

Bilingual Language Acquisition in Children of International Marriages

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Abstract

Environmental factors that influence bilingual language acquisition in children of Japanese-Taiwanese international marriages were investigated in a three year longitudinal study. To elucidate the factors that influence retention of the mother tongue and the circumstances that promote second-language acquisition, this study focused on children of Japanese-Taiwanese marriages who attended a Taiwanese school and received supplemental Japanese language instruction on the weekend. Over a three-year period, the children and their parents were given annual tests in Japanese and Chinese vocabulary and a questionnaire on the language environment. These were used to assess simultaneous learning of Japanese and Chinese in Japanese children living in Taiwan, with a focus on changes in bilingual ability that occur with advancement at school, awareness of the language environment, and general development. The results revealed that changes in bilingual ability and whether improvement occurs for only one or both learned languages is connected to the desire to study, general development, and the degree of contact with bilingualism in everyday life.

Key words: bilingualism, longitudinal research, Chinese and Japanese language acquisition, vocabulary text, investigation of environment

Introduction

Bilingual children are raised in complex social, family, and school environments. Previous research on the factors influencing bilingualism has generally been limited, and has only considered factors such as children at the age when they enter school (Johnson & Newport, 1989; Uchida, 1997, 1999; Cummins & Nakajima, 1985; McLaurghlin, 1984, 1985; Lee, 2001), their attitude toward learning (Hermann, 1980), motives (Strong, 1984), learning environment (Brown, 1983), parents (Feenstra, 1969), friends (Elias-Olivares, 1976), and racial minority consciousness (Genesee, 1983) in isolation; rarely have these various influences been investigated in a comprehensive manner. Many factors that are complexly intertwined are involved in the process of acquiring a second language, including not only the purpose of study and education level but also characteristics of the students, such as their motivation, attitude, and personality traits, as well as factors related to their sociocultural circumstances (Yorio, 1976; Brown, 1994). Therefore, detailed investigation of the environmental factors involved in second-language acquisition--such as the form of instruction, motivation, the degree of language use, everyday life, character, identity, parental education level, and economic circumstances--is

necessary to increase our understanding of individual differences in second language acquisition. In other words, it is important to investigate not only the development of bilingualism in children but also the social environment in which it occurs. For example, a study by Harly and Wang (1997) revealed that the ability to learn pronunciation does not necessarily decay in adults, but rather that environmental differences influence the ease of learning. In fact, learning environment, rather than age, is the decisive factor (Singleton & Lengyel, 1995; Romaine, 1995).

The process of learning a second-language is connected in complex ways to factors relating to the individual learner and the surrounding socio-cultural environment, including the goal of learning, motives, attitude, and personality (Yorio, 1976; Brown, 1994). However, not enough attention has been paid to what these types of factors entail, or to the possible relationships or interactions between them. Furthermore, few studies consider both the Chinese and Japanese languages. For these reasons, it is necessary to investigate the role of the language environment in second language acquisition in greater detail. Examining the form of instruction, motives, frequency of language use, everyday life, personality, identity, and parents' education level and economic circumstances can deepen our understanding of the particulars of second language acquisition.

Previous Research

The environmental factors that influence language acquisition in children include guidance from teachers and parents, issues regarding the child's personal development, and the language environment at home and school. Understanding precisely how these factors affect the process of learning language is critical to the question of whether limited exposure during childhood is sufficient to foster bilingualism, as well as questions regarding the main influences on language acquisition. Raising a bilingual child involves several complex and interrelated factors, including the social, family, and school environment. Setting aside individual factors, Landry and Allard (1992) have offered a "macroscopic model" for theoretically understanding the influence of environmental factors on second language development. Their model describes the mutual effects of sociological and socio-psychological environmental factors, as well as individual factors at the psychological level. They argue that the dominance of the mother tongue or the second language is determined by the relationship between the individual and society. Furthermore, as parents are important participants in children's language acquisition, it is also important to investigate children's awareness of the language education their parents received. In early stages of learning in particular, the language used by the parents and the language encountered in the local society can be very influential. For example, Ishii (2000) gave a questionnaire to the parents of Portuguese children to investigate learning of the mother tongue at home. The results indicated that while the parents valued developing both the children's mother tongue and Japanese, they did not take any steps toward promoting learning Japanese or the mother tongue at home.

