took it home to decorate for Christmas...

spelling strategy was used in both English and Spanish was that of asking an adult. This was never used randomly but in the cases of spelling confusion between both languages.

At this time Marcela demonstrated other writing strategies not related to spelling. She showed signs of styles and writing conventions from children's literature and she often re-read her pieces in order to correct and add information.

All of these characteristics have been observed previously by other researchers who study writing acquisition and development with monolingual Spanish or monolingual English speakers.

In 1980 Glenda Bissex published a book, Gnys at Wrk, in which she recorded data about her son's literacy acquisition process. She began when Paul was five years old and completed her study when he became eleven. Bissex (1980) recognized the need of her son to understand and know his world. This extended into writing: the naming strategy used to comprehend and be part of his reality was reflected in his writings of signs and labels. Later, this evolved to a need of categorizing which was reflected in writing charts.

Paul's development as a writer, his strategies, themes, plots and styles were very close to his life.

In Marcela's case, there is also a reflection of her life. At the beginning of the study we found her using a naming strategy in her school productions. This was prompted by school experiences and it remained a school strategy throughout the study. This changed only when she realized that the literacy expectations of the kindergarten teacher were similar to her parents.

#### Grapho-phonetic organization

In this section of the data we will discuss Marcela's spelling hypotheses in both English and Spanish. This comparison will help us draw a parallel between Spanish and English in an important aspect of the writing acquisition process. Each language will be studied separately.

Spanish Hypotheses. In October, 1989 Marcela wrote on a piece of paper:



A MYE/GUSTA  
HUGLA  
PORK  
ESLE  
FERE 18

The same features observed previously about the consistent use of the English sound value of the letter -H- replacing the Spanish letter -J- and the use of -K- instead of the Spanish -C- were here (see footnote #1). We should take into account that at this moment Marcela did not represent with letters all the sounds that she heard in a word: "me" was represented by the letter -E- alone, "porque" (because) was written without the final -E- and "chévere" (nice) was divided between two lines and spelled "LEFERE". However we also start to find standard spellings:

GUSTA (like),  
ESTAR (to like) and  
BUENA (kind)(October, 1989)

The following are examples of instances that show the influence of English grapho-phonetic values when Marcela is writing in Spanish:

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<sup>18</sup> Correct spelling: A mi me gusta jugar porque es chévere. Translation: I like to play because it is nice.

Date	Marcela's spelling	Correct spelling	English transl	Loan from Engl.
9/89	YAMA	llama	call	use of Engl. -Y- for Span. -Ll-
10/89	ESKELA	escuela	school	use of Engl. -K- for Span. -C-
1/90	Soobir	subir	go up	use of Engl. -OO- for Span. -U-
6/90	Kiere	quiere	love	use of Engl. -K- for Span. -Qu-
3/89	ALKAPWRIA	alcapurria	P.R.food	use of Engl. -K- for Span. -C- use of Engl. -W- for Span. -U-
3/89	HAMON	jamón	ham	use of Engl. -H- for Span. -J-
3/90	POJO	pollo	chicken	use of Engl. -J- for Span. -Ll-
3/89	MAYORKA	mallorca	corn on the cob	use of Engl. -Y- for Span. -Ll- use of Engl. -K- for Span. -C-

One of the interesting features of these loans is that in some of the pieces one can find other words where the same sound has been written with the correct letter.

For example, in the piece where Marcela wrote "quiere" using the English -K- instead of the Spanish -U-, she wrote the word "Queridos" using the -Qu-. However, other loans like the English sound value of -H- substituting the Spanish sound -J-, and the use of -K-

instead of a -C- are very consistent throughout the study (See footnote #1).

Another interesting feature of Marcela's spelling strategies in Spanish was that although she had familiarity with a word, when she wrote it, she used her own invented spelling depending on the language she was writing. In February of 1990, Marcela wrote a letter to one of her aunts. Talking about her school she spelled the last name of her teacher in Spanish "Ginli" <sup>19</sup>. Another example of this but in English to Spanish will be described later when discussing Marcela's spelling strategies in English.

In April, 1990, Marcela's hypothesis around the shared use of letters -K- and -H- in English and Spanish was still present:

Marcela's spelling	Correct spelling	English transl.	Substitutions
asukal	azúcar	sugar	use of English -K- for Spanish -C-
FRAHiLES	frágiles	fragile	use of English -H- for Spanish -G- <sup>20</sup>

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<sup>19</sup> The correct spelling is Ginley.

<sup>20</sup> In this case the G is making the sound of J as in "jabón" that sounds like the H in hat.

LeHos	lejos	far	use of English -H- for Spanish -J-
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Around the beginning of April, 1990, I also observed another interesting aspect of the interference of English spelling into Spanish; use of "silent e" and adding the letter -E- to the list of letters that had an English sound value in Spanish:

Marcela's spelling	Correct spelling	English translation	Feature
Bone Bone	bonbón	candy	use of silent -e-
close	Claus	as in Santa Claus	use of silent -e-
cuchello	cuchillo	knife	English sound value for letter -E-

This started after Marcela's teacher mentioned in a writing workshop mini-lesson the use of "silent e." From this moment on, I observed a profusion of silent e's in her English writings. Her hypothesis in English spilled into Spanish as happened with the sound values of -K-, -H- and -E-.

Marcela's last interesting spelling hypothesis in Spanish appeared around the end of the data collection. Because she had never taken formal literacy lessons in Spanish, Marcela had never formally been introduced to the letters that are exclusive of the Spanish alphabet.



Therefore she relied on her metalinguistic awareness and memory of how certain words that have those letters are spelled and how those letters are used.

Marcela's spelling	Correct spelling	English translation
banios	baños	baths
maniana	mañana	tomorrow
ninios	niños	children

At this moment in the data collection Marcela was observed reading these words and others that have the letter ñ in context and not stumbling over them but assigning the sound value that the letter had in Spanish. However she was not able to incorporate the letter into her writing scheme. Consequently, she used the strategy she had mastered, her phonetic knowledge. If you say any of those words slowly, trying to hear all the letter sounds, and you do not have the letter ñ in your scheme, you would probably come with the same spelling as Marcela did.

English Hypothesis. When this study began, Marcela had some standard spellings mixed in with invented spellings. She had trouble separating all the words and she would not bother to read back what she had written to correct it. Gradually, throughout the year, all of

these changed. Little by little, the standard spelling became more common and the separation of words was more consistent.

During the first three months of school we found the standard spelling of <book>, <Marcela>, <Mama>, <and>, <love>, <Otero>, <can>, <go>, <to>, <Dad>, <I> and <not>. Five months later we found standard spellings of words like <kindergarten>, <half>, <today>, <movie>, <during>, <asleep>, <mutant>, <turtle>, <there>, <with>, <kiss>, <show>, <missed> and <yesterday> among others.

