# A Longitudinal Observational Study of Code Switching 

Noordin bin Noor<br>Center For Languages And Translation<br>Universiti Sains Malaysia


#### Abstract

Makalah ini mengkaji fakta-fakta yang mengakibatkan penonjolan sesuatu bahasa di dalam penuturan seorang yang berdwibahasa. Kajian yang dijalankan menunjukkan bahawa pemilihan bahasa di dalam penuturan seorang berdwibahasa dipengaruhi oleh bahasa yang dikaitkan dengan orang yang dihadapi dan orang yang dituturkan. Hasil kajian ini dapat dijadikan panduan kepada Pengajar Bahasa untuk mendapatkan tindakbalas di dalam bahasa yang dikehendaki.


## Introduction

The present study is primarily concerned with determining whether the prominance of one language over another in alternating use of English and Malay in the speech of a bilingual speaker whose native tongue is Malay is influenced by the anticipation of context. In a study by Herman and Shield (1960) with newly arrived immigrants to Israel from Poland, they were told that the child spoke only Polish to the parents at home and continued to do so when they took him to the nursery school. But when the school came into view (and even before he entered its gates), he/she switched over to Hebrew. The questions of the prominance of one language over another, in particular L1 over L2 or vice-versa, is an interesting question, the answer to which would provide enlightened guidance to educators concerned with the teaching of English as a Second Language and also to those concerned with bilingual education.

This study is designed to inquire into the possibility of context influencing the dominance of L1 over L2 (or visa-versa) in the oral expression of a bilingual child. Comparison of aspects of performance in the bilingual's two languages is made.

The following questions are asked in search of meaningful indices of the differences in performances in oral expression:

1. Does the speaker (Subject) show a preference for one of her languages correlated with the perceptual field or in anticipation of context?
2. Will the input language influence subject's language output?
3. Will performances in different topical domains influence the Subject's choice of language or the dominance of one language over another?
4. Will the use of one language over another attach significance to the person or the underlying role attached to the person in reference?

## The Subject

The Subject (henceforth ' S ') for this study is my youngest daughter, Norliza who is 9 $1 / 2$ years old and native speaker of Malay.

Prior to coming to the United States, her exposure to English (British - English) was on attending kindergarten at the age of 5 where the medium of instruction was mainly English and at the age of 6 through 9 in a public school where the medium of instruction was mainly Malay and English was taught as a subject. The frequency of contact was 5 periods ( 40 minutes a period) a week. English is not used for daily interactions among learners in most Malaysian Schools.

In the home, since all the members of the family are 'proficient in English, S was further exposed to English apart from her formal exposure in the classroom. It could be said that her exposure to English was greater than most of the children in her class. This is a common situation in a Malay family whose parents or family members are English educated. S's exposure was further extended through English television programs and movies.

At the time this study was carried out, S had been in the United States for $11 / 2$ years. Since her arrival she had been attending a public school in San Jose. Even though she is now (in manner of speaking) experiencing 'total immersion' she is still sporadically exposed to her native tongue in the home, mainly with her mother. Her exposure to the language could be said minimal, since in the home the other family members often code-switched between English and Malay.

## Procedure

This study is based on twenty-minute audio recordings of 'free conversation' with S. S was unaware of the study and recordings. In order to minimize variables that might influence S to code-switch, the recordings were confined to the time S was being taken to school in the morning and while returning home after school. The topic of conversation was not preplanned, but some basic guides were prepared in order to initiate conversation, if needed, such as what to have for lunch, how the school hours were spent, about a classmate, etc. The conversations were, as far as possible, allowed to be dominated by S and pertaining to S's topic of interest at hand.

Certain perspectives and procedures have been adopted by researchers in defining a bilingual, but to date no specific defination has been provided to encompass all bilinguals. Bilinguals have been described and measured by Category, Dichotomies and Scales' (W.F. Mackay 1979a.) In this paper I am adopting Weinreich's definition (1964): 'the alternating use of two languages'.