Prior research has shown that simply growing up in a bilingual environment does not guarantee that children become bilingual (e.g., Ono, 1989; Yamamoto, 2001). Since the 1970s, opinions concerning second-language acquisition have become greatly fragmented, as they have expanded to encompass an increasing number of issues. However, this research is largely based on data from speakers of English or other European languages (Yoshioka, 1999). While the number of native Japanese speakers who speak Chinese as a second language is increasing, little research has examined the joint use of Japanese and Chinese (Lee, 2003). Recently, Asia has witnessed diversification of children and pupils, and, particularly in Taiwan, the number of foreign residents taking Taiwanese spouses has increased. Japanese spouses are the fourth most numerous in Taiwan—a trend that has been on the rise in recent years (National Immigration Agency, Taiwan, 2010). Because of the difficulty in preserving and developing both Chinese and Japanese language abilities among those living for

extended periods in Taiwan, caregivers in such households are particularly attentive to their children's Chinese language abilities, while they try to prepare them for returning to Japan through Japanese language study. A systematic investigation of Chinese-Japanese bilingualism can therefore be a useful means for providing educational guidelines for the development of bilingualism among such children.

The development of a second language depends not simply on the child alone, but on the balance between the amount of second-language contact at home, at school, and in society. Therefore, when support from schools or society is absent, encouragement from the family plays an important role. Furthermore, bilingual abilities are not static, but are acquired through dynamic change. Awareness of the language environment also changes over time. Therefore, a longitudinal study is needed to examine in detail the factors involved at various stages of bilingual language acquisition.

Through a longitudinal investigation, the present study aims to clarify the role of the linguistic environment on bilingual language acquisition in children. The goal is to investigate changes in environmental awareness and how this relates to improvement or deterioration of Japanese and Chinese linguistic abilities. This study focuses on Japanese and Chinese linguistic development in a group that has rarely been studied, the children of Japanese-Taiwanese marriages. Following Japanese children growing up in a Japanese and Chinese linguistic environment, we investigate how a second language is acquired and what influences this process at different points in time. Specifically, we focused on change in bilingual ability and awareness of the linguistic environment between the second to fourth years of primary school.

Methods

Participants

The participants were four children of Japanese-Taiwanese marriages and their guardians (who were usually Japanese). They attended regular Taiwanese schools and only had two hours of supplementary Japanese study on the weekends. The amount of time the children lived in Japan, the survey period, and the grade in school were the same for all four children.

Teaching materials

Chinese language ability was measured by a Chinese vocabulary test (Quo, 1996), and Japanese language ability was measured by a Japanese vocabulary test (Ono & Hayashibe, 1989). A language environment questionnaire was also prepared and administered. The language environment questionnaire was composed of 59 items concerning environmental factors and 80 items

concerning self-evaluation of linguistic ability and supplementary items. The content of the language environment questionnaire is displayed in Table 1. Attitudes toward the Chinese and Japanese languages were examined by investigating the degree to which proficiency in a language was desired and in what country the student wanted to live in the future.

Procedure

The Japanese and Chinese vocabulary tests and the language environment questionnaire were carried out at three points in time: May to June 2006, May 2007, and May 2008. The time given to complete the vocabulary tests was restricted to 40 minutes each, while time was unlimited for the language environment questionnaire.