In November, 1989, Marcela was observed re-reading what she had written and correcting it as she continued writing for the first time:

Marcela is writing school, she writes  
SO, notices she needs the sound of K and  
places a K between the S and the O  
(Field notes, November, 1989).

This was an important moment because it showed the connection between reading and writing. Before, when she would reread what she had written she did not really pay attention to what was on the page. From this moment on she started focusing more on her spelling.

Finally, in March, 1990, as I mentioned before, after a writing workshop mini-lesson where the "silent e" was

discussed in response to the question of one student, Marcela started to place silent e's everywhere:

Marcela's spelling	Correct spelling
pieste	paste
wate	wait
souloude	swallowed
touth	tooth
brenge	bring
presente	present

There is here a connection between a feature observed in oral language development and literacy development -the overgeneralization of rules. Marcela learned that there was something called silent -e-. But because she did not know exactly when to use it, she used it everytime a word ended in a consonant. This same feature has been observed in children developing oral language with the -ed past tense. The overgeneralization points to the generation of rules. Children know that language is ruled governed and they are constantly trying to master these rules. In other words, there are patterns to the overgeneralization of rules. Marcela's attempt to figure out a pattern resulted in using the silent e every time a word ended in a consonant. This was

observed in the attempt to transfer the rule to Spanish spelling as in her English spelling hypothesis.

Summary. Through this data we observed that when Marcela learned a rule in one language, she applied this rule to the other language. There is a possible relation between this and the slight undifferentiation of the letter sound values of each of her languages (see footnote #1).

To understand this problem, we have to take into account two facts: It was in preschool that Marcela learned the letters of the alphabet and their correspondent sound in English. Her exposure to written material in English is greater than in Spanish. These two elements contribute to an explanation of Marcela's undifferentiation of some of the sound values of Spanish and English. She is trying to apply the usage rules of those English sounds to Spanish.

Using the common storage model (Swain, 1972), we understand that Marcela stored the sound representation rules for the letters -H-, -K- and silent -e- in a common place. It is expected that in the future, when she realizes that those are not common rules, she will store them with the appropriate language, in this case, English.



On the other hand, Marcela's writing development in terms of separating words and going from nonstandard to standard spelling developed simultaneously in both languages.

### Text

Marcela learned to use written language to fulfill her needs. She regularly made "Things to do" lists. She left notes for her parents as reminders of supplies she needed: "I HAV No GLoo, Marcela" (December, 1989). She also left secret notes to remind me of special occasions:

January 30, 1990. I found a note left by Marcela in my bureau reminding me of her approaching birthday: MY BRSDAY is coMiNG. MarceLa (Journal, January, 1990).

Towards the end of January and the beginning of February there was a change in terms of the style of Marcela's pieces. I no longer observed the use of the "naming" strategy, where the emphasis of the entry was the picture and the text was naming or describing it. The text was second to the picture. This trend was first observed in the preschool introductory information and continued throughout the first half of Marcela's Kindergarten school year:

Y L K P Y P L U Z K R L Y H A R AD  
PY P L U Z F T H R (October 5,  
1989) <sup>21</sup>

ZES EZ A PiKHCR OV A KWEN (December  
7, 1989) <sup>22</sup>

Although we observed growth in terms of the form of the pieces, a move towards conventional spellings and spaces between words, the style remained the same, "a formula approach to writing" where the text began almost always with the same type of phrases: "This is a picture of..." or "I like ..."

I believe that for Marcela, this was a "school based approach" to writing. The pieces done outside of the classroom did not have these characteristics. It was outside of the classroom that Marcela explored inventing her own writing projects. This "formula" approach did not appear in the home data.

It was during the months of January and February that the apparent gap in terms of the quality of the pieces seemed to narrow itself. The pieces produced in school began to explore new themes. This change occurred in

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<sup>21</sup> I like people with curly hair and people with flat hair

<sup>22</sup> This is a picture of a queen

form and content. From this moment on the pieces produced became more complex and varied:

in THE FoREST LiVED A GERLE SHe  
WAS'Nt HAPPi BECOS SHe DEDONT HaVE  
ENiTHig to WER BUT A MAJEC BUTER-  
fLAI MEiD HeR SOM CLOtHis. (March,  
1990) <sup>23</sup>

Genres. From the beginning of this study, even in the preschool information gathered before September, 1989, Marcela showed an awareness of different genres. I found evidence of this not only in her writing, but in reading, too. In the preschool information she showed knowledge of the conventions of different genres: she wrote non fiction and fiction, journal entries, lists and letters, dinosaur books and stories with imaginary characters. The exploration of the different literary genres did not stop there. The knowledge of the conventions of different genres showed in a conversation with Marcela in November, 1989, where she made a comparison between La casa que Juan construyó (The house that Jack build), a traditional oral story, and There was an Old Lady Who Swallowed a Fly, stating that in both of them there was lot of repetition (November, 1989).

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<sup>23</sup> Correct spelling: In the forest lived a girl She wasn't very happy because she didn't have anything to wear but a magic butterfly made her some clothes.

In the data gathered between the months of September, 1989, and June, 1990, Marcela explored, in addition to the genres already mentioned, poetry and songwriting.

LA OHS E  
CIN POR AI  
TOTOTO  
TO KON LOS  
OHS LA  
MIRN  
TOTO 24

This attempt at writing a song, though in Spanish, took place in my office at school. While she was writing it, she sang the melody. Seven months later, almost at the end of the school year, Marcela sat down one afternoon at home and wrote a poem.

#### La rosa

Uele come asukal  
rojo como un bone bone  
i como el sombrero de Santa Close  
Las espina son como un cuchello  
afilado  
i los petalos son tan frahiles  
que el biento los puede soplar lehos 25

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<sup>24</sup> Correct spelling: Las hojas se caen por ahí, tu, tu, tu.

Tu con tus ojos las miras, tu, tu. Translation: The leaves are falling, to, to, to. You watch them with your eyes, to, to.

<sup>25</sup> Correct spelling: La rosa Huele como azúcar roja como un bonbón y como el sombrero de Santa Claus Las espinas son como un cuchillo afilado y los pétalos son tan frágiles que el viento los puede soplar lejos. Translation: The Rose Smells like sugar, red as a candy or as Santa Claus' hat. The thorns are like a sharp knife and her petals are so fragile that the wind can blow them far.



Marcela also explored the style of different types of children's books. In January, 1990, she prepared a book titled Rainbow. On each page, there was a picture of an object and under the picture there was a card naming the drawing: "red gloves, brown triangle, gold dress, etc." This book looks and sounds like the commercial picture books written for young children.

