## Bilingual development of English preschool children in Turkey

Bloomfield (1933: 56) suggested that bilingualism means 'a native-like control of two languages'. Diebold (1968), on the other hand, defined bilingualism as the ability to use or comprehend more than one language. Thus, we can assume that a bilingual is an individual who can demonstrate any skill between these two extremes. Though in the past bilingualism was considered to have negative effects on intelligence and learning ability, case studies of bilingual children conducted since the 1940s supported the efficiency of early bilingualism. Reviews on such case studies come from Hatch (1978) and McLaughlin (1984) (see also McLaughlin, this volume). The study most often cited is that of Leopold (1939-1949). His study was based on Hildegard's learning of English and German. Another wellknown study comes from Burling (1959). This study is about Stephen learning Garo (Indian) and English. Although Stephen entered the second language community at the age of $1 ; 4$, he quickly acquired Garo. However, he lost his Garo after having left the country. As opposed to the acquisition of English, Stephen acquired the morphology of Garo, not the syntax, due to the fact that Garo was not an IndoEuropean language where meaning is often conveyed by word order rather than inflections. Mixing of the two languages was also reported. A study with special focus on the acquisition of the bilingual lexicon was conducted by Celce-Murcia (1978). This study was on Caroline learning French and English while being dominant in English. Celce-Murcia divided Caroline's vocabulary into four groups: words known in both languages and used readily (bird/oiseau), words with similar pronunciation and causing confusion (schoollécole), words known in one language only (milk, pipi), and concepts known in both languages but used in one due to the ease of articulation (garçon/boy; 'boy' being easy is utilized). A more recent study comes from Saunders (1983). This study is about Thomas and Frank learning German and English simultaneously. German is not the native language of the parents. They do not live in a German-speaking environment either. It is only that Saunders is fluent in German and wants his sons to learn German from him and English from their mother.
This chapter focuses on the acquisition of Turkish by two pre-school Englishspeaking children. The aim of the study is to investigate what strategies these bilingual children have adopted in communicating with peers and adults. Children's responses to posed questions are analysed to observe the degree of comprehension
as opposed to production. Moreover, attention is paid to strategies for communication in L2 and to patterns of language preference and language transfer.

## Design of the study

In the present study the speech samples of two pre-school English-speaking children acquiring Turkish will be analysed (Olmez, 1984; Bada, 1991). Since the method of data collection was different for each child, the procedure applied will be explained in terms of two separate cases.

## Case I

One of the children, named Ian, was monolingual in English and had American parents. He was exposed to Turkish at the age of $2 ; 9$ at a day-care centre in Adana, while playing with other Turkish children. He was in Adana because his parents had come to teach at Çukurova University. He was placed at the day-care centre the day after their arrival.
A month after he started attending the day-care centre, he was observed at this setting for a period of four months. He was visited three times a week by the researcher, and each visit lasted about three hours. During the visits he was recorded whenever the conditions permitted. Since there were many children around the subject shouting and making all kinds of noise, the recordings were not very successful. In circumstances of this kind, the research assistant made do by taking notes of the verbal and non-verbal behaviour of the subject. Thus, most of the data consisted of spontaneous speech samples and non-verbal behaviour of the subject during conversations with his peers and his teacher.

## Case II

The second child, named Serkan, had a British mother and a Turkish father. He had been brought up in Turkey within the family from the day of his birth. Up to the age of two, he had no contact with English speakers other than his own family consisting of his parents and two elder sisters. When the parents moved to a larger city, the mother had the opportunity to meet some native speakers of English with whom the child also had an opportunity to speak. However, he still did not have anybody from his peer-group to practice his English.
At the age of $2 ; 3$, the boy's mother started to work and sent him to a day-care centre. From this period on, the subject seemed to be reluctant to shift to English at home. When the subject got sick, the mother would stay at home with him. During this short period of time, a noticeable shift in language preference towards English could be noted (Olmez, 1984). The method of data collection for this child was more guided because at the time of the study he was very fluent in Turkish, perhaps primarily due to the longer period of exposure. Thus, in order to observe the instances causing a shift in the language and to determine in which language he was
more fluent, a special technique was utilized in collecting data. Four different types of conversations with two variations were recorded between the subject and adults known to the subject (see Table 1).

