

Effects of Visiting Enrollment on Japanese-English Bilingual Children Being Raised in the U.S.¹

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The maintenance of language minority children's first language is often a desired outcome, but previous research has illustrated the difficulties of maintaining this language and shown that these children are susceptible to incomplete L1 acquisition. Visiting enrollment in the target language country has therefore received attention as a way to boost language minority children's L1. This study aims to examine the effectiveness of such experiences on the Japanese ability of children of Japanese immigrants to the U.S. (whether their parents are married to Japanese or native English speakers). Four second-generation Japanese-English bilingual children (three of the children have American fathers and Japanese mothers, and one child has Japanese parents), aged 3;9 to 9;4, who were simultaneously acquiring English and Japanese as their first languages traveled with their parents to Japan on summer vacation and were enrolled in Japanese schools for four to six weeks. To examine the effects of their visiting enrollment, tape-recorded family conversations in natural settings were examined before their departure for Japan, twice during their stay in Japan, and twice after their return to the United States. Since postpositional particles are crucial elements for measuring the completeness of Japanese language acquisition, postpositional particle production by the children and their parents and errors made by the children during these conversations were examined. The major findings included the following: 1) Visiting enrollment furthered the Japanese acquisition of the children whose L1 Japanese was strong before their departure; 2) the children who did not show improvement in postpositional particle production made the kinds of errors that occur during L1 acquisition, others that occur during L1 attrition, and some that can be found in both L1 acquisition and L1 attrition. These findings give some insight into the effectiveness of visiting enrollment as a way to support the L1 of language minority children and also shed light on research on integrating L1 and L2 acquisition, L1 attrition, and incomplete L1 acquisition.

体験入学が米国で育つ日英語バイリンガルの子どもに及ぼす効果

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少数言語話者の子どもたちが母語を維持することは望ましいこととされているが、母語維持の難しいことと、子どもたちの母語習得が不完全になりがちであることは、先行研究で示されてきた。それゆえ、母語が話される国での体験入学は母語を強めるカンフル剤として注目を集めてきた。本研究ではそのような経験が米国の日本人移民（親たちは日本人か英語母語話者と結婚している）の子弟の日本語力にどのような効果があるのかを調べた。日本語と英語のバイリンガルの二世の子どもたち4人（年齢は3歳9ヶ月から9歳4ヶ月で、4人のうち3人はアメリカ人の父と日本人の母を持ち、一人は両親が日本人）は英語と日本語を第一言語として同時に習得しているが、親と日本に行き、4～6週間日本の学校に体験入学した。体験入学の効果を調べるために、家庭での自然な会話の録音を日本への出発前に一回、日本滞在中に二回、帰米後二回、分析した。日本語の完全さを測る尺度として助詞は重要であるので、子どもたちと親の助詞の使用、子どもたちの助詞のエラーを調べ、次のような結果が得られた。1) 体験入学は出発前から母語としての日本語の強い子どもたちの日本語習得をさらに促した、2) 助詞の使用に向上が見られなかった子どもたちに、第一言語喪失と第一言語習得の両方のエラーが見られた。これらの結果は、少数言語話者の子どもの母語をサポートする方法としての体験入学の効果や、第一、第二言語習得、第一言語喪失、第一言語不完全習得を統合しようとする研究に示唆を与えてくれる。

INTRODUCTION

Many immigrants hope that their children will maintain the parents' native language and also master the language of their new community. For example, the efforts of Japanese parents trying to raise bicultural and bilingual language minority children in North America have been examined and well documented (for Japanese-Americans: Fujii, 2004; Kondo, 1997; Minami, 2003; Shibata & Koshiyama, 2001; Sugimori, 2003; for Japanese-Canadians: Kano, 2003; Nakajima, 2001; Oketani, 1995; Sakamoto, 2000). However, problems in achieving this goal may arise regardless of efforts to sustain the children's L1. As Montrul (2002) has shown, exposure to L1 from birth is not enough for complete L1 acquisition for children acquiring L2 simultaneously or from early childhood, and these children may display incomplete L1 acquisition. When children's L1 is a minority language in their community, the community language, which is often their second language (L2), takes over, and these children tend to become L2

monolinguals.

Is there any way to avert incomplete L1 acquisition? Research shows that fostering biliteracy is a contributing factor for successful bilingualism and that trips to the target language country can be helpful in language maintenance (Hirai, 2002; Kamada, 1995, as cited in Noguchi, 2001; Nakajima, 2001). Since the school year in the United States ends some time between the end of May and the middle of June, while schools in Japan are in session until about July 20, it is possible for Japanese parents living in the United States to enroll their children in regular schools such as kindergartens and elementary schools in Japan for four to six weeks during the American school summer vacation. Parents who take advantage of this difference in school calendars hope that intense exposure to the children's L1 through such "visiting enrollment", involving explicit literacy instruction and interactions with peers, will boost their children's L1.

Although this type of schooling is possible, the number of Japanese-speaking children living outside Japan who are able to take advantage of such opportunities is limited due to financial and logistic problems as well as institutional barriers.² Compiling case studies of children who have been given this opportunity may therefore provide valuable, rarely gathered information on the maintenance of a minority language. When English-Japanese bilingual children spend long periods in Japanese monolingual communities in Japan, their proficiency in Japanese might be expected to become stronger sooner or later. However, when their stays in Japan are limited to one to two months, the question arises as to whether this short period is sufficient for them to show significant improvement in language proficiency. This paper examines the impact of this kind of visiting enrollment, tracing the changes in natural speech production by four English-Japanese bilingual children during the course of their short-term enrollment in Japanese schools.

The effectiveness of study-abroad programs in boosting L2 acquisition has been the subject of a number of linguistic studies. In a review of such research, Freed (1995) points out that standardized tests, such as ACTFL Oral Proficiency Interview Test (OPT), are often used to measure the impact of such programs. These studies provide information about the changes in general language proficiency, but do not touch on specific aspects of language. There are, however, other linguistic studies that do just that. For example, Vainika & Young-Scholten (2002) tape-recorded two American teenagers who studied in Germany for eleven months. These researchers report that just before their return to the United States, the two teenagers were able to produce verbs in German embedded clauses in correct word order.

Although there has been some research on the impact of exposing Japanese-speaking children living overseas to schooling in Japan, there have been no conclusive findings on the effectiveness of such experiences in boosting the children's Japanese language ability. For example, in a study on the benefits of visiting enrollment by Japanese expatriate children, Langager (2001) found that parents and teachers place more emphasis upon the children's enactment of Japanese-ness than actual linguistic gain.

By examining the actual speech produced by the visiting enrollees before their departure for Japan, during their stay in Japan, and after their return to the United States, my study will explore the impact of visiting enrollment on their speech. It is hoped that studying the effects of the Japanese-English

bilingual children's short-term visiting enrollment upon their Japanese will deepen our understanding of L1 acquisition.