A few months later, in March, 1990, Marcela published her first story in her classroom, The Little Caterpillar.

Once upon a time there lived a little caterpillar with his mother. One day he came out of the ground. He felt very frightened by the people that were surrounding him. He was so frightened by the people that he went down to his mother. The caterpillar talked with his mother about what he had seen outside and that he wanted to move. His mother agreed. They set out to find a good place to build their home. On the way they met a friendly owl. He invited them to stay with him at his house in the trees. There the little caterpillar and his mother turned into two beautiful butterflies. The day they flew away the owl was very, very sad.

Marcela began to explore different styles. Among these were the use of suspense and sound effects. These were explored in English and Spanish:

Sodantle the saond of rochen raen  
splach splach doun kaem raen splach  
all the windows war sokad wethe raen  
(December, 1989) <sup>26</sup>

nadie sabia una cosa muy emportate que  
solo sabia un mago la cosa era que el  
monstro era aire (January, 1990) <sup>27</sup>

The emphasis in Marcela's classroom was to make the children produce stories, to make them believe they could write, to encourage them to take a pencil and paper and write something down. The goal of Marcela's teacher was to build the self-confidence of her students, to make them believe they were competent writers. Although editing was the subject of some mini-lessons taught by the teacher, this was not stressed. What her group needed was to believe in themselves as children who knew how to write.

Marcela was exposed to different styles of writing and she learned through these demonstrations. After a mini-unit on chivalry stories, Marcela wrote these pieces on different days:

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<sup>26</sup> Correct spelling: Suddenly the sound of rocking rain, splash, splash. Down came rain, splash... All the windows were soaking with rain.

<sup>27</sup> Correct spelling: Nadie sabía una cosa muy importante que sólo sabía un mago La cosa era que el monstruo era aire. Translation: No one knew something very important that only the wizard knew. The monster was made out of air.

Ons apon a time ther lived a soldier  
 naimed Marcela the knoight She wod  
 fight eniwon ho wod distroi her kindom  
 of kil the queen and king. Ho he  
 love'd dirle (March, 1990) 28

Feve yers ago ther lived a wis kigng.  
 He niw evre trik of fiteng in the  
 worlld. Bicon of the paworfol wisard  
 that townt him to do this. He has ben  
 faimos and honard by ol of the pipol  
 that new him (March, 1990) 29

At home Marcela also tried different styles. One day  
 after playing for a long time with her Barbies, she sat  
 down and wrote a dialogue about an adventure using the  
 Barbie dolls as the characters:

I cant move im tiede to a rope siede  
 skiper. Il get you uote ove her som  
 how. Siede Biarbe  
 soon kine arive its almost do one he  
 siede.  
 we beter get you ot of her before their  
 hapanse fo ose too.  
 I have an idea sede ken  
 he wesperde hes idea to barbi and  
 (May, 1990) 30

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<sup>28</sup> Correct spelling: Once upon a time there lived  
 a soldier named Marcela, the knight. She would fight  
 anyone who would destroy her kingdom or kill the queen  
 and king. Who he loved dearly.

<sup>29</sup> Correct spelling: Five years ago there lived a  
 wise king. He knew every trick of fighting in the  
 world. Because of the powerful wizard that taught him  
 to do this. He has been famous and honored by all of  
 the people that knew him.

<sup>30</sup> Correct spelling: "I can't move, I'm tied to a  
 rope", said Skipper. "I'll get you out over here  
 somehow", said Barbie. Soon Ken arrived. "It's almost  
 done", he said. "We better get you about of here before  
 this happens to us too". "I have an idea", said Ken.  
 He whispered his idea to Barbie and...

## Summary

In this study we observed Marcela exploring different aspects of the written language. She came to the study with a sense of ownership and privacy over her productions. However this did not mean that she could not cooperate and help her classmates when they needed her. Marcela used language to satisfy her needs. She learned to use a variety of genres, from the useful ones of notes and lists to the more creative ones such as poetry and drama. Her themes came from her daily life and her interests. Her interest in fairy tales with princesses, witches and magicians as characters made her produce stories of this type.

## Reading

According to the linguistic interdependence principle (Cummins & Swain, 1986), the languages of the bilingual child or adult have a common base. "Based on the linguistic interdependence principle, we can say that as children master reading, they will be able to read in the other language as well, without as much effort. They have already acquired some background information on the process and mechanics of reading that they can utilize in reading in the other language" (Williams & Snipper, 1990, p. 42). If we believe that reading and



writing are similar processes then we should expect to observe the transfer of reading skills and strategies from one language to the other as we have observed in Marcela's writing development.

In this section Marcela's reading development will be addressed in each of her languages separately.

### Spanish

In the beginning of September, 1989, when reading Spanish, Marcela only focused on her decoding skills. She did not self-correct when something did not make sense. She would look puzzled, but she did not go back to make sure it said what she read. She did not pay attention to understanding what she was reading. Also she was not using the illustrations as comprehension cues. Her miscues were very similar to the words on the page:

Date	Marcela's Miscue	Text	English translation
9/89	diajes	viajes	trips
9/89	dijieron	dijeron	said
10/89	algunes	algunos	some
10/89	olfatodeando	olfateando	smelling

However, by the end of September Marcela was developing voice to print match. She was observed reading a book that she knew more or less by heart and correcting herself when she deviated from the text. Her Spanish reading strategies started to develop. She started to predict using the first letters of the words as cues. By the end of October she was using the illustrations consistently in order to help her understand the story.

Some of the strategies that she used when reading Spanish are common reading strategies no matter the language is. However, Marcela had developed some reading strategies that work primarily in Spanish. For example, sometimes when she was reading a word that had an -H-, she was observed placing her finger on the -H- because she knew in Spanish the letter -H- does not sound (Field Notes, November, 1989).

By December, 1989, Marcela was able to read the Clifford books in Spanish. Her reading strategies had developed to a point that when reading if she found a word with the Spanish letter -ñ-, she self-corrected based on meaning:

"... el ano pas..., el año pasado fué diferente"

In February of 1990, Marcela received a package full of comics from Puerto Rico and although she read them constantly, her reading was very monotonous and there was not much self-correction when something did not make sense.

A Miscue Reading Inventory in Spanish was given to Marcela in February. She was asked to read the book Nadarín, a translation of Leo Leonni's Swimmy. The book proved to be a bad choice because it contained language which Marcela was not very familiar with. The results from the Miscue Analysis concurred with the observations up to this point. When Marcela read a text she was not acquainted with, she did not pay much attention to meaning, and she made extreme use of her decoding skills without self-correcting. If she did not understand, if there was no meaning getting across, she kept on "reading" (or decoding) until she got to a section she understood. This resulted in a loss in comprehension.