Table 1. Information on data collection for Case II

| Linguistic background of <br> the speaker (type) | Language of <br> conversation | Conversation sessions | Language of the book <br> (variations) |
| :--- | :--- | :--- | :--- |
| Monolingual (English) | English | One | English |
| Monolingual (English) | English | One | Turkish |
| Bilingual (English) | English | Two | English |
| Bilingual (English) | English | Two | Turkish |
| Monolingual (Turkish) | Turkish | Three | Turkish |
| Monolingual (Turkish) | Turkish | Three | English |
| Bilingual (Turkish) | Turkish | Four | Turkish |
| Bilingual (Turkish) | Turkish | Four |  |

The types of adult speakers varied depending on the adult being monolingual in English or Turkish, or bilingual but dominant in one of the languages. Variations also related to the book utilized to find topics for conversation with the subject. In one context, an English storybook consisting of pictures was made use of; in another context, a Turkish textbook consisting of lots of pictures with related exercises was utilized. The aim of using different books written in different languages, and asking different people of different language backgrounds, was to see how much the subject would be influenced and effected by the linguistic and social environment.
The first conversation was carried out in English between the monolingual English speaker and the subject, using the English book first and then the Turkish one. The second conversation was conducted in a similar fashion but with a bilingual speaker dominant in English. In the third conversation, a monolingual Turkish speaker conversed with the subject using both books. In the forth one, a bilingual dominant in Turkish conversed with the subject in Turkish using the same books.

## Data analysis

## Case I

Although the language used at home was English, the instruction provided in the kindergarten was Turkish. Therefore, the child started to become bilingual to the extent that the language of the school and community differed from the language of the home (Genesee, 1987). During the time of his stay in Turkey, the subject was
observed to have gone through certain stages towards becoming bilingual (Bada, 1991).

Since he started without any knowledge of Turkish, the subject had to go through a silent period trying to familiarize himself with the language and to adjust himself to the social environment.
Then he started to develop an awareness of the target language. One day he came home and told his mother in English that his teachers had asked the pupils to tidy the room in school. Obviously, he had not understood what the teacher had asked them to do. However, seeing the other children tidying the room after the teacher's statement, he joined them in the activity. This way, he guessed the content of the teacher's statement. He mentioned this to his mother as the most important news of the day, because it was the first time that anything said by the teacher had made sense to him.
As a next step, he started to perform required actions in response to given instructions such as 'Take off your shoes', 'Put them under your bed'. Gradually, in order to cope with the other children and to defend himself during play, he learnt certain key words that his friends used to get their basic needs fulfilled. In learning vocabulary, he went through several stages. First he refused to pronounce an introduced vocabulary item and repeated the English version. Eventually he used both versions (Example 1). When he reached a point where he felt comfortable in pronouncing the word, he used the Turkish version only.

1. Teacher - Bak bu kuş.
(Look this [is a] bird.)
Subject - No it's a birdy.
Teacher - Kuş. Çocuklar bu ne?
(Bird. What's this, kids?)
Other children Kuş. (Bird.)
Teacher - Bu neymiş?
(What do they say this is?)
Subject - It's kuş-birdy.
After having learned to respond to imperatives by performing the required actions, he started to comprehend the questions as well, but attempted to respond to them in English (Example 2).
2. Teacher - Arabayi ver.
(Give me the car.)
Subject - It's right there.
At the end of the third month, he started to imitate his peers and to utter the sentences he heard with very slight variation in pronunciation. For instance, he articulated the dental fricative voiceless rather than the voiced counterpart (Example 3).
3. Children - Biz yaptık, biz yaptik.
(We made [it], we made [it].)
Subject -Bis yaptık, bis yaptık.
In the first week of the fourth month, we observed the occurrence of imperatives such as 'ver' (give), 'at' (throw), 'gel' (come), and 'git' (go) in the speech samples of our subject. These imperatives were composed of two or three sounds that would not cause any problems of articulation, and at the same time help him to participate in activities in which other children were involved. In the second week of the fourth month, he started to use two-and three-word utterances (Example 4).
4. 

- Bak burun. (Look, [it's a] nose.)