Table 1 Language environment questionnaire

Main categories	Sub-categories	Example items
Individual factors	Desire, value (4 items)	Would you like to become good at Chinese? (5 choices) If you know Chinese, do you think it will help you in the future? (5 choices)
	Life course (4 items)	Would you like to go to a Japanese school in the future? (5 choices) Would you like to live in Taiwan in the future? (5 choices)
	Attitude (2 items)	Do you like Japan? (5 choices) Do you like Taiwan? (5 choices)
	Identity (1 item)	What nationality do you think you are? (3 choices)
	Character (5 items)	Do you think that you are sociable? (5 choices)
	Family characteristics (17 items)	Family structure, number of siblings, age at arrival in Taiwan, parents, e.g., father's country of origin (fill-in-the-blank)
Language use and frequency of contact	At home (6 items)	Language used when talking with your mother (5 choices) Were you read to as an infant? (5-point scale)
	With friends (4 items)	Language used when playing with Japanese friends (5 choices)
	Frequency of media contact (11 items)	Watching Chinese television and videos (5 choices)
	Community (5 items)	Language used when talking with people in the neighborhood (5 choices)

(Other items)

- * Child's adaptation in Taiwan and in Japan (5-point scale)
- * Child's main language
- * The goal of the child's language proficiency in Chinese and Japanese (mother tongue fluency = 100, no capacity at all = 0)
- * How language is used at home regarding the child (5-point scale)
- * The level of language use by the parents (5-point scale)

Results and Discussion

The Japanese and Chinese vocabulary tests for each of the three years were graded and assigned a competence level in order to assess the changes in and influences on ability in the two languages. Based on the results, the participants could be divided into two groups: those whose Japanese and Chinese language abilities increased with age, and those whose abilities in one language improved while they deteriorated or did not change in the other language.

Figures 1 and 2 display the data for children who improved in both languages, and Figures 3 though 4 display the data for children who improved in only one language. Each figure illustrates the change in second language ability based on the results of the three surveys. The scores on vocabulary tests for each language were adjusted to align with level in school. Data for the control group were based on a standardized scale for the vocabulary test in the second language. Level 1 is equivalent to the first year in primary school.

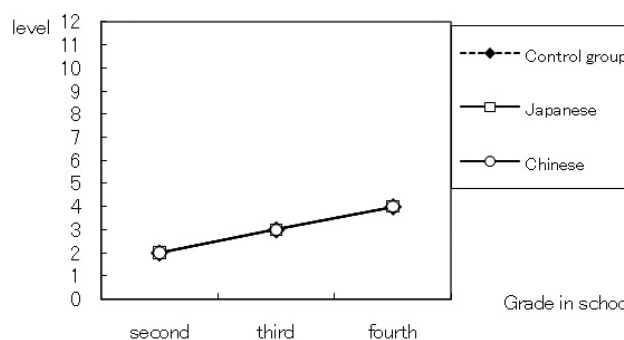


Figure 1 Changes in the Bilingual Abilities of Participant 1

Items on the language environment questionnaire that changed over time.
 Language environment category: (answer in the second grade → answer in the third grade → answer in the fourth grade)
 1. Desire: "Chinese is useful"
 hard to say → agree strongly → agree strongly

2. Desire: "Reason for learning Japanese"
 Because my mother told me → in order to talk to my relatives → in order to get information about manga and the like

3. Frequency of language use and contact: "Talking to my father"
 mainly Chinese → mainly Chinese → both languages about the same

The participant represented in Figure 1 showed a trend toward a general increase in bilingual ability with advancement in school. Awareness of the linguistic environment was marked by a clear desire to study both Japanese and Chinese, and a positive change was evident. In particular, a change in the frequency of second language contact was apparent, as the form of contact changed from only television to include other sorts of media, such as books and manga, as well as playing with Japanese friends. In addition, it was clear from the item "being read books in Japanese" that the parents read Japanese books to the child every day over the three years of this study. Furthermore, Participant 1 actively improved his or her Japanese language ability by attending a Japanese school for three weeks during the summer holidays. The parents strove to increase the child's vocabulary through extra lessons with a Japanese language tutor, reading the child books, and sending the child to a Japanese school on a short-term basis.

Participant 1's mother was Japanese and the father Taiwanese, and over time their language of communication shifted from "mainly Chinese" to "both languages about the same." Because conversations with siblings occurred in "both languages about the same," it is clear that both languages were used frequently in the household. Changes in bilingual ability were linked to a desire to learn, friendships, and frequency of second language contact in everyday life. These results suggest that positive changes in environmental factors are connected to an improvement in bilingual ability.