In this Reading Miscue Inventory Marcela scored 40% "no loss" and 60% "loss" in the comprehension column. She showed partial strength in the area of grammatical relations, scoring 36% strength, 48% partial strength, 12% weakness and 4% overcorrections. This Miscue Analysis showed Marcela's tendency to emphasize the

graphic-sound aspect of reading. Both in the graphic and sound columns she scored 95% high and 1% no graphic and sound similarity. She also maintained the grammatical function of her miscues, scoring 95% in this section. The number of miscues per hundred words (MPHW) was 15.

In the retelling score of the Miscue Analysis Marcela got 70%. She remembered most of the events, failing to mention those where most of her uncorrected miscues occurred. She understood the plot of the story but could not get the theme. This was probably because it is developmentally inappropriate to expect a child of that age to grasp the concept of a theme.

The Miscue Analysis also showed a level of confusion with some phonetic elements of Spanish. These were miscues based on phonetic elements which pertain to Spanish phonics not shared with the English language (see footnote #1).

For example she read:

1. "asusar" for <azúcar> substituting the -S- for the -C-
2. "angüila" for <anguila> pronouncing the -U-
3. "lamada" for <llamada> not pronouncing the -Ll-
4. "arastrados" for <arrastrados> not pronouncing -Rr-
5. "cüedarse" for <quedarse> pronouncing the -U-.



These were not the only instances where these miscues related to Spanish phonics occurred. The substitution of -S- for -C- was very consistent through out the test. In some of the cases the miscues were corrected based on comprehension. Again, when she was making meaning, Marcela self-corrected, but if she did not understand, the miscue remained.

At the beginning of June, Marcela was given another RMI using the bilingual book My Aunt Otilia's Spirits, Los espíritus de mi Tía Otilia, where the story was written in English on one side and in Spanish on the other. This book proved to be a good selection because the characters of the story were the members of a Puerto Rican family who lived in the United States and it was written in Puerto Rican Spanish. It was interesting to note that during the reading, Marcela did not attempt to read the text in English although sometimes it shared the same page with the Spanish. Her reading of this book was more fluent than the previous RMI and because she understood the content better, she got a higher retelling score, 90%. Her MPHW (miscues per hundred words) was 4. Again, the only part she missed was the theme of the story. The problem observed previously --pronouncing letters not shared with English-- tended not to be as critical in this RMI. She mispronounced

fewer words and corrected herself. Two factors gave her the confidence to use better reading strategies such as prediction and to stop relying so much on the grapho-  
phonic information. She had more experience at this point in reading in Spanish, and she also completely understood the story.

In the June RMI she scored in the comprehension section 68% "no loss", 25% "partial loss" and 7% "loss". There was also an improvement from the previous RMI in the grammatical relations section. She scored 48% strength, 35% partial strength, 9% weakness and 7% overcorrection.

Towards the end of the data collection I observed an increase in Marcela's interest in reading and writing in Spanish (Journal- June, 1990). This was caused mainly by the excitement over and anticipation of an imminent family trip to Mexico. Marcela started saving money to buy children's books in Spanish and started practicing Mexican Spanish vocabulary.

### English

In September, 1989, when Marcela read in English without attempting to decode, she only paid attention to the illustrations and to her memory. Most of her books

in English she knew by heart. At this moment in the data collection there were instances that showed that when she was engaged in a read aloud situation Marcela was following the text:

Last night as I was reading her a bedtime story in English she corrected my pronunciation of a word pointing to the double e saying: "Esto se pronuncia como -i-"(This is pronounced like -i-, using the Spanish pronunciation) Field Notes, October 6, 1989.

The first day of school Marcela demonstrated the use of another reading strategy observed previously in Spanish, predicting using the first few letters of a word in context.

After school we went to the Teacher's Room and Marcela wanted to go to the bathroom. She asked me which door was for girls. They were labeled Women and Men. I told her that they did not say girls or boys but women and men, not pointing to the words, and that she could read it. And she did. Field Notes, September, 1989.

There was a correlation between the development of her reading strategies in Spanish and in English. The data shows that by October Marcela was developing the voice to print match in both languages at the same time, along with using beginning letter sounds and the illustrations to bring meaning to a text.

By the end of February Marcela was given a Reading Miscue Inventory in English. She read Happy Birthday Sam by Pat Hutchins. The MPHW (miscues per hundred words) was 20, higher than the February RMI in Spanish. There were a good number of miscues that I categorized as intonation miscues. When Marcela reads a verb with the -ed past tense she was consistent pronouncing it -id:

"dressid" for dressed  
"climid" for climbed  
"switchid" for switched  
"brushid" for brushed  
"arrivid" for arrived

Her miscues had a high sound/graphic relationship. In the graphic similarities columns she scored 61% high, 15% partial and 23% had no graphic similarities. In her sound similarities column she scored 46% high, 23% partial and 31% with no sound similarity. 69% of the grammatical functions were identical. However in the comprehension section she scored 62% "no loss", 14% "partial loss" and 23% "loss". This showed why her retelling score was 80% failing only to identify the theme of the story. Again, this was consistent with her retelling score in Spanish, where she also missed the theme of the story.



Between March and April, Marcela was reading books in school like Cricter by Ungerer, Beauty and the Beast and The Runaway Bunny. She had a Reading Record Notebook where she entered the date, the title of the story and rated the story with numbers from 0 to 5. The categories went from 'I didn't like it,' to 'A great book.' Some of the stories had comments like "I likt the ilostraichons" (I liked the illustrations), "GrAete" (great) or "I DiDoNte like the stoRe" (I didn't like the story).

Another Reading Miscue Inventory was given to Marcela by the end of May. This showed an increase in the level of Marcela's reading proficiency. In this RMI the MPHWH (miscues per hundred words) dropped to 6 compared to the MPHWH of 20 of the February RMI.

For this RMI Marcela read a nonfiction book about a stranded harbor seal, Sterling, the rescue of a baby harbor seal, written by Sandra Verrill White and Michael Filsky. This is a book filled with photographs that help depict the process of the rescue of a stranded seal by the Marine Mammal Stranding Unit of the New England Aquarium. When Marcela started reading the book she felt very confident and at ease with the reading. However there were some sections where she had problems

with the vocabulary. Her speech changed and she started using a lower voice whenever she was in trouble. She took long pauses to study the photographs very carefully. These helped her understand what she was reading. These long pauses and the organization of the book, where the text was not presented in a solid block, but was relegated to the pictures, contributed to Marcela's twice skipping an entire paragraph of text.

