ÇUKUROVA UNIVERSITY
INSTITUTE OF SOCIAL SCIENCES
ENGLISH LANGUAGE TEACHING DEPARTMENT

ACQUISITION OF TURKISH BY A BILINGUAL CHILD: A CASE STUDY

Özden AKYOL

MASTER OF ARTS

ADANA, 2009

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Supervisor: Assoc. Prof. Dr. Hatice SOFU

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To Çukurova University Institute of Social Sciences

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ÖZET

TÜRKÇENİN İKİ DİLLİ BİR ÇOCUK TARAFINDAN EDİNİMİ: BİR DURUM ÇALIŞMASI

Özden AKYOL

Yüksek Lisans Tezi, İngiliz Dili Eğitimi Ana Bilim Dalı
Danışman: Doç. Dr. Hatice SOFU
Ağustos 2009, 100 sayfa

Bu çalışmada, birinci dil (İngilizce) edinimi devam ederken ikinci dili (Türkçe) edinmeye başlayan ardıl iki dilli bir çocuğun ikinci dildeki gelişimi incelenmiştir. Çocuğun edinmekte olduğu Türkçe ile İngilizce biçimbirim- sözdizimi açısından bazı dil alanlarında belirgin farklılıklar göstermektedir. Bu nedenle bu alanlarda ardıl iki dilli çocuğun, dil gelişiminde tek dilli çocuklardan farklılık gösterebileceği beklenmektedir. Bu amaçla, bu çalışmada iki dilli çocuğun Türkçe özne kullanımı, soru edinimi, olumsuzlama ve isim durum eklerinin edinimi incelenmiştir.

Uzun süreç yöntemiyle yapılan bu çalışmanın katılımcısı çalışmanın başlangıcında 3 yaş 2 aylık İngilizce-Türkçe dilleri konuşmacısı olan bir kız çocuğudur. Katılımcı doğumunun ilk 3 yılında İngiltere'de kalmış, 1. ve 2. yıllarda 2 aylık yaz döneminde Türkiye'ye gelmiş, 3. yılında ise Türkiye'ye yerleşmiştir. Türkiye'ye taşındıktan 3 ay sonra, 7 ay süreyle katılımcının Türkçe kullanımı gözlemlenmiştir.

Çalışmanın sonucuna göre, iki dilli çocuğun Türkçe kullanımı ve gelişimi belirli oranda tek dilli Türkçe konuşan çocuklara benzemektedir. Ancak, özne kullanımı ve olumsuzlamada İngilizcenin etkisi gözlemlenmiştir. Bunun nedeni, Türkçe'nin adıl düşüren dil olması dolayısıyla öznenin bağlama göre düşürülebilmesi, İngilizce'deyse özne kullanımının zorunlu olmasıdır. Olumsuzlamada ise farkın Türkçe'de olumsuzlamanın son ekle, İngilizce'de ön ekle yapılmasından kaynaklandığı düşünülmektedir. Katılımcı kısa bir süre Türkçe olumsuzlamaları İngilizce söz dizimine göre yapmıştır. Soru edinimi ve isim durum eklerinde ise bazı gelişimsel hatalar görülmüştür; fakat bu hataların bazı tek dilli çocuklarda da görülebildiği bilinmektedir.

İki dilli çocuğun bu hataları iki dili arasındaki bilişsel sürecinin yansımaları olarak değerlendirilmektedir.

Anahtar Kelimeler: Rekabete Dayanan Model, diller arası etkileşim, ardıl iki dillilik, biçim birim söz dizimi, gelişimsel yol.

ABSTRACT

THE ACQUISITION OF TURKISH BY A BILINGUAL CHILD: A CASE STUDY

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Master of Arts, English Language Teaching Department
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In this study, a sequential bilingual child's language development was observed in the second language (Turkish) which she started acquiring at a point after the "first" language (English) had already started to be established. In this study, we investigated the acquisition of subject pronouns, questions, negation and case markers in Turkish.

The participant of the study was born in England and stayed there for three years and spent summer holidays in Turkey for two months in the first and second years. In the third year, the family moved to Turkey. 3 months after their arrival, the spontaneous speech data between the participant and the researcher was collected for 7 months in Turkish.

Our aim of this study was to shed light on the issue of bilingualism (English-Turkish) in the frame of the morphosyntactic development of two typologically different languages. The investigation of distribution of morphosyntactic forms to evaluate the extent to which domains at the interface between syntax and pragmatics were vulnerable to cross-linguistic influence in bilingual acquisition and the developmental path of the acquisition of some structures were inquired.

As a conclusion of this study, we asserted that the bilingual children mainly followed the developmental paths of monolingual children; however, cross-linguistic structures were found in the use of subjects and negated elements. Turkish is a pro-drop language while English is non-pro-drop language. In Turkish, there are three ways for negating constructions one of which is by adding a negative marker between the stem and the other markers like tense and person. As this requires more analysis of the

structure compared to the other lexical elements, the bilingual child uses the English structure at the beginning of her acquisition with a universal vocalized negation element which is observed only for a month; after that, she uses the target-like structures in her production. In questions and case markers, the bilingual child gradually developed the cognitive patterns required for competence in linguistic domains.

Keywords: The Competition Model, Cross-Linguistic Influence, Sequential Bilingualism, Morphosyntax, Developmental Path.

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CHAPTER 1

INTRODUCTION

1.0. Introduction

In this chapter, background of the study, statement of the problem, purpose and importance of the study, research questions, limitations of the study, and operational definitions are presented.

1.1. Background of the Study

Children start putting words together between the age of 18 months and 2 years. Although the first multiword utterances are defined to be telegraphic utterances which lack grammatical particles, they are not a mere simplification of the adult language. When they are examined, they show features of a grammatical, rule-governed system (Guasti, 2002). Children are very quick to learn the properties of the language they are exposed to, and languages are different from one another in the way ordering constituents and in the morphosyntactic properties of verbs (Guasti, 2002). They may even show such skills in acquiring more than one language.

Garcia (1983; in Romaine, 1995) points out that early childhood bilingualism is a very widespread phenomenon. It is estimated that nearly half of the world's population is functionally bilingual, and that most of these bilinguals are "native speakers" of their two languages (Wölck, 1987; in Romaine, 1995). In this context, it is only fitting that studies of child language should not focus primarily on the world's monolingual children, but on the "multilingual majority" (Snow, 1985, in Romaine, 1995) as well. The study of bilingual children can greatly contribute to theories of acquisition, since bilingual acquisition can show us the limits of language acquisition, and it can teach us more about the potential for language learning in early childhood (Romaine, 1995).

The bilingual acquisition context can be regarded as an experimental setting and the monolingual one as its control to help us understand the cognitive processes involved in language acquisition (Dopke, 1998), because Dopke (2001) emphasizes that

most of the untypical developmental structures in the bilingual data also occur in monolingual data, but those structures are more frequent in the bilingual data.

There are three possibilities to explain untypical structures in the bilingual data. First, a unified syntactic system is formed from both languages. Second, one language dominates the other. Third, there are cognitive interactions between the languages.

Dopke explains each of these possibilities. According to her (2001), if the first possibility is correct, then the syntactic structures should be very similar in form and frequency regardless of the languages (Genesee, 1989), and cross-linguistic influence should be bilateral. If the second possibility is correct, cross-linguistic influence should be from the stronger to the weaker language. If the third possibility is correct, target structures should be in the majority, cross-linguistic structures should be bilateral, and cross-linguistic structures should be based on intra-linguistic input.

To see the full picture of language learning processes and the reasons of cross-linguistic structures, we need to study bilingual acquisition with typologically different languages of which similarities and contrasts are clear to observe.

1.2. Statement of the Problem

Bilingualism is an important field in linguistics which helps us to study the development of two languages, to see the possible interference of those languages and to make research on cross-linguistic variations. For that reason, in this study, the developmental patterns of the acquisition of Turkish by an English-Turkish bilingual child will be investigated in comparison with monolingual Turkish-speaking children in the literature and one monolingual child recorded for research purposes.

Dopke (2001) reports that a difference between bilingual and monolingual children is that unusual structures are predictable, though infrequent, in bilingual data. However, they are found exceptionally in monolingual data. Döpke (2001) found out that all of the four bilingual children in her study produced some examples of the same type; and she argued that they were predictable to some extent. She also found cross-language influences bilateral irrespective of dominance, although she concluded that the

direction was partly related to the strength of a structural phenomenon within its donor language.

In this study, our subject's English is stronger than Turkish in the beginning; thus, her Turkish is expected to be highly influenced by her stronger language, English; and this would lead cross-language structures to occur in the data. However, the extent of influence and the intruded linguistic domains need to be investigated.

1.3. Purpose of the Study

The aim of this study is to shed light on the issue of bilingualism (English-Turkish) in the frame of the morphosyntactic development of two typologically different languages. The investigation of distribution of morphosyntactic forms to evaluate the extent to which domains at the interface between syntax and pragmatics are vulnerable to cross-linguistic influence in bilingual acquisition and the developmental path of the acquisition of some structures will be inquired.

1.4. Importance of the Study

There have been an increasing number of studies about cross-linguistic influence in the last few decades. The reason for the amount of studies on this subject is the interdisciplinary nature of the research among the fields of bilingualism, cognitive science, psychology, SLA, and theoretical linguistics which means that research and findings in bilingualism and cross-linguistic influence will contribute a lot to the field.

The question about bilingual acquisition is whether the patterns of acquisition in bilingual children are the same or different from those of monolinguals (de Houwer, 1994; in Dopke, 1999). The differences in bilingual development from monolingual development are important because different paths may explain the way young children process linguistic information to acquire the language system and it may maintain a better understanding of psycholinguistics as cross-linguistic structures and untypical intra-linguistic variations will help worries about the effects of bilingualism on young children (Dopke, 1999).

This study is important in terms of English being the developing first language of the child and Turkish being acquired in the meantime; that is, the child started to learn a second language while her first language has not been established as a full linguistic system. What is more, the two languages in this study are typologically different from each other. That is why, this language pair is important to be observed in a bilingual acquisition context, as these two typologically different languages may show us the similarities and contrasts of cross-language structures between the two languages clearer, as opposed to cases of two similar languages, like Italian and Spanish.

1.5. Research Questions

The following research questions will be the focus of the study:

1. What patterns of development emerge in the acquisition of Turkish morphosyntactic structures of an English/Turkish bilingual child?

    a) What kind of development does the bilingual child follow in the use of subjects?
    b) What is the developmental pattern of the bilingual child in yes/no and wh-questions?
    c) What is the developmental pattern of the bilingual child in negation formation?
    d) What are the patterns in her usage of case markers?

2. Are these patterns similar to or different from those that have been reported in Turkish monolinguals?
3. Is there a structural influence of one language on the other in the course of development?

1.6. Limitations

As there is only one participant of the study, the loss of the subject may be the main limitation as it would be hard to find a substitute. Another limitation is about the generalizability of the findings. As the data are gathered from children's spontaneous speech and there are individual differences, there is not one completely true

explanation. In bilingual cases, it is almost impossible to compare even two subjects as there are a lot more factors influencing the language development. Thus, the results of this study cannot be completely regarded as facts. As Serratrice, Sorace & Paoli (2004) state, individual variation plays a crucial role in the acquisition process; other bilingual children may behave differently from the one that has been studied (p.187). Lack of English data also restricts our interpretation of the Turkish data and the bilingual development as we cannot observe development and structures in English and influence from Turkish to English.

1.7. Operational Definitions

Cross-linguistic Influence: Cross-linguistic influence refers to the influence of a person's knowledge of one language on that person's knowledge or use of another language (Jarvis & Pavlenko, 2008). In the present study, cross-linguistic influence will be studied as influence from English (L1) to Turkish (L2).

Sequential Bilingual: Sequential bilinguals acquire two languages successively in childhood. They begin to acquire the "second" language at a point after the "first" language has been clearly established- generally at around age three.

Simultaneous Bilingual: Simultaneous bilinguals acquire two languages at the same time.

Source language: The language from which cross-linguistic effects come from (Jarvis & Pavlenko, 2008).

Recipient language: The language being examined for cross-linguistic effects (Jarvis & Pavlenko, 2008).

CHAPTER 2

REVIEW OF LITERATURE

2.0. Introduction

In this chapter, the literature about the Competition Model, a detailed inquiry on the bilingual acquisition, and the two controversial hypotheses about the developmental pattern of the acquisition: the Unitary/Single System Hypothesis and the Dual/Separate System Hypothesis are presented. Furthermore, the cross-linguistic influence in bilingual acquisition is explained. Additionally, Turkish monolingual acquisition and a brief overview of Turkish structures to be examined are also presented in this chapter.

2.1. The Competition Model

Acquisition of first and second language differs from each other in many ways. In first language acquisition, infants learn about the world while learning a language, their malleable brain has not been dealing with other tasks (MacWhinney et al., 2000, in MacWhinney, 2005), and they get an intense social support from their caregivers (Snow, 1999; in MacWhinney, 2005). Considering these factors, many researchers think that first and second language acquisition are so different processes that there has to be separate theories for each.

There are two basic approaches for second language learning: nativist and emergentist. Nativist models explain the second language learning of grammar with the principles and parameters of UG; while emergentist models, like the Competition Model, approach to grammatical learning as an interaction between the learner, the input, and the context. However, neither of the models can provide a full understanding of the learning process of second language. Nativists focus on the syntactic models; and the Competition Model, which is developed by Bates and MacWhinney in 1989, on the process of language learning in the individual learner. It is centered on the interaction between mental characteristics of the learner and properties of the input, leaving out how the learner goes through the learning process (MacWhinney, 2002).

To include that aspect of language learning, the Extended Competition Model is designed to explain the learning mechanisms in first and second language acquisition, including bilingualism. As the model was first constructed to explain first language acquisition and then extended to second language acquisition and recently to bilingualism, studies of application of the model to bilingualism are very few. However, the essence of the model applies to bilingualism and in this study the implications of second language learners in the Competition Model studies are considered similar to bilinguals to some extent.

The earlier versions of the Competition Model had the core concept of competition along with the three components at the top of the figure: arenas, cues (mappings), and storage. The new aspects in the Unified Competition Model are the components at the bottom: chunking, codes, and resonance. Figure 1 presents the interrelated structural and processing components of language learning.

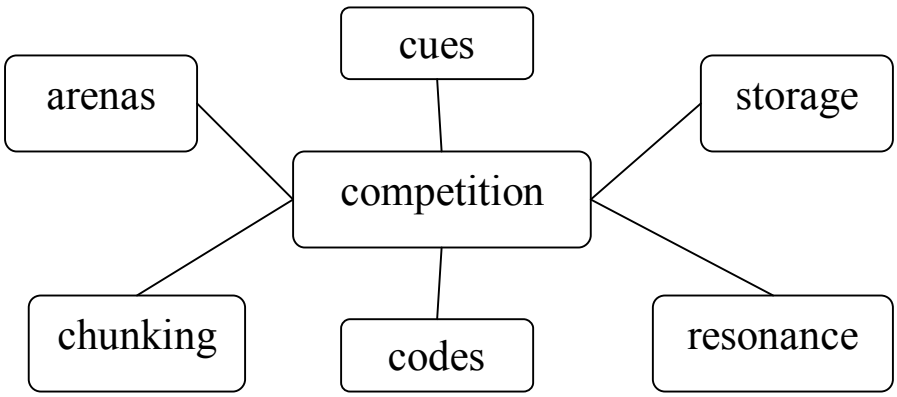


Figure 1. The Unified Competition Model (MacWhinney, 2005, p. 52)

In the Extended Competition model, competition is again the core of the interacting non-modular components. There are six more subcomponents: arenas, cues, chunking, storage, codes and resonance. According to the model, learning is a process based on storage, chunking and support to acquire new mappings (MacWhinney, 2002).

Competition is the core of the model which is a processing system selecting between various options or cues regarding their relative cue strength. Competitions in most of the arenas are formulated by MacWhinney and his colleagues, for example, in the auditory arena, the processing of cues relies on the bottom-up features and

activation from lexical forms; in the morphosyntactic arena, an item-based competition between word orders and grammatical markings occurs (MacDonald et al., 1994, MacWhinney, 1987; in MacWhinney, 2005).

Competition occurs in four linguistic arenas: phonology, lexicon, morphosyntax, and conceptualization in production and comprehension. Additionally, older learners use two more arenas of orthographic competition: reading and writing (MacWhinney, 2005).

Cues are the mapping between form and function. Forms are cues for functions during comprehension, and functions are cues for forms during production. In the Competition Model, each lexical item or syntactic construction is figured out as a form-to-function mapping (MacWhinney, 1997). For example, the pronoun "him" is a form expressing the functions of masculine gender and the role of the object of the verb (MacWhinney, 2005).

Storage in short-term and long-term memory is essential in the learning of new mappings. The role of short-term memory is fundamental for the phonological forms of words and the mapping of these forms into meaningful lexical items as well as processing specific syntactic structures. The essence of syntactic processing is the learning and use of item-based constructions (MacWhinney 1975; in 2005). Item-based constructions allow places for arguments which may occur in specific positions or get specific morphological markings.

Chunking is related to the size of particular mappings. It emerges when a series of actions or percepts are stored as a single unit. Words are stored as a chain, because production of beginning segments initiates the later segments. Strengthening of chains helps learners to articulate the whole word as a single unit (MacWhinney, 2002). In first language acquisition, children count on chunking to build up syllables, words, and sentences as well as combinatorial processing. It is also used for the learning of the phonological shape of individual words for both first and second languages (Gupta & MacWhinney, 1997; in MacWhinney, 2005) and it helps to improve fluency. They take two or more items together which occur together and make them a single automatic

unit. They can also use chunking processes to make larger grammatical structures and complex lexical forms (MacWhinney & Anderson, 1986; in MacWhinney, 2005).

Codes are essential for bilingualism and second language acquisition for theory of code activation. There are two constitutes of the theory of code competition in the Competition Model. One is the theory of code interaction for code selection, switching and mixing. The other is the theory of transfer including positive and negative transfer in different linguistic domains. Transfer is important to describe the interactive nature of cognitive processing and to explain the age-related declines in L2 learning ability without relying on the hypotheses about critical age period (MacWhinney, 2005).