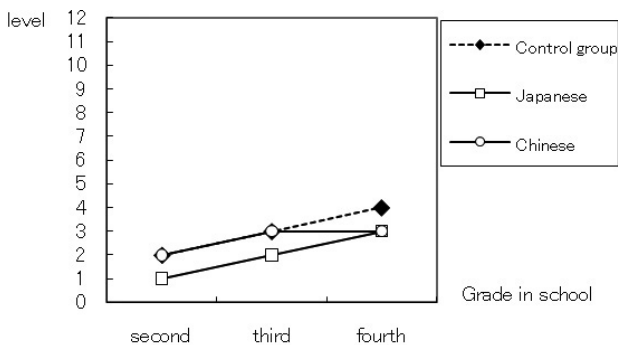


Figure 2 Changes in the Bilingual Abilities of Participant 2

Items on the language environment questionnaire that changed over time.
 Language environment category: (answer in the second grade → answer in the third grade → answer in the fourth grade)

1. Life course: "Going to a Japanese university," "living in Japan"
 hard to say → agree a little → don't agree

2. Life course: "Going to a Taiwanese university"
 hard to say → hard to say → agree a little

3. Frequency of language use and contact: Being read Chinese books"
 no → no → 2-3 times per week

The participant represented in Figure 2 has a Taiwanese mother and a Japanese father, and exhibits a general trend toward improvement in both languages with advancement in school, with Chinese ability improving slightly more than Japanese ability. The results of the parental report indicate that primary contact with the second language (Japanese) occurred through talking with the father or the father's family, and that Chinese was used with the mother and siblings. However, a problem emerged concerning the child's language use and vocabulary: if the environment was not entirely Japanese, the child did not speak Japanese. Instead, the child conformed to the conditions of a predominantly Chinese language environment and used Chinese over Japanese.

These results reveal a connection between improvement in Chinese and environmental awareness, life course, and contact frequency. They also indicate that if the frequency of use and contact is greater for Chinese than Japanese, then it becomes difficult to make use of supplementary lessons to improve Japanese.

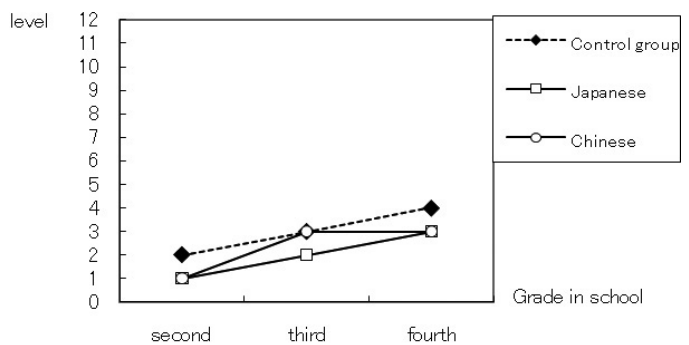


Figure 3 Changes in the Bilingual Abilities of Participant 3

Items on the language environment questionnaire that changed over time.
 Language environment category: (answer in the second grade → answer in the third grade → answer in the fourth grade)

1. Life course: "Living in Taiwan"
 agree a little → don't really agree → don't really agree

2. Life course: "Going to a Japanese university," "Living in Japan"
 agree a little → agree strongly → agree strongly

3. Frequency of language use and contact: "Reading Chinese books"
 common → not really → no

4. Frequency of language use and contact: "Reading Japanese books"
 common → not really → no

The participant represented in Figure 3 has a Japanese mother and a Taiwanese father, and exhibits a general trend toward bilingual improvement with advancement in school, but at a level below what would be expected for the particular grade. In terms of awareness of the language environment, a connection between life course and frequency of contact with both languages is evident. The results of the parental survey indicated that the child is introverted and tends not to be very talkative. The results of the child's survey revealed that the reason for learning Japanese is "because my mother told me to" and the reason for learning Chinese is "because I live in Taiwan." Furthermore, among the resources for learning Japanese, the most effective was going to supplementary Japanese classes, followed by exposure to Japanese media and books.