When we compare the results of the RMI given to Marcela in February, both profiles tend to be very similar. We found a strength in the predominance of a high graphic-sound relationship. She scored 86% high graphic and 66% high sound similarity. In terms of the grammatical function of the miscue there was a tendency towards retaining it; she scored 66% high, 20% partial and 13% none. There was no marked difference between both RMIs when comparing the numbers on the weakness and strength columns of the grammatical relationships. In this RMI she scored 40% strength and 28% weakness in the area of the grammatical relations. The two RMI profiles shared also a tendency for overcorrection of the grammatical relationships:

Date	Reader	Text
2/90	we	he
2/90	clothis	clothes
2/90	tabs	taps
5/90	seals	seal
5/90	thousands	thousand
5/90	hunt	hunts

Marcela was very conscious of the word on the paper and she wanted to read exactly what was written. This might also explain her tendency towards a high graphic-sound relationship.

The comprehension section of this RMI showed a strength in this area where Marcela scored 76% "no loss" and 28% "loss". This relates to the retelling score of this RMI where she scored 85%. The retelling scores in both RMIs were very similar. Marcela understood what was happening in the story about Sterling and what she missed from the text she got from the photographs. Again, as in Happy Birthday Sam, she could not identify the theme of the book.

### Summary

At the beginning of this study Marcela's strategies in English and Spanish were different. Probably because of the high grapheme-phoneme regularity of Spanish, she

focused on the usage of a decoding strategy not paying attention to other important aspects of reading.

On the other hand, in English she was using a wider array of strategies which included using the illustrations to bring meaning, predicting on the basis of content and also predicting using the first letter of the word. A month after school started, the reading strategies in English and Spanish started to develop simultaneously.

It would be possible to interpret these findings as showing that on a language with a high and regular sound-letter correspondence, as Spanish, decoding as a reading strategy would be more important than in less regular languages such as English. However, we must not forget that reading is not decoding and that the core of the process is comprehension. Marcela discovered this and began using other reading strategies. A cross-analysis of Marcela's Reading Miscue Inventories serves to prove this point. However, it still may be that children whose language have a regular sound-symbol relation tend to rely on decoding strategies when they are learning to read.

Miscue Analysis. From a cross-comparison of Marcela's Reading Miscue Inventories in English and



Spanish we found patterns detected in early studies. Consistent through the literature on Miscue Analysis is the finding of miscues that have higher graphic than sound proximity to the text (Devine, 1981; Hodes, 1981; Willoughby Mott, 1981). This has been observed among readers with different proficiency levels.

The comparison between Marcela's RMIs is consistent with this finding. Her scores in the Spanish as well as the English RMI's were higher in the graphic similarities columns than in the sound columns. This suggests that Marcela obtained more information from the graphic characteristics of the words than from the sound-letter relationships.

However, when we compared the Spanish RMIs to the English RMI's in this area, we found that Marcela's usage of the grapho-phonetic cues was higher in the Spanish RMI's. In the graphic and sound sections, Marcela scored 95% in February and 90% in June in the high similarity column in Spanish. In the English RMIs these numbers were lower: 86% high graphic and 66% high sound in February; 61% high graphic and 46% high sound in May. This suggests a higher reliance on the grapho-phonetic cuing system when reading in Spanish.

Goodman (in Devine, 1981) found that readers tended to rely more heavily on the grapho-phonetic cues as the reading material became more difficult for them. Marcela's data points to the same finding. When we observe her RMI scores across languages, we can find that as she became a more proficient reader, she relied less on the grapho-phonetic system in each language utilizing the semantic and syntactic cues more consistently.

Finally through the study of Marcela's RMI's we came across some developmental patterns accounted for in the Miscue Analysis literature (Clarke, 1981; Devine, 1981): a higher frequency of acceptable syntactic and semantic structures and the decrease in MPHWS, both with the increase in reading proficiency.

#### Summary of Data

The data in this study provided evidence to the possibility of establishing a relation between literacy and biliteracy as between bilingualism and biliteracy. The preschool background information established Marcela as an early reader and writer whose audience determined her language choice.

Through the kindergarten data we witnessed that behaviors observed in bilingual language acquisition and biliteracy acquisition were present in her reading and writing development. The areas of language awareness and the influence of the environment over language choice corroborates previous research done by Andersson (1981), Edelsky (1986), Kupinsky (1983) and Saunders (1988).

Additionally, we found that this study provided information about the phenomenon of code-switching that supplements findings of previous research. We observed that code-switching in writing was not as common as oral code-switching.

There is a tendency in the research that confirms these findings. For Marcela as for the children in Edelsky (1986), written language apparently is more formal than oral language. This could be the reason behind the rarity of written code-switching in both studies. To understand the fact that Marcela's switches were from Spanish to English, we have to acknowledge the importance of the influence of her language background on her language choice.

However, there is an example in the pre-school information which would seem to contradict this. Her

autobiography is the most balanced instance of code-switching that appeared in the data. Her switches here, from Spanish to an English piece, were not caused because she did not know the word in the other language or because she was translating. Although Marcela's environmental language, English, was her preferred language to communicate orally or in writing, it is interesting that her autobiography is truly bilingual. In this piece Marcela flowed linguistically from English to Spanish, as she flowed socially between her monocultural environments as any bicultural individual. This seems to be a confirmation of Grosjean's (1985) theory of the bilingual as an integrated whole. According to Grosjean

... the bilingual is rarely equally or completely fluent in the two languages. Levels of fluency in a language will depend on the need for that language and will be extremely domain specific... (Grosjean, 1985, p. 471)

This domain, Marcela's autobiography, was extremely specific. It dealt with herself; consequently, it called for a switch between English and Spanish.

Another interesting finding in this study is in the issue of interference. We observed that most of Marcela's examples of interference occurred in relation



to grapho-phonics and in most of the instances English rules were applied to Spanish. The fact that English was the dominant language of the environment and that Marcela was formally taught English sound-letter correspondences are probably the reasons behind these findings in the data.

This study also provided data that pointed to the possibility of parallels between Marcela's reading and writing development in each of her languages and literacy acquisition in monolingual and bilingual settings.

Marcela's use of different reading and writing strategies such as re-reading what she had written, sounding out slowly, copying words from the environment, an initial labeling strategy, using the adult for information, using styles and writing conventions from children's literature and prediction are present in the literacy acquisition literature with monolingual Spanish and English populations. Finally, the increase in the use of different cuing systems when reading is also consistent with the findings in the literature.

## CHAPTER V

### CONCLUSIONS AND IMPLICATIONS

#### Introduction

In this section I will first discuss the possible conclusions and implications that can be drawn from this study. Issues in common with the literature on biliteracy and bilingualism discussed in Chapter II, such as the influence of the environment of the subject's language choice, the transference of reading and writing strategies from one language to another, the question of language interference and code-switching will be addressed separately. A discussion about the finding of the existence of a parallel between literacy and biliteracy will be followed by a section where the findings on the home-school dichotomy will be discussed.