PREVIOUS RESEARCH ON ACQUISITION OF JAPANESE AS L1

Postpositional Particles

This study approaches the question of the efficacy of visiting enrollments by examining postpositional particle³ production. In Japanese, content words, such as nominals, are accompanied by postpositional particles. Postpositional particles are divided into two kinds: case particles and postpositions. Case particles or case markers "indicate that in a sentence the accompanying noun functions as subject, object, and so forth" (Tsujiura, 1996, p.135), but postpositions bear specific inherent meanings. The following are commonly-used postpositional particles and their major functions:⁴ *ga* (subject, agent), (*w*)*o* (accusative, patient), *ni* (dative/goal), *de* (place, instrument), *kara* (source), *to* (comitative, quotative), and *no* (genitive). In particular, *ni* and *no* warrant attention because of their multifunctionality. *Ni* has a homophonous postposition. Kabata (2000) lists nine kinds of functions of *ni*, including "goal," "place of existence," and "reason."⁵ *No* also functions as a complementizer (Kuno, 1973) and pronominalizer (Horie, 1993; McGloin, 1985).

One characteristic of spoken Japanese is the frequent omission of postpositional particles. In particular, case particles such as *ga* (nominative) and (*w*)*o* (accusative) are often omitted in colloquial speech. For example, Yamada (1980) found that (*w*)*o* was almost never used in the speech of the mother in her study. Miyazaki (1979) reported that *ga* was omitted in only 10.2 percent of potential contexts in adult-adult conversation, but in the mother's speech to her 2-year-old child, she elided (*w*)*o* 30 percent of the time. Miyazaki therefore argues that the omission of (*w*)*o* is characteristic of mothers when talking to small children. More recently, Yamada and Nakagawa (1995) found that *ga* is used only 7.1 percent of the time in casual conversations among university students, leading them to conclude that no particle use is a default in conversations in Japanese.

Therefore, a low rate of postpositional particle production does not always mean that the participants have not yet acquired the particle, and linguists have not reached a consensus regarding the grammaticality of sentences without postpositional particles (Kuno, 1973; Martin, 1975). Furthermore, linguists differ in their treatment of *ni* and whether it is a case particle or a postposition (cf., Miyagawa, 1989). In contrast, *de*, *kara*, *to*, and *no* can never be omitted.

Errors in Postpositional Particle Production in Japanese L1 Acquisition and Attrition

One study that includes data on postpositional particle production by English-Japanese bilingual children was done by Yukawa, who examined Japanese L1 attrition and recovery in her two children from various perspectives, including this aspect (Yukawa, 1998). Yukawa raised her children in English in Japan and in the other countries where her family lived, so they acquired Japanese mainly from the community while living in Japan. During Yukawa's initial collection of data, her son Haruki was 5 years old when she analyzed his speech before and after a short stay in Hawaii. Later, her daughter Shoko was 3;10 and Haruki was 7;0 when she analyzed their speech both before and after spending several

months in the United States and Sweden.

Yukawa's (1998) findings included errors in the children's postpositional particle production. The types of errors she found are presented in Table 1.

TABLE 1: Types of Postpositional Particle Errors Reported in Yukawa (1998)

Shoko			Haruki		
(error	→	target)	(error	→	target)
<i>ga</i>	→	<i>wa</i>	<i>ga</i>	→	<i>ni</i>
<i>ga</i>	→	<i>(w)o</i>	<i>ga</i>	→	<i>(w)o</i>
<i>ni</i>	→	<i>de</i>	<i>ga</i>	→	<i>wa</i>
<i>ni</i>	→	<i>ga</i>	<i>ni</i>	→	<i>de</i>
<i>wa</i>	→	<i>ga</i>	<i>de</i>	→	<i>ga</i>
<i>(w)o</i>	→	<i>ga</i>	<i>de</i>	→	<i>ni</i>
<i>de</i>	→	<i>ga</i>	<i>zero</i>	→	<i>kara</i>
<i>to</i>	→	<i>ni</i>			

In the above table, the entry *ga* → *wa* in Shoko's section means that Shoko mistakenly said *ga* (error) when she should have said *wa* (target). It would be interesting to see whether this pattern is a universal one found in L1 Japanese attrition or is a result of incomplete L1 acquisition. For this reason, it is essential to review developmental errors in L1 acquisition.

Generally speaking, during Japanese L1 acquisition children typically start out failing to use a particle and then gradually increase its rate of production (Clancy, 1986), so errors in postpositional particles are not usually reported in Japanese L1 acquisition research. Even so, as shown in Table 2 on the next page, some developmental errors in postpositional particles among Japanese children are reported.

TABLE 2: Types of Developmental Postpositional Particle Errors Reported in Previous Research

error → target	Children's Age	Source
<i>ga</i> → <i>ni</i>	1;9	Fujiwara, 1977
<i>ni</i> → <i>ga</i>	2;0 –2;1	Sanches, 1968
<i>ga</i> → (<i>w</i>) <i>o</i>	4- to 6;8	Fujimoto, 1977; Hakuta, 1982; Takahashi, 1975
<i>de</i> → <i>ni</i> (locative)	4	Takahashi, 1975
(<i>w</i>) <i>o</i> → <i>ga</i>	2; 4 and 3-year-old	Clancy, 1986

As shown above, four out of the five types of errors previously reported involve *ga*, leading Clancy (1986) to conclude that problems with *ga* may persist in the early school years. Errors involving *ga* were also in the majority in Yukawa's study. Errors involving *ni* were also common between the two groups. What makes Yukawa's children's errors (which occurred during Japanese attrition and recovery) distinct from developmental errors is their variety and the presence of errors involving *kara* and *to*, which are both postpositions which cannot be deleted.

Matrix Language Frame (MLF) and the 4-M Models

Based on the understanding that in bilingual speech one of the languages is normally more dominant than the other, Myers-Scotton (1993) formulated the Matrix Language Frame (MLF) Model to classify morphemes⁶ in complimentizer phrases.⁷ She divided morphemes into two kinds: content morphemes, such as nouns and verbs, and system morphemes, such as inflections and most function words. In this model, the dominant language, called the matrix language (ML), is thought to contribute more abstract structure than the other language, called the embedded language (EL), with the ML projecting the morphosyntactic frame of the complimentizer phrase by providing system morphemes.

A major difference between content morphemes and system morphemes is that most content morphemes either assign or receive thematic roles, while system morphemes do not. The 1993 version of the MLF model proposed that all syntactically relevant system morphemes must come from the matrix language (ML). Myers-Scotton (1998) also predicted that changes in the "socio-political balance" of individuals or an entire community, such as occurs with immigration, would promote an ML turnover, or replacement of one language by another, as a potential outcome.