Resonance is responsible for co-activation processes in both L2 learners and bilinguals. The choice of a particular code during lexicalization is determined by factors such as activation from previous lexical items, the influence of lexical gaps, expression of sociolinguistic options, and conversational cues produced by the listener. Resonance also helps understanding code separation, age-related effects, and the micro processes of learning and processing. Resonance occurs during inner speech in L1 and L2 learning. Young children give themselves instructions describing their actions (Vygotsky, 1962; in MacWhinney, 2005) and they guide their cognition, which happens with L2 learners as well. It is used to process new input and relate new forms to previous forms. Thus, resonance is also called as the repeated co-activation of reciprocal connections, because as the connections grow, cross-associations and mutual activations grow and a coherent co-activating neural circuit is formed (MacWhinney, 2005); which is to say, several concepts are co-activated and their mutual stimulation develops a resonant pattern (MacWhinney, 2002).

In bilingual acquisition, the child's first words show phonological interaction which is foreseen by the Competition Model which emphasizes competition, interaction and transfer. However, when the child produces the first sentences, low level of interaction is observed. The reason of lack of interaction is interpreted with the dynamics of balanced competition between two languages. When the Spanish-English bilingual child is speaking Spanish, both "mesa" and "table" are activated for talking about a table. However, more activation occurs for "mesa" during Spanish speech as "mesa" is interconnected with other Spanish words, constructions and meanings. This

happens when two languages are balanced. If one of the languages is stronger, then the level of influence of stronger language into weaker language gets more (Hernandez, Li & MacWhinney, 2005).

In simultaneous bilinguals, if two languages are almost similar in dominance, each system has enough system-internal resonance to block excessive transfer. On the other hand, if one of the languages is weaker, then it will not have enough internal resonance to block occasional transfer (Dopke, 2000; in MacWhinney, 2005). As to second language learners, it is rather difficult because of L1, which makes them need additional learning strategies for optimization of input, promotion of L2 resonance, avoidance of processes that affect input chunks negatively. Transfer from L1 to L2 is highly expected, along with weaker amount of transfer from L2 to L1 because of the interactive competition (MacWhinney, 2005).

Second language learners transfer syntactic structures from L1 in the beginning which works to some extent. However, later, they need to restructure the pieces, because most of the time, transfer of syntactic patterns is correct structurally, but inaccurate pragmatically. In addition, overutilization and underutilization of some structures can occur (MacWhinney, 2002). An interesting example about the differences in sentence production in different languages comes from Bates and Devescovi's study about the use of relative clauses in Italian and English. In both languages, it is grammatical to describe a picture of monkey eating a banana by saying either "A monkey is eating a banana" or "There is a monkey that is eating a banana". The striking result is that English speakers typically use the first option, and Italian speakers use the second option with relative clause three to five times more (Bates & MacWhinney, 1988). This study implies possible transfer cases and overutilization of relative clauses by English learners of Italian speakers in this particular structure as second language learners.

To sum up, the Competition Model underlines competition between various options during production and comprehension. Different possibilities compete and levels may influence each other (resonance). MacWhinney claims that L2 learning theories need to consider L1 learning because of transfer effects and similar learning mechanisms (Murre, 2005). As Dopke (2001) mentions in her article, the Competition

Model explains grammar learning through making connections between meaning and form on the ground of structural cues and their competition for related functions. Frequently used, reliable and perceptually salient cues win over less strength cues. “If there is competition between several cues for the same function or if the same cue represents several functions, the acquisition of a particular structural phenomenon will be delayed” (p.94). In bilingual acquisition, two similar forms in the languages compete between languages.

As a whole, the Competition Model views learning as an interaction between each of the different subcomponents during the process of competition and resonance; and it indicates the links between learning mechanisms and linguistic tasks. It also suggests particular learning strategies for specific linguistic structures at particular points in development (MacWhinney, 2002).

2.2. Historical Development of Studies on Bilingualism

In the last two decades, there has been an increase in the study of bilingual acquisition. In this part, we will mention the summary of the studies done prior to the mid-1980s, stated in De Houwer (2005). There were very few, 4, empirical studies in the field. However, there are some studies which made a great contribution to the scholars who study bilingual acquisition. The first empirical study was done by a French linguist, Jules Ronjat, in 1913. This is the first empirical study published in book-length publication. The less known is on the acquisition of French and Serbian by the psychologist Millivoie Pavlovitch, 1920. This study is about the very early acquisition of a second language while the others are on the acquisition of two languages simultaneously from birth. The most famous monumental work is by a linguist, Werner Leopold. He published his study in four volumes between 1939 and 1949 and was reprinted in 1970. The study by the psychologist Traute Taeshner, 1983, was very influential but his article with Virginia Volterra in 1978, titled as “The acquisition and development of language by a bilingual child” which discussed the stages of the bilingual acquisition was severely criticized. The book by Garcia, 1983, is also about bilingual acquisition but it does not have a developmental perspective.

2.3. Bilingual Acquisition: One System or Two?

The nature of language development of bilingual acquisition has been under research in the past few decades. There have been two opposing ideas about early stages of development. The first one is known as the Unitary Language System Hypothesis (ULSH). The contrary argument is the Dual/Separate Development Hypothesis.

2.3.1. The Unitary/Single System Hypothesis

In the 1980s, the research on bilingualism was centered on the question whether bilingual children have one or two systems from the very beginning of their acquisition process. Studies supporting "one system hypothesis" claim that bilingual children start out with a single lexical system applying the same syntactic rules regardless of the languages. There are a number of studies (Imedadze, 1967; Leopold, 1970; Swain, 1977; Volterra and Taeshner, 1978; Redlinger and Park, 1980; Grosjean, 1982; Taeshner, 1983; Saunders, 1988; Arnberg, 1987; in Juan-Garau & Perez-Vidal, 2000) in the support of undifferentiated phonological, lexical and syntactic subsystems: Leopold (1970) proposed arguments about phonological and lexical systems; Swain (1977) claimed that rules of both languages are stored in a single place (in Juan-Garau & Perez-Vidal, 2000).

The main argument on this issue was declared by Voltarre and Taeshner (1978), in their article "The acquisition and development of language by bilingual children". In this article, they present a three stage model. The first two stages of the argument by Volterra and Taeshner form "the single system hypothesis".

As illustrated in Figure 2, the first stage is claimed to have one lexical system with words from both languages with no equivalent pairs corresponding to the terms in the other language. This claim is based on a list of 137 words by each of two bilingual subjects of this study ages between 1;0 and 1;6. In the second stage, the child has two different lexicons, with corresponding words to each language. However, the child applies the same syntactic rules to both languages. In the third stage, the lexicon and syntax are differentiated (Volterra & Taeshner, 1978). These stages are illustrated in Figure 2.

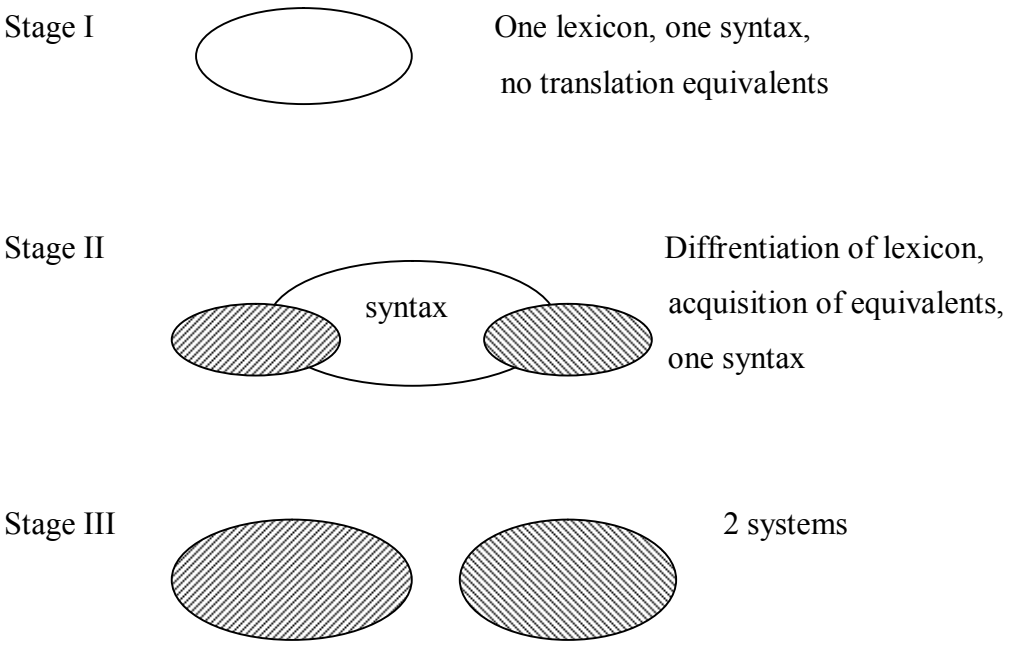


Figure 2. Gradual Separation Of Two Languages (Gawlitzek & Tracy, 1996, p.907)

This study has been criticized harshly by many linguists for different reasons. Genesee (1989) and De Houwer (1990) argued the methodological constraints. They claimed that the evidence for their assertion is insufficient and limited in nature as they cannot assess the translation equivalents in their subjects' lexicons. What is interesting is that, Quay (1993) re-analyzed Taeshner's data and found out that the subjects had some translation equivalents (in Juan-Garau & Perez-Vidal, 2000).

Another weak point about the ULSH is that it is not consistent with the nature of language development in general, so it does not make correct predictions about the bilingual development. They claim that applying the same syntactic rules to the both languages in the early stages is the sign of unitary system (Mishina-Mori, 2005). However, Meisel (1989) claims that going through identical developmental patterns in certain areas of grammar does not mean the unified system.

Another drawback of the hypothesis is that pragmatic and syntactic levels of bilingual children's use are not analyzed. Although language mixing is used on the pragmatic level, it is considered to be syntactic differentiation (De Houwer, 1990; Meisel, 1989, 1994; Paradis & Genesee, 1996; in Mishina-Mori, 2005).

2.3.2. The Dual/Separate Development Hypothesis

In the last two decades, much of the research on bilingual acquisition has been centered to the language separation. More current linguists argue in favor of the Dual/Separate System Hypothesis. The linguists who support the two-system hypothesis claim that children differentiate the two linguistic systems from early on (Bergman, 1976; Lindholm and Padilla, 1978; Meisel, 1986, 1989; Genesee 1989, 1993; De Houwer, 1990, 1995; Schlyter, 1990; Deuchar, 1992; Quay, 1995; in Juan-Garau & Perez-Vidal, 2000).

There are some studies to support the differentiation in certain domains; namely, the study by Bosch and Sebastián-Gallés (2001) on speech perception, Quay (1995) on language-specific lexical choices, Genesee, Boivin and Nicoladis (1996) on socio-pragmatic sensitivity to the language of the interlocutor, Meisel (1989, 1994), De Houwer (1990), Genesee, Nicoladis and Paradis (1995), and Köppe (1996) on morphological and syntactic differentiation (in Serratrice et al., 2004).

Specifically, Koehn and Müller (1990) suggest that an early structural separation of two languages is possible, especially if "une personne/ une langue" strategy asserted by Ronjat, 1913, is used by the parents. Similarly, De Houwer (1990) claims that in the Separate Development Hypothesis the morphosyntactic development proceeds separately if a child is exposed to both languages in a separate manner (DeHouwer, 1990). Meisel and Mahlau (1988) also suggest that bilingual children develop two grammatical systems from early on. Likewise, Deuchar (1992) claims that forms are used in language-specific manner from the first appearance of morphology, and in the multiword utterances, it continues to be language-specific. In the complex sentences, word orders are also used in language-specific manner (De Houwer, 1988; Müller, 1990; in Juan-Garau & Perez-Vidal, 2000).

In the same line with other studies, Meisel (1986) and Parodi (1990) studied the development of morphosyntactic properties in French/German bilingual children and explored that they use differentiated word order, agreement, tense and case marking rules in each language when functional categories emerged in their production (in Mishina-Mori, 2005). Similar arguments were suggested by Genesee (1993) saying that

bilinguals are capable of discriminating and differentiating the two languages from the one word stage (in Juan-Garau & Perez-Vidal, 2000). Further, in the study of Juan-Garau and Perez-Vidal (2000), they concluded that their subject followed separate ways in his syntactic development in his languages; that is, he acquired word order patterns in a language-dependent manner.

2.4. Cross-Linguistic Influence in Bilingual Acquisition

There has been a consensus among linguists that bilingual children differentiate their two languages from early on. However, the data of bilingual children contain non-target-like elements of either language. Hence, autonomous development of two languages is challenged by many researchers. The new approach to bilingual acquisition is to show that early bilingual acquisition involves independent and interdependent development. Thus, this leads to a shift of research focus of the bilingual acquisition to cross-linguistic influence. In accordance with this, Yip and Matthews (2000) have suggested that the research should switch from language separation to examination of the details of systematic interaction between the developing languages.

There are two basic claims about the way two languages develop. The first one is the claim that separation of two linguistic systems means autonomous development without interaction resulting in developing grammars like those of monolinguals (e.g. De Houwer, 1990). Meisel (1994) and Paradis and Genesee (1996) suggested that their bilingual subjects showed no cross-linguistic effects in the structures investigated. The second one is Müller (1998) and Döpke's (2000) claim that there are interaction and cross-linguistic influence between the two developing languages. The question is about the nature of the influence and whether it composes transfer.

Studies on early bilingual development have claimed that patterns of dominance and features of input determine the syntactic transfer in bilingual acquisition. Even though two languages exist with separate phonological, morphological and syntactic systems, interaction between two systems may occur to some extent (Serratrice et al., 2004). The possible explanation of how two languages develop is the Independent Development Hypothesis which refers to two separate systems developing

independently of each other. The other explanation is that they may influence each other in the development process.

Several researchers argue for the Independent Development Hypothesis (Gawlitzek-Maiwald & Tracy, 1996; Mishina-Mori, 2002; Paradis & Genesee, 1996; Sinka & Schelletter, 1998, in Mishina-Mori, 2005). There are two types of evidence: (i) transfer (De Houwer, 1990; Mishina-Öori, 2002; Paradis & Genesee, 1996; in Mishina-Mori, 2005); and (ii) acceleration (Mishina-Mori, 2002; Paradis & Genesee, 1996) or lead-lag pattern (Gawlitzek-Maiwald & Tracy, 1996; Sinka & Schelletter, 1998; in Mishina-Mori, 2005).

Paradis and Genesee (1996, p. 3) defined transfer as "the incorporation of a grammatical property into one language from the other." Paradis and Genesee (1996) presented French and English as differing languages in terms of the location of negator, and detected no misplacement in either of the languages. Likewise, Gawlitzek-Maiwald and Tracy (1996) reported that word order development of English/German bilingual child was similar to monolingual development in each language.

Mishina-Mori (2005, p. 293) explains acceleration as "the influence of a developmental timetable between the two languages." This means that a grammatical structure in language A triggers the emergence of the corresponding structure in language B. If this is the case, then a grammatical structure occurs at the same time in both languages, while they emerge at different times in monolingual development of each language. If such an interaction does not exist, a lead-lag pattern is observed. Many studies on the acquisition of English with a morphologically more complex language presented that there is unparallel development in the structures. For example, Paradis and Genesee (1996) reported that finiteness developed earlier in French than in English in their bilingual subjects. Similarly, Sinka and Schelletter (1998) claimed that Latvian morphology marking was observed from the very beginning of the study, while the equivalent markers in English were observed later in the development in their Latvian/English bilingual subject's data. These findings suggest that development of different patterns is similar to monolingual development of each language, with no interaction between them (Mishina-Mori, 2005).

Unlikely, some other researchers maintain that although two separate systems are developed from early on, interaction between the two languages during development is likely and predictable (Döpke, 1998, 1999; Hulk, 1997; Hulk & van der Linden, 1996; Müller, 1998; in Moshina-Mori, 2005). Dopke (1998) points out that all of the studies involve cross-linguistic effect or transfer in their bilingual data, but they give different explanations to them like their being performance errors or being too few for systematic patterns. For example, Gawlitzek-Maiwald and Tracy (1996) present many examples of influence of one language on the other, but they claim that their data support the Independent Development Hypothesis and instances of transfer are claimed not to be the evidence of interaction but a type of bilingual bootstrapping. This view proposes that bilingual children collect resources from one language and apply them when a structure has not emerged in that language yet.

In a study, Muller (1998) explored transfer in subordinate clauses in some, but not all, of the German/French, German/English, and German/Italian bilingual children. She asserted that ambiguity in the German input led to transfer, as German subordinate clauses allow both verb-final and non-verb-final structures while the other three languages allow only one word order. Muller (1998, p. 152) proposed that children were "tempted to transfer features from the language presenting unambiguous input into the one which is ambiguous." In line with this explanation, Hulk (1997) and Hulk and van der Linden (1996) claimed that their French/Dutch bilingual subject transferred Dutch word order into French, suggesting that French input is not transparent (in Mishina-Mori, 2005) .

Another possible explanation for the same phenomenon was presented by Dopke (1998, 1999). She found out that her subjects went through a period of using both head-final and head-initial representations unlike monolinguals although they knew the structural differences between German and English. She claimed that this is proof for the influence of English on German structure on the basis of the Competition Model. She argued that transfer is a result of cross-linguistic cue competition as the head-initial structure exists in both languages and it gains strength cross-linguistically, causing to frequent use of this structure in English.

At this point there are some questions at issue that researchers are to study. One is whether and to what extent interaction between the languages emerge, and in which subcomponents of grammar. For the analysis of transfer effect, Yip and Matthews (2000) suggested that bilingual data should be compared with monolingual development for similarity and differences. As a result, qualitative and quantitative influence may appear. Qualitatively, structures in bilingual data which are not found in monolingual development are searched for structural influence of one language on the other. Quantitatively, frequency and productivity of influenced structures are also compared to monolingual data.