## Case II

The data collected from the four conversations with the second subject were analysed to look into deliberate vs. non-deliberate code-switching and interference phenomena.

The term 'deliberate code-switching' is used to refer to instances where the subject is aware of the code to be used, and deliberately shifts to that language in order to be able to carry on the conversation: for instance, a shift of the language to English while talking to a monolingual speaker of English and to Turkish when talking to a monolingual speaker of Turkish. Non-deliberate code-switching takes place when the speaker unconsciously shifts to the other language. Four possible reasons were considered for this type of shift: the speaker being associated with a particular language, the topic or domain being associated with a particular language, the lack of knowledge of vocabulary of the speaker in one language, and the physical or psychological state of the speaker.

Interference in Selinker's (1969) term is the application of linguistic elements of one language while conversing in another language. Regarding the speech of our subject in Case II, interference phenomena were observed in three main linguistic domains: syntax, lexicon, and semantics. Accordingly, they are categorized as occurrences of syntactic (Example 5), lexical (Example 6), and semantic transfer (Example 7).
5.

- Where are my shoe?
- It's like a scissors.

In English some nouns are used in the plural form only as in 'scissors'. However, these nouns do not necessarily take a plural marker in Turkish.
6.

- I like dondurma.

7.     - It's a water star. (To mean 'star fish')

The subject knows the Turkish word 'deniz yıldızı' (star fish), and when he is forced to refer to the same concept in English, he tries to translate it. Not knowing what 'deniz' (sea) means in English, he uses 'water' instead. The translated phrase, however, does not refer to any concept in English nor does it help the listener to think of the 'star fish', which the subject had in mind.

## Conversation One

In Conversation One, one may assume that the Turkish book triggered the use of Turkish. With a monolingual speaker of English, the child responded 100 percent of the time in English when talking about a storybook written in English. When the topics to be discussed were derived from a Turkish book comprising mainly pictures, the subject shifted 16 percent of the time to Turkish (Table 2).

Table 2. English and Turkish responses in Conversation One.

| Responses | English Book |  | Turkish Book |  |
| :--- | :---: | :---: | :---: | :---: |
| English | Token | Percentage | Token | Percentage |
|  | 27 | $100 \%$ | 42 | $84 \%$ |
|  | 0 | $0 \%$ | 8 | $16 \%$ |

One may expect that the percentage would have gone higher if the book had been written in Turkish, and especially if it had been read to him several times. Although the book had no Turkish text but only pictures, and the speaker did not know any Turkish, it triggered Turkish because the subject had been discussing the content of the book in Turkish at school.

As can be seen from the results, the subject used English as his code when conversing with a monolingual speaker of English. While discussing the pictures in the Turkish book, several code-switches of non-deliberate nature could be noted, due to the fact that the subject had not been introduced to the English words corresponding to these vocabulary items. In some cases, the mother kept utilizing Turkish words such as 'dondurma' (ice-cream) and 'kapıcı' (apartment manager) while talking to the subject in English. Thus, the subject might have considered these terms to be cognates. The numbers of these instances of non-deliberate code-switching are indicated according to the type of transfer involved and the book utilized (Table 3).

Table 3. Categories of non-deliberate code-switching in Conversation One (Ölmez, 1984: 51).

|  | Semantic | Syntactic | Lexical | Total |
| :--- | :---: | :---: | :---: | :---: |
| English book | 2 | 0 | 0 | 2 |
| Turkish book | 1 | 1 | 6 | 8 |
| TOTAL | 3 | 1 | 6 | 10 |

## Conversation Two

Although there was only one instance of code-switching observed in the second conversation while utilizing the English book, thirteen instances could be noted during the utilization of the Turkish book (Table 4); they were all lexical in nature (Table 5). Out of this number, seven were directly associated with the type of the book used. Since the topics in the Turkish text were discussed in Turkish at the day-care centre, the subject had difficulty in talking about these items in English. Even when the conversation was not limited to the topics in the Turkish book but extended to other subjects related to his family life, we observed the subject's reluctance to use English because he was aware of the fact that the speaker also knew Turkish (Example 8).
8. - Why didn't you go to school yesterday?

- Çünkü ablam korktu.