## Data and Analysis

In determining whether 'anticipation of context' influences the dominant use of one language over another, a word count of Malay and English found in the S's alternating speech was made. In doing this, it is intended to determine whether S's pscyhological frame of mind in context anticipation (e.g. the school or the home) has an influence on S's language dominance.

Chart 1a, 1b, 2a and 2b below list the analysis of the data of S's total Malay and English output with Malay or English input from the interviewer.

In Chart 1a, utterances consisted of $39.5 \%$ Malay and $61.5 \%$ English words during the early hours of the day on the way to school. On returning home from school with Malay input (Chart lb), S's utterances consisted of $34.6 \%$ Malay and $65.4 \%$ English. The above figures represent the ratio of Malay and English words found in S's response to Malay input.

In Chart 2a, in response to English input, on going to school from S's home, it was found that S's responses consisted of $19.4 \%$. Malay and $80.6 \%$ English words and on returning home from school it was $27.2 \%$ Malay and $72.8 \%$ English.

## Chart 1a

Input - MALAY
Context - GOING TO SCHOOL

| No. Malay <br> Words | $\%$ | No. English <br> $\%$ | $\%$ | Diff. <br> $\%$ | M/E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 122 | 36.5 | 212 | 635 | 27.0 | $(+\mathrm{E})$ |
| 81 | 38.4 | 130 | 61.6 | 13.2 | $(+\mathrm{E})$ |
| $* 153$ | 53.9 | 131 | 46.1 | 7.8 | $(+\mathrm{E})$ |
| 87 | 41.8 | 121 | 58.1 | 16.4 | $(+\mathrm{E})$ |
| 24 | 13.7 | 151 | 86.3 | 73.6 | $(+\mathrm{E})$ |
| 467 | 39.5 | 745 | 61.5 | 22.0 | $(+\mathrm{E})$ |

Chart lb
Input - MALAY
Context - GOING HOME

| No. Malay <br> words | \% | No. English <br> words | \% | Diff. <br> $\%$ | M/E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 103 | 40.7 | 150 | 59.3 | 18.3 | $(+\mathrm{E})$ |
| 76 | 29.2 | 184 | 70.8 | 41.6 | $(+\mathrm{E})$ |
| 38 | 15.7 | 204 | 84.3 | 68.6 | $(+\mathrm{E})$ |
| 291 | 54.8 | 365 | 55.6 | 0.8 | $(+\mathrm{E})$ |
| 152 | 30.5 | 345 | 69.4 | 39.8 | $(+\mathrm{E})$ |
| 660 | 34.6 | 1248 | 65.4 | 30.8 | $(+\mathrm{E})$ |

Chart 2a
Input - ENGLISH
Context - GOING TO SCHOOL

| No. Malay <br> words | \% | No. English <br> words | $\%$ | Diff. <br> $\%$ | M/E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 42 | 21.8 | 151 | 782 | 56.4 | $(+\mathrm{E})$ |
| 34 | 30.9 | 280 | 69.1 | 30.2 | $(+\mathrm{E})$ |
| 75 | 27.8 | 195 | 72.2 | 44.4 | $(+\mathrm{E})$ |
| 70 | 20.8 | 268 | 79.2 | 58.4 | $(+\mathrm{E})$ |
| 31 | 16.8 | 153 | 83.2 | 67.2 | $(+\mathrm{E})$ |
| 252 | 19.4 | 1047 | 80.6 | 61.2 | $(+\mathrm{E})$ |

