



# A Study on the Communication Strategies of Bilingual Children

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**Abstract.** Through the task of picture description, the performance of 3–4 years old Cantonese - Putonghua bilingual Child B and mandarin Child A on information points were compared. The results showed that there was no significant difference in the number of language points between two languages, and there was no significant difference in the number of description language points between Child B's first language and second language. Moreover, the second language learning strategy of child was not completely different from the first language. Child B's communication strategies were influenced by his language level. When his language level was low, he was inclined to use native-based communication strategies, especially code-switching and reduction strategy. With the improvement of his language level, the frequency of code-switching decreased, and recall strategy was less used.

**Keywords:** Bilingual children · Communication strategy · Mandarin children · Contrast

## 1 Introduction

In 1972, Selinker first proposed Communicative strategies [1], since then many scholars have worked on the definition, classification, and function of communication strategies [2, 3]. Faerch [4] and Ellis [5] divided communication strategies into two types of strategies: reduction strategies and achievement strategies. Reduction strategies include form reduction and functional reduction. The internal categories of achievement strategies include compensatory strategies and recall strategies. Compensatory strategies include: the first is the cooperative strategy: direct help-seeking, indirect help-seeking; the second is the Non-cooperative strategy: Native language-based strategy (code-switching, foreignization, direct translation, etc.); the third is the Interlanguage-based strategy (generalization, paraphrasing, word creation, Reorganization, etc.); and recall strategies mainly rely on waiting, semantic field and language. Since the classification of these communication strategies has a wide impact, this classification is also adopted in this study.

Communication strategies are different from learning strategies. Learning strategies are long-term solutions to problems, while communication strategies are short-term solutions [5, 6]. The research on communication strategies by domestic scholars started with

the introduction of foreign theories [7], and the definition and development of communication strategies [8]. As a rating scale for assessing learners' speaking proficiency, the picture description task is often used, including the number of information points mentioned by learners and the form of the language compared with the standard information points of the target language in communication [5, 9, 10].

Such communication strategies were also present in bilingual children. Reduction strategies were also present in 4-year-old Cantonese dialect children learning Mandarin, such as:

- (1) “妈妈, 垃圾桶, 垃圾放进去。” (“Mom, trash can, put the trash in.”)
- (2) “拉过来你的手, 妈妈。” (“Pull over your hand, Mom”.)

When the Cantonese children began to learn Mandarin, he could understand the word “Ba”, but did not output it. Therefore, in order to avoid using the word “Ba”, he would use a reduction strategy and use two or more simple sentences to express the meaning to achieve the purpose of communication. However, there are no studies on the communication strategies used by children with Chinese dialects to learn Mandarin. This study investigated the characteristics and patterns of Cantonese dialect children's communication strategies in learning Mandarin by comparing the way dialect children learn Mandarin with Mandarin children's oral narration by looking at pictures, and a two-month follow-up survey of Cantonese-speaking child's learning process of Mandarin.

## 2 Research Methodology

### 2.1 Research Questions

The main research questions of this paper are what are the main communication strategies used by bilingual children, what are the differences in children's communication strategies when they read pictures orally in their first and second languages and do the communication strategies use by children change as their language level increases.

### 2.2 The Task

Two children are provided with two sets of 4-frame pictures. The first set of pictures shows a child preparing to nail a wall to put up a picture, but the wall is broken and the child falls down. The other set of pictures is about a girl putting apples in a bowl. Each picture needs to be expressed with the word “Ba”.

### 2.3 Testing

The analysis of the story description was derived from the method used by Ellis [5], which compares the amount of information and language expressions of Cantonese-speaking Child B in Mandarin and Cantonese dictation of picture tasks, and the amount of information and expressions of language points spoken by Mandarin-speaking Child A, respectively. To investigate the communication strategies of Cantonese-speaking Child B

in learning a second language, the two groups of photos were first presented to both children, and the children were asked to dictate what they observed and recorded them, and then transcribed their recordings. This was supplemented with follow-up observations of Cantonese Child B since learning Mandarin for two months, and the weekly one-hour recordings were transcribed to understand the dynamic trend of his communication strategies.

## **2.4 Subjects of Investigation**

In this survey, a 4-year-old Child B speaks Mandarin in the Cantonese dialect, and a 3-year-old Child A speaks Mandarin. Since Child B was born, his grandparents have spoken Cantonese with him. His mom and dad talk with B in Cantonese most of the time. When reading poetry or telling stories, they use Mandarin. After 3 years and 10 months, Child B went to kindergarten. The kindergarten was mainly in Mandarin. The results of the previous study showed that Chinese children aged 1 year and 11 months could not only understand and produce “Ba” sentences but could also produce various types of “Ba” sentences by the age of 2.5 years at the latest [10]. Interviewing Child A’s mother, it is found that A has been able to produce different types of “Ba” sentences.