2.4.1. Hulk and Muller's Hypothesis

Many linguists argue that the dominant or the preferred language affects the influence of one language to the other. However, Muller (1998) asserts that the input has the crucial role; in that, if the language learner is exposed to ambiguous input in one language, then transfer will occur in the domains of the grammar in question. Thus, she claims that bilingual children use a relief strategy for the ambiguous properties of one of the languages through the analysis of the other language.

Hulk and Müller (Hulk and Müller, 2000; Müller and Hulk, 2000, 2001) have claimed that cross-linguistic influence may occur in structures at the interface between syntax and pragmatics. They suggested three conditions for cross-linguistic influence: (i) language A allows for more than one possible structural analysis of a syntactic construction; (ii) language B contains significant positive evidence for one of the analyses allowed by language A; and (iii) the structural analysis shared by language A and language B maps directly onto universal pragmatic principles and is not grammatical in language A.

An alternative explanation to children's non-target grammatical behavior is their reliance on pragmatics. The role of the discourse in early grammar has been argued by many researchers (e.g. Chien and Wexler, 1990; Sano and Hyams, 1994; Hoekstra, Hyams and Becker, 1996; Roeper, 1999; and Rizzi, 2002; in Serratrice et al. 2004). The core of literature on the effect of discourse pragmatics on argument realization is presented by Serratrice et al. (2004). They mention that, for example, Greenfield and

Smith suggested “principle of informativeness” for children’s early utterances. They claim that linguistically encoded information is related to the aspects of an event which is not easily recovered by the hearer. On the other hand, if the information is highly accessible to the hearer, then the linguistic elements carrying the information are left out. Additionally, Clancy proposed a number of pragmatic variables such as animacy, person, query, absence, contrast, and newness which may lead to realization of arguments overtly. Allen and Schröder, and Allen studied with four Inuktitut-speaking children to find out patterns of realization using Clancy’s variables by adding their own predictors like differentiation in discourse and context. They concluded that many of the variables were statistically significant and informativeness feature had an effect. Another variable was joint attention which was defined by Skarabela and Allen. In their study, they explored that triadic joint attention context with the children, the interlocutor and the referent led to unexpected realization of null arguments.

That the children do not omit arguments randomly but with a pragmatically proper way was proposed by the studies of Serratrice (2002), and Serratrice and Sorace (2003, in Serratrice et al., 2004). They investigated the distribution of subjects by monolingual and bilingual Italian children longitudinally. The results showed that they omit arguments whose referents had a low informative status (typically referents that were first or second person, old, highly active, present, neither contrasted nor in need of disambiguation) more than arguments with high informative status (e.g. third person referents, new to the discourse, not present in the physical context, contrasted, or in need of disambiguation).

Serratrice et al. (2004) also claim that the syntax-pragmatics coordination has two sides. Children go through a stage of omitting obligatory language-specific morphosyntactic elements (e.g. determiners, subjects, objects, tense/agreement morphology). At this stage, they use a discourse strategy for the interpretation of missing categories not the syntactic operations. This decreases in time with omission rates. However, they also point out that syntax-pragmatics coordination is challenging for monolinguals; thus,it is twice harder for bilinguals who have to organize more language-specific morphosyntactic constructions.

Besides all, Muller (1998) argues that as Hornstein and Lightfoot, 1981, claim if transfer will be integrated into a language acquisition theory, then it needs to be explanatory and predictable, not just a notion that is observed, because both bilinguals and monolinguals take "wrong paths" but bilinguals do it more frequently and it takes more time to "correct the error". Similarly, Genesee et al. (1995) maintain that like monolinguals, bilinguals use their linguistic resources to express themselves; with the exception that monolinguals' resources are limited to one language while bilinguals' resources are two languages. In addition to that, as Muller (1998) suggests transfer is an individual process.

2.4.2. Limitations of Hulk and Muller's Hypothesis

There are two limitations of the model. The first one is about its empirical nature. There is not any study reporting cross-linguistic influence in subject realization predicted by Müller and Hulk between a null-subject Romance language and a Germanic non-null subject language. Some researchers (Juan-Garau and Pérez-Vidál, 2000; Cantone and Schmitz, 2001; Serratrice, 2002; in Serratrice et al., 2004) found out that English/Spanish, German/Italian and English/Italian bilingual children omitted subjects at significantly different rates in their two languages, similar to monolingual counterparts.

The second limitation is about the range of their proposal. There is a stage that the production is not syntactically ungrammatical, as in early stages, but there are overt forms which are pragmatically inappropriate. Then, in English/Italian bilingual cases, pragmatically inappropriate overt subjects are expected in Italian instead of null subjects. A study by Paradis and Navarro (2003) proposed results in accordance with this assumption. The English/Spanish bilingual child used a higher proportion of overt subjects in Spanish compared to two monolingual Spanish speaking children. One fourth of the overt subjects were uninformative referents.

2.3.3. Factors Affecting Transfer

The conditions for transfer are to be specified and directionality of influence needs to be predictable. Paradis and Genesee (1996, p. 3) assert that "transfer is most likely to occur if the child has reached a more advanced level of syntactic complexity in

one language than the other". Meanwhile, in a certain domain of structure, one language can be more developed than the other; that is why, syntactic complexity should also be considered in this regard.

Ambiguity of input is a factor triggering transfer when "two different grammatical hypotheses are compatible with the same surface string" (Müller, 1998, 153). Similarly, Döpke (1998) argues that partially overlapping structures in the input results in overextension of non-target structures (verb-object patterns in German and English main clauses) in her study with English/German bilinguals, which is not the case in monolinguals. These lead to an inference of two simultaneously developing separate systems' interaction to some extent and cross-linguistic influence due to the structural complexity and ambiguity of the dual input.

Another point in cross-linguistic influence is the typological features of language pairs. Sinka (2000) claimed that typological similarity of languages lead to transfer while languages with distinct underlying structures have minimal influence on one another. Still, this hypothesis should be tested with different language pairs (in Mishina-Mori, 2005).

Quay's subject, Manuela, had equivalents from the very beginning, and she asserts that the absence of equivalents may be the result of preference (1995); thus, preference is another factor. In line with this assumption, Genesee (1989) and Lanza (1992) offered to examine the role of context to comprehend the transfer issue better.

Besides all these, De Houwer (1998) claims that in all learning systems with a strong memory component, previous learned ones may have an effect on those of latter learned. Thus, she claims that the explanation as transfer is plausible.

2.5. Findings of Cross-Linguistic Influence

The findings of CLI during the 1960s-1980s have shed light on what is known today concerning effects of CLI (Jarvis & Pavlenko, 2008, pp. 11-12). These findings are covered in Odlin, 1989, and Jarvis and Pavlenko, 2008. Here we will mention them

as they are important to be known for second language teachers to understand the learner errors and developmental path.

1. CLI does not only occur in errors, but also in positive cases like in accelerated language acquisition. Teachers of languages should be aware of similarities and differences between the source and the recipient language and expect underproduction or overproduction of some structures in the recipient language. Additionally, language users may also prefer using certain language structures instead of others when there is more than one choice.
2. CLI may affect the rate, the route- the stages and sequences- and the end state of L2 acquisition.
3. Contrary to the Contrastive Analysis Hypothesis, differences between the source and the recipient language do not necessarily cause language learning difficulties; but, may make target structures easier to acquire.
4. In some cases, transfer errors decrease when the proficiency in recipient-language increases; while in some other cases, CLI may be observed in later stages when the learner recognizes the similarities and differences between the two languages as his/her proficiency increases.
5. Language transfer can occur from L1 to L2, L2 to L3, and L2 to L1.
6. The factors that affect transfer are language users' age, the perception of the language distance, the degree to which the language structures are perceived as language-specific.
7. CLI may occur in language forms, but also in meanings and the way of language use in pragmatic functions.
8. Individual differences affect the types and extent of CLI.

2.6. Linguistic Development in Turkish

Turkish child speech differs from most of the other languages in that they are not telegraphic at any stage; because suffixed inflections are realized from the very beginning. Although their speech is short and simple, they are rarely ungrammatical or incomplete. This supports that young children notice the grammatical elements when they are salient and analyzable. (Aksu-Koc & Slobin, 1985).

Children get the inflected forms of words as amalgams at early period of their language development as parental speech often contains function words containing suffixed morphemes, and having stress. Thus, children imitate the lexical material at early stages. Apart from that, in Turkish, questions include words with affixes which give some clues to children in responding. For example, a parent asks a 2-year-old, *Kim**i** gördün?* '**Whom** did you see?' (with the accusative inflection on the question word, *kim*) and the reply is *Ahmed**i*** and *Murad**ı**,* providing a name with the same accusative inflection (Aksu-Koç & Slobin, 1985).

Nevertheless, Turkish inflectional system appears early in child language compared to some of the other languages. By 24 months of age or earlier, all of the noun inflections (case markers and number) and much of the verbal paradigm (tense-aspect, person, negation and interrogation) are acquired. These inflections are realized in the one-word stage and productively used by 15 months. This is because stems are mono- or bisyllabic and suffixes are stressed. For example, the verb stem and the suffix *–mE*, as in *gitme* 'don't go' make the negative imperative (Aksu-Koc & Slobin, 1985).

Children are aware of pragmatic functions of flexibility of word order. In Aksu-Koç and Slobin (1985), they suggest that all six orders of SVO are comprehended by 2 years. On the other hand, in Batman-Ratyosyan and Stromswold's study (2002), they found that SOV is the underlying word order of Turkish. In their study, children did best on SOV sentences regardless of inflection or context. What is striking in their study is that, when they provide the context, 2 year-old children did worse. The possible reasons are listed in three categories. The first one is, one cannot learn the discourse/pragmatics of Turkish if one does not know the basic morphosyntax of Turkish. The second is, one needs more input to learn discourse/pragmatics than to learn morphosyntax. The third is that acquiring morphosyntax is relatively automatic process that only involves using one's linguistic module (s) while discourse/pragmatics requires additional non-linguistic abilities.

2.6.1. Acquisiton of Subject Pronouns

Ekmekçi and Sofu's study (1994) about the acquisition of subject pronouns in Turkish reveals that monolingual Turkish-speaking children use subject pronouns even

in different positions (null, pre- and post-verbal) for contrastive and emphatic purposes at the age of 2;0. In this study, they also report that children use subject pronouns for asking questions and imperatives in addition to speech acts and modes of expression functions reported by Slobin and Talay (1986; Ekmekçi & Sofu, 1994). In Slobin and Talay's study (1986), they claim that their subjects do not use subject pronouns redundantly, but they perform differentiated pragmatic functions at a very early age.

2.6.2. Acquisition of Questions

The acquisition of questions is very early and almost error-free from the beginning of first appearance at 2;0 because of the regularity of Turkish structure (Sofu, 1998). The error reported by Sofu was about the placement of question particle; however, it should be indicated that the children who made the errors could form correct structures in their questions in previous sessions. The examples are as follow:

(25) hızlı mı da mı alıyor?
instead of
Hızlı da alıyor mu?

(26) oyuncak olsa oynarım mı?
instead of
Oyuncak olsa oynar mıyım?

In the first example the place of particle should be at the end of the utterance; and in the second example, the person marker should be attached to the question particle. That is to say, the errors are about the placement of the question particle, and the order of the morphemes.

2.6.3. Acquisition of Negation

Some children were observed to simplify the system of negation before the age 2. Negation of verbal predicates are done through the insertion of the particle *–mE-* after the verb root or verb + voice particles, but before the modal, tense and person suffixes. For example, *al-dı* 'take-PAST:3SG', *al-ma-dı* 'take-NEG-PAST:3SG'. Nonverbal predicates are negated with the use of lexicals *yok* 'nonexistent' and *değil* 'is not'. For

example, *su değil* ‘water NEG:EXIS’ (= ‘there is no water’) (Aksu-Koc & Slobin, 1985).

At first, some children use only one of the lexical forms, or a phonological variant of *–mE-* (mı mı), or *ı-ıh* (the sound for negation). They use them after the model for negation of nonverbal predicates and also generalize it to verbal predicates. In Slobin and Aksu-Koç’s study (1985), one child used *değil* as a general marker until age 2;3, and another used *ı-ıh* until 2;6, and another child used *mı mı* until 2;0. These are some examples:

**Anne otur, kalk değil.*
mother sit get:up NEG
‘Mother sit, don’t get up’ (= *kalk-ma* ‘get:up-NEG’)

**Yap -ıcağ -ım ıh.*
Do FUT 1SG NEG
‘I won’t do (it)’ (= yap-mı-yacağ-ım ‘do-NEG-FUT-1SG’).

It seems that negation of nonverbal predicates is acquired before that of verbal predicates. The reason of that can be their being perceptually salient, independent words in sentence final position. Moreover, using lexical forms instead of inflectional negative prevents the problem of insertion to the linguistic units (Aksu-Koc & Slobin, 1985).

2.6.4. Acquisition of Case Markers

Turkish is a language which relies on inflections; and case markers convey the semantic and pragmatic information. Thus, SOV order can be scrambled as long as proper case markers are used, because agglutinating structure lets flexibility in syntactic structure (Sebüktekin, 1974; in Sofu, 1989).

One of the main sources and first studies in acquisition of Turkish is the Ekmekçi’s longitudinal study (1979) with a Turkish child, Didem. In her study, she claims that her subject relies on inflections in her communication from very early on which leads her utterances to have more inflections than words, which enables her to

give the message through inflections, not with word order. In Table 1, numbers of Didem's speech with case markers are presented with the ages.

In this table, it can be observed that by age 2;0, the child could productively use the case markers. As Slobin (1979) suggests Turkish children rely on regular inflectional system not the word order as children acquiring English. Thus, Turkish children know that case markers indicate grammatical relation and they use them before age 2;0.

Table 1. Distribution of the number of case markers in Didem's speech for each session (Ekmekçi, 1979, p. 130).

Case	Age											
Marker	1.3	1.4	1.5	1.6	1.7	1.8	1.9	1.9½	1.10	1.11	2.0	2.4
Dative	2	3	7	8	15	12	17	19	26	28	49	51
Accusative	2	6	4	2	3	13	10	17	23	25	47	36
Locative	-	-	-	-	16	7	17	10	27	4	25	9
Instrumental	-	-	1	7	2	1	-	2	1	2	2	4
Ablative	-	-	-	-	-	-	1	2	5	4	12	10

In the cross-sectional study of Sofu (1989), she presented the acquisition order of case markers which is: NOM<LOC<GEN<DAT<ABL<ACC. She also mentioned the errors of her subjects and categorized them. One of the categories is the misapplication of case markers, an example is illustrated as follows:

A: Kurt nereden bakıyor?
'From where does the wolf looking?'
C: Orda bakıyor.
there-LOC
instead of
Oradan bakıyor.
there-ABL

The other category is lack of the case marker, as in the example below:

A: Bu kimin evi?

'Whose house is this?'

C: Baba.

dadØ

instead of

Babamın

dad-POSS-GEN

However, she stated that they were very few. As to the usage of case markers according to the mastery level, Sofu indicated that the production of most of the case markers are above half mastery level, 50%; and none of the case markers are produced 100%.

2.7. Turkish Grammar

Turkish is an Altaic language with the classic features of an object-verb language (Greenberg, 1966; Lehman, 1978; in Aksu-Koc & Slobin, 1985). The neutral word order is SOV, with suffixed inflections, postpositions, and preposed demonstratives, numerals, possessives, adjectives, and relative clauses. (Erguvanlı, 1979; in Aksu-Koc & Slobin, 1985). However, for pragmatic purposes, word order shows variation.

Turkish is a highly agglutinating language and it has only a few exceptions to general principles. Each morpheme has its phonological and semantic features and position in the string. Each morph is syllabic and stress is in the word-final position. For example, the order of noun suffixes is: stem + (plural) + (possessive) + (case), as in *el* 'hand', *-ler* 'plural', *-im* 'first person possessive', *-de* 'locative'. The followings are the possible combinations (Aksu-Koc & Slobin, 1985):

ev 'house'	*ev-ler* 'houses'
ev-im 'my house'	*ev-ler-im* 'my houses'
ev-de 'in the house'	*ev-ler-de* 'in the houses'

ev-im-de in my house' *ev-im-de* 'in my house'

2.7.1. Conditions Under Which Personal Pronouns are Used

Like many other null subject languages, in Turkish, subjects can be dropped in finite clauses and possessive noun phrases (Kornfilt, 1988; in Haznedar, 2007). Although the presence of an overt pronoun is required when there is a topic change in discourse, and the occurrence at the beginning of discourse is enough to set the topic; its repetition causes ungrammaticality (Öztürk, 2002). When the referent can be inferred from the discourse, the speaker may leave out the pronoun.

(1) a. ------ okul-a gid-eceğ-im
school-DAT go-FUT-1SG
'I'm going to go to school '

b. Ben okul-a gid-eceğ-im
I school-DAT go-FUT-1SG
'I'm going to go to school'

A subject pronoun is used in the following situations (Goksel & Kerslake, 2005):

(a) Where a subject contrasts with that of the preceding sentence:

(2) Ayşe bugün sinemaya gidecekmiş. Sen bir yere gitmeyi düşünüyor musun?
'Ayşe is going to the cinema today. Are *you* thinking of going anywhere?'

(b) Where the subjects is focused:

(3) Bugün yemeği **ben** yaptım.
'It was *I* who cooked the dinner today.'

(c) Where a 1st or 2nd person subject is one of a set of people actually or potentially involved in some action or situation:

(4) O gün **sen**, Ayten ve Yavuz tenis oynamıştınız.
'That day *you*, Ayten and Yavuz played tennis.'

(c) Where a 3rd person subject is an entity that was introduced in a non-subject role in the previous sentence:

(5) Filmi Esra'ya verdim. **O** ne zamandır onu izlemek istiyordu.
'I gave the film to Esra. *She* had been wanting to watch it for ages.'