Extending the MLF model, Myers-Scotton and Jake (2000) proposed a new morpheme categorization system called the 4-M model,⁸ which has since been applied in explaining many language contact phenomena, including L1 attrition. In the 4-M model, system morphemes are further classified as early

and late. Prototypical examples of early system morphemes in many languages are plural suffixes, personal pronouns, and articles. Late system morphemes, which satisfy the grammatical requirements of a language, are divided into bridges and outsiders. Bridges depend on the maximal projection in which they occur. In many languages, outsiders include “subject-verb agreement . . . and case affixes” (p. 76). For example, in the sentence “Pepe likes chewing on Mashka’s bone”, *Pepe*, *like*, *chew*, *bone* and *Mashka* are content morphemes; *-ing* and *-s* are outsiders; and *-’s* is a bridge morpheme (Schmitt, 2000a, p. 646).

The 4-M model can be used to classify Japanese morphemes. For example, the 4-M model’s distinction among different types of morphemes is clearly captured in Tsujimura’s (1996) explanation of Japanese postpositional particles.

Postpositions, in general, bear an inherent meaning. Case particles, in contrast, do not bear specific semantic content. Rather, their roles are more functionally determined within a sentence in that they indicate that in a sentence the accompanying noun functions as subject, object, and so forth. (Tsujimura, 1996, p. 135)

Case particles include *ga* (nominative), *w(o)* (accusative), and *ni* (dative). The phonological form of the dative *ni* is identical to that of the postposition *ni*. My own classification of Japanese morphemes based on the 4-M Model is presented in Table 3, which I modified from Takagi (2000).

TABLE 3: Japanese Morphemes in the 4-M Model

Category in the 4-M model		Japanese Morphemes	
Content Morphemes		nouns, verbs, adjectives, adjectival nouns, pronouns, adverbs, discourse markers, some postpositions	
System Morphemes	Early System Morphemes	derivational suffixes (e.g., <i>-te</i> , <i>-sa</i> , <i>su-</i>) prefixes (e.g., <i>fu-</i> , <i>mu-</i> , <i>hi-</i>), postpositions	
	Late System Morphemes	Bridges Outsiders	case particles verb endings, sentence-final particles

As shown above, all case particles and most postpositions would be classified as system morphemes, which are important in examining the completeness of the child participants’ matrix language frame in the 4-M Model.

Myers-Scotton (2002) claimed that there are three levels of abstract grammatical structure in any lexical item:

- (1) lexical-conceptual structure (semantic/pragmatic features)
- (2) predicate-argument structure (relations between thematic role assigners—verbs and some prepositions—and the arguments they map onto phrase-structure units)
- (3) morphological realization patterns (elements and constituent orders required by well-formedness constraints for surface-level realizations) (p. 96)

Furthermore, Myers-Scotton predicted the following hierarchy of susceptibility to alteration under attrition at the abstract and morpheme levels:

Predicate-argument structure < morphological realization patterns < lexical-conceptual structure

Late system morphemes < early system morphemes < content morphemes (2002, p. 231)

The differences found in these abstract lexical structures, as well as the differences found on the surface morpheme level, led Myers-Scotton (2002) to propose five hypotheses, of which the following two are most relevant to the current study:

Hypothesis 4. Early system morphemes are less susceptible to replacement or loss in attrition than content morphemes, but more so than late system morphemes. Substitution is more likely than loss.

Hypothesis 5. Of all morpheme types, late system morphemes are least susceptible to absolute omission. (Myers-Scotton, 2002, pp. 196-213)

If these hypotheses hold, this would mean that in L1 Japanese attrition, postpositions would be more susceptible to substitution or loss than case particles because postpositions are early system morphemes (or content morphemes) but case particles are late system morphemes.

RESEARCH QUESTIONS

This study looks into the following two points:

- (1) whether or not the children's Japanese improved during visiting enrollment in terms of their use of postpositional particles
- (2) whether or not improvement was a matter of furthering L1 acquisition or reversing L1 attrition in terms of Myers-Scotton's 4-M Model

METHODOLOGY

Participants

Through my personal connection as a parent whose child attends a Saturday Japanese language school and through other connections, I knew more than forty children living in the United States who were about to embark on visiting enrollments to Japan. From this pool of candidates for my study, I selected

the participants based on the following criteria. I searched for Japanese-American children who were born in the United States to make sure that both English and Japanese were first languages for them. I also looked for candidates who would allow me to examine a range of L1 proficiencies. (In particular, Sara and Dan, who are described below, were chosen mainly for this reason). Furthermore, I wanted to see the children in Japan during their visiting enrollments, and, therefore, their proximity to me in Toyama, where I would be staying in Japan, was seen as a plus.

I selected four Japanese-American children as the participants in this study. The parents of one child are Japanese, while the other three children have American fathers and Japanese mothers. All four children were enrolled in Japanese schools during short-term visits to Japan. The children’s ages ranged from 3;9 to 9;4.

Before their departure for Japan, I interviewed their parents over the telephone about their ideas concerning the children’s Japanese maintenance, English proficiency and family background. I also interviewed them face-to-face during their stays in Japan. The backgrounds of the children are similar in terms of family socioeconomic status and parental education: Each of their fathers has a doctorate and their mothers have at least a college-level education.

The information I gathered from my interviews on the participants’ home language environment is summarized in Table 4 and the personal history summaries that follow it. To protect the participants’ privacy, pseudonyms are used. The table shows the children’s ages at the onset of the study.

TABLE 4: Participants’ Home Language Environment

Name	Gender	Age	Language		
			Father to Child	Mother to Child	Between Parents
Sara	F	9;4	English	Japanese	English/Japanese
Ken	M	7;2	Japanese	Japanese	Japanese
Dan	M	4;9	English	Japanese	English/Japanese
Nina	F	3;9	English	Japanese	English/Japanese

Each child’s profile, based on my interviews with their parents, is presented below. The parents’ perceptions of their children’s English and Japanese proficiency are also reported. To check on their perceptions of the children’s Japanese ability, the researcher administered to each child the Picture Vocabulary Test in Japanese (Ueno, Utsuo & Inaga, 1991) during their stay in Japan; the results are also included in the children’s profiles.

The PVT is designed to measure the receptive ability of vocabulary items among Japanese-speaking children in Japan with chronological or mental ages between three and ten. The children were shown a sheet of four pictures at a time. For example, the sheet of the most basic vocabulary items consists of a bicycle, a banana, a dog and a pair of shoes. The researcher gave cues, such as, "which one is a banana?", and the task of the children was to point to the correct picture. About eighty percent of the cues are nouns (which name exactly what is pictured), but the remaining twenty percent are verbs (which describe actions taking place in the picture). In other words, the PVT measures the children's receptive knowledge of content morphemes.