#### Bilingualism and Literacy

This research was designed to study the development of the biliteracy of a bilingual child. The subject, Marcela, acquired English and Spanish simultaneously when she was a baby characterizing her as an early bilingual. One of the things I sought to discover through this study was whether the parallels established between language and literacy acquisition in monolingual

populations could be found in a bilingual child. In other words, are the patterns and processes observed in bilingual language development present in biliteracy development?

The studies done with children described as early bilinguals have findings in common. These children demonstrate an awareness of their two languages, an influence of the environment over their language choice, an initial stage of mixing the languages and the influence of one language over the other when the environment favors one language (De Houwer, 1990; Grosjean, 1982; Hakuta, 1986; Saunders, 1988; Van Naerssen, 1986).

One of the major issues in bilingual language development and bilingual education is the subject of interference and transfer of skills and strategies from one language to the other. Swain (1972) proposed a common storage model for bilingual language development which acknowledges the possibility of interference as well as transfer (Swain, 1972). The studies done on biliteracy development tend to indicate the validity of this model.

Edelsky's (1986) data shows that children at different stages of bilingualism applied rules of their

first language to their second language until they internalized the new rule (Edelsky, 1986). Different language rules pertaining to the same item do not impede children from learning a second language. This is similar to Krashen's (1980) position against the argument of interference of one language with the other in terms of literacy and to the overgeneralization of rules observed in monolingual language development. When a monolingual child learns a new rule, he or she tends towards overgeneralization, applying the rule everywhere until she or he learns the exceptions to it.

The existing studies on biliteracy exhibit some of the findings of bilingual language development studies. The environmental factor as influence on language choice and inter-language influence and in the case of literacy, biliteracy awareness, are present in the literature (Andersson 1978, 1981; Edelsky, 1986; Kupinsky, 1983; Past, 1976; Saunders, 1988). This literature also shows the children's ability to transfer strategies and skills from one language to the other (Andersson, 1981; Christian, 1977; Saunders, 1988).

All of these findings are present in Marcela's biliteracy development. For the purpose of this discussion each of them will be addressed separately.



## Environment

The influence of the environment in the language choice of the biliterate child has been observed in previous studies. Kupisky found that the subjects' ability to read was better in English, the dominant language in the general non-school environment (Kupinsky, 1983). According to two informal reading inventories, Mariana, the daughter of Al and Kay Past, had better reading skills in English, the environmental language, than in Spanish (Andersson, 1981).

In this study, we found evidence of the influence of the environment in Marcela's language choice across the board. Because the dominant language of the environment was English, the majority of her written productions were in English. However, when the balance of environmental language moved towards Spanish, Marcela started producing more writing in Spanish. As in the studies of bilingual language development, audience played an important factor in determining Marcela's language choice.

The inter-language influences (one language over the other) of the environment's dominant language, English, over Spanish, were observed in the overgeneralization of rules. A rule learned in English was applied by Marcela

to Spanish until she found it not to belong to that code. The rules that influenced one language over the other were the rules of English because this was the dominant environmental language. Another possibility that could explain this is the fact that she was taught the rules in English and not in Spanish. In the data there was no evidence to the contrary, a Spanish rule applied to English.

### Transference

Although in previous research the transference of strategies and skills from one language to another in biliterate settings have been observed, the process has not been explained. The children observed by Saunders (1988) transferred their reading skills from English, the language of school instruction, to German, the home language. The account of Katrina's biliteracy development is the most extensive regarding biliteracy. According to Saunders, he and his wife refrained from teaching Katrina to read in English, leaving this to the school:

But Katrina could not wait and took matters into her own hands, 'teaching' herself to read English and transferring the reading skills she had already acquired in German, quickly figuring out the different relationships between letters and sounds (Saunders, 1988, p. 205).

Except for the use of the grapho-phonetic information, no reference is made in the literature to other reading strategies. Similarly Christian, mentioned the issue lightly.

Upon entering kindergarten, they learned quickly to read English, although they had spoken that language minimally before they entered school (Christian, 1977, p. 530).

The idea of defining bilingualism as one system where the strategies of one language are transferred to the other seems compatible with the findings of this study. Marcela's writing strategies were observed developing in her two languages simultaneously.

The findings on the use of reading strategies were similar. During the first month of school Marcela was able to decode (not reading, where the reader understand the text) Spanish texts. In October she was observed predicting, using the first letter of the words and utilizing the illustrations to understand texts in English. That same month, she started predicting and using the illustrations to bring meaning to texts written in Spanish.

Additionally, we have to remember that Marcela never received school literacy lessons in Spanish. Although according to the research by Harste, Woodward and Burke

(1984), the Spanish literacy environment provided at home would be enough to acquire Spanish literacy skills, her development showed the important influence of the school literacy instruction in relation to her Spanish literacy development. Thus, the development observed in Marcela's Spanish literacy skills suggests that there was a transfer of skills from English to Spanish.

### Interference

Marcela was aware of her two languages. Consequently, she was also aware of the similarities and differences between them. At the beginning of the study she showed an undifferentiation of some of the spelling characteristics of her two languages (use of -C-, -K-, -Q-, and -H-). It is important to acknowledge at this point that some of these phonetic elements that caused confusion to Marcela also have been observed causing confusion among monolingual Spanish and English children (Edelsky, 1986). However, Marcela solved the confusion between the use of -C-, -K- and -Q- by asking an adult until she was able to sort out the uses of each of the letters in each of the languages.

It should be pointed out that in the issue of interference, all the examples have to do with grapho-phonetic correspondences. It is probable that at the



moment this study took place, Marcela had already differentiated the syntax, the vocabulary and semantics of English and Spanish.

This topic is discussed in Edelky's (1986) study. Among her findings, at the beginning most of the instances of spelling inventions in English sprung from a reliance on Spanish orthography. However, as the exposure to English increased, the application of Spanish orthography decreased (Edelsky, 1986).

There is a difference here between the findings in this study and previous research. Most of Marcela's spelling inventions involved applying an English rule to Spanish. This was probably caused by Marcela's educational program. Marcela was formally taught the English sound-letter correspondences, while the children in Edelsky's (1986) study, as part of a bilingual program, were introduced to the Spanish sound-letter correspondences before being formally taught English. Another factor that probably contributed to this finding was that English was the dominant language in Marcela's school environment. The families of Edelsky's (1986) children were Spanish dominant. "Over 60% of the parents interviewed who had kindergarten-age children estimated their children's English proficiency to be

poor or non existent" (Edelsky, 1986, p. 32). These children were part of a bilingual program, consequently although they were taught English as a second language, Spanish was part of the school environment. Whereas in Marcela's the school and the society's dominant language was English and Spanish was a language used only by a few.