(d) Where, despite the continuance of the same subject, there is a shift from a statement about a specific event to a generalization about the person involved:

(6) Bora anahtarlarını kaybetmiş. **O** zaten oldum olası dağınıktır.
'Bora lost his keys. *He* has always been such a disorganized person.'

(e) In the opening sentence of a conversation, or a sentence in which the speaker introduces a new topic of discussion:

(7) Ayşe, **ben** şimdi çıkıyorum.
'Ayşe, *I*'m going out now.'

2.7.2. Questions

In Turkish, to form yes/no questions and alternative questions, the question particle *mI* is inserted; and as for wh-questions, wh-phrases are used such as *ne zaman* 'when', *kim* 'who' or *neden* 'why'.

2.7.2.1. Yes/No Questions

When *mI* is added to a main clause predicate, its position is dependent on what kind of suffixes or clitics (if any) occur at the end of the predicate. *mI* precedes any of the items listed below: the copular markers *–(y)DI* and *–(y)mIş* (20), the person markers, except for the 3rd person plural marker and the colloquial combinations with *–(y)AcAK* (21), the generalizing modality marker *–DIr* in 3rd person forms (Goksel & Kerslake, 2005):

(8) Çalışmış mıydınız? 'Had you studied?'

Burada mıymış? ‘Was it there?’

(9) Geliyor musun? ‘Are you coming?’
Hazır mısınız? ‘Are you ready?’

(10) Gelmiş midirler? ‘[Do you think] they have come?’
Okulda mıdır? ‘[Do you think] s/he/it is at school?’ / ‘Is s/he at school?’

If the predicate is nonverbal, *mI* follows the predicate but precedes the personal ending and the ending is attached to *mI* (Underhill, 1976):

(11) Hasta mıyım?
sick part.-1SG
‘Am I sick?’

The particle *mI* may be used in different places within the sentence to question the word that immediately precedes:

(12) Mehmet mi geldi?
‘Did Mehmet come?’
(Was it Mehmet who came?)

2.7.2.2. Wh- Questions

Wh-questions are formed by using a question phrase (a wh-phrase) such as *ne* ‘what’, *ne zaman* ‘when’, etc. The wh-phrases in Turkish are the following: *Kim* ‘who’, *Ne* ‘What’, *Hangi* ‘which’, *Nere-* ‘where’, *Hani* ‘where’ (informal), *Ne zaman* ‘when’, *Kaç* ‘how many’, ‘what time’, *Ne kadar* ‘how much’, *Nasıl* ‘how’, *Niye* ‘why’, *Neden* ‘why’, *Niçin* ‘why’. Turkish is a ‘wh-in-situ’ language and the wh- element mostly remains in a pre-predicative focus position; that is, the element in question is not moved to any clause-initial topic or complementizer position with scope over the whole construction, but rather remains in its basic position (Herkenrath, Karakoç & Rehbein, 2003, p. 233).

2.7.3. Negation

The negative markers *–mA*, *değil* and *yok* are the means of negation in Turkish.

2.7.3.1. The Negative Marker *–mA*

The negative of verbal suffixes is made with the suffix *–mA* which follows the verb stem and precedes the tense (Underhill, 1976):

(13) git-**me**-di-m
go-**NEG**-PAST-1SG

There are some irregularities in the combination of the negative marker with (Goksel & Kerslake, 2005):

(i) the aorist -(A/I)r (producing the combination –mA-z):
(14a) gel-ir
come-AOR-3SG
(14b) gel-**me**-z
come-NEG-3SG
(ii) the possibility suffix –(y)A:
(15a) yap-abil-di
do-ABIL-PAST-3SG
(15b) yap-a-**ma**-di
do-ABIL-NEG-PAST

2.7.3.2. Negating Nominal Sentences

The negative of nonverbal sentences is made with *değil* 'not' (Underhill, 1976).

(16) Ben yorgun **değil-im.**
tired not-1SG
'I am not tired.'

The negative existential expression *yok* 'non-existent' is the negated form of *var* 'existent'(Goksel & Kerslake, 2005):

(17) Burada hiçkimse yok.

'There isn't anybody here.'

2.7.4. Inflectional Suffixes

Inflectional suffixes are means of showing the relation among the constituents of a sentence and functional relations, like case and person.

2.7.4.1. Possessive Suffixes

Possession or relationship is indicated with possessive suffixes and case endings follow them: *gözü**m**de* 'in my eye' (Lewis, 1953). The third person singular form *–(s)I(n)* occurs as *–(s)I* when there is no other suffix to follow it: *eli* 'his hand'.

2.7.4.2. Case Suffixes

The function of case marking (or its absence) is to show the relationship between the noun phrase to which it is attached and other sentence constituents (Goksel & Kerslake, 2005). Turkish is more dependent on overt case marking than a positional language like English. Turkish has seven cases (Göçmen, Şehitoğlu & Bozşahin, 1995):

suffix	case	examples
-	**nominative**	*ev* 'house', *okul* 'school'
-(y)I	marker of the **accusative** case	*kalemi* 'the pen(ACC)', *suyu* 'the water(ACC)'.
-(y)A	marker of the **dative** case	*odaya* 'to the room', *dereye* '(in) to the river'.
-DA	marker of the **locative** case	*evde* 'at home', *bardakta* 'in the glass'.
-DAn	marker of the **ablative** case	*okuldan* 'from/of/out of (the) school'.
-(n)In/-Im	marker of the **genitive** case	*çocuğun* 'the child's', *bahçenin* 'of the garden'.
-(y)lA	marker of the **comitative/instrumental** case: *annemle* 'with my mother'.	

These suffixes are also used with pronouns, demostratives, question words, and derived nouns. For example, the ablative forms of nouns (*masa*-DAN 'from (the) table), pronouns (*sen*-DEN 'from you'), demostratives (*bun*-DAN 'from this'), question words (*nere*-DEN 'from where', *kim*-DEN 'from whom'), and derived nouns (*yüz-mek*-TEN 'swim-NOML-ABL' = 'from swimming'). There are denominal and deverbal derivational suffixes. There is not a gender marking (Aksu-Koc & Slobin, 1985).

2.7.5. Noun Compounds

Noun compounds are word-like units which are composed of two nouns or an adjective and a noun. There are two types of noun compound:

(i) bare compounds: *erkek kardeş* 'brother', *naylon torba* 'plastic bag'.
(ii) –(s)I compunds: *at arabas**ı*** 'horse-drawn carriage', *buzdolab**ı*** 'refrigerator'.

In both types, the second noun, which is the head, is modified by the first noun or adjective.

2.7.5.1. Marking Possession in *–(s)I* Compounds

A noun can have only one possessive suffix at one time; that is why, if a possessive suffix is attached to a *–(s)I* compound, the compound marker *–(s)I(n)* has to be dropped. Thus, the non-possessed forms and the 3rd person possessed forms of *–(s)I* compound are indistinguishable (Goksel & Kerslake, 2005):

(18) *yatak oda-sı*
(i) bed room- NC 'bedroom'
(ii) bed room- 3SG.POSS 'his/her bedroom'
(19) *yatak oda-m*
bed room- 1SG.POSS 'my bedroom'

When noun compounds end in a consonant, where case marking is present, the 2nd/3rd person ambiguity also arises:

(20) Ders kitab-**ın**-ı beğenmedim.

(a) lesson book-**NC**-ACC
'I didn't like *the* textbook.'
(b) lesson book-**2SG.POSS**-ACC
'I didn't like *your* textbook.'
(c) lesson book-3SG.POSS-ACC
'I didn't like *his/her* textbook.'

2.7.5.2. The Genitive-Possessive Construction

Two noun phrases construct a noun phrase with genitive-possessive construction marked as follows (Goksel & Kerslake, 2005):

(noun phrase+genitive) + (noun phrase+possessive)

The first noun phrase is the modifier and shows the possessor, and it has genitive case marking. The second noun phrase is the head and shows the possessed, and it has possessive marking:

(21) Hasan-**ın** gitar-**ı** 'Hasan's guitar'
Hasan-GEN guitar-3SG.POSS
(22) Ev-**in** balkon-**u** 'the balcony of the house'
House-GEN balcony-3Sg.POSS

The possessive suffix has to agree the grammatical person with the possessor-modifier, as illustrated below:

(23) Ben-**im** araba-**m** 'my car'
I-GEN car-1SG.POSS
(24) O-**nun** araba-**sı** 'his/her car'
his/her-GEN car-3SG.POSS

CHAPTER 3

RESEARCH METHODOLOGY

3.0. Introduction

In this chapter an overall design of the study will be presented. A detailed information about the intasubjective approach and the participant will be given along with the data collection procedures and analysis.

3.1. Intrasubjective Approach

There are two approaches to investigate CLI which are intrasubjective and intersubjective approaches that differ in the level of attention given to individuals. In this study, we used the intrasubjective approach which is based on the cases of CLI in the language use of individuals. The advantages and disadvantages of this approach is presented in Jarvis and Pavlenko (2008). They mention that the main advantage of this approach is the level of interpretational validity which is provided with clearly specified contexts; while, the main disadvantage of this approach is the lack of generalizability. The advantages and the disadvantages of the intersubjective approach are just the opposite.

They also claim that instances of CLI which are related with individual variation are best observed through case studies. In intrasubjective approach, language and cognition of real individuals should be outlined with as many patterns as possible. To manage this, data should be presented vastly with qualitative description of activities, linguistic and situational environment during the data collection (Gass & Selinker, 2001; Johnstone, 2000; Richards, 2003; in Jarvis & Pavlenko, 2008).

Additionally, the qualitative description needs to include how and why certain patterns occur and quantitative information need to be added to explain how frequent these patterns occur and may occur in different contexts (Creswell, 2003; Johnstone, 2000; Richards, 2003; in Jarvis & Pavlenko, 2008).

What is more, it should be kept in mind that each type of data has strengths and weaknesses; and no single type of data collection is completely reliable. Thus, data should be collected in different ways and from different perspectives (Johnstone, 2000; as in Jarvis & Pavlenko, 2008).

3.2. The Participants

There are two participants in this study. One is an English-Turkish bilingual child, Lale; the other is a Turkish monolingual child, Başak. In order to distinguish properly between effects of transfer and general language learning phenomena we need monolingual comparative data which are also needed to evaluate the rate and structure of development in both languages. The researcher collected the data of the bilingual child by herself; for the monolingual data, we used the monolingual studies in the literature, and the data of Turkish monolingual child who was chosen from the corpus which was collected by the supervisor of this study for another project.

3.2.1. Language Development Prior to and Across the Study Period of the Bilingual Child

One of the participants of this case study is Lale, an English- Turkish female born in England on April 26, 2005. Lale was chosen as the subject for this longitudinal study due to her status as a sequential bilingual which can also be considered as a learner of Turkish as L2 as well as her availability to the researcher for observation. Before her arrival in Turkey on April 28, 2008 at the age of 3;0, Lale lived in an one-parent English-speaking mother and one-parent Turkish-speaking father family and attended an English-only nursing school in Southampton, England.

After their arrival in Turkey, she went to a nursery school for four hours, twice a week for a month before the summer and since September 2008, she has been attending a kindergarten for a duration of daily seven hours, five days a week.

The input of the two languages differs from the beginning of her birth. The percentages of input from the two languages are presented in Figure 3 according to the report by bilingual child's mother.

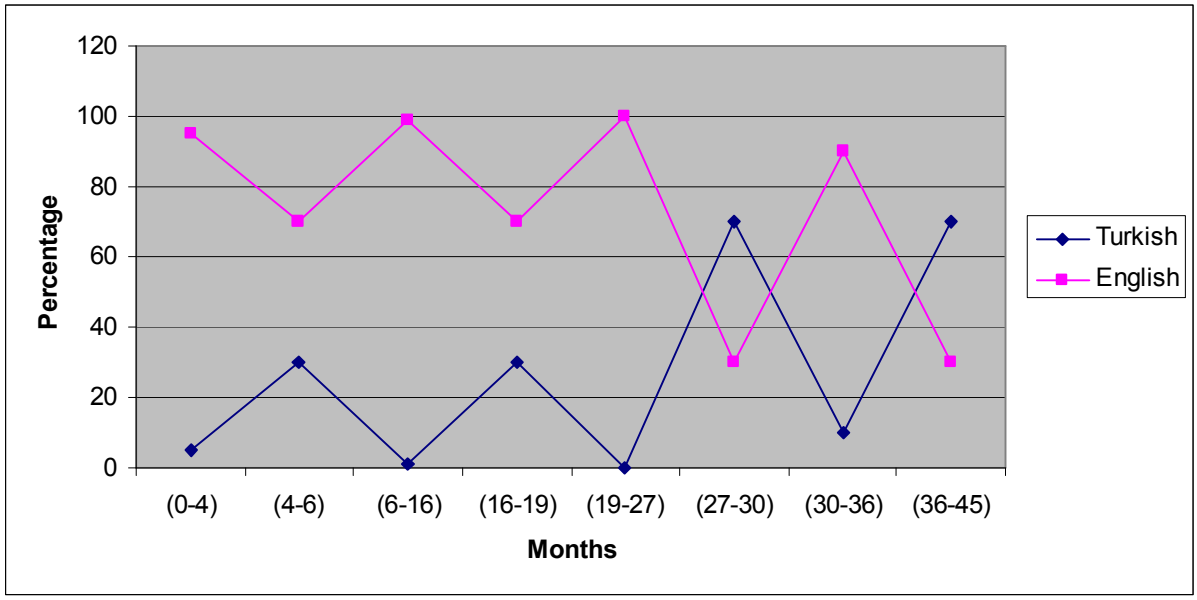


Figure 3. The Percentages of Language Input

For the first four months after birth in England, Lale was exposed to both Turkish and English although the amount of input was different across the languages. People around her, except her father, the main caregiver- mother- and the maternal grandparents and friends were English, and only the father who could spend very short time with her was Turkish.

Between the 4th and 6th months, Lale and her parents lived with father's family in Turkey. Only the mother and parental aunt, who is a teacher of English language, spoke English, and grandparents and the other aunt spoke Turkish.

After that, between the 6th and 16th months, the family went back to England, and the mother spoke English, while the father spoke a small amount of Turkish and mainly English.

Between the 16th and 19th months, they again came to Turkey to spend their summer holiday. During this visit, the mother was the only interlocutor who spoke English. Lale started to play with other Turkish children in the garden and the park. During this period, Lale started to speak and could say some English words and a few words in Turkish as well.

After that period, between the 19th and 24th months, they went back to England. All the people around her were speaking English and she could not hear any Turkish as the father was working for long hours. At the 19th month, she started to attend a nursery school in England and spent 6 hours a week there and her spoken English improved dramatically. She could form sentences, ask questions, describe things around her, and talk about what she did that day and what she would do next day.

Between the ages of 2;3 and 2;6 they lived in Turkey with the father's family. She spent a lot of time living with the extended family and playing with a 10-year-old cousin and lots of friends in the park. She could say a few words in Turkish, such as "water", "sister", "brother", "come", "go" and "sea".

Between the ages of 2;6 and 3;0 , they lived in England. The father did not speak any Turkish and the sole Turkish she could hear was children's films in Turkish. Lale attended an English-only nursing school 3 days a week for 8 hours.

After the age of 3;0 till present, she has been living in Turkey with her mother and parental aunt. Only the mother and one of the aunts, who visit them occasionally, speak English. The other aunt living with them speaks only Turkish to her. The grandmother often visits them and speaks Turkish. Four months after their arrival, she began attending a kindergarten program for eight hours per day, five days per week. All of the children in her class are Turkish, and she only hears English in the English classes for two hours in a week.

As can be seen from the description of the language exposure, Lale was exposed to the two languages in different intervals and amount which was basically English till the age of 3, and Turkish from then on.

3.2.2 The monolingual child

The data of Turkish monolingual child, Başak, who was chosen from the corpus was matched with Lale for her gender and her being the only child in the family, and both of the children's parents had undergraduate degree. The monolingual's data between the age of 2;0 and 2;7 was also matched for the MLU of the bilingual child.

3.3. Instruments

This longitudinal case study was based on naturalistic data on the participant's use of Turkish collected for a 7- month period beginning with 3 months after her arrival in Turkey on July 11, 2008. Naturalistic data were recorded at home throughout this period by the researcher who is a native speaker of Turkish every other week though there was some missing weeks because of some external reasons. Spontaneous interaction between the researcher and the child was recorded and transcribed by the researcher herself as soon as possible after the recording. For the first few months, the mother kept a diary of Lale's new utterances with new lexical items and grammatical particles.

3.4. Data Collection

Recordings took place every month and sometimes twice a month. Although efforts were made to keep the two-week interval at the beginning of the study, most of the time, this was not possible due to trips, sickness and the parents' schedules. Hence the corpora together comprise a total of 10 recording sessions with an approximate duration of 30-45 minutes each. The total number of complete and intelligible utterances in the combined corpus is 1701, when the mixed utterances are excluded, the total number is 1671. The primary source of data was audio-recordings. Recordings took place in naturalistic situations while the child was engaged in everyday indoor activities with the researcher. The activities engaged in varied across the recording sessions, including playing with toys, reading books, drawing pictures, cooking, and so forth. One of the sessions was recorded by the Turkish grandmother of the child.

3.4.1. Transcription

The researcher transcribed all Lale's utterances from naturalistic data. Utterances with errors were classified in the categories of the grammatical morphemes with the subcategories of subject pronouns, questions, negations, and case-markers.

3.4.2. Mean Length of Utterance (MLU)

Throughout this study, developmental stages are defined and compared using morpheme MLU rather than the chronological age of the participants, as an indicator of

children's general linguistic level. This is because there are marked individual differences in terms of age of acquisition, especially among bilingual children, which makes it rather difficult to compare development based on chronological age.

MLU is calculated by counting the morphemes of the first 100 utterances starting with the second page of transcription. Repetition, imitation, self correction, amalgams and unintelligible utterances are excluded. Then, total number of morphemes is divided by the total number of utterances (100). Brown (1973) gathered data from different studies on first language acquisition and his own study with three children acquiring English and prepared five stages based on the mean-length utterance (MLU) and the longest utterance, upper bound (UB), and categorized them according to the syntactic and semantic development.