Table 4. English and Turkish responses in Conversation Two.

| Responses | English book |  | Turkish book |  |
| :--- | :---: | :---: | :---: | :---: |
| English | Token | Percentage | Token | Percentage |
|  | 19 | $98 \%$ | 17 | $56.6 \%$ |
| TOTAL | 1 | $2 \%$ | 13 | $43.3 \%$ |

Three main reasons could be identified for instances of non-deliberate code-switching (Ölmez, 1984: 59): association of language with topic or domain, psychological state of the speaker, and lack of vocabulary.

Table 5. Categories of non-deliberate code-switching in Conversation Two.

|  | Semantic | Syntactic | Lexical | Total |
| :--- | :---: | :---: | :---: | :---: |
| English book | 0 | 0 | 1 | 1 |
| Turkish book | 0 | 0 | 13 | 13 |
| TOTAL | 0 | 0 | 14 | 14 |

## Conversation Three

No instances of code-switching could be noted. The subject carried out the conversation in Turkish with a monolingual speaker using both books without any difficulty at all.

## Conversation Four

Although no instances of code switching could be noted during the utilization of the Turkish book, there were instances of code switching comprising 10 percent of the whole conversation while talking about the topics in the English book (Table 6).

Table 6. English and Turkish responses in Conversation Four.

| Responses | English book |  | Turkish book |  |
| :--- | :---: | :---: | :---: | :---: |
| English | Token | Percentage | Token | Percentage |
|  | 15 | $10 \%$ | 0 | $0 \%$ |
|  | 135 | $90 \%$ | 70 | $100 \%$ |

Given the number of tokens, a great deal of communication took place during the fourth conversation. The length of the conversation being long reveals that the subject was more comfortable while talking in Turkish.

## Overall analysis of the four conversations

When we analyse the results obtained from the four conversations, we can draw the following conclusions. First of all, a subject's choice of language varies according to the language of the interlocutor. The amount of code-switching is greater when a bilingual interlocutor is involved. The subject is aware of the interlocutor's knowledge of more than one language and this gives him the freedom of shifting to the other language whenever he is confronted with a problem. While talking to bilinguals, the subject tends to shift to Turkish rather than to English. Shifting to Turkish is readily made whenever the linguistic background of the interlocutor or the langu-
age the topics yield encourages discussion in Turkish. The language in which the topic was discussed, rather than the language of the interlocutor, seems to trigger the shift.

With respect to the acquisition of lexical items, the following observations could be made. The use of the same vocabulary item in both languages seems to give the child the impression that the same word exists in both languages. Lack of vocabulary in one language seems to force the child to retrieve words from the other language.

## Teacher and learner strategies

According to Krashen's Input Hypothesis (1985), we can understand what is said to us if we are exposed to an input that is a little beyond our present level of competence, and we can easily acquire the language if this treatment continues. Genesee (1987: 181) suggests five strategies adopted by the teacher and three by the learner in order to make language input comprehensive. The findings of this study will be discussed in relation to these proposed strategies.

## Teacher strategies

Modification of talk is the most observed strategy. A teacher tries to use simplified, redundant and slower speech in order to facilitate comprehension by a second language learner. The same technique is applied for first-language learners (Snow and Ferguson, 1978; Ekmekçi, 1979). Most of those who are in contact with foreigners are aware of the fact that native speakers, while talking to non-native speakers in non-school settings, apply the same strategies (Long, 1980).

In the speech of the teacher directed to our subject in Case I, the number of words per utterance does not exceed four. The teacher's statements are generally in the form of a command requiring a change in the behaviour of the subject, or a question inquiring about basic needs, such as food and toilet (Examples 9-10).
9.

- Hadi, kahvaltiya.
(Come on, to breakfast)

10. 

- Karnın aç mı?
(Are you hungry?)
Direct questioning of previously presented material is another strategy encountered at schools. Teachers or native speakers involved in communication with a nonnative speaker try to reformulate misunderstood messages or try to convey the same message by other means when the non-native speaker does not seem to comprehend the message.