The issue of transference versus interference has been an important one for the general public and for policy makers. We must not take educational issues out of perspective and forget their influence on politics. Transference versus interference is a hot spot. Interference could be interpreted as a negative aspect of bilingualism. Those who argue that interference of one language over another occur, are arguing against the promotion of bilingualism in this society. If the rules of one language interfere with the rules of the second language, then the latest could not be learned properly. On the other hand we have transference. A bilingual individual can transfer rules, knowledge and strategies from one language to the other.

This research provided evidence towards the latest, the issue of transference. Although we found a degree of interference of English over Spanish grapho-phonetic

correspondences this was probably caused by the unbalanced language situation. It is also possible that interference could be a stage of biliteracy development as it has been observed in bilingual language acquisition where there is an initial stage of mixing the languages (Grosjean, 1982). This could also be related to the fact observed by Wallace (1986), that early bilinguals are less inclined than late bilinguals to keep their linguistic systems distinctive and separate.

#### Code-switching

The instances where we found Marcela code-switching in writing were very few in the data. This makes it difficult to generalize in this area. However, we observed that the motive behind some of her switches was the familiarity with the structure. In two instances Marcela switched from Spanish to English because she was more familiarized with the phrase in English: Museum of Science and English letter headings.

Some of the findings in this area are similar to Edelsky's (1986). Although there are differences between the populations of the studies, we can affirm that the minimal use of code-switching found in the data of both studies "...is evidence that writers could and

did honor the integrity of each language when the situation required it..." (Edelsky, 1986, p. 97).

The difference between the findings of the studies in the area of code-switching refers to the amount of code-switching. In this study there is less code-switching than in Edelsky's (1986). This discrepancy could be caused again by the differences in language background and educational program between the studies. Edelsky's (1986) children were in the process of learning English. Spanish was the language they felt most comfortable with. In contrast, Marcela controlled both languages orally and she was not part of a bilingual educational program, as were the children in Edelsky's (1986) study. In terms of the direction of Marcela's code-switching, it is difficult to arrive at any conclusion because of the limited data in this area.

Finally, I have to point to a piece that was produced before this study officially started. In the pre-school information Marcela produced a text which was an autobiography. In this piece there is evidence of an English to Spanish switch. This is also the most balanced instance of code-switching in the data. It is interesting that Marcela needed to write this text using both her languages resulting in a nearly linguistically



balanced text. This finding confirms Grosjean's view of the language fluency of the bilingual individual, where the linguistic balance and fluency is domain specific and determined by the need for the language (Grosjean, 1985).

### Literacy and Biliteracy

Another question that guided this research was whether biliteracy development was comparable to monolingual literacy development. We wanted to know if a positive comparison could be established between both processes.

The research on literacy development portrays children as active participants in their own education. Through a process of experimentation, creating and confirming hypotheses, children make sense of their world. That same process of meaning construction is applied to literacy. Children want to make sense of the written word as they want to make sense of oral and nonverbal language. Using their knowledge about language and their previous experiences as a base, children embark on transactions with the written word.

From the beginning of this study Marcela was characterized as a risk taker. We observed her using

her knowledge of language and testing hypotheses about the written world. These hypotheses were developed in different areas.

In terms of spelling, we observed a move from simple hypotheses to more complex, a move from nonstandard to standard spellings. At the beginning of the study Marcela was observed using the "one letter-one word" strategy, a syllabic hypothesis and standard spellings, all in the same piece. Gradually we observed her moving towards standard spellings. Marcela also spelled using her knowledge about oral Spanish as a basis (substitution of -R- for -L-) when we observed features of oral Puerto Rican Spanish in her productions. The fact that she applied grapho-phonetic properties of English to Spanish also shows Marcela's hypothesis testing.

In other areas, Marcela's literacy skills developed as with any monolingual child. She explored different genres and styles as well as uses of writing. Her writing was functional when she wrote lists and notes, it was personal when she wrote her diary entries; she used writing to communicate when she wrote letters and for pleasure when she wrote stories, poems and songs.

One final point has to be made in relation to Marcela's reading development in Spanish. The data provided by the Reading Miscue Inventories suggested that Marcela tended to use the grapho-phonetic cuing system more in Spanish than in English. Additionally, through the observational data we found that at the beginning of the study Marcela used the grapho-phonetic system almost exclusively when reading in Spanish.

Most of Marcela's reading and writing occurred in a parallel way across both languages. Invented spelling based on sound, the use of grammatical and semantic relations in reading developed in parallel. However, where the languages differed, the strategies that Marcela used were different, too. At the beginning of the study, when reading, Marcela tended to over depend on the grapho-phonetic aspects of Spanish although she had never been taught the sound-letter correspondences in this language. This was probably caused by the grapho-phonetic regularity of Spanish.

Marcela was introduced in her pre-school, before this study started, to the fact that letters have a sound correspondence. This instruction took place in English. However, because she was exposed at home to texts in Spanish and to reading demonstrations in Spanish, we can

assume that Marcela discovered that the sound-symbol relations existed in Spanish, too. Because Spanish is a language with a regular grapho-phonetic relation, this was the first reading strategy she used. After being exposed to other reading strategies by her kindergarten teacher, she started using, when reading Spanish, those strategies as well and relying less on the sound-symbol relations of the language.

It is possible to interpret this data as evidence that in languages that have a regular sound-symbol relationship, some children tend towards relying on the grapho-phonetic over the semantic and syntactic cuing systems. However, as they continue to be exposed to real literature and reading, not to contrived adult creations where the emphasis is on the grapho-phonetic elements, they figure out the need to use the other systems in order to understand what they read.

In my experience as a teacher, I was able to observe children developing as Spanish readers. This has provided me with the experience of observing how some Spanish-speaking children, not all, approach reading the same way Marcela did. These children start decoding Spanish, as Marcela did. Because they were exposed to real literature and other reading strategies were



modeled, they figured out decoding is not reading. Within a matter of weeks, they started predicting and using the context and illustrations to bring meaning to the process just as Marcela did.

I have also witnessed the contrary. In my years as a teacher I have observed children who are incapable of understanding what they have decoded, because in their classroom there was an overemphasis on the sound-symbol relations of Spanish. Additionally, I have seen children who, because their teachers taught them to read overemphasizing the grapho-phonetic aspect of Spanish, generally understood what they read, but this process was very slow and painful. They read every letter in the text, not using strategies such as prediction.