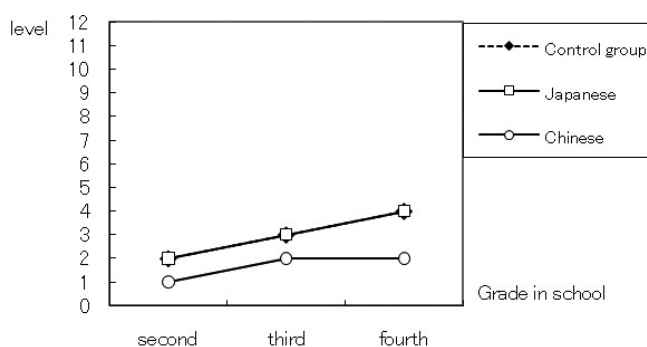


Figure 4 Changes in the Bilingual Abilities of Participant 4

Items on the language environment questionnaire that changed over time.
 Language environment category: (answer in the second grade → answer in the third grade → answer in the fourth grade)

1. Life course: "Living in Taiwan"
 agree a little → agree a little → don't agree at all

2. Desire of frequency of language use and contact: "Language use with friends"
 mainly Chinese → mainly Chinese → both languages about the same

3. Frequency of language and contact: "Reading Chinese books"
 common → sometimes → not really

4. Frequency of language use and contact: "Playing with Chinese friends"
 sometimes → not really → not really

The participant represented in Figure 4 has a Japanese mother and a Taiwanese father, and exhibits a general trend toward greater improvement in Japanese than Chinese with advancement in school; as the child advances in school, only Japanese language ability improves. The results of the parental survey on efforts to improve the child's linguistic skills indicated that they left improvement in Chinese up to nature. But for Japanese, they made efforts to enable contact with various media, and encouraged practice in reading and writing. Furthermore, the child was sent to a Japanese school on a short-term basis every year. The parents appeared to fear that the child might forget the Japanese language and culture as he or she became integrated into Chinese schools and the local area.

The questionnaire on awareness of the language environment revealed a link between life course, friendships, and frequency of second language contact in everyday life. As the desired future place of residence changed from Taiwan to Japan, the frequency of contact with Chinese decreased, and the frequency of Japanese usage increased, suggesting that singular improvement in Japanese was a result of contact and usage.

Conclusion

This study examined the connection between the linguistic environment of children raised in Japanese-Taiwanese households and their actual Japanese and Chinese vocabularies in order to clarify the relationship between environmental factors and the acquisition of bilingual abilities. Four students were selected, who did not differ in age, length of residence in Taiwan, and year in school. A longitudinal investigation with annual testing between the second and fourth years of primary school was used to investigate the language acquisition process, focusing on the relationship between changes in linguistic environment and bilingual abilities in Japanese and Chinese. The results revealed a connection between change in bilingual abilities and a child's desire to learn, life course, and frequency of bilingual contact in everyday life. All four sets of parents had high course for bilingual education, believing that, in the case of Japanese, the most effective means for fostering improvement was to send their child to a supplementary Japanese school on the weekends. To improve vocabulary, the children had supplemental lessons from a Japanese tutor, were read Japanese books, attended schools in Japan on a short-term basis, and attended supplementary lessons. But regardless of the amount of effort put toward bilingual education, there were still cases where language improvement was one-sided. This was likely due to a strong connection between language improvement and frequency of linguistic contact, which in turn was highly dependent on the environment. Indeed, it is difficult to

improve Chinese through attending local schools alone, and it is difficult to maintain Japanese solely through supplementary schooling. Beyond the degree of bilingual contact in everyday life, the establishment of personal course (e.g., desire to learn), is also important because these course provide motivation for exerting effort toward special study. However, further longitudinal research is needed to compare the results with children of different ages, as well as investigate factors beyond linguistic environment that may influence bilingual ability.

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Acknowledgement

This paper is a revised version of a paper published in the 2008 Japanese Association of Sociolinguistic Sciences Twenty-Second Convention Presentation Collection, pp. 82-85.

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