Stage I MLU (1.0- 2.0) Basic semantic and grammatical roles: nominations, nonexistence, recurrence, attribution, possession, agent action-object.

Stage II MLU (2.0- 2.50) The modulation of meaning: progressive aspect, in, on, plural, past irregular, possessive inflection, uncontractible copula, articles, a, the, past irregular, third person regular, uncontractible progressive auxiliary, contractible copula, contractible progressive auxiliary

Stage III MLU (2.50- 3.00) Modalities of the simple sentence: yes-no questions, wh-questions, negatives, ellipsis of the predicate emphasis

Stage IV MLU (3.00- 3.50) Embedding one simple sentence within another: relative clauses, various kinds of subordinate clause

Stage V MLU (3.50- 4.00) Conjunction of one simple sentence with another: with no parts deleted, with various redundant constituents deleted once, subject deleted, predicate deleted, predicated nominal deleted

(Brown, 1975; in Sofu, 1989; p.19).

In our study, we added the upper stage (>4.00) as we kept collecting data after stage V to see the bilingual child's proficiency effects on her language use.

In the bilingual child's data, one of the sessions which was recorded by the grandmother of the child was mainly composed of question-and-answer; thus, for this session, the total number of morphemes was divided by 50 instead of 100. As a result of the nature of the conversation, in this period, the MLU stage happened to be lower than the previous sessions although it was always getting higher in every successive recording.

3.5 . Data Analysis

The data were analyzed qualitatively and quantitatively; because the qualitative description show how and why certain patterns occur and quantitative information helps to explain how frequent these patterns occur and may occur in different contexts For each category of analysis, comparative information from monolingual children's development is used. Target structures produced by the bilingual child are presented, as well as non-target structures which are compared to non-target structures in monolingual children. We analyzed the non-target structures as we considered them important to give us some idea about the bilingual development. The reason is that if they occur in 30-45 minutes recordings once or twice a month, then they may occur more during the period that we do not record.

CHAPTER 4

RESULTS AND DISCUSSIONS

4.0. Introduction

In this chapter, the results of the bilingual data collected between the age of 3;2 and 3;9 will be compared to monolingual data matched for the MLUs and the other monolingual development in the literature will be presented in the domain of morphosyntax which are acquisition of subject use, questions, negation, and case markers. The findings and discussions will be introduced in comparison to the other studies in the literature.

4.1. Comparison of Language Use of the Bilingual Child and the Monolingual Children

We analyzed the language use and the developmental path of the bilingual child and compared the findings to the monolingual data to see the similarities and differences to explain the way children process linguistic information to acquire the language system.

4.1.1. Acquisition of Subjects

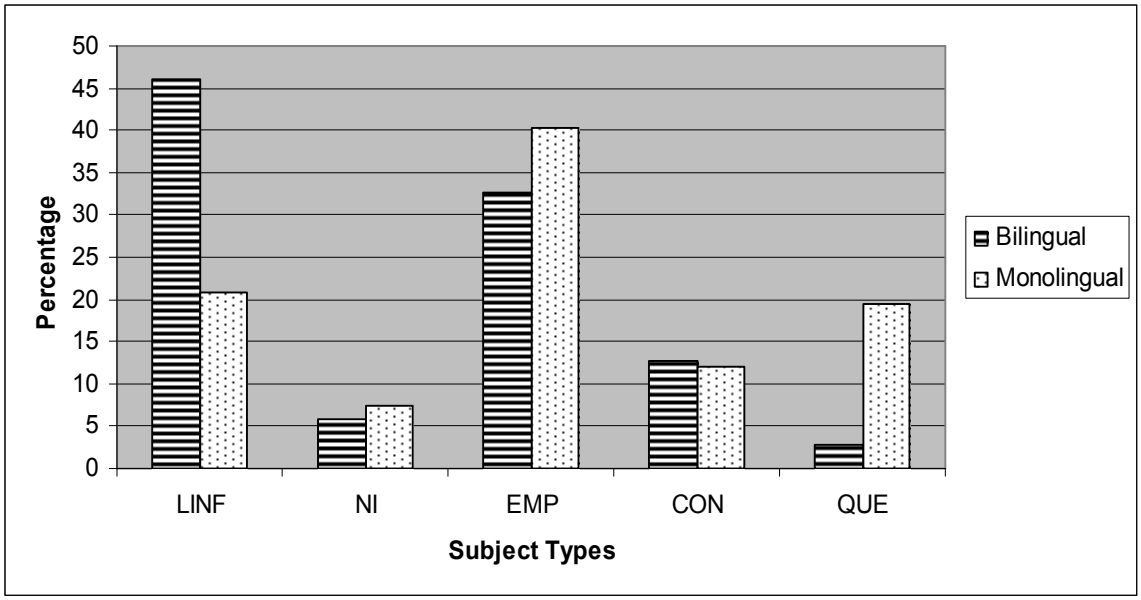
In this section we have compared a Turkish/English bilingual child, Lale, with a monolingual child acquiring Turkish, Başak. We calculated the percentage of overt and null subjects realized by the children out of all Turkish utterances; then we examined the discourse-pragmatic contexts of the subjects and computed the percent use of overt subjects in each of the 3 categories, namely, 1) new information, 2) discourse pragmatic purposes: contrast, query, and emphasis, and 3) low informativeness. In Table 2, the distribution of overt, null and lexical subjects is presented.

Table 2. Overt vs. Null subjects

	Bilingual		Monolingual	
	%	(N)	%	(N)
Overt	**27**	**141**	**24**	**67**
Null	66	339	72	198
Lexical	7	35	4	11
Total	100	515	100	276

As can be seen in Table 2, the monolingual child overtly used subjects around 27% of the total utterances. Likewise, the bilingual child used overt subjects around 24%. This is very surprising when the results are compared to the findings of other studies. For example, in Haznedar's (2007) case, her bilingual subject used overt subjects over 62% while the monolingual child used overt subjects 33%. The difference is almost two fold. Thus, it is rather impressive to see that the bilingual child's use of subjects was not influenced by her English in the first analysis. We can conclude that the bilingual child knows that Turkish personal suffixes convey the meaning of the referent.

In this regard, analysis of overt subjects in discourse-pragmatics context gains a vital significance to make any kind of conclusion to see if the bilingual child uses the overt subjects appropriately in discourse contexts, as well. If this is not the case, that is, if she uses overt subjects incorrectly, then we can argue for the cross-linguistic influence of English structure over Turkish. In order to test this hypothesis, we analyzed all overt subject pronouns in terms of their discourse-pragmatic contexts. However, we excluded the lexical subjects in our analysis as they both used them in low percentages, namely, the bilingual used lexical subjects about 7% (35 out of 515 utterances) and the monolingual used them around 4% (11 out of 276 utterances).



LINF (Low Information Category) EMP (Emphasis) QUE (Query)
NI (New Information) CON (Contrast)

Figure 4. Overt Subjects in Discourse-Pragmatic Contexts

In Figure 4, when the percentages of subject uses are compared between the bilingual and the monolingual child, we have the following proportions: in the low information category (LINF) the bilingual child used subjects around 46 % while the monolingual child used them 21% which was more than two times. For the new information category (NI), the bilingual's and the monolingual's percentages were almost the same, the former had 6 %, and the latter had 7%. As to the emphasis category (EMP), the monolingual had a bit higher percentage, 40%, than the bilingual, 33%. In the contrast category (CON), the percentages were very similar; the bilingual had 13% and the monolingual 12%. The percentages in the query category (QUE) was somewhat different which can be attributed to the nature of the conversation, the bilingual had 3% while the monolingual had 19%. Despite all these similar numerical results in the categories other than the low information, the monolingual and the bilingual children showed resemblance in their usages. However, they differed from each other in the low information category which is a sign of target-like utterances and should be rather low. To see the picture clearer, we present the frequencies of overt subject use in discourse-pragmatics context in Figure 5.

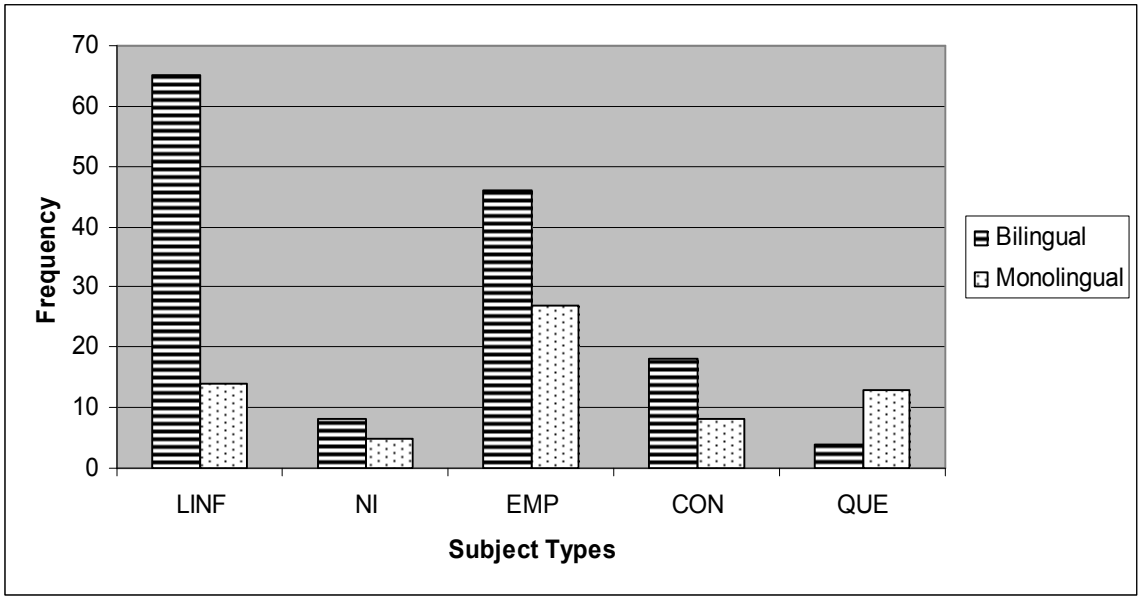


Figure 5. A comparison of the usage of Overt Subjects Between the Bilingual Child and the Monolingual Child.

In Figure 5, it can be observed that the bilingual child used 65 utterances out of 141 (46%) in the low information category, while the monolingual used only 14 utterances out of 67 (21%). The new information category is rather limited in that the bilingual had 8 utterances while the monolingual had 5. For the emphasis category, the bilingual used 46 utterances, but the monolingual used 27. As to the contrast, the bilingual used 18 while the monolingual used 8 utterances. Lastly, the bilingual used only 4 utterances in the query category, while the monolingual used 13. The frequencies of all these categories, especially the low information category, prove that the bilingual child clearly used more subjects with no discourse-pragmatic function than the monolingual child. The following are some examples from the bilingual child's data in the low information category. In all of these examples, the subjects were used with no discourse- pragmatic function:

(1) A: Kim getirdi sana bunu?
'Who brought this for you?'
C: Babam. Ben onu alabilir miyim?
'My father. Can I take it?'

(2) A: Şimdi de kediyi boya.
'Now, color the cat.'
C: Ben kediyi yapıcam.
'I will do the cat.'

(3) A: Aferin, açtın.
'Well done, you opened it.'
C: Sen istiyor musun?
'Would you like some?'

(4) A: Çıkaramadın mı?
'Couldn't you take it off?'
B: Ben çıkarttım.
'I took it off.'

Figures 4 and 5 show that both bilingual and monolingual children use overt subjects in all of the discourse-pragmatic contexts. Interestingly, in the new information, emphasis and contrast categories, the difference is not very significant. However, in the query category, the monolingual child uses more overt subjects which can be the result of the nature of the conversations between the subject and the interlocutor. On the other hand, what are important in these figures are the percentages of low information category. The bilingual child uses more pragmatically inappropriate overt subjects.

Although the percentages and frequencies of the usage of subjects give us an idea about the difference between the monolingual and the bilingual child, we still need to analyze the data in a more detailed way to see if there is any change in the developmental process. That is, if the usage of null subjects decreases when the child becomes more proficient in the language and better acquires the pragmatic function of subject use and realizes that personal suffixes convey the meaning and there is no need to use subjects if there is no discourse-pragmatic function. To do that, we categorized the subjects according to the stages. Table 3 shows the percentages of the monolingual child and the bilingual child according to the stages.

Table 3. The Percentages of Overt Subjects With Discourse-Pragmatics Features of The Monolingual Child and the Bilingual Child According To MLU Stages.

Stage												
Feature	I (%)		II (%)		III (%)		IV (%)		V (%)		Upper (%)	
	M	B	M	B	M	B	M	B	M	B	M	B
LINF	-	-	-	**86**	**33**	-	**14**	**68**	**24**	**35**	**25**	**41**
NI	-	-	-	-	-	-	14	-	7	-	-	12
EMP	-	-	33	-	50	-	36	8	38	21	66.5	41
CON	-	-	-	14	-	-	18	24	14	39	-	3
QUE	-	-	67	-	17	-	28	-	17	5	12.5	3

We have data of the monolingual child starting from the second stage of MLU, and at this stage she did not use any subjects inappropriately. However, in Table 3, it can be observed that the monolingual child used subjects 33% at the third stage in the low information category. Then, a decrease in the usage was recorded in the fourth stage; and a slight increase occurred in the fifth and upper stages. However, they were lower than the bilingual child's usages, as the bilingual child used 86% in the second stage. We do not have any data of the bilingual child in the third stage. Still, in the fourth stage, there was a decrease in the usage which was 68%. In the fifth stage, the subject usage occurred almost two times lower that the previous stage and was 35%. In the upper stage, the usage was 41%. In all of the stages, the bilingual child used subjects remarkably higher than the monolingual child. For a better understanding, we counted the frequencies of the usages of the monolingual and the bilingual child which is presented in Table 4.

Table 4. The Number of Overt Subjects With Discourse-Pragmatics Features of The Monolingual Child and the Bilingual Child According To MLU Stages.

Stage												
Feature	I (N)		II (N)		III (N)		IV (N)		V (N)		Upper (N)	
	M	B	M	B	M	B	M	B	M	B	M	B
LINF	-	-	-	**6/7**	**2/6**	**-**	**3/22**	**17/25**	**7/29**	**15/43**	**2/8**	**27/66**
NI	-	-	-	-	-	-	3/22	-	2/29	-	-	8/66
EMP	-	-		-	3/6	-	8/22	2/25	11/29	9/43	5/8	27/66
CON	-	-	-	1/7	-	-	4/22	6/25	4/29	17/43	-	2/66
QUE	-	-	-	-	1/6	-	4/22	-	5/29	2/43	1/8	2/66

Table 4 enables us to see that the numbers of the overt subject use of monolingual and bilingual children differ substantially. For example, in the fourth stage the monolingual child used 3 inappropriate subjects out of 22, while the bilingual child used 17 out of 25. In the fifth stage, the monolingual used 7 out of 29, but bilingual used 15 out of 43. What is striking is the numbers in the upper stage. The monolingual child used overt subjects only 8 times and only 2 were inappropriate, while bilingual child still used 66 utterances with overt subjects and 27 of which were with no discourse-pragmatic function.

To sum up, what we can infer from the results is despite the fact that the monolingual child acquired knowledge of syntax and pragmatics as she went through the upper MLU stages, the bilingual child still did not manage to integrate syntactic knowledge and knowledge from other domains even though her proficiency increased.

4.1.2. Acquisition of Questions

In this section, we presented a sequential bilingual's development of yes/no and Wh-questions. The question formation of the bilingual child contains some order errors in yes/no questions, but no errors were observed in wh-questions. Hence, we analyzed the data qualitatively and quantitatively, and found out the gradual emergence of correct order of morphemes in yes/no questions. We compared the data to monolingual data to see the degrees of similarity and difference of acquisition patterns. In Table 5, we presented the numbers of correct and incorrect use of yes/no questions produced by the bilingual child. In Table 6, we categorized the wh-questions produced by the bilingual child and the monolingual child according to the MLU stages.

In Turkish, the place of question particle is determined by the pragmatic functions; that is, the particle follows the inquired item. Additionally, the markers may either precede the particle or are attached to it. The irregularity of the rules about the order of morphemes creates some difficulties for the bilingual child, and she made some errors in question formation. Table 5 presents the correct and incorrect usages according to the stages.

Table 5. Numbers of Correct and Incorrect Use of Yes/No Questions By A Bilingual Child.

Stages	Correct use	Incorrect use
1	-	-
2	-	1
3	-	-
4	5	1
5	10	3
Upper	20	6

In the first two sessions, the bilingual child, Lale, did not ask any yes/no questions, because in these periods, either her MLU was low, at the stages of 1 and 2, or her first need was to learn new words and use them instead of inquiry.

In the third session when her MLU was 3.07, at stage 4, Lale produced her first attempt to ask a yes/no question (1) which was:

(1) bitti mi?
finish-PAST PART.
'Is it finished?'

As to the monolingual child, Başak, she also did not produce any yes/no questions in the first two sessions when she was at the stages of 2 and 3. In the third session, at stage 4, she asked some yes/no questions, such as "Yiyeyim mi?" (Should I eat it?), "Yer mi?" (Does it bite?), "Eli var mı?" (Does it have a hand?) and "Doktora gittin mi?" (Did you go to the doctor?).

Although both the bilingual and the monolingual children had yes/no question samples in their recordings, we cannot consider their utterances at the same level of productivity; that is, the bilingual child's sample is hesitating as the word "bitti" (all-gone or all done) appears very early in the monolingual data, even when they are in the one-word stage (Aksu-Koc & Slobin, 1985), so the question form of it may not be considered as productive as the questions of the monolingual child in this session, as they were productive usages.