## **3 Results and Discussion**

### **3.1 The Difference Between Monolingual and Bilingual Speaking**

The results are described and counted mainly in terms of the number of information points and the linguistic form of expressing them.

From Table 1 and Table 2, it can be seen that the number of information points expressed by the Child A is more than Child B, but in the same topic, the number of information points expressed by bilingual Child B there is no difference, no matter whether he uses one language or two languages to oral stories. Generally speaking, no matter which language sequence is used by bilingual Child B, the information expressed was similar.

Although bilingual Child B sometimes noticed some information points, the language forms of expressing information were different from that of Mandarin Child A. For example, Mandarin Child B expressed “move a square picture here”, he used the verb “come here”, while bilingual child expressed “move a picture and put it here” (with gestures), and bilingual Child B often used various auxiliary methods in communication. Bilingual Child B often used various communication strategies or gestures to achieve the purpose of communication.

### **3.2 Communication Strategies of Bilingual Children**

Child B used various communication strategies when narrated stories, mainly including the following communication strategies:

Table 1. Information points for the description of cartoon one by Child A and Child B

Object	Information points											
Child A	孩子(Child)	搬(move)	四方形图画(square picture)	过来(come over)	凳子(stand in the stool)	用一个锤子(with hammer)	敲墙(knock on the wall)	把图画挂上去(hand the picture)	马上(immediately)	他摔倒了(he fell down)	一敲墙就坏了(It was broken when you hit the wall)	凳子掉了(the stool fell)
Child B (Mandarin)	哥哥(Brother)	搬(move)	幅画(A picture)	放这(Set it here)	一个锤子(A hammer)	锤子(hammer)	画挂上去(hand the picture)	列出来(List it out)	the stool fell(凳子跌了)	People fell down(人跌倒了)	the wall is broken(墙坏了)	
Child B (Cantonese)	哥哥(Brother)	搬(move)	幅画(A picture)	过嚟(Come over)	用锤(With hammer)	敲墙(knock on the wall)	挂好幅画(hand up picture)	佢敲烂墙啦(he knocked on the wall)	凳跌落嚟(the stool fell)	个人(that man)	跌佐落嚟又(fall again)	

**Table 2.** Child A and Child B describe the information points in cartoon 2

Object	Information points					
Child A	姐姐(Sister)	手里拿着苹果 (Apple in hand)	手里拿着碗 (With a bowl in his hand)	把苹果放进碗里面 (Put the apples into the bowl)	最后 (Finally)	完成了 (finished)
Child B (Mandarin)	姐姐(Sister)	拿苹果 (Take the apple)	拿碗 (Take a bowl)	放苹果 (Put the apple)	放碗里 (put in a bowl)	
Child B (Cantonese)	姐姐(Sister)	攞苹果 (Take the apple)	攞碗 (Take a bowl)	放苹果 (Put the apple)	放入去 (Put in)	

### 3.2.1 Using a Reduction Strategy

Since Child B's Mandarin expression ability and vocabulary were insufficient, the reduction strategy was often used in the process of communication. The first is the Reduction of vocabulary. For example, when expressing the sentence "Knocking on the wall with a hammer" in Mandarin, Child B expressed it in Cantonese as "knocking on the wall with a hammer", while expressing it in Mandarin with gestures as "a hammer hammer", "with" and "Wall" are omitted. The second is the form reduction. The words used by bilingual Child B in Mandarin and Cantonese did not correspond exactly to each other; Child B expressed "hang the picture" and "put the apple in the bowl", he avoids the word "Ba" and directly used "The picture hung up" and the two single sentences "Put the apple" and "Put it in the bowl" were expressed, but Child A said them naturally. There is no "Ba" in Cantonese expressions. Although there is a similar usage of "Jiang" instead, the "Ba" is a sentence is frequently used sentence in Mandarin, and "Jiang" in Cantonese is "extremely uncommon" [11]. The word "Jiang" is more common in the topical language of current affairs topics [12]. In the observation of Child B, he hardly uses the word "Jiang" in oral Cantonese communication. For example, in his daily life, he used Cantonese to express "拉你的手过来(pull your hand over)" instead of "将你的手拉过来(pull your hand over)". Since there is no direct corresponding "Ba" sentence in the first language, and the frequency of "Jiang" in the first language is extremely low, the bilingual child B acquire the "Ba" sentence relatively late in the second language. Both children used "hang up", and bilingual Child B had been able to explain in the target language instead of completely transplanting the first language, which showed that the language level had improved.