Participants' Profiles

Nina

Nina is a preschooler whose father is American and mother is Japanese. She is an only child. Nina's father lived in Japan for several years and has near-native fluency in Japanese, which enables him to collect interview data in Japanese for his research and to teach sociology in Japanese as a visiting scholar in Japan. Nina was born in the United States, but she and her mother visited Japan when she was four months old and stayed there for one and a half years. When she was two years old, the family stayed in Japan for a month. Other than that, Nina and her parents have lived in an academic community in California. Growing up in a multicultural environment, Nina has been exposed to other Japanese peers since she was small. Her visiting enrollment at a daycare center in Osaka at the age of 3;9 was her first experience in a structured educational setting.

When interviewed, Nina's parents mentioned their strong motivation to raise Nina bilingually using the one-parent one-language approach. After her return to the U.S., Nina began to attend an English-medium kindergarten. At the start of this study, Nina's parents felt that Nina had a good command of Japanese. Her vocabulary age in terms of PVT was 3;8, just one month lower than her actual age of 3;9.

Sara

Sara is a third grader whose father is American and whose mother is Japanese. Sara has a younger brother, Dan, who was also a participant in this study (see below). Sara's father's academic interest lies in Asia, including Japan. Although he has lived in Japan for four years, his proficiency in Japanese is low.

Sara was born in Pennsylvania. When she was 3;8, the family moved to Yokohama and stayed there for eighteen months. As a result, her Japanese grew very strong, to the degree that she needed ESL service when the family moved to Illinois at age 5;2. Until she was 6;7, the family lived in a multicultural academic community in Illinois where she was enrolled in a magnet school that emphasized multicultural education. The school offered a daily thirty-minute Japanese and mathematics class taught in Japanese for native speakers. In addition, almost every day after school, her mother, Sara, and Dan participated in a Japanese playgroup for two hours.

When Sara was six, the family moved to a rural area in another Midwestern state where there were only eight Japanese in the community. The eight Japanese were all women in their seventies who had married American GIs as war brides. Because Sara's mother felt that a considerable cultural distance

existed between these women and herself, contact with them was almost non-existent.

The nearest Japanese Saturday school, which met only for two hours weekly, was a three-hour drive away (one way). However, sustained by their passion for their children's L1 Japanese maintenance, Sara and Dan's parents continued to take them to the school for two years.

Sara experienced visiting enrollment in a Japanese kindergarten twice for about one month each time in classes which were the equivalent of the first and third years of preschool. While in the United States, she studied Japanese school subjects through a correspondence course with the help of her mother. Her mother also encouraged Sara to enter an essay she had written in a Japanese essay competition sponsored by the Ministry of Posts and Telecommunication, and the essay won a prize. Although Sara was Japanese-dominant when the family returned from Japan when she was five, at the start of the study, when Sara was nine, it was clear to her mother that she was English dominant. Even so, her mother felt that Sara's Japanese proficiency was much higher than her brother Dan's, which will be discussed shortly. Sara's vocabulary age in terms of PVT was 8;6, while her actual age was 9;4.

Dan

Dan is Sara's younger brother and was a preschooler at the time of this study. When he was one month old, the family moved to Yokohama, where they stayed for eighteen months. From his first year of preschool, Dan also attended the same Japanese language Saturday school as Sara.

He is an active boy who likes sports very much. Since Dan showed resistance to his Japanese studies, over the years his mother gradually ceased to expect high achievement from him. His friends were all American. Even so, because of his extroverted personality, Dan interacted well with his peers in Japan during his visiting enrollment. He did not worry about his mistakes in Japanese. Unlike Sara, who experienced a turnover of her stronger language, Dan's stronger language was always English. It was clear to his mother that his Japanese was much weaker than that of Sara at the same age. His Japanese vocabulary age in terms of PVT was 3;8, although his actual age was 4;9.

Ken

Ken was a first grade student in elementary school at the time of this study. Both of Ken's parents are Japanese, and Ken is the author's only son. Ken was born and raised in Massachusetts. His parents have very positive attitudes towards his acquisition of Japanese and speak to him exclusively in Japanese. He was exposed to English for at least six hours a day in daycare centers and in schools since he was one year and four months old.

Ken began to attend a Saturday morning Japanese language school when he was three years old. Classes run for three hours, and Japanese and mathematics are taught at the children's grade level.⁹ In other words, during these three-hour Saturday morning lessons, the children are exposed to almost the same curriculum of Japanese language and mathematics as their peers in Japan. Ken said that his English and Japanese are equally strong, but he received ESL services at his elementary school for two years, suggesting that his English was not as strong as that of his native-speaking peers at that time.

Ken and his mother visited Toyama, Japan, when he was eleven months old and stayed there for five

months. Since Ken turned three, they have visited Toyama for about one month annually. Enrollment at a kindergarten when Ken was five was the beginning of his annual visiting enrollment.

Ken did well in the Saturday morning Japanese language school in Massachusetts, and it was obvious that his Japanese was stronger than his English. However, because he sometimes used incorrect particles, his parents thought his Japanese was much weaker than his peers in Japan. Nonetheless, in terms of the PVT, Ken's vocabulary age was 7;2, the same as his actual age.

Participants' Visits to Japan and Relative Japanese Proficiencies

During their stays in Japan, Dan, Sara, and Ken lived in the same school district in Toyama. Sara and Ken even attended the same elementary school. Dan attended a kindergarten during his first visiting enrollment in Japan. Nina attended a kindergarten in Osaka, but also stayed in Toyama at her father's friend's house.

We can assume that Ken receives the most Japanese input of all the participants because both his parents are native speakers of Japanese and he also attends a Japanese language school in the United States. Dan and Sara are in the least advantageous position in terms of Japanese input because of their lack of exposure to Japanese in their community and their lack of Japanese input from their father. Because of the relative lack of exposure to Japanese, it is possible that Dan is more likely to be susceptible to incomplete L1 acquisition of Japanese than the other children. Nina is probably somewhere in between Ken and Dan.

Data Collection

To gather data on the participants' Japanese language proficiency before, during, and after their visiting enrollments in Japanese educational institutions, family conversations during mealtime were tape-recorded, with some recordings containing activities before and/or after mealtime. The recordings lasted about an hour each time. The researcher tape-recorded Ken's data. The other children's parents were given the recorder to tape their conversations. To establish a baseline, one dinnertime conversation was tape-recorded before the participants' departure for Japan. Then, conversations of a similar length were tape-recorded weekly during the children's stay in Japan.

It was expected that the longer the language learners stayed in their target language community, the more proficient they would become in the language, though it was not clear whether or not one month was enough to show any significant improvement in the children's Japanese. It was also considered to be logical that the children would show more progress later in their stays in Japan than at the time of their arrival. Therefore, two transcripts of recordings made during the later stages of their stays in Japan, about one month after their arrival, were chosen for analysis. Natural family conversations were also tape-recorded approximately one month and two months after the children's return to the United States.