#### Home-School Dichotomy

Classically it has been established that there is a separation between the worlds of the bilingual child (Delgado-Gaitán, 1987; Hakuta, 1986; Rodríguez, 1982; Sinclair and Ghory, 1987). Richard Rodríguez's (1982) account of his schooling process is a testimony to the abyss that exists in the lives of some bilingual children. Although the same separation has been observed among some economic sectors of the Anglo society (Cook-Gumperz, 1986), it is more dramatic in the

case of bilingual families. The linguistic gap that sometimes exists between the bilingual family and the school adds to the social gap, making the separation more extreme.

Marcela comes from a bilingual family that was actively part of the school environment. She did not experience the cultural separation between home and school experienced by other Hispanic children. There were, however, quality differences between her school and home productions in writing. Marcela's previous school experience socialized her to produce certain kinds of writing using labeling strategies (This is ..., or I like ...) contrasting with her home productions. No matter what language Marcela chose to write, at home she explored different writing genres and styles while at school, initially at least, she was using the labeling strategy. Later in the year this changed, when Marcela understood that her teacher's expectations were similar to her home expectations.

Finally, Marcela understood the difference between her two environments in relation to her language choice. Because she knew that her parents understood English, she could use either of her languages at home. However, at school it was different. The only way Spanish could

be used at school was in non-academic instances, like communicating with a Hispanic friend.

### Implications for Education

This case study dealt with an early bilingual, a child who entered school being proficient in two languages. This research points to the possibility of early bilinguals' developing literacy in both their languages. For this to take place, they need an environment that fosters biliteracy.

The research in literacy acquisition calls our attention to the importance of the environment in the development of literacy. The environments where children have opportunities for engagement with real literature, where experimentation with oral and written language takes place and where children are active participants in their literacy education process have proven to be the ideal environments for literacy development. These conditions should be present also in an environment where the main purpose is to develop biliteracy.

Marcela's Spanish-dominant home provided exposure to children's literature in Spanish, a Spanish-speaking audience and the opportunity to experiment with oral and

written Spanish. The value placed on Spanish as a language was also an important part of Marcela's home environment. This home environment also provided Marcela the freedom to explore English literacy through a wide array of children's literature in English and the possibility to explore written English. The home environment provided Marcela the opportunity develop Spanish along with English literacy. An opportunity that her schooling did not provide. The kindergarten school environment provided the opportunities to solely develop English literacy neglecting Marcela's home language.

In an environment that is designed to foster biliteracy, there should be bilingual and biliterate adults who function both as role models and as audience. Children learn from demonstrations and these adults would demonstrate biliteracy as a possibility. This environment would also need to provide a wide array of literature in both languages.

This study suggested that providing bilingual education is not the only thing to be considered. Establishing maintenance bilingual programs is not enough when considering biliteracy development. Theories and methods of literacy instruction should be



closely looked upon. Marcela's initial stage of using a decoding Spanish reading strategy was probably caused by the instructional method she was exposed to in pre-school. The kindergarten literacy instruction she was later exposed to provided the environment to explore holistic English literacy strategies which she transferred to Spanish reading.

Although this was a case study, which could make it hard to be generalize, its findings are congruent with previous studies on biliteracy. This research along with its predecessors suggests that it is possible for an early bilingual to learn reading and writing in the child's two languages simultaneously.

However, we could say that what makes these studies difficult to generalize is a social and economic factor. These studies deal with children who come from privileged home environments, where their parents are graduate students or professionals. On the other hand, we have the common Hispanic child who comes from an economically deprived environment. Percilia Santos' (in Saunders, 1988) provided evidence to the contrary. Her research was done with children coming from a low-income Spanish speaking population. She found that bilingual children were more proficient reading two languages than

monolingual children reading one. This was concluded according to the compared performance on standardized reading tests of the children in the program with the norm groups at the end of kindergarten. 94% of the children enrolled in the program, when evaluated in their dominant language, were above their chronological age (Saunders, 1988).

It is clear that bilingual education policies and attitudes need to change. In a country in which Hispanics have the highest drop-out statistics along with the privilege of being the poorest racial group in the nation, we have to look not only at educational policies but at societal attitudes.

Historically, the major focus of educational policies for Hispanics had to do with language. It was believed that the underachieving of Hispanic students was caused by the lack of language proficiency in English. The remedy was either immersion in English as a Second Language or English curriculum. "The early development of bilingual education programs (within the compensatory education model) was a result of the need for concerned parents and educators to subvert their goals for truly bilingual and bicultural programs to the prevailing political reality" (Walker, 1987, p. 22). Recently

researchers are focusing on other aspects concerning bilingual populations (Walker, 1987).

Cummings (1984) has argued that bilingualism has to take into account the social environment where it takes place. The reason for the success of the Canadian-French bilingual immersion programs for English-speaking children lies in the consideration of the social environment. In the context in which these programs take place, the minority language is valued. On the other hand, we have the English immersion programs for Spanish-speaking children in the United States. These have proven to be a failure. One of the reasons has to do with the undervaluing of the language of the minority students.

In the same way, bilingual transitional programs undervalue the language of minority children. Although proficiency in the language of the minority before making the transition to mainstream is a goal in these programs, we could define them as implementing a subtractive bilingual model. We have to understand that language development is a process. The development process in the minority's language is not fostered through the school life of the child in transitional bilingual programs. What these programs offer in

reality is an undervaluing of the minority's language and a preference for the majority or mainstream language.

On the other hand, maintenance programs do foster both the minority's and the majority's languages. It is obvious that language backgrounds need to be taken into account to develop different educational programs. Programs where early bilingual children are exposed to the acquisition and development of biliteracy could be part of this additive model of bilingual language development.

In relation to literacy acquisition, the findings of this research point to the need to acknowledge that not all children approach reading the same way. We need to foster educational theories and classroom practices where each child can explore, discover and experiment with literacy. In this way, each child would find his or her own ways with words.

### Research Implications

It is clear that more research is needed in the area of biliteracy acquisition. Studies need to be designed encompassing a broader population, taking into account the socio-economic status of the participants. As the



research increases, the findings would be more reliable. Case studies should also continue but take into account different variables.

The relation between the development of bilingualism and literacy should also be explored focussing on the effects of biliteracy acquisition on the development of oral bilingualism. Another possible focus of the research could be the study of English-Spanish biliteracy development in which both languages are valued by the society. This could show a more balanced relation between both languages.

Biliteracy development should also be studied in cases where the home-school separation is well established. In this way school versus home biliteracy expectations could be examined. There is also a need for longitudinal studies on biliteracy. These would demonstrate the long term effects of biliteracy on the individual.

Finally a research area that still needs to be studied is early literacy acquisition with Spanish-speaking children. The question about the preferential use of the grapho-phonetic system by some children who are exposed to real literature and reading should be examined.

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