In the fourth session, the bilingual child was recorded by her grandmother and the nature of their conversation was mainly question-and-answer. Thus, Lale gave short answers to her grandmother's questions and there were only 50 utterances and her MLU was lower than the previous sessions, MLU stage of 2. During the session, there was only one question of the child which was a yes/no question. It was asked when they were talking about a family meeting. The question was acceptable, but it was missing tense and person marker on the question particle *–mI*. She said (2):

(2) Sen burda değil mi?
you here-LOC not PART.
'Weren't you here?'

instead of

Sen burda değil miydin?

you here-DAT not part.-PAST-2PS

In the fifth session, Lale's MLU was 3.08, stage 4. She asked three yes/no questions which were syntactically grammatical. When the context and intended meaning were analyzed, one of the questions was considered as ungrammatical (3) because the question particle should have been placed after what was inquired, which was the noun not the verb in this context. She said:

(3) Sen bunu getirdin mi?
you this-ACC bring-PAST-2PS PART.
'Did you bring this?'

instead of

Sen bunu mu getirdin?
you this-ACC PART. bring-PAST-2PS

When the monolingual child was at stage 4, MLU 3.3, she used the question particle at places other than the end of the utterance. She put the particle after the object which was the inquired element in that question(4). She said:

(4) Seni mi çektim?
you-ACC PART. take-PAST-1PS
'Did I take your picture?'

When Lale's MLU was 3.35, stage 4, she asked two yes/no questions both of which were grammatical syntactically, but had some problems with case markings (5). The problem can be indicated as follows:

(5) *Burdasında mı?
here-LOC-GEN-LOC part.
Is it here?

% talking about where to wash the dolls'hands

instead of,

Burada mı?
here-LOC part.

As can be noticed, she used genitive and locative markers redundantly.

At the stage of 5, MLU 3.61, the bilingual child asked two yes/no questions, one of which had case marking error. She formed the question like as follows (6):

(6) *Bunun içinde bunu koyalım mı?
this-POSS in-GEN-LOC this-ACC put-OPT. part.
Should we put this in this?

instead of

Bunun içine bunu koyalım mı?
this-POSS in-GEN-DAT this-ACC put-OPT. part.

As can be observed, the bilingual child used locative marker instead of dative.

The monolingual child had two questions at stage 4, MLU 3.45. One of them was grammatical (7). She said:

(7) Senin çiçeğin var mı?
you-GEN flower-POSS exist part.
'Do you have a flower?'

The other question had some problems in the order of morphemes. When they were talking about the recording machine, she was curios about her voice and she asked "Yine çıkacam mı?" (Will I be heard again?), instead of "Yine çıkacak mıyım?". The problem was in the placement of person marker which should be attached to the question particle, not to the tense marker.

When the bilingual child was at 3.77, there were a lot of instances of yes/no questions, these questions were perfectly realized except for the questions in progressive tense. In Turkish, yes/no questions of nouns and some of the tense markers are formulated different from the other kinds. The child made a predictable mistake by overgeneralizing the morpheme order as monolingual children also make this kind of errors. The sequence of the morphemes are verb-(NEG)-TENSE-PERSON PARTICLE; whereas, this order is changed according to the tense of the sentence, like with progressive and aorist markers, the order would be verb-(NEG)-TENSE PARTICLE-PERSON; just like with nouns which is noun PARTICLE-PERSON (which is another

error observed in the following session). That is, the person marker is not attached to the tense marker, but to the question particle *mI*. The following is an example of this kind:

(8) *Korkmuyorsun mu?
scare-NEG-PROG-2PS PART.
'Aren't you scared?'
Instead of
Korkmuyor musun?
scare-NEG-PROG PART-2PS

What are striking in the data are her grammatical questions with aorist which have the same morpheme order as progressive marker (9). For example:

(9) Gelir misin?
Come-AOR PART-2PS

The reason of this grammaticality can be the result of its being an unanalyzed unit, as in daily life the requests are formulated in simple present tense and the child hears it a lot in every request by adults around her.
Meanwhile, the monolingual child was at stage 5, MLU 3.85, and she correctly put the question particle after the inquired item (10). For example:

(10) Selin de mi istedi?
Selin also PART. want-PAST
'Did Selin also want it?'

She also uttered a negative question grammatically which was "Hasan yapamaz mı?" (Can't Hasan fix it?).

At the upper stage, MLU 4.18, the bilingual child still had problems with the placement of morphemes with progressive tense marker (11) and nouns (12) in yes/no questions, such as:

(11) *Abisini çağırıyorsun mu?

brother-POSS-GEN call-PROG-2PS PART.

'Are you calling her brother?'

instead of

Abisini çağırıyor musun?

brother-POSS-GEN call-PROG PART-2PS

Similarly, she said:

(12) *Bebekim mi?

baby-1PS PART.

'Am I a baby?'

instead of

Bebek miyim?

baby PART-1PS

The other problem with her yes/no questions was with the placement of the question particle which should be placed after the inquired item. In the following example (13), the question is grammatical syntactically; however, as we know the context and the intended meaning of the child, it is considered as ungrammatical.

(13) *Uzun saç yaptın mı burda?

long hair draw-PAST-2PS PART. here-LOC

'Did you draw a long hair here?'

instead of

Uzun saç mı yaptın burada?

long hair PART. draw-PAST-2PS here-LOC

% while they were drawing.

In this session, we also noticed that the questions with the verb sevmek 'to like' in progressive tense also seem to be rote-learned amalgam. We infer that in Turkish culture, children are frequently asked if they like somebody or something which is formed with the progressive marker. As can be expected, she formed the following question without error in the correct placement of the question particle and the personal

marker. However, the accusative marker necessary at the end of the noun in the object position was missing (14). She said:

(14) Seviyor musun mavi?
Like-PROG PART-2PS blue
'Do you like blue?'

instead of

Maviyi seviyor musun?
Blue-ACC like-AOR PART-2PS

Meanwhile, the monolingual child, MLU 3.75, could correctly order the morphemes with nouns (15). She said:

(15) Sen doktor musun?
you doctor part.-2PS?
'Are you a doctor?'

She could also place the particle correctly after the inquired element, as in "Bu bitince bunu mu açayım?" (Should I open this when this finishes?).

In the last session, the bilingual child's MLU was 4.24, at the upper stage. She was observed that she put the morphemes in correct order as in (16) and (17). She said:

(16) Sen istiyor musun?
you want-PROG PART-2PS
'Do you want?'

(17) Forum'da bundan var mıydı?
Forum-LOC this-ABL exist PART-PAST?
'Was there one of this in Forum?'

At this stage, she put the question particle after the inquired item grammatically (18) as well. She said:

(18) Sen yedin mi bunu?

you eat-PAST-2PS PART this-ACC
'Did you eat this?'

The monolingual child, at the upper stage, MLU 4.44, produced yes/no questions without errors. As in the following examples:

(19) Gördün mü?
see-PAST-2PS PART
'Did you see it?'
(20) Anne, aboneyi söyliyeyim mi?
Mum, abone-ACC sing-OPT PART
'Mum, should I sing "abone"?'

We can conclude that in yes/no questions, there is intra-linguistic cue competition in the placement of the question particle and in the order of morphemes in irregular sequences.

The acquisition of wh-questions will be investigated in the following parts. Table 6 presents the question words that the bilingual and the monolingual children uttered according to the stages.

Table 6. List of Turkish Question Words Produced By the Bilingual Child and the Monolingual Child According to the Stages.

Stages	Bilingual	Monolingual
1	what	-
2	what where	what who where whose what time
3	-	-
4	what where	what who where whose
5	what who where how	who where which how
Upper	what where why	what where

In the very first recording, when Lale's MLU was 1.95, stage 1, she was only repeating the questions of the interlocutor, instead of answering, and she didn't ask any questions of her own. For example, when the interlocutor asked "Bu ne?" (What is this?), she either repeated and said "Bu ne?" (What is this?), or repeated part of the question, for example, when the interlocutor asked "Bak, ne çıktı?" (Look, what came out?), she repeated it "Ne çıktı?". This can be attributed to her communicative strategy to keep the conversation going on because, most probably, she does not know the necessary words for proper answers.

When her MLU was 2.42, stage 2, she was still repeating the questions, such as "Kaşık nerede?" (Where is the spoon?) and "Napıyorum?" (What am I doing?). However, at this stage, she started to ask questions "Bu ne?" (What is this?) and "O ne?" (What is that?) frequently. This can be her survival strategy to learn new words to communicate. In this stage, her answers were meaningful enough to make a conversation between an interlocutor and her. For example, the question of "Naptın bugün Lale?" (What did you do today, Lale?) is replied by saying "Uyudum, kalktım" (I slept and got up).

On the other hand, the monolingual child was uttering wh-questions with "who" and "what" when her MLU was 2.45, stage 2. Her questions were like "Gazeteyi kim koydu?" (Who put the newspaper?), "Kim yapıştırdı?" (Who sticked it?), "Bu ne?" (What is this?), "Ne getirdin?" (What did you bring?).

As we made the comparison between the bilingual child and the monolingual child, we realized that in another session when the monolingual child was at stage 2, MLU 2.71, she could ask wider range of questions, such as for person, place and time. She could ask questions like "Kim getirdi bunu?" (Who brought this?), "Kime?" (To whom?), "Napıyor?" (What is it doing?), "Nerden buldun?" (Where did you find it?), "Nerden geldin sen?" (Where did you come from?), "Kaçta geldin?" (At what time did you come?).

At stage 4, MLU of 3.07, Lale asked wh-questions like "Bu ne?" (What is this?), "Puppy napıyor?" (What is puppy doing?), "Kim seviyor?" (Who likes it?) (while they were talking about dogs), "Baba nerde?" (Where is the daddy?). Yet, her questions are

limited to person, things and place. She was still repeating the questions of the interlocutor when she does not know the answer, but at this stage, she did not simply repeated the question but reformulated it syntactically and also deleted the demonstrative pronoun “bu” (this). As in the following sample:

(21) A.: Napıyor bu ikisi?
what-PROG. this two-POSS
‘What are these two doing?’
C.: İkisi napıyor?
‘What are two of them doing?’

Meanwhile, at stage 4, MLU 3.21, the monolingual child was adding case markers to her wh-question words “who” (22) and (23), “what” (24) and “where” (25). The examples are as follows:

(22) Kimin bu?
who-GEN this
‘Whose is this?
(23) Kimi yer?
who-ACC eat?
‘Who does it eat?’
%when they were talking about dogs.
(24) Neyi bu?
what-POSS this
‘What part is this?’
(25) Nerden geldin?
where-ABL come-PAST-2PS
‘Where did you come from?’

For the next three sessions, at MLU 2.26, 3.08 and 3.35, we did not observe any examples of wh-questions in the bilingual data.

The monolingual child was producing wh-questions at stage 4, MLU 3.3. Her questions were like “Kime?” (To who?), “Kimi çektim?” (Whoses picture did I take?), “Neyi?” (What?), “Arkadaşın nerde?” (Where is your friend?).
At stage 5, MLU 3.61, the bilingual child, Lale, asked only one wh-question which was a modality question (26). She said:

(26) Nasıl yapıcam?
how do-FUT-1PS
‘How will I do it?’

When the monolingual child was at stage 5, MLU 3.85, she could attach case markers to all of the wh-questions and she had negative wh-questions in her data as well. For example, “Kime yapıyorsun onu?” (Who are you making that for?), “Nereden kapandı?” (Where did it switch it from?),“Kim bakmasın diye kaldırdın?” (For who not to see did you put it away?).

When Lale was at stage 5, MLU 3.77, there were a lot of instances of wh-questions which were consisted of inquiry of people (27), things (28) and place (29) in her production. She said:

(27) Kim?
who
‘Who?’
(28) Ne var?
what exist
‘What is there?’
(29) Nerede?
Where-LOC
‘Where?’

At the same stage, MLU 3.75, Başak, the monolingual child, asked questions like “İçindeki ne?” (What is in it?), “Babasının adı neydi?” (What was the name of his father’s name?).

At the upper stage, MLU 4.18, Lale added an important wh-form in her speech, which is causality, like in the example (30):

(30) Niye söylemedin?
Why say-NEG-PAST-2PS
'Why didn't you say it?'

In another sample for causality (31), she still had some problems with case markings. When they were drawing pictures and talking about horses, she meant to ask why horses have horseshoes. She said:

(31) Niye bunu var?
why this-ACC exist
'Why does it have this?'
instead of
Niye bundan var?
why this-ABL. Exist

Another ungrammatical sample in this recording was about her mixed question with a wh-word and yes/no question particle (32). She should not have used the question particle, but she said:

(32)*Ne mi var?
what PART. exist
'What is there?'

At the upper stage, MLU 4.44, Başak asked a few questions in this session which were about things and place. Her questions were attached dative (33) and ablative (34) case markers. She said:

(33) Nereye?
where-DAT
'To where?'
(34) Nerden?

Where-ABL

'From where?'

At upper stage, MLU 4.24, Lale, the bilingual child, produced wh-questions for things (35), place (36) and causality (37). She said:

(35) Bu ne?

whis what

'What is this?'

(36) Nerede?

where-LOC

'Where?'

(37) Niye?

why

'Why?'

However, she had some case marking errors in the following example (38). She said:

(38) Bu ismi ne?

this name-ACC what

'What is its name?'

instead of

Bunun ismi ne?

this-POSS name-GEN what

As can be observed from the example the error is based on the use of case marker rather than the question formation.

To sum up, the bilingual child started to ask wh-questions by repeating the interlocutor's questions. Later, she started asking questions to learn new words to fill the lexical gap in her developing language. After that, she added new wh-words in her utterances and she did not have any problems with the syntactic structure of wh-questions. However, as she had problems with case suffixes, they were observed in her questions as well.

The difference between the bilingual child and the monolingual child is that the monolingual child started asking questions of her own earlier than the bilingual child; and the monolingual child's range of wh-words flourished even at the stage 2 while the bilingual child could not produce the equivalent questions words even at stage 4.

4.1.3. Acquisition of Negation

Negation is a particular type of cross-linguistic structure of English/Turkish bilingual child in our study. Hence, in this section, we analyzed negated structures in Turkish data of the bilingual child. We noticed non-target like structures in her production in terms of the placement of the negative element. Thus, we categorized the negative elements and calculated the frequency of each item and examined the monolingual data to see whether there were any similarities in the monolingual data.

There are three negative elements in Turkish. The negative of verbal suffixes is made with the suffix *–mA* which follows the verb stem and precedes the tense with some irregularities in the combinations with aorist and possibility suffix. The negative of nonverbal sentences is made with *değil* 'not', and the negative existential expression *yok* 'non-existent' is the negated form of *var* 'existent'.

Negation is an optional feature in free speech samples, so negated structures did not occur very frequently in the data. We examined the first three months of the observation for negation; because, from the second month on, she did not make any mistakes in negation. There were 65 utterances with negative elements, out of 677 utterances between 3;2,5 and 3;5,23. This is the equivalent of 9.6%. In Table 7, an overview of the negative elements is presented according to age intervals.

Table 7. Negative Elements in the Bilingual Child's Turkish According to Age Intervals.

Age	ı-ıh	değil	yok	-mA	Total
3;2,5	1	-	-	-	1
3;2,19	4	1	-	2	7
3;3,5	17	-	4	4	25
3;4,24	-	5	-	3	8
3;5,8	-	-	-	6	6
3;5,23	-	-	5	13	18

As can be seen in Table 7, all four types of negative elements occurred in the sessions. In the first three sessions, the most frequent form was *ı-ıh*, the vocalized negation marker. From the fourth session on, she stopped using *ı-ıh* to negate her utterances, and an increase was observed in her negation with the negative marker *–mA*. Apparently, after the age of 3;4,24, she productively used *–mA* in her utterances; before then, the bilingual child used it only with the verb *sevmek* (to love) as in *sevmiyorum* (I don't like) as an unanalyzed whole.

When we analyzed the data, we found out that the bilingual child used *ı-ıh* before nouns and verbs till she acquired the negative elements *değil*, *yok* and *-mA* in Turkish. Examples of the negation marker *ı-ıh* with nouns are given in (1):

(1) a. A: Bu da fil.
'And this is an elephant.'
C: *ı-ıh* fil, balley.
'ı-ıh elephant, balley' (3;2,5)

instead of

Fil değil.
elephant not
'It is not an elephant.'

b. C: Bu ne?

'What is this?'

A: Böcek.

'a bug'

C: *ı-ıh* böcek.

'ı-ıh bug' (3;2,19)

instead of

Böcek değil.

bug not

'It is not a bug.'

c. A: Bu büyük yatak.

'This is a big bed'.

C: Büyük yatak. Büyük pembe. Bu *ı-ıh* pembe.

'A big bed. The big one is pink. This is ı-ıh pink' (3;3,5)

instead of

Bu pembe değil.

this pink not

'This is not pink.'

The bilingual child also used *ı-ıh* to negate verbs. What she exactly did was to use *ı-ıh* before finite verbs, as in (2). She said:

(2) a. A: Ateş?

'Ateş?'

C: Ateş *ı-ıh* gelecek.

Ateş *ı-ıh* come-FUT-3SG

'Ateş will not come'

instead of,

Ateş gel-me-(y)ecek.

Ateş come-NEG-FUT-3SG (3;3,5)

b. A: Naptın? Karanlık oldu burası.

'What did you do? It got dark in here.'

C: Yap-tı-m. Sen yat, ben *ı-ıh* yat-ıyor-um.

did-PAST-1PS. you sleep, I *ı-ıh* sleep-PROG-1SG (3;3,5)

instead of

Ben yat-mı-yor-um.

I sleep-NEG-PROG-1SG

'I am not sleeping'

In these examples, she could not place the negative marker *-mA* (*not*) after the verb and before the other suffixes. Instead, she used a universal vocalized negation marker *ı-ıh* as a strategy to communicate the negative utterances. What is different between a monolingual Turkish child and the bilingual English-Turkish child in this study is the placement of the negative marker. Although in our monolingual data, we do not have any errors in negative markers, Aksu-Koc and Slobin (1985) reported that some Turkish monolingual children use *ı-ıh* to negate their utterances after the model for negation of nonverbal predicates (3). For example, one Turkish monolingual child was reported to say:

(3) Yap-acağ-ım *ı-ıh.*

do-FUT-1SG NEG

'I won't do (it)'

instead of

yap-mı-yacağ-ım

do-NEG-FUT-1SG

As can be observed from the examples above, the bilingual child used the English negation word order in her Turkish utterances which is to use the negative marker to the left of the verb or noun, while the Turkish child used it to the right of the verb.