Table 5 shows the participants involved in each of the tape-recording sessions analyzed in this paper.

TABLE 5: Other Participants

Child Participant(s)	Before	Japan I	Japan II	After I	After II
Nina	Father Mother	Father Mother Father's friend	Mother Grandmother	Father Mother	Father Mother
Sara and Dan	Father Mother	Mother Grandfather Grandmother	Mother Grandfather Grandmother	Father Mother	Mother
Ken	Mother	Mother Grandmother	Mother	Mother	Father Mother

Data Analysis

The tapes were transcribed by the researcher using the CHILDES format for Japanese (Oshima-Takane & MacWhinney, 1995), and the transcripts were analyzed in terms of the children's production of postpositional particles. For comparison, the transcripts were also analyzed in terms of the production of the same particles by the parents who accompanied their children on their visits to Japan.

In defining the point of "acquisition" of grammatical morphemes, I referred to a pioneering study of language acquisition by Brown (1973), who conducted a longitudinal study of three American children's language development by tape-recording their spontaneous conversations regularly. At the time of his initial recording session, the youngest child participant in Brown's study was 1;6 and the other two were 2;3. In the transcripts of their speech, Brown examined the children's production of obligatory grammatical morphemes: the present progressive *-ing*, the plural *-s*, the articles *a* and *the*, and the prepositions *in* and *on*. In assessing the point of acquisition of each morpheme, Brown utilized the following definition from Cazden (1968): "the first speech sample of three, such that in all three the inflection is supplied in at least 90 percent of the contexts in which it is clearly required" (p.435).

Cazden's definition makes sense when researchers tape-record young children's utterances from the time when they have not acquired the target forms they are investigating to the time they have fully acquired them. Considering that my own study involves children older than those in Brown's study, it is possible that the children in my study had already acquired the target forms before the onset of the study. However, it was decided to use Cazden's definition because it is established in the field of first language acquisition and it was also the only definition that was available.

RESULTS AND DISCUSSION

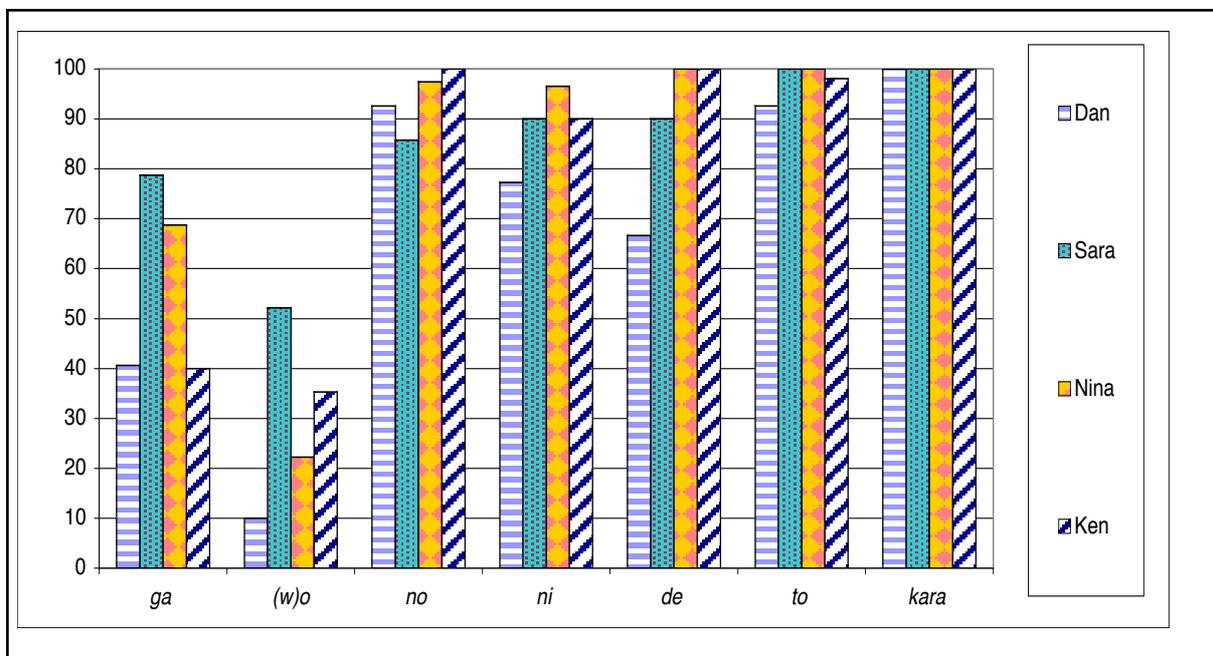
Overall trends

The analyses in this section seek to answer the first research question regarding the effects of visiting enrollment on the children's production of postpositional particles. The first three sets of analyses examine the overall trend in the postpositional particle production by the children (Figure 1) and their parents (Figure 2). Although these analyses treat *ni* as a single category for the sake of convenience, the tolerance of deletion differs depending on which function *ni* is fulfilling. Therefore, the third analysis (Tables 6 and 7) re-analyzes the data based on the different functions of *ni*. Finally, the fourth analysis (Table 8) explores the effects of visiting enrollment on particle production by the children.

Figure 1 shows the overall percentage of correct use of each postpositional particle by each child. All the contexts where the particles could possibly occur were examined. When the children used correct particles, they were counted. When they omitted them or substituted incorrect particles, they were not counted. In the first and second analyses in this section, *ni* will be treated as a single category. The data from pre-departure, during their stay in Japan, and after their return to the United States were combined.

Because case particles and postpositions behave differently, some cautions are necessary. Omission of the case particles *ga* and *w(o)* and the postposition *ni* with some functions, such as goal, is acceptable to some degree. However, other postpositional particles tend not to be deletable.

FIGURE 1: Rates of Postpositional Particle Production by Children



Overall, the correct production rates were lower for the case particles *ga* and *w(o)* than for the other particles *de*, *to*, *no*, and *kara*. When these results are compared to those from past studies on the