## Chart 2b

Input - ENGLISH
Context - GOING HOME

| No. Malay <br> words | \% | No. English <br> words | $\%$ | Diff. | M/E |
| :---: | :--- | :---: | :---: | :---: | :---: |
| 80 | 28.0 | 206 | 72.0 | 44.0 | $(+\mathrm{E})$ |
| 57 | 29.1 | 139 | 70.9 | 41.8 | $(+\mathrm{E})$ |
| 88 | 28.5 | 221 | 71.5 | 43.0 | $(+\mathrm{E})$ |
| 77 | 22.1 | 272 | 77.9 | 55.8 | $(+\mathrm{E})$ |
| 84 | 29.7 | 196 | 70.3 | 50.6 | $(+\mathrm{E})$ |
| 386 | 27.2 | 1034 | 72.8 | 45.6 | $(+\mathrm{E})$ |

Note: $\quad+E$ ) Indicates English dominant
(+M) Indicates Malay dominant

Chart la and lb show a high ratio of English words found in S's speech as compared to Malay words, irrespective of the anticipatory of context in view. On going to school and returning home the amount of English words used was $38.0 \%$ and $30.8 \%$ respectively higher than Malay.

Chart 2a and 2b, also support this finding, English being more dominant in S's speech, on going to school English was higher by $61.2 \%$ and a returning home $45.6 \%$.

It is also interesting to note that when the input language in English, the use of Malay is less than when the input in Malay. It can be seen from the figure below (Chart 3) that there is a significant drop in the use of Malay words when the input language is English.

## Chart 3

| Input | Output |  |
| :--- | :---: | :---: |
|  | Malay | English |
| MALAY | 39.5 | 61.5 |
|  | 34.6 | 65.4 |
| ENGLISH | 19.4 | 80.6 |
|  | 27.2 | 72.8 |

The use of Malay dropped from $39.5 \%$ and $34.6 \%$ to $19.4 \%$ and $27.2 \%$ respectively. Based on these figures it can be concluded that language input is a determining factor rather than context in the dominance of one language over another in the case of the subject under study.

With reference to the conversation extracted from the recordings (Example $\mathrm{A}, \mathrm{B}$ and

C below), it can also be seen that when the topic of conversation was related to happenings in school, S switched more to English irrespective of language input. Even though the input was Malay, S's utterances were $77.4 \%$ English, and when the input was English, S's use of English was 69.9 \%.

In analyzing the examples below, it may be concluded that 'topic' influences the dominance of one language over another. In the S's case, topics related to school, (which has English psychological significance to $S$ ) is a determining factor in the S's use of a higher percentage of English than Malay. In Example A, the use of English is 77.4\% and in Example B 69.9\%.

Topical influences on interchanging use of languages by S (a bilingual) is further determined with reference to S's responses (underlined) in example D below. S switched more to Malay, her native tongue, when the topic was related to personal health.

But when responses in references to S's brother, a switch to English was made. S's brother ( 13 years old) could be termed to S, to perform the 'English role'. This is evident from the daily language interchanges between S and her brother being dominantly English. Example E shows that $S$ responded exclusively in Malay when the topic of conversation was related to returning home to Malaysia and also when relating to her grandmother.

## Conclusion

While the present study is not conclusive, it has shed light clarifying the falsity of relying totally on impressionistic opinions formed with regard to the alternating use of English and Malay. This study has shown my long standing impression that S is dominantly Malay in her speech is of suspect.

This study has shown the need for systematic and scientific observations to provide explanations to alternate language use or speech of a bilingual. It has also shown that the factors that influence switching in the speech of a bilingual varies. A bilingual slips-back to his native tongue when topic of personal nature is encountered. Apart from the topic, the language role attached to the person is of psychological significance in determining the language choice.

This study has shown that the anticipation of context (Hermon and Shield, 1960) does not influence Language dominance of a bilingual.

## Significance

The above findings have pedagogical significance for the 'Teaching of English As A Second Language.' Since language teaching is learner oriented, teachers should have a better understanding of students' psychological make-up.

This study has shown that teachers should try to develop and instill in the learners' mind the role an English teacher plays in and out of the classroom. He should potray himself to the learners that he is 'English'. In this case, he takes the role of an English speaker.