In Case 1, when a nurse sees the subject's finger all bandaged, she asks a general question about the child's health. When she does not get an answer, she
formulates her question in a more specific way (Example 11).

| 11. Nurse | - Ne oldu oğlum sana? |
| :--- | :--- |
| (What happened to you, son?) |  |
| Child | - [No answer] |
| Nurse | - Ne oldu eline? <br>  <br> (What happened to your finger?) |
| Child | - Anne kapı. [He points at the door] <br> (Mummy, door.) |

Defining or clarifying new or unfamiliar concepts that may cause confusion is another strategy adopted by teachers. In Case 2, the adult asks the subject what the picture is about. When the subject says that he does not know, the adult gives assurance that he does, and tries to clarify that it is a little animal, and asks him to name it (Example 12).

```
12. Adult - What is this?
    Child - I don't know.
    Adult - You do. It is a little animal. What do we call it?
    Child - Frog.
```

In Genesee's words, 'meaning can also be made comprehensible through the provision of contextual support, that is, the use of nonverbal frames of reference, such as physical objects or realia, or experiences familiar to the students' (1987: 181).

In Case 2, the adult, realizing the reluctance of the subject in answering her questions, tries to draw the subject's attention by explaining the content of the pictures, and asks for a response that has already been cited (Example 13).

| 13. Adult | - What is this? |
| :--- | :--- |
| Child | - [No answer] |
| Adult | - Here are the elves and the shoemaker. |
|  | - Who is this? [Pointing at the picture of the shoemaker] |
|  | Child |

Teachers are also sensitive to nonverbal feedback they get from their learners, because some nonverbal behaviour may lead to different denotations depending on the culture of the learner. Other qualifications or strategies of the adult affect the learner in adjusting himself to the environment and to start working on his second language. For instance, in Case 1, one of the boys at the day-care centre who usually led the other children around him has decided to include our subject into the group. When one of the children was opposed to this, he said, ' N (initial of the American boy) is just a baby, he doesn't know how to speak. My little brother can't speak properly either'. From that day on, our subject has been included into the group, and from then on, there has been a great improvement in the speech of our
subject because he had felt the security of being a part of the group. In this instance, the leader of the group, having a small brother at home, has shown sensitivity to the subject's extraordinary situation.

One more strategy is observed as adopted by the Turkish teacher at the daycare centre while communicating with the American boy and teaching him certain vocabulary items. The teacher introduced a vocabulary item in relation to a picture or an item in the room, but the subject refused to 'admit' it. Then she asked the other children in the day-care centre to tell her the name of the object and turned back to our subject to ask the very same question. Finally, she managed elicit the requested answer.

Another strategy adopted by most mothers involved in mixed marriages is to pretend not to understand (Example 14) or to misunderstand (Example 15) the child's utterances in the other language (Ölmez, 1984: 31).


## Learner strategies

Learners may question the teacher demanding clarification, simplification or repetition. No instance of this strategy could be observed in our two cases. In Case 1, the subject did not know enough to ask for explanation. Being the only American child among all the other Turkish children, he might not have the courage to demand clarification. In Case 2, the recorded speech samples were not spontaneous; therefore, they did not yield much information regarding this type of a strategy.

Moreover, learners try to indicate the fact that they have not understood the teacher by nonverbal gestures. In Case 1, whenever the subject did not understand the teacher's question or command, he would usually put his hand up and look at her with a puzzled face. Learners also shift to their own native language especially if they know that the teacher or the adult they speak to is bilingual. This is one of the most common strategies encountered in both cases.

When the subjects realized that they lacked native-like proficiency, they were afraid of being marked as non-native speakers. Thus, they refused to speak or get involved in any conversation in the second language. A feeling of this kind, as Ryan (1983) states, has negative social connotations. As in Case 1, children in the day-care centre tried to approach the American boy, but, at initial stages, he would always refuse to play with them, and preferred to play by himself.

The subjects are successful in utilizing some key words that help them in controlling the behaviour of others. For instance, in Case 1, the American boy was very successful in acquiring certain words such as 'anne' (mummy) and 'yapma' (don't) that proved to be beneficial in defending him against other children's mischievous behaviour. Thus whenever he was in trouble, he used to get away from it with this limited number of words. Other words, such as 'çiş' (pipi) and 'su' (water) were useful to get his essential needs fulfilled.