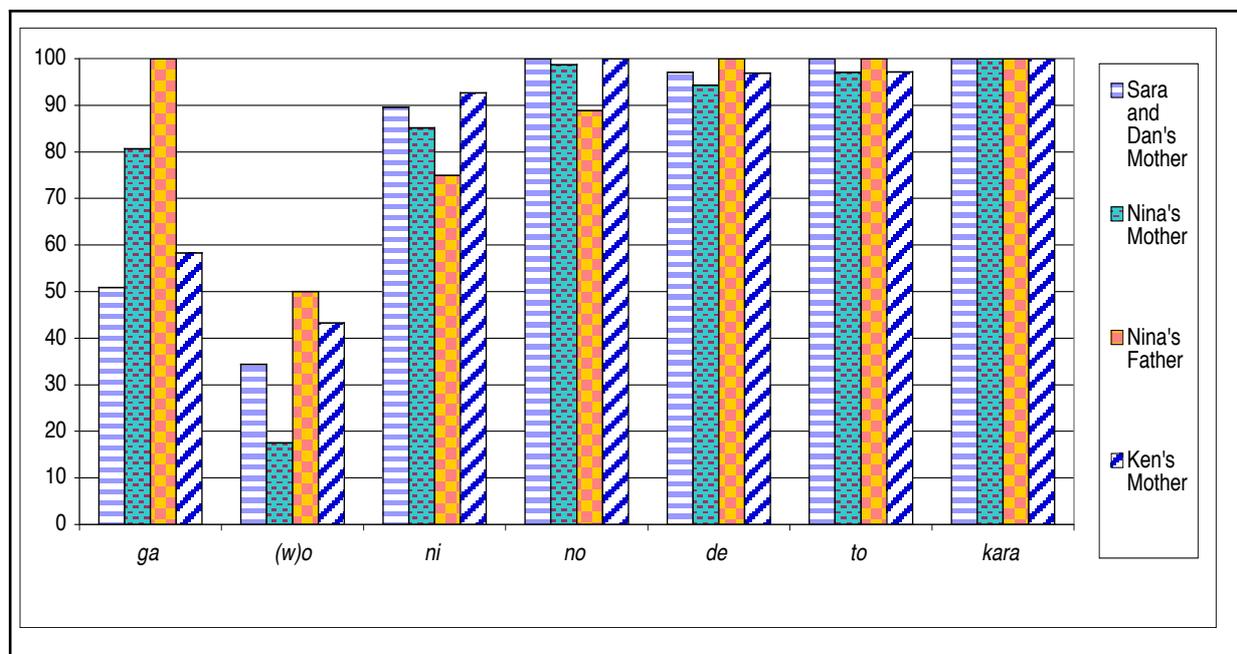
production of case particles in the colloquial speech of Japanese monolingual adults, however, we find that the child participants' omission of case particles was target-like (Miyazaki, 1979; Yamada & Nakagawa, 1995).

Individual differences did emerge, however. Applying Cazden's 90-percent-use-in-obligatory-context criterion as reflective of mastery in developmental data, it was found that Nina and Ken had mastered all of the postpositional particles studied. Sara was found to have mastered *ni*, *de*, *to*, and *kara*. Also, she was found to have used *ga* and *(w)o* the most frequently of the children.

In contrast, Dan's low production of postpositions stood out. His production of *ni* and *de* fell below Cazden's limit. These results may indicate Dan's incomplete acquisition of *ni* and *de*. However, because errors involving *ni* and *de* were reported in past studies of both L1 acquisition and attrition (Takahashi, 1975; Yukawa, 1998), one may be tempted to conclude that Dan's errors were within a normal range. Even so, it needs to be pointed out that in creating Figure 1, only the correct use of postpositional particles was counted; incorrect use was not considered. This issue will be discussed in the next section. Overall, the rate of Dan's postpositional particle production was the lowest, but the rates of the other children were similar to one another, indicating that they had mastered the use of these particles.

The overall use of postpositional particles by the parents who accompanied their children to Japan during their visiting enrollment is shown in Figure 2. Since Ken's father did not go to Japan with Ken and his mother, his data is not included. The data from the pre-departure recording sessions is combined with that from the recordings made during their stay in Japan and after their return to the United States.

FIGURE 2: Rates of Postpositional Particle Production by Parents



As shown in Figure 2, the overall rates of production of the seven postpositional particles examined in obligatory/potential contexts were almost the same among the native speaker mothers. Surprisingly, the rate of use of four of these seven particles by Nina’s father, who is a non-native speaker of Japanese, was higher than those of the native-speaker mothers. Nina’s father produced *ga* (nominative) 100 percent of the time in the potential contexts, while the native-speaker mothers did so at a rate of 80 percent or lower. This may imply that he was hypercorrecting (Labov, 1972). When I shared this result with Nina’s father, he told me that because English does not have the equivalent of these particles, he always pays particular attention to which one (*ga*, (*wo*), etc.) he should use and to which particle native speakers around him use in what context.

Postpositional functions

Tables 6 and 7 show the breakdown of the participants’ production of *ni*. Based on Kabata’s (2001) categorization, which was mentioned above, the use of *ni* was divided into case particles and postpositions. Other postpositions that did not fit Kabata’s categorization are shown in the category “Other”.

TABLE 6: Parents’ Production of Particle *ni*

	Nina’s Mother	Nina’s Father	Ken’s Mother	Sara & Dan’s Mother
Case Particle	18.2%	0.0%	2.9%	13.8%
Postposition	56.4%	50.0%	57.1%	55.2%
Other	25.5%	50.0%	40.0%	31.0%

TABLE 7: Children’s Production of Particle *ni*

	Dan	Sara	Nina	Ken
Case particle	10.5%	5.6%	11.4%	1.9%
Postposition	78.9%	69.4%	42.9%	71.7%
Other	10.5%	25.0%	45.7%	26.4%

As can be seen in Tables 6 and 7, the use of *ni* as a postposition was more frequent than that as a case particle for all of the participants, parents and children alike. However, the particle *ni* was used by at least one parent in all of the categories but was missing in the children's data in the following categories: indication of the doer of the action in a passive construction; indication of the person to whom something is given; and in parataxis, or the combination of clauses or phrases, as in *ani hitori ni otouto hitori* (one elder brother and one younger brother). All of the children's errors involved *ni* as a postposition, not as a case particle.

Impact of visiting enrollment

This section discusses the overall and individual trends. It also examines the efficacy of the visiting enrollment for each child by comparing the data from before, during, and after the experience.

The rates of postpositional particle production by each child during each of the five data collection sessions are presented in Table 8. In this table, "Before" refers to the baseline recording made before the participants' departure for Japan. "Japan I" and "Japan II" refer to the recordings made during their stays in Japan. "After I" refers to the recording made about one month after their return to the United States, and "After II", to the recording made about two months after their return. The difference between "N/A" and "0.0%" in the table deserves attention. (See the first line in the table for the recording of Dan before his departure, for example.) "N/A" means that there was no context during the recording in which the production of the postpositional particle was required. "0.0%" means that there were some contexts, but the speaker did not produce the correct particle at all.

Except for *no*, all uses of the particles were counted. Because the only function of *no* which was used in all of the children's speech was the genitive function, production of *no* was counted only when it appeared as a genitive.

The rates of case particle production, *ga* and *w(o)*, varied greatly from session to session in all the children. Because *ga* and *w(o)* are often deletable, the results from the children in this study are within a normal range. Even so, it is worth noting that three out of four children did not produce *w(o)* at all before their departure, but, even if temporarily, their production of *w(o)* jumped in the Japan I session. Great individual differences were also found. Production of the obligatory *de*, *to*, *no*, and *kara* by Nina and Ken was almost always 100 percent, showing their mastery of these particles. Sara also produced *kara* and *to* 100 percent of the time, and her production of *ni* was also almost at the acquisition level. However, her production of *de* and *no* was below the acquisition level.