Meanwhile, the bilingual child could say *sevmiyorum* (I don't like) grammatically; that is, she used the negative marker after the verb and before the other suffixes at the ages of 3;2,19 and 3;3,5. However, this usage is regarded as a rote-learned amalgam, because she could not use this structure with any other verbs till the age of 3;4,24. Then, she could produce target-like utterances in negative forms (4) with three different verbs at 3;4,24. The examples are as follows:

(4) a. A: Meriç'e gidelim mi?
'Shoud we visit Meriç?'
C: Yok, mummy git-me-(y)elim.
No, mummy go-NEG-OPT.
'No, mummy let's not go.'

b. A1: Corinne, Lale İngilizce şarkı bilmiyor.
'Corinne, Lale does not know any English songs.'
A2: Biliyor.
'She knows.'
C: Bil-mi-yor-um.
know-NEG-PROG-1PS
'I don't know'.

c. A: Kim ağlattı seni?
'Who made you cry?'
C: Ağla-ma-dı-m.
cry-NEG-PAST-1PS
'I didn't cry.'

(3;4,24)

From that age on, she productively used the negative marker *–mA* in her negative utterances, just like at age 3;5,8, she used 13 negated utterances with *–mA*. Some of them are shown below:

(5) a. A: Sen de gidiyor musun partiye?
'Are you also going to the party?'
C: Yok, git-me-(y)eceğ-im
no, go-NEG-FUT-1PS
'No, I won't go.'

b. A: Isırdın mı yoksa parmağını?
'Did you bite her finger?'
C: Isır-ma-dı-m

bite-NEG-PAST-1PS
'I didn't bite it.'

c. A: Binebildi mi?
'Could he ride on it?'
C: Evet, ama bu binmesin.
yes, but this ride-NEG-IMP.3PS
'Yes, but let this not ride on it.'

(3;5,8)

As can be observed from the examples, she started to use the negative marker in Turkish correctly. However, she made a mistake in the negative form of possibility suffix (5), which is an irregular case in Turkish negation. She said:

(6) Bin-ebil-me-di
ride-POSS-NEG-PAST
instead of
bin-e-me-di
ride-POSS-NEG-PAST
He couldn't ride on it'

What is wrong in her utterance is that, the form of the possibility suffix changes from *–AbIl* to *–A* in the negative form. On the other hand, it should be noted that, monolingual Turkish children also may make this kind of error in the early acquisition period.

As to the other two negative elements in Turkish *değil* and *yok*, the bilingual child used them correctly in her production. She used *değil* for negating nominal sentences (7), and *yok* for the negative existential expression (8). She said:

(7) a. A: Yine pembe ama düğmesi var.
'It is also pink but it has a button.'
C: bebek ben. Ben bebek değil(im).

'I was a baby, then. I am not a baby now.'

(3;2,19)

b. A: Bu ne, inek mi bu?
'What is this, a cow?'
C: İnek değil, duck.
'It is not a cow, it is a duck.'

(3;4,24)

(8) a. A: Tasmasını bulamadın mı?
'Couldn't you find its collar?'
C: Tasma yok.
'There is no collar.'

(3;3,5)

b. A: Diğer barbiler nerde?
'Where are the other barbies?'
C: Burda barbie yok.
'There isn't any barbie here.'

(3;5,23)

In the examples above, the negative elements *değil* and *yok* were used correctly.

4.1.4. Acquisition of Case Markers

In this section, we analyzed the usage of case markers by an English/Turkish bilingual child. We compared the developmental pattern of the bilingual child to the two basic studies on the case markers reported by Ekmekçi (1979) and Sofu (1989) about the monolingual acquisition to define the similarities and the differences in the acquisition process.

In this study, we observed the seven case markers which are nominative, accusative, dative, locative, ablative, genitive, and comitative-instrumental and the possessive suffix in Turkish. We categorized the usage of these markers into three: 1) correct use, 2) no use, and 3) misuse. In the "correct use" category, we counted all the

markers in proper usage; in the "no use" category, the utterances which were not marked with any of the markers although it was necessary were counted; and in the "misuse" category, the instances where one of the case markers was used although another case marker were required were calculated. In Table 8, we presented the frequencies of each case marker according to the MLU stages of the bilingual child.

Table 8. Distribution of the Usages of Case Markers and Possessive Suffix By the Bilingual Child According to the MLU Stages.

	Stages																	
	I			II			III			IV			V			Upper		
	+	-	*	+	-	*	+	-	*	+	-	*	+	-	*	+	-	*
nominative	6	-	-	23	-	-	-	-	-	51	-	-	57	-	-	68	-	-
genitive	3	-	-	1	-	-	-	-	-	12	3	-	8	-	-	13	4	-
locative	-	-	-	3	-	-	-	-	-	34	1	8	19	-	2	24	1	1
dative	-	1	-	1	2	-	-	-	-	6	6	1	8	2	-	19	-	-
ablative	-	-	-	-	-	-	-	-	-	2	-	-	1	-	-	11	-	-
accusative	-	2	-	-	3	-	-	-	-	12	8	3	17	2	1	37	-	-
instrumental	-	-	-	-	1	-	-	-	-	2	-	-	3	-	-	3	-	-
possessive	-	2	-	3	-	-	-	-	-	13	22	-	25	2	-	57	3	-

+: correct use

-: no use

*: misuse

In the first stage, the bilingual child's utterances were mainly repetitions of the interlocutor; no matter they were questions or statements. Thus, these utterances were excluded from the analysis as they were not the production of the child herself. However, the partial repetitions were calculated when she changed the markers and pronouns, as these utterances were formed by the child's own attempts, as in the example below:

(1) A: Annemi seviyorum de.
mum-POSS-ACC love-PROG.1SG say
'Say "I love my mum."

C: Anne seviyor.
mum love-PROG.3SG
'Mum loves.'

instead of

Annemi seviyorum.
mum-POSS-ACC love-PROG-1SG
'I love my mum.'

In Table 8, it can be observed that in the first MLU stage, the bilingual child used productively the nominative case marker (2) which was mainly the answers to the questions when she knew the name of the things, and then she had a few attempts for the genitive marker, as in (3). She said:

(2) A: Bu ne?
'What is this?'
C: Köpek.
dogNOM
'Dog.'

(3) a. A: Bu neyin sesi?
'What's sound is this?'
C: Bu-n-un
this- buffer- genitive
'Its.'

b. A: Kimin o?
'Whose is that?'
C: Lale'nin
Lale-GEN
'Lale's.'

In the "no use" category, we found out that she did not produce the dative (4) marker, and the accusative and possessive markers (5) although they were required. These sentences are presented below:

(4) A: Anneye mi götüreceksin?
'Are you taking it to mum?'
C: Anne.
mumØ
instead of
Anne-ye
mum-DAT
'To mum.'

(5) A: Babamı seviyorum de.
'Say "I love my daddy."'
C: Baba seviyor.
dadØ love-PROG.3SG
'Dad loves.'
instead of
Baba-m-ı seviyorum.
daddy-POSS-ACC love-PROG.1SG
'I love my dad'.

In the second MLU stage, the child's usage of markers started to flourish. She produced the locative (6), dative (7), and possessive (8) markers in addition to the nominative and genitive markers. However, her utterances with the locative case marker were deictic expressions such as "Burda" (here) and "Orda" (there) which is in line with the monolingual data reported by Ekmekçi (1979) and Sofu (1989). She said:

(6) A: Arabamı verir misin?
'Can you give my car?'
C: Orda.
there-LOC
'There.'

(7) C: Anamur'a gidelim mi?
Anamur-DAT go-OPT-1PL part.
'Should we go to Anamur?'

(8) A: Kim sevdi atı?
'Who stroked the horse?'
C: Annem.
mum-POSS
'My mum.'

As to the errors at this stage, the child did not attach the dative (9), accusative (10) and instrumental (11) markers when they were required. She said:

(9) A: Neye bakacaksın?
'What will you look at?'
C: At.
horseØ
instead of
At-a.
horse-DAT
'At the horse.'

(10) A: Şahin'i mi seviyorsun?
'Do you like Şahin?'
C: Barış.
BarışØ
instead of
Barış'ı.
Barış-ACC

(11) A: Uçakla mı gidelim?
'Should we go by plane?'
C: Yok, otobüs.
no, busØ
instead of
Yok, otobüsle.
No, busINSTR.
'No, by bus.'

We did not have any data for the third stage as the child went through the fourth stage from the second.

In the fourth stage, the bilingual child produced utterances with all of the markers attached. She mostly used the nominative marker; then the locative marker came with mainly deictic expressions. She also used the accusative, genitive and possessive markers. As to the ablative and instrumental markers, she used them only twice during the fourth stage. On the other hand, it should be noted that she either made mistakes with the application of the markers or did not use them when they were required; except for the ablative and instrumental markers. To exemplify the usages, some instances are presented. For example, the nominative marker was used correctly as in the following example (12).

(12) A: Köpek nerde?
'Where is the dog?'
C: Köpek kaçmış
dogNOM run-PF
'The dog ran away.'

She also used the locative marker; however, they were mostly deictic expressions. She also produced some locative marked nominals, as in (13). She said:

(13) Benim anne arabada.
I-GEN mum car-LOC
'My mum is in the car.'

In this stage, she used 12 accusative markers; however, it should be taken into account that half of them was with the demonstrative marker "Bu" (this), as in "Bunu" (thisACC). The rest was with nouns, such as:

(14) C: Elimi yıkayayım.
Hand-POSS-ACC wash-OPT-1SG
'Let me wash my hand.'

She also used the genitive (15), possessive (16), and dative (17) markers, in addition to the ablative (18) and instrumental (19) markers, which were very rare in the data. She said:

(15) C: Bu barbinin.
This barbie-GEN
'This is barbie's.'

(16) C: Annem koydu akşam.
mum-POSS put-PAST evening
'My mum put it in the evening.'

(17) C: Parmağı kopmuş.
Finger-POSS-ACC break-PF
'Its finger broke.'

(18) C: Yeni eve taşınıyoruz burdan.
new house-DAT move-PROG-1PL here-ABL
'We are moving into a new house from here.'

(19) C: Ben gezicem bunla.
I wander-FUT-1PS this-INSTR
'I will wander with this.'

As to the errors in marking, at this stage, the child either did not mark the nominals at all, or mark with a wrong marker. In this sense, she had "no marking" error with the genitive (20), dative (21), accusative (22) and possessive (23) and locative (24) markers. She said:

(20) C: Ben şapka var.
I hatØ exist
instead of
Benim şapkam var.
I-GEN hat-POSS exist

‘I have a hat.’

(21) C: Ben parti gidiyorum.
I partyØ go-PROG-1SG
instead of
Ben partiye gidiyorum.
I party-DAT go-PROG-1SG
‘I am going to the party.’

(22) C: Barış ıslattım.
BarışØ wet-PAST-1SG
instead of
Barış’ı ıslattım.
Barış-ACC wet-PAST-1SG
‘I wet Barış.’

(23) A: Kim geldi haftasonu buraya?
‘Who came here at the weekend?’
C: Baba.
dadØ
instead of
Babam.
Father-POSS
‘My dad.’

(24) A: Bu ne?
‘What is this?’
C: Bu deniz var.
this seaØ exist
instead of,
Bu denizde var.
this sea-LOC exist
‘This is in the sea.’

The second type of errors she made was the “wrong marking” or as Heijden and Verhoeven (1994) mention in their study “overgeneralization”. She used the locative marker instead of the dative (25), ablative (26) and accusative (27) markers; and the dative instead of the locative marker (28); and the accusative instead of the dative marker (29). She said:

(25) C: Anne koydu burda.
mum putPAST here-LOC
instead of
Annem koydu buraya.
mum-POSS putPAST here-DAT
‘My mum put it here.’

(26) C: Su geliyor burda.
water leak-PROG here-LOC
instead of
Su geliyor burdan.
water leak-PROG here-ABL
‘Water is leaking from here.’

(27) C: Ben özledim burda.
I miss-PAST-1PS here-LOC
instead of
Benözledim burayı.
I miss-PAST-1PS here-ACC
‘I missed here.’

(28) C: Bu yatacak eve.
this sleep-FUT.3PS house-DAT
instead of
Bu evde yatacak.
this house-LOC sleep-FUT.3SG
‘This will sleep in the house.’

(29) A: Ne getircek sana?

‘What will he bring for you?’

C: Beni oyuncak

I-ACC toy

instead of

Bana oyuncak

I-DAT toy

‘Toy for me.’

At the fifth MLU stage, it can be observed that the wrong usages of markers decreased remarkably. As a result, the proficiency of some markers increased significantly. For example, the use of possessive marker was used almost three times higher than the previous stage, and the error with no marking for possessive suffix was almost 10 times lower than the previous stage. This also affected the use of genitives; she did not make any errors with the genitive marker at this stage. Additionally, in line with the previous stage, she did not make any errors with the ablative and the instrumental markers, either.

On the other hand, she still made some errors with the locative, dative, accusative and possessive markers. However, when Table 8 is observed, it would be noticed that the errors occurred only two times at most. The errors with the dative (30), accusative (31) and possessive (32) markers are in the “no use” category. She said:

(30) C: Ben Forum gittim.

I ForumØ go-PAST-1SG

instead of

Ben Forum’a gittim.

I Forum-DAT go-PAST-1SG

‘I went to Forum’.

(31) C: İsim ne?

nameØ what

instead of

İsmi ne?

name-ACC what

'What is her name?'

(32) C: Benim baba yaptı.
I-GEN dadØ do-PAST.3SG
instead of
Benim babam yaptı.
I-GEN dad-POSS do-PAST.3SG
'My dad did it.'

As to the errors with the wrong use of markers, she used the locative marker instead of the dative (33) and ablative (34) markers, and the accusative instead of the dative (35) marker. She said:

(33) C: Bunun içinde bunu koyalım mı?
this-GEN in-POSS-LOC this-ACC put-OPT part.
instead of
Bunun içine bunu koyalım mı?
this-GEN in-POSS-DAT this put-OPT part.
'Shall we put this in this?'

(34) A: Düştün mü?
'Did you fall?'
C: Masada.
table-LOC
instead of
Masadan.
table-ABL

(35) A: Nereye gidiyoruz?
'Where are we going?'
C: Çarşıyı.
downtown-ACC
instead of
Çarşıya.

downtown-DAT

'To the downtown.'

At the upper stage, the usages of case and possessive markers were increased notably; especially the dative, ablative, accusative and possessive markers. As her proficiency level increased, her rate of errors was decreased comparatively. At this stage, she did not mark the genitive (36), locative (37) and possessive (38) markers in a few instances; and marked incorrectly the locative marker instead of dative (39) once. She said:

(36) C: Bu ismi ne?

thisØ name-POSS what

instead of

Bunun ismi ne?

this-GEN name-POSS what

'What is her name?'

(37) C: Birkere gittim burda.

once go-PAST-1PS here-LOC

instead of

Birkere gittim *buraya/oraya.

Once go-PAST-1PS *here/there-DAT

'I went *here/there once.'

(38) C: Ben yeşil saat varım, o koptu.

IØ green watchØ exist-1PS that break-PAST.3SG

instead of

Benim yeşil saatim vardı, o koptu.

I-GEN green watch-POSS exist-COP.PAST that break-PAST.3SG

'I had a green watch and it broke.'

Apart from the wrong usage and no marking errors, the child also made some errors with overmarking the possessive *–sI* suffix, as in (39) and (40). She said:

(39) A: Barbilerinin kıyafetlerini getirdin mi?
'Did you bring your barbies' clothes?
C: Getirdim ama birisi kıyafet yok.
bring-PAST-1PS but one-POSS-POSS cloth not
instead of
Getirdim ama birinin kıyafeti yok.
bring-PAST-1PS but one-POSS-GEN cloth-POSS not
'I brought them but one of them doesn't have any clothes.'

(40) C: Köpek evisi var.
dog house-POSS-POSS exist
Instead of
Köpeğin evi var.
dog-GEN house-POSS exist
'The dog has a house.'

This type of error is observed in monolingual data and the other bilingual data in the literature.

4.2. Discussion

In this study, we examined the use of subject pronouns by an English/ Turkish bilingual child and a monolingual Turkish-speaking child, because of the differences of pro-drop and non-pro-drop properties of these two languages. Our first aim was partly to explore whether Hulk and Müller's (2000) hypothesis, which is about the claim that cross-linguistic structures occur at the interface between syntax and pragmatics, applies to English/Turkish bilingual child's subject use and find out any cross-linguistic influence by analyzing discourse-pragmatics contexts in subject realization in the English/Turkish bilingual child and Turkish speaking monolingual MLU-matched peer.

Our findings confirm that the bilingual and the monolingual children differ from each other in their usages of subjects with discourse-pragmatics function. Although the monolingual child learned to use the subjects as her MLU increased, the bilingual child still used more subjects with no discourse-pragmatics function.

Similar results were revealed in Paradis and Navarro's study (2003). They examined one Spanish/English bilingual child between the ages of 1;9-2;6, and as controls, two monolingual Spanish children, ages 1;8-1;11 and 1;8-2;7. They proposed that the use of overt subjects in Spanish would be influenced from English quantitatively. They examined the discourse/pragmatic context of overt subject use and parental input. Their data showed that use of pragmatically inappropriate overt subjects of the bilingual child was more than twice as many as the two monolingual Spanish speakers.

Likewise, Serratrice and Sorace (2003) and Serratrice et al. (2004) examined one Italian/English bilingual child between the ages 1;10-4;6 and six monolingual Italian controls between the ages 1;7-3;3. They found similar results in that the bilingual child's use of pragmatically inappropriate overt subjects was higher than that of the monolingual Italian speakers.