### 3.2.2 Mother Tongue-Based Strategy

#### 3.2.2.1 Expression Through Non-cooperative Strategies Such as Direct Translation into the Native Language

In expressing the language points of pictures, Child B directly appropriated the Cantonese “幅画(picture)” into the expression in Mandarin; compared with Mandarin Child A, Child B tended to use the monosyllabic words “锤(hammer)” and “凳(stool)” for nouns instead of the disyllabic word “锤子(hammer)” and “凳子(stool)”, this was also influenced by the first language Cantonese; Child B used “跌(falled)” instead of “掉(falled)”. “跌(falled)” is a Cantonese expression.

#### 3.2.2.2 Code-Switching Strategy

Child B's code-switching used the second language Mandarin instead of the first language Cantonese. Li Yuming [13] believed that children have a bias in using language, and this bias is not only in their preference for a certain word he has just learned but also in their preference for using a certain language. In order to gain a more comprehensive understanding of Child B's communication strategies, a two-month follow-up investigation was also conducted on Child B. In the process of learning a second language Mandarin in the first month, he used Mother tongue-based strategy a lot and conducted Cantonese Code-switching as the main one. Judging from the transcoded text, the number of code-switching times reached 184, while the frequency of using code-switching in the second month was greatly reduced, and the number of code-switching times was only 73 times.

#### 3.2.2.3 Interlanguage-Based Strategies

In the picture dictation task, Mandarin Child A and bilingual Child B have a generalization phenomenon, and both use “一个锤子(a hammer)”. In ordinary observation, whether it is in the Cantonese or Mandarin learning process, the phenomenon of generalization was common, such as “我们玩一阵就回家(We Played for a while and then went home)” would be generalized to “我们玩五阵就回家(we played five while and then went home)” and so on.

Two methods were used to assess the communicative behavior of the bilingual children in this study: (1) by comparing the Cantonese child's oral picture task in Mandarin with the Mandarin child's information points and linguistic expressions; (2) by examining the dynamic change process of the bilingual child's communication strategies in a two-month follow-up.

There was a difference in the number of information points and the linguistic expressions used by bilingual children to dictate pictures, but there was little difference in the number of words used by bilingual children to dictate pictures in their first and second languages, and there was a strong correlation between the communicative behavior of bilingual child when he used both languages to describe the same topic, which suggested that communication strategies skills were closely related to language ability and cognitive experience.

Can it be said that children's second language communication strategies are completely different from their native language? Obviously not. The two-month recording revealed that Child B would say “我饱了(I'm full)”, and they would also say “我讲饱了,

不想再讲了(I'm full of speaking, and I don't want to talk anymore).” The child's generalization of the quantifier “个” was particularly noticeable, especially in Cantonese and Mandarin. For example, “拉一个尿(pull a pee)”, “玩一个飞机(play a plane)”, and so on. Such expressions were found in both first-language Cantonese and second-language Mandarin, and there was no absolute situation where Cantonese was used correctly and Mandarin was used incorrectly. So it was a generalization phenomenon in the process of Child B's language learning. This was also consistent with Selinker et al., who suggested that the discourse domain was closely related to the experience of the person in the relay language [14]. It can be seen that Child B's second language communication strategies were not completely unrelated to their native language learning strategy, and there is not enough evidence to prove that child completely adopted a new set of native language learning strategies in the process of learning a second language.

Ellis [5] pointed out that generally speaking, learners with lower language proficiency tend to use reduction strategy or native-based strategy, while learners with higher proficiency are more accustomed to using target-language-based strategy. Affected by language level, Child B often used reduction strategies such as vocabulary reduction and formal reduction in communication, especially when one language did not have a complete corresponding language or one language was not frequently used, bilingual child was more inclined to use reduction strategy. Child's language ability is weaker than adults, so they rarely used recall strategies in communication, and it hadn't been found in the test.

## 4 Conclusion

When dictating a story through pictures, the number of oral information points depends on the child's ability to comprehend the pictorial information. No matter which language he used, he could always find a way to express himself, in this study, bilingual Child B had no obvious difference in the information points and language expressions in the process of using the first language or the second language. For bilingual children in the process of learning a second language, the use of communication strategy was a dynamic process. In this process, it would be affected by various factors, especially his own language level ability. When his second language proficiency was relatively low, he tended to use a code-switching strategy, and when his language proficiency and knowledgeability improved, he would use the target language for code-switching. However, the case study lacks confirmation of group cases, which is the limitation of this study.

**Authors' Contributions.** This paper is independently completed by Huomei Yang.

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