The teacher should, in a manner of speaking, be the 'switch' to light the bulb in the speakers' mind so that English emerges as the learners' dominant language at the point in time. The teacher will act as a replacement of the English environment that is lacking especially; in the Malaysian context. He also initiates the need for the learner to communciate in English. This is deemed very necessary, in particular, in Malaysia, where the environment is not conducive for the learner to emerse himself into the language environment. Furthermore, the learners are culturally and politically influenced in their choice of language.

The learner may also be culturally compelled to use his native tongue when relating to a fellow native speaker, for fear of being alienated by his peers. Thirdly, since Malay is the National Language of the nation, the learner may feel guilty of placing dominance on English. These are factors English teachers are up against today.

Teachers of English then have to find means and ways of attaching the English role to themselves and at the same time instill confidence in the learners that they are not contravening their culture or national policy.

This study has also provided an insight for curriculum planning, in particular, the topics to be selected for class activity. Topics of personal nature such as personal health and discussion of persons who are associated to L1 role, could be delayed to a stage where the learner is more 'comfortable' in the language. The planner/teacher should try to relate to topics and persons that are more associated to English functions or role.

As teachers of English, we should leave no rock unturned in persuing this matter so as to ensure that learning and acquisition takes place in our learners. We have an important role to play so as to ensure that our learners are provided with the best assistance. We, as facilitators, should facilitate the learners in meeting their needs.

## Example A

In Masa break main dak?
S. Main. Nasib baik adik tak kena detention.

In. Fasal apa?
S. The ball bukan, masa break teacher writes nicely but our class number bukan. Lepas tu they thought that was theirs because tu was nineteen they take away from us. Lepas tu depa bagi dekat the server. Kita kena main kalau we want that ball juga we have to play. Lepas tu I ask my fried because I don't want to play with them. They are too rough bukan. Lepas tu, but we got the ball backlah, but we had to explain to the teacher.

In. Adik terang macam mana?
S. Adik tak explain. My friend explain.

In. Awat adik tak pi jumpa teacher?
S. Saja. Tak nak. Lepas tu she says, my friend says, we have to save the number nineteen.

In. Habis apa? Kawan adik kata apa?
S. My friend says we have to save the number.

In. Esok boleh main lagi.
S. Kalau we don't got the number nineteen tak pa. Today yang Who never read in the book, yang 'The American' yang he don't call bukan, yang adik tak kena bukan tapi I don't read it.

## Chart 2b

Input - ENGLISH
Context - GOING HOME

| No. Malay <br> words | \% | No. English <br> words | $\%$ | Diff. | M/E |
| :---: | :--- | :---: | :---: | :---: | :---: |
| 80 | 28.0 | 206 | 72.0 | 44.0 | $(+\mathrm{E})$ |
| 57 | 29.1 | 139 | 70.9 | 41.8 | $(+\mathrm{E})$ |
| 88 | 28.5 | 221 | 71.5 | 43.0 | $(+\mathrm{E})$ |
| 77 | 22.1 | 272 | 77.9 | 55.8 | $(+\mathrm{E})$ |
| 84 | 29.7 | 196 | 70.3 | 50.6 | $(+\mathrm{E})$ |
| 386 | 27.2 | 1034 | 72.8 | 45.6 | $(+\mathrm{E})$ |

Note: $\quad+E$ ) Indicates English dominant
(+M) Indicates Malay dominant

Chart la and lb show a high ratio of English words found in S's speech as compared to Malay words, irrespective of the anticipatory of context in view. On going to school and returning home the amount of English words used was $38.0 \%$ and $30.8 \%$ respectively higher than Malay.

Chart 2a and 2b, also support this finding, English being more dominant in S's speech, on going to school English was higher by $61.2 \%$ and a returning home $45.6 \%$.

It is also interesting to note that when the input language in English, the use of Malay is less than when the input in Malay. It can be seen from the figure below (Chart 3) that there is a significant drop in the use of Malay words when the input language is English.