Dan also produced *kara* consistently. However, his production of other particles, *ni* and *de* in particular, was unstable. His correct production of *ni* in the Japan I session was 0 percent. However, a careful look at the data shows that my conservative grammaticality judgment was partially responsible for the low percentage. I regarded two of his utterances which contained "*eiga de deru hito*" (a person who appears in the movie) as ungrammatical. In my judgment, *ni* instead of *de* should have been used in this context. However, several Japanese informants regard the use of *de* here as acceptable. Furthermore, Sara and Dan's mother also said "*eiga de deru hito*" in the same transcript. If these utterances had been excluded, Dan's rate of correct production rate of *ni* would have been higher, although it still would have

been below the acquisition level.

TABLE 8: Children's Production of Postpositional Particles

Child		Particle						
		<i>ga</i>	<i>(w)o</i>	<i>ni</i>	<i>de</i>	<i>to</i>	<i>no</i>	<i>kara</i>
		nominative	accusative	dative/goal	instrument	comitative	genitive	source
Dan	Before	N/A	0.0%	100.0%	N/A	100.0%	N/A	N/A
	Japan I	66.7%	25.0%	0.0%	0.0%	100.0%	80.0%	100.0%
	Japan II	30.8%	0.0%	86.7%	100.0%	88.2%	100.0%	100.0%
	After I	100.0%	N/A	50.0%	100.0%	100.0%	100.0%	N/A
	After II	40.6%	10.0%	77.3%	66.7%	92.6%	92.6%	100.0%
Sara	Before	50.0%	0.0%	100.0%	N/A	100.0%	N/A	N/A
	Japan I	72.7%	25.0%	88.9%	100.0%	100.0%	89.0%	100.0%
	Japan II	90.0%	88.9%	89.5%	100.0%	100.0%	78.9%	100.0%
	After I	50.0%	66.7%	90.0%	50.0%	100.0%	90.0%	N/A
	After II	78.7%	52.2%	90.0%	90.0%	100.0%	85.7%	100.0%
Nina	Before	40.0%	0.0%	75.0%	100.0%	100.0%	100.0%	100.0%
	Japan I	75.0%	50.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Japan II	53.3%	0.0%	75.0%	100.0%	100.0%	100.0%	100.0%
	After I	83.3%	50.0%	100.0%	100.0%	N/A	100.0%	100.0%
	After II	68.8%	22.2%	96.6%	100.0%	100.0%	97.4%	100.0%
Ken	Before	22.2%	37.5%	87.5%	100.0%	100.0%	100.0%	100.0%
	Japan I	50.0%	28.6%	100.0%	100.0%	100.0%	100.0%	N/A
	Japan II	25.0%	27.3%	71.4%	100.0%	100.0%	100.0%	100.0%
	After I	100.0%	33.3%	100.0%	100.0%	95.4%	100.0%	100.0%
	After II	68.8%	22.2%	96.6%	100.0%	100.0%	97.4%	100.0%

* Note: N/A = Not Applicable.

The effects of visiting enrollment upon the children's production of postpositional particles can be measured by comparing their rates before their departure to Japan, during their stay in Japan, and after their return to the United States. Throughout the period examined, Nina's and Ken's production of *de*, *to*, *no*, and *kara* were consistently above the acquisition level, making it difficult to detect the impact of the visiting enrollment. Comparison of their production of other particles before their departure and during their stay in Japan, however, reveals a complex picture. Nina's production of *ni* rose from 75 percent before departure to 100 percent during the Japan I session, but then it declined to 75 percent again during the Japan II session. Ken showed a similar pattern. His correct use of *ni* increased from 87.5 percent before departure to 100 percent during the first recording in Japan, but it then fell to a level lower than his pre-departure level during the second recording session in Japan. Although more research is needed to determine why this happened, it may be that increased communicative demands during the visiting enrollment (including interaction with monolingual Japanese grandparents, for example) may have led to situations in which the children needed to produce more complex Japanese sentences without resorting to English than they had prior to leaving the States. I conjecture that this resulted in more errors in postpositional particle productions than might have otherwise been the case.

Sara's and Dan's Japanese utterances before their departure were missing contexts for four out of seven particles examined, leaving only the three particles *w(o)*, *ni*, and *to* to be compared. Even so, I need to point out that the frequencies of Sara's and Dan's Japanese utterances during the "Before" session were the lowest of the four children. (Sara produced only 40 utterances and Dan, only 34 utterances, compared to 104 by Nina and 168 by Ken.) Therefore, Sara's and Dan's results from the "Before" session may not be reliable. The results during their stay in Japan also showed no consistent pattern. In sum, the rates of Sara's and Dan's production of postpositional particles did not show any consistent improvement between the predeparture session and the two sessions near the end of their stay in Japan.

Next, the predeparture production rates of each particle were compared with the mean production rates after the children's return to the United States. A remarkable improvement was observed in Nina's and Ken's production of *ni*. Nina's production of *ni* was 75 percent before her departure, but during her stay in Japan the mean rate rose to 87.5 percent. After her return, the rate rose further to 98.3 percent. In Ken's case, his rates of production of *ni* before his departure and during his stay were almost the same and were below the acquisition level. However, after his return to the States, it rose to 98.3 percent, above the acquisition level.

Sara's and Dan's Japanese utterances before their departure lacked the context for some particles. Even so, one can measure the effects of visiting enrollment by comparing their mean rates of particle production during their stay in Japan and those after their return. Sara's production of *to* and *kara* remained the same, while her rate of production of *no* rose slightly. However, her rate of production of both *ni* and *de* declined. Dan's production of *to*, *no*, and *kara* continued to be above the acquisition level. His production of *no* and *de* improved, but that of *ni* declined.

To sum up the effects of visiting enrollment on Japanese L1 acquisition as reflected in the children's production of postpositional particles: for Nina and Ken, the two participants whose Japanese appears to

have been well-developed before their visit to Japan, their increased production of the postposition *ni* after their return confirms that visiting enrollment helped further their Japanese L1 acquisition. For the remaining two children, Sara and Dan, whose Japanese proficiencies were lower prior to departure, visiting enrollment appears to have been too short to stimulate a significant improvement in their particle production.

Errors in Production of Postpositional Particles

Table 9 shows the children’s errors in the use of postpositional particles and what they should have said instead. Since Nina’s and Ken’s production of postpositional particles were almost error-free, only the data from Dan and Sara is presented. In this table, the postpositional particles produced by each child are shown to the left of the arrow. “Zero” means that the child omitted the particle. For example, in the first row for Japan I, Dan omitted a postpositional particle which he should have used, and the table presents this error as “zero → *no*.” Since the recording of the two children before their departure (Before) did not contain errors, nothing appears in that row.