The same inappropriate use was found in Hacohen and Schaeffer's (2004; in Haznedar, 2007) study on the use of subjects by a Hebrew/English bilingual child and five monolingual Hebrew controls. They found that the bilingual child uses inappropriate overt subjects 3 times more than monolinguals.

As for the use of subjects by children acquiring Turkish, Haznedar (2007) compared the pragmatically inappropriate overt subject use in Turkish of a bilingual Turkish/English child between the ages 2;4 and 4;3 and a monolingual Turkish child, ages 1;7 and 3;10. She also analyzed the pragmatic contexts to see whether discourse pragmatics constrain the bilingual production. She concluded that the bilingual child uses the pragmatically inappropriate overt subjects more than 10 times higher than the monolingual child.

Besides Hulk and Müller's hypothesis, another possible explanation about the inappropriate use of subjects by the bilingual child is to draw on the Competition Model, as suggested by Dopke (1998); in that, subject use is a requirement in English, whereas in Turkish, it depends on the discourse-pragmatics function, so it is one of the possibilities in Turkish. Thus, the signs of cross-language cue competition can be

observed in bilingual child's use of subjects. The intra-language cues gain strength through cross-language similarities; in that, in Turkish for some discourse-pragmatic functions, subject use is grammatical like English. Children exposed to both languages are presented with highly available and reliable subject use common in both languages, so subject use gains strength cross-linguistically. Thus, as far as the subject use is concerned, children would initially hypothesize that subject use will always result in a grammatical utterance, and therefore apply the English rule to both languages. This affects the syntactic structure and subjects in low category; they are used more frequently by the bilingual child than the monolingual child.

As to the acquisition of yes/no questions, we found out that the bilingual child made more errors in the placement of question particle and attaching the morphemes in the right order to the particle. The reason of these ungrammatical structures in yes/no questions can be explained by applying Muller's (1998) analysis and argue that the ambiguous/ unambiguous contrast in terms of copula placement in Turkish caused non-target-like production, because Turkish presents the child with ambiguous input due to various morpheme placement in verbal and nominal questions.

To explain this developmental path, we can make use of the intra-linguistic cue competition; in that, the question particle frequently appears at the end of the utterances with morphemes preceeding it. However, the particle occurs in different places in a sentence as well, and sometimes with tense, person and case markers attached to it. All these lead to competition between the options and the more salient one wins first. After the analysis is done for the morpheme order, the child starts to form the target-like utterances.

The difference in wh-questions in the bilingual and monolingual data is about the frequency. The bilingual child occasionally asked the question 'What is this?'/ 'Bu ne?' in all of the sessions as a conversational strategy (Pfaff, 1994). As to questions about place (where), causality (why), modality (how) and time (when), they were observed very rarely during the sessions. This can be interpreted as the bilingual child's need of new vocabulary in the first place. For survival reasons, her first need is to learn the names of objects in her post-L1 or early L2 language. Thus, she asked 'Bu ne?' very frequently. Later on, she started to ask other kinds of questions but possibly because of

the nature of the conversations between the interlocutor and the child, she did not ask questions in that category very frequently. In any ways, this is a comprehensible result parallel with the studies in literature in this area; because, studies done cross-linguistically show that children acquire names of concrete objects around them and ask their name with "what", firstly. Then, they ask "who" for people and possessions; later "where" for place. After that, they ask for abstract concepts, such as causality (why), modality (how), and time (when) (Soriente, 2007).

On the other hand a study by Herkenrath et al. (2003) report that the Turkish-German bilingual children produce more instances of *non-in-situ wh* elements than the monolingual children. They relate this to their mentally dependence on German structures. However, in our study, we did not observe a similar case; even we did not observe any errors in wh-questions like monolinguals as reported by Sofu (1998).

In the acquisition of negation, Lale produced utterances with negative elements in sentences according to English syntax for some period, even though in Turkish, negation marker is not used in pre-verbal position. Thus, in the usage of negative elements, we observed transfer from English structure clearly.

The reason of this can be attributed to Yip and Matthews' claim (2000). They suggest that the patterns of transfer are characteristic of a period, when one of the languages is more developed; it provides a temporary means to construct complex structures. In our study that structure is negation, which she has yet to acquire in Turkish. Therefore, she used a relief strategy (Muller, 1998) to express the negative constructions by transferring English negated structure to Turkish. After this period, the data showed that the target-like competence was achieved after a month, because the utterances chunked by the child are not found in the input she receives, so they are short-lived (Dopke, 1999).

We can also explain this with MacWhinney's (1987; in Hulk and Van der Linden, 1998) claim that bilingual child may make short cuts and create strategies from one language to be used in the other. Some cues may be stronger in one of the languages which facilitate acquisition. In the negated structures, we observed that the

English negative structure was stronger; hence, the bilingual child made short cuts and created strategy from English to be used in Turkish.

The developmental path of the acquisition of case markers indicates that the bilingual child go through the stages mentioned by Slobin (1979; in Sofu, 1989) which can also be interpreted as the mental operations in the child's morphosyntactic development (Dopke, 1999) because the structures she used are not supported by either of the target structures.

In Sofu's study (1989), she reported that within the first three years of children acquiring Turkish, they attain the half mastery level in the production of most of the case markers. The nominative case reaches the highest production level, 83.3%, while the ablative case reaches only 34.37%. Sofu gave a detailed analysis of production for each case marker. She noted that the nominative case was acquired before the other case markers, which is also the case with the bilingual child's production in this study.

The accusative case marker did not appear very early in Sofu's study, not until 2;1; but once it appeared in the production, the usage increased gradually. Similarly, in Ekmekçi's study, the subject used the accusative marker very early, at 1;3. In our study, the accusative marker was used at the fourth stage with a few errors, but in the fifth stage, she used it productively without any errors.

As to the dative marker, Greenfield and Smith (1976; in Sofu, 1989) indicated that their subjects used it at a very early age; however, their production was low at later stages. Ekmekçi also reported the same development for the dative case. Her subject used it at 1;3 for the first time, but only after 1;9, she used it productively. In Sofu's study, the same developmental pattern was observed. She reported that the production rate increased only after 2;1. In our study, the bilingual child first used the dative at the second stage only once, at the fourth stage, she used more but there were equal cases where she did not use it although it was required. At the fifth stage, she missed 20% times to use the dative which was better compared to the previous stage where it was 50%. At the upper stage, she did not make any errors and used it productively.

When it comes to the locative case marker, Ekmekçi found that her subject used it at 1;7 after the dative, accusative and instrumental case markers. In addition to that, Sofu reported (1989) that her subjects used more deictic expressions like “Burda” (here) and “Orda” (there) than actual nouns with locative case markers. The same thing observed in our bilingual data, where the child used mainly deictic expressions.

Swift (1963; in Sofu, 1989) maintained that the production of ablative case started early, but the usage was interrupted later on. However, in our case, the ablative and the instrumental markers observed from the fourth stage on, and they were very rare in the data, but in the upper stage, the ablative case marker was used productively. What was interesting with the ablative marker was that it was the only marker that, the bilingual child did not make any errors about it in her production.

In Sofu’s study, the genitive case was used at 1;6, after the nominative and the locative case markers. In our study, the bilingual child used the genitive marker from the first stage on, using it more productively through the upper stages, and her errors were attributed to English structures.

As to the possessive marker, it appeared in the second stage with no errors, but in the fourth stage her error rate was 73% which stemmed from not using the marker. We interpreted that the possible cause is the Child Directed Speech where third persons are not attached with any possessive markers when an adult talks to a child, such as:

A: Baba getirecek.
‘Dad will bring it’
instead of
Baban getirecek
‘Your dad will bring it’.

As a result of this, when a child is asked a question like “Kim getirecek?” (Who will bring it?), the answer sometimes is “Baba” (Dad) instead of “Babam” (my dad).

When we analyzed the process of the bilingual child’s acquisition of case markers, we realized that she went through the 4 stages that Slobin (1979) mentioned. These are 1) no marking, 2) appropriate marking in limited cases, 3) overgeneralization

of marking, and 4) full adult system. He assumes that these stages are universal and need to be checked cross-linguistically. Sofu claims that in her study, "no marking" stage was not observed as the children started to use case markers from very early on. Moreover, she asserts that the "overgeneralization of marking" stage was not observed in her study, either; as the number of errors was very few. In opposition to her study, the bilingual child in our study went through all of these stages; not with all of the markers, though. To put it clearer, we interpreted that the case markers which had instances in the "no use" category went through the Slobin's first stage, which was all the markers except the nominative and ablative markers. The appropriate marking in limited cases and the overgeneralization of marking were also observed when the child used the wrong markers when other markers were required. For the full adult system, we observed that the child made no errors with the nominative, dative, ablative, accusative and instrumental markers.

In a study by Heijden and Verhoeven (1994), the structural properties of the selected domains in a Turkish-Dutch bilingual child were reported. They analyzed the usage of case markers which was acquired at an early age with some errors claiming that errors disappear with the expansion of the child's linguistic repertoire. They concluded that lexical entries displaying features as argument structure and subcategorization restrictions are to be learned one-by-one. The examples they gave are illustrated below:

1. a. C: Ondan seveceğim.
that-ABL love-FUT-1SG
instead of
Onu seveceğim.
that-ACC love-FUT-1SG
'I will love that.'

b. C: Onda istiyorum.
that-LOC want-PROG-1SG
instead of
Onu istiyorum.
that-ACC want-PROG-1SG

‘I want (something form) that.’

In our study, the bilingual child made similar errors with locative, dative and accusative markers.

In Heijden and Verhoeven’s study the Dutch-Turkish child had also some difficulties with genitive and possessive markers, for example, she used N N-poss construction when N-gen N-poss was required. In these cases, the definite noun was always a proper name, and she considered it as if it were indefinite. The same error occurred with the N-poss-gen N-poss constructions, as well. In this case, the genitive case marker caused the problem, as she always left out the genitive case. She said:

2.a. İlker annesi.
İlkerØ mother-POSS.3SG
instead of
İlkerin annesi.
İlker-GEN mother-POSS.3SG
‘Ilker’s mother.’

b. Elim boyadım ya. İçini.
hand-POSS.1SG paint-PAST-1SG. Inside-POSS.3SG-OBJ
instead of
Elimin içini boyadım.
hand-POSS.1SG-GEN inside-POSS.3SG-OBJ
‘I painted the inside of my hand.’

The bilingual child in our study had some difficulties in marking genitive in a very few examples, as well. In Pfaff’s study (1994), one of the bilingual children also had errors with possessive markers. She only marked the possessor but not the possessed noun. She said:

C: Benim para var.
I-GEN moneyØ exist
instead of

Benim param var.
I-GEN money-POSS.1SG exist
'I have money.'

They also reported that children sometimes overgeneralized lexically idiosyncratic possessive forms. One child said:

C: Sonra bebeğin kolusunu koparmak istiyor.
then doll-GEN arm-POSS-POSS-ACC take off-INF want-PROG.3SG
instead of
Sonra bebeğin kolunu koparmak istiyor.
then doll-GEN arm-POSS-ACC take off-INF want-PROG.3SG
'Then he wants to take the doll's arm off.'

They stated that forms like "kolusunu" were not "errors" in case marking, but overgeneralization of the regular rules to certain lexical items. They mentioned that monolingual pre-schoolers were also reported to have that kind of instances in their speech as reported by Ekmekçi (1986). In our study, the bilingual child did not mark the genitive case and overused the possessive marker as in the example, "köpek evisi" instead of "köpeğin evi", which is a good example to illustrate both kinds of instances in one example.

CHAPTER 5

CONCLUSION

5.0. Introduction

In this chapter an overall conclusion of the study will be presented in line with the research questions and the findings. The implications of the study and the suggestions for further studies will also be provided.

5.1. Conclusions

The aims of this study are to investigate the distribution of morphosyntactic forms and to evaluate the extent to which domains at the interface between syntax and pragmatics are vulnerable to cross-linguistic influence.

We will explore our findings on the basis of three research questions. The first research question is:

1. What patterns of development emerge in the acquisition of Turkish morphosyntactic structures of an English/Turkish bilingual child?

a) What kind of development does the bilingual child follow in the use of subjects?

The percentages of the use of overt subjects are similar in both bilingual and monolingual data; however, when the discourse-pragmatics functions of the usages are analyzed, the difference between the bilingual and the monolingual child becomes clearer. In the low information category, the bilingual child uses more overt subjects than the monolingual child. When the developmental pattern is observed across the MLU stages, the difference in the developmental path between the bilingual child and the monolingual child is noticed. We find out that the bilingual child uses higher rate of redundant subjects even her proficiency in the language increases.

b) What is the developmental pattern of the bilingual child in yes/no and wh-questions?

We observe that the bilingual child made some errors in yes/no question formation which are about the sequence of the morphemes in noun questions and in progressive tense with *–yor* morpheme. It should be noted that, these kinds of errors in yes/no questions are also found in monolingual Turkish children in the literature, though they are very rare. As to wh-questions, the bilingual child does not make any errors in wh-questions in the placement of wh-forms. The difference in the bilingual and monolingual data is the variety of wh- words in the data through the stages. The monolingual child starts earlier to use different question words, while it takes some time for the bilingual child to use the equivalent wh-words.

c) What is the developmental pattern of the bilingual child in negation formation?

In Turkish, there are three ways for negating constructions one of which is by adding a negative marker between the stem and the other markers like tense and person. As this requires more analysis of the structure compared to the other lexical elements, the bilingual child uses the English structure at the beginning of her acquisition with a universal vocalized negation element. What is interesting is that she uses this even in the cases where lexical items are required. This transfer effect is observed only for a month; after that, she uses the target-like structures in her production.

d) What are the patterns in her usage of case markers?

The bilingual child can be called to have the most difficulty in this domain; as she makes attempts to use the case markers in her production. Thus, she makes more errors compared to monolingual children. She also goes through the four stages that Slobin mentions as 1) no marking, 2) appropriate marking in limited cases, 3) overgeneralization, and 4) full adult system. However, monolingual children do not go through the “no marking” and “overgeneralization” stages.

2. Are these patterns similar to or different from those that have been reported in Turkish monolinguals?

The linguistic patterns studied in this research show similarities to the monolingual data in terms of the kinds of the errors. The difference from the monolingual data is about the frequency of occurrence; because, not all errors are observed in every monolingual child. Some of them are mentioned as the errors which can not be analyzed because they are very rare in the monolingual data.

3. Is there a structural influence of one language on the other in the course of development?

The structural influence is clearly observed in subject use and negations. The reason of the effect of English to Turkish in subject use is English being non-pro-drop language requiring overt subject pronouns in almost every construction, while Turkish is a pro-drop language and the use of overt subjects are determined by the discourse-pragmatics functions. The structure of negations, on the other hand, influenced by English structure is appeared as a relief strategy, as Turkish negation requires some processing in the order of morphemes while English negative element is lexical and precedes the negated element which is already available in the bilingual child's knowledge. Therefore, she transfers what she knows to the unknown areas.

In conclusion, in this study, we assert that the bilingual child mainly follows the developmental paths of monolingual children; however, cross-linguistic structures are found in the data, and some rare variations found in monolingual children are more frequent in the bilingual data. The bilingual child gradually develops the cognitive patterns required for competence in linguistic domains.

5.2. Implications for ELT

In the literature, we mentioned the findings of CLI during 1960s-1980s. Some of these findings can be interpreted as implications of this study for ELT. Thus, we present the related items in the following.

1. Teachers of languages should be aware of similarities and differences between the source and the recipient language and expect underproduction or overproduction of some structures in the recipient language. Additionally, language users may also prefer using certain language structures instead of others when there is more than one choice.
2. CLI may affect the rate, the developmental path and the end state of L2 acquisition.
3. Differences between the two languages are easier to acquire while similarities lead learners to make associations and interlingual identifications.
4. In some cases, transfer errors decrease when the proficiency in recipient-language increases; while in some other cases, CLI may be observed in later stages when the learner recognizes the similarities and differences between the two languages as his/her proficiency increases.
5. CLI may occur in language forms, but also in meanings and the way of language use in pragmatic functions.

5.3. Suggestions for Further Studies

In this study, CLI was investigated only from L1 to L2 (forward transfer); whereas, CLI also occurs from L2 to L1 (reverse transfer). In further studies, a bilingual child's both languages should be recorded and analyzed to see the effects of CLI in both ways. In the following studies, the parental input factor should be taken into account to see the frequency of occurrence of the different linguistic forms; and transfer effects in perception and comprehension can be investigated.

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PAPERS

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PROJECTS

2007- Present **:** The MacArthur- Bates Communication Development Inventory (CDI) adaptation project in Turkish, funded by the National Science Council of Turkey (TUBITAK).

ATTENDED CONFERENCES- SEMINARS- SUMMER SCHOOLS

- International Symposium on Bilingualism 7, Utrecht, HOLLAND, 2009.
- American Culture and EFL Teaching in Turkey, Columbia University Teachers College Summer Institute, METU, Ankara, TURKEY, 2009.
- The Linguistic Institute, Barcelona, SPAIN, 2008.
- Teacher Development Conference, "On the Quality Trail- A Sound Basis for the Future of Teacher Training", TOBB University of Economics and Technology, TURKEY, 2008.
- ELT Conference, "Going Beyond Methods: Active Teaching Strategies", Cukurova University, TURKEY, 2008.
- International ELT Conference, "Stepping Over Thresholds: Transitions in English Language Learning and Teaching", Cukurova University, TURKEY, 2008.
- Intercultural Dialogue IP Seminar, Adana, TURKEY, 2008.
- 5th ELT Conference, Buyuk Kolej, Ankara, TURKEY, 2007.
- 5th ELT Conference, "Technology C.A.L.L.s you!", Ankara University Development Foundation Schools, Ankara, TURKEY, 2007.
- 4th ELT Conference, Büyük Kolej, Ankara, TURKEY, 2006.
- 9th METU International ELT Convention, "The Fusion of Theory and Practice", METU, Ankara, TURKEY, 2006.
- "Storytelling Skills for the Classroom" Seminar, Jan Blake, Vilnius, LITHUANIA, 2006.