## Chart 3

| Input | Output |  |
| :--- | :---: | :---: |
|  | Malay | English |
| MALAY | 39.5 | 61.5 |
|  | 34.6 | 65.4 |
| ENGLISH | 19.4 | 80.6 |
|  | 27.2 | 72.8 |

The use of Malay dropped from $39.5 \%$ and $34.6 \%$ to $19.4 \%$ and $27.2 \%$ respectively. Based on these figures it can be concluded that language input is a determining factor rather than context in the dominance of one language over another in the case of the subject under study.

With reference to the conversation extracted from the recordings (Example $\mathrm{A}, \mathrm{B}$ and

## Example C

S. Tengok my teacher gave me this.

In. Your teacher gave you this?
S. Cause she picks my name kan, apa ni dalam box kan dia buatlah sendiri kan, lepas tu, she picks my name, lepas tu adik dapat yang bi.

In. Mr. Petersonkah?
S. No. Another teacher.

In. Ready to go? Did Mr. Peterson ask you why you didn't come to school?
S. No. He is not here today.

In. $\quad \mathrm{Oh}!\mathrm{He}$ is absent?
S. Ha !

In. He went on stike?
S. No.

In. Because I heard the teachers are going on strike. So who took your class?
S. Apa ni ..... her name is too long. I don't know how to pronounce her name. But she is a lady.

In. A nice lady?
S. Ah - Ah, tapi she's roughlah.

In. Rough! Everyone is rough to you. Who is not rough?
S. No, she is a bit nice. Tapi sometimes she scoldlah sikit. Tapi adik tak kena pun. You know I didn't get detention pun in school. Ha! Ha!

## Example D

S Adik ada hingus sikit
In. Apa dia? Hingus. Kalau sakit jangan pi
Awat tak telefon balik?
S.

Saja tak nak.
In.
Adik rasa apa?
S.

Adik rasa hingus, rasa macam nak bersin.
In.
Rasa nak bersin?
S. (Change of topic-refer to her brother) Are you going to get boy?

In. Babah nak pi pos surat dulu, lepas tu kita pi ambil boy. Lain kali kalau sakit telefon baliklah. Oh, susah pula tak dak telefon.
S. Ha.
n. Banyak kali bersinkah?
S. $\quad Y a$, the whole day.

In. Tak dak tissuekah. Jadi adik bersin macam mana seh hingus?
S. Hingus hilang.

In. Kalau sakit tak payah pi sekolahlah. Adik sakit?
S. Tapi, I got my homework to do. My homework, my spelling all that.

## Example E

In. Kita tok sah balik adik?
Tr. 'We shouldn't go back (to Malaysia)?
S. Nak, nak balik ah. Adik nak balik.

In. Balik pi kat sapa? Nak tengok Tok Mah? Tengok Tok Mah tu. Teruk saja.
S. Adik nak tengok, adik nak balik. Tran. I want to see (my grandmother). I want to go back.

In. Apa yang seronok balik tu.
S. Ada kawan.

Tran: I have friends.
In. Sapa ada kawan di sana?
S. Adik ada.

## References

Bowen, J. Donald 'Linguistic Persfective in Bilingual Education' in Current Trends in Bilingual Education. The Hague, Mouton, 1960.

Lambert, W.E. 'Measurement of the Linguistic Dominance of Bilinguals,' in Lambert, W.E., Language, Psychology and Culture, Stanford, Stanford University Press, 1972.

Hornby P.A. Bilingualism: Social and Psychological Implications, New York, Academic Press, 1976.

Mackey W.E. "The Description and Measurement of Bilingualism," in the Linguistic Reporter, Centre for Applied Linguistics, Arlington Virgnia, 1967.

Weinreich, U. Languages in Contact, The Hague, Mouton, 1953.
Hermon and Schield In Bowen J. Donald. Measuring Language Dominance in Bilinguals, The Hague, Mouton, 1960.