While talking with a monolingual speaker, and not being able to find the name of the object they would like to express their need or opinion about, the subjects imitate an aspect of it, point at it, or demonstrate its function (Examples 16-18). This is also true when they are asked to name the location of an object. They either point at the object only or, along with the nonverbal behaviour, they utter demonstrative adverbials (Example 19).

| 16. | Child | - Dondurma. (ice-cream) |
| :---: | :---: | :---: |
|  | Adult | - What do you do with it? |
|  | Child | - [imitates licking] |
| 17. | Child | - Makas gibi. <br> (Like scissors.) |
|  | Adult | - Uh? |
|  | Child | - It's like this. |
|  | Adult | - It's like a fork? |
|  | Child | - No, it's like a ...[demonstrates using scissors] |
| 18. | Adult | - Have you seen a penguin? |
|  | Child | - Yes, kanatları yokmuş. |
|  |  | It can't ...[swings his arms up and down.] |
|  | Adult | - Fly? |
|  | Child | - Yes. It can't fly. |
| 19. | Adult | - Uçak nerede? |
|  |  | (Where is the plane?) |
|  | Child | - [Points at it in the book] işte. (Here.) |

When they are forced to use a suffix in the second language that they have not acquired yet, they apply the corresponding morpheme in their first language. Our subject in Case I applied English suffixes on the acquired Turkish words when he did not know how to express them in Turkish (Example 20).
20.

$$
\begin{aligned}
& \text { - kuş+es } \\
& \text { (bird+s) }
\end{aligned}
$$

## Perspective

Most of the strategies uncovered, have also been observed in children acquiring Turkish in a monolingual setting (Ekmekçi, 1979). Since our subjects have been exposed to Turkish at very early ages, the adaptation of similar strategies seems to be natural. However, it is difficult to make generalizations at this point due to the small number of subjects and observations. Further research on this matter should shed light on the issue.

## References

Bada, T., 1991. Second language acquisition: A case study of American and Turkish children. Unpublished M.A. Thesis. Çukurova University, Adana, Turkey.
Bloomfield, L., 1933. Language. New York: Holt.
Burling, R., 1959. Language development of a Garo and English speaking child. World, 15, 45-68.
Celce-Murcia, M., 1978. Simultaneous acquisition of English and French in a twoyear old. In: E. Hatch (ed.), Second language acquisition: A book of readings. Rowley, Mass.: Newbury House.
Cummins, J., 1981. The role of primary language development in promoting educational success for language minority students. In: Schooling and language minority students: a theoretical framework, 1-50. Los Angeles: Evaluation, Dissemination, and Assessment Centre.
Diebold, A., 1968. The consequences of early bilingualism in cognitive development and personality formation. In: E. Norbeck, et al. (eds), The study of personality. New York: Holt, Rinehart and Winston.
Ekmekçi, Ö., 1979. Acquisition of Turkish: A longitudinal study on the early language development of a Turkish child. Unpublished Ph.D. Thesis. The University of Texas at Austin, Austin, Texas.
Genesee, F., 1987. Learning through two languages. New York: Newbury House. Hatch, E., (ed.), 1978. Second language acquisition: A book of readings. Rowley, Mass.: Newbury House.
Krashen, S., 1985. The input hypothesis. London: Longman.
Leopold, W., 1954. Speech development of a bilingual child: A linguist's record
(1939-1949). 4 vols. Evanston, Illinois: Northwestern University Press.
Long, M., 1980. Linguistic and conversational adjustments to non-native speakers. Studies in Second Language Acquisition, 2, 177-193.
McLaughlin, B., 1984. Second-language acquisition in childhood. Volume 1: Preschool children. Hillsdale, N. J.: Lawrence Erlbaum Associates.
Ölmez, C., 1984. Code-switching in a pre-school bilingual child. Unpublished M.A. Thesis. The Middle East Technical University, Ankara, Turkey.
Ryan, E., 1983. Social psychological mechanisms underlying native speaker evaluations of non-native speech. Studies in Second Language Acquisition, 5, 148-161.
Saunders, G., 1983. Bilingual children: Guidance for the family. Cleveland, England: Multilingual Matters.
Selinker, L., 1969. Language transfer. General Linguistics, 9, 67-92.
Snow, C. \& C. Ferguson, 1978. Talking to children: Language input and acquisition. Cambridge, England: Cambridge University Press.