TABLE 9: Errors in Production of Postpositional Particles

Session	Dan		Sara	
	error	→ target	error	→ target
Before				
Japan I	zero	→ <i>no</i>	zero	→ <i>ni</i>
	zero	→ <i>ga</i>	zero	→ <i>ga</i>
	<i>ni</i>	→ <i>de</i>	zero	→ <i>no</i>
	<i>to</i>	→ zero		
	<i>ga</i>	→ (<i>w</i>) <i>o</i>		
	zero	→ (<i>w</i>) <i>o</i> (<i>de</i>)		
Japan II	<i>no</i>	→ <i>ni</i>	<i>de</i>	→ <i>ni</i>
	(<i>w</i>) <i>o</i>	→ <i>ga</i>	zero	→ <i>no</i>
After I	zero	→ <i>ni</i>	<i>ni</i>	→ <i>de</i>
After II	zero	→ <i>no</i>	zero	→ <i>ni</i>
			zero	→ <i>de</i>
			<i>ni</i>	→ <i>de</i>
			<i>ga</i>	→ <i>no</i>

Dan's and Sara's transcripts contain two common types of errors: omission and incorrect usage. The brother and sister made more errors in production of postpositional particles than the other two children did. However, Sara also produced postpositional particles at the highest rate because she used more complex grammatical constructions than the other children. Nonetheless, it is not the case that Sara and Dan made more errors because they produced more utterances. In fact, the total number of Japanese utterances produced by Sara and Dan were lower than those produced by the other children. Although these errors can also be viewed as developmental errors, it seems that they were more frequent in Sara's and Dan's speech. Moreover, the varieties of errors the two children produced more closely resemble errors seen in L1 attrition (Yukawa, 1998) than in L1 acquisition.

Dan's speech also contained other types of errors involving morphological realization patterns, as shown in Examples 1 and 2 below.

Example 1 (from Japan I)

Mother:	<i>kore tabete miru</i>	(Actual Japanese utterance)
	/ this eat try /	(English gloss)
	[Do you want to try this?]	(English translation)
Dan:	* <i>to ocha</i>	(Actual Japanese utterance)
	/ with tea /	(English gloss)
	[<i>ocha to</i>]	(Correct Japanese)
Mother:	<i>to ocha?</i>	(Actual Japanese utterance)
	/ with tea /	(English gloss)

In Example 1, *to* is a postposition that means "with".¹⁰ In normal Japanese morpheme order, *to* should appear after the noun (e.g., "*ocha to*"). However, the morpheme order Dan used here is that of English, preposing the postposition before the noun. This error is especially surprising because Dan's mother demonstrated the correct usage of *to* immediately before his turn.

Example 2 exhibits the same pattern.

Example 2 (from Japan II)

Mother:	<i>shinbun de</i>	(Actual Japanese utterance)
	/ newspaper in /	(English gloss)
Dan:	* <i>de shinbun</i>	(Actual Japanese utterance)
	/in newspaper /	(English gloss)

De is a postposition, yet Dan puts it before the noun, following English morpheme order. These two errors were the only errors of this kind in all the transcripts.

Dan's utterances above give fresh insight into research on codeswitching. Some researchers have

assumed that typological differences of the two languages involved can determine the constraints or the conditions under which codeswitching can occur. To date, a codeswitched utterance such as that in Example 3 from Nishimura (1986) has been considered as an example of English-Japanese bilingual speech.

Example 3 (from Nishimura, 1986, p. 128)

What do you call it <i>nihongo de</i> ?	(Codeswitched utterance)
/What do you call it Japanese in?/	(English gloss)
[What do you call it in Japanese?]	(Intended meaning)

The speaker in Example 3 inserted the Japanese phrase “*nihongo de*” into an English sentence, retaining the Japanese morpheme order and supposedly placing the Japanese phrase in the position of an English prepositional phrase. Citing the above example, Azuma (2001) hypothesized that the morpheme order of “noun + postposition” is retained in English-Japanese bilingual speech. However, Dan’s utterances in Examples 1 and 2 may counter Azuma’s claim, showing that what determines the word order of codeswitched utterances is not dictated by the combination of languages only. The strength of the speaker’s language ability, or more specifically, whether or not he or she can correctly form the matrix language, is also very important.

Dan often indicated his uncertainty about postpositional particles by hesitating through the use of the filler “*eeto*” (uhmm), as shown in the following excerpt from his speech during the second recording session in Japan.

Example 4 (from Japan II)

Dan: <i>nanka pilot eeto no hanashi shiteta desho</i>	(Actual Japanese utterance)
/Err. . . pilot uhmm GEN talking was probably /	(English gloss)
[You must have been talking about the pilot.]	(English translation)

In this example, the filler *eeto* is produced between the noun *pilot* and the genitive *no*, breaking up the unit of noun and postpositional particle. As far as my research is concerned, Dan’s error—that is, a production of an element between the noun and postpositional particle—is an error unheard of among monolingual Japanese children.¹¹ It indicates not only Dan’s uncertainty of postpositional particle choice, but also the incompleteness of his matrix language frame (Myers-Scotton, 2002) in Japanese, or more specifically, a *bunsetsu* unit (Hashimoto, 1934). My English native-speaker informants agree that the English equivalent of the above construction (“a story of uhmm a pilot”) does not sound ungrammatical; the insertion of a filler between a preposition and a modified noun is acceptable. If this is so, it is possible that Dan mapped an English structure onto his Japanese speech.

To sum up, the errors made by the two children who showed low rates of correct production of postpositional particles were closely examined. The kinds of errors detected in their speech can be found in both the L1 development and the L1 attrition literature. In particular, the errors involving morphological realization patterns are associated with L1 attrition. “Attrition” usually refers to a situation in which

something once acquired is lost, but we are not sure whether or not Dan had actually acquired the target forms. This result may indicate that his L1 acquisition was incomplete.

CONCLUSION

This study investigated the effect of visiting enrollment in Japanese schools on the Japanese speech of four school-age Japanese-English bilingual children who were acquiring both languages as L1s. In particular, the study examined their postpositional particle production and error patterns in their Japanese utterances to ascertain the impact of their trip. It also compared some of their results with those of their parents.

Overall, the study revealed great individual differences in the impact of visiting enrollment on the children's Japanese language ability. The two children who were fairly proficient in using Japanese postpositional particles before their departure to Japan furthered their Japanese L1 acquisition during their stay and after their return to the United States. This suggests that visiting enrollment in a school in the target language country was effective in furthering the minority language ability in some children, and, if repeated annually, this kind of stay and study in the target language community might be an effective way to help bilingual and language minority children maintain and further improve their minority language.

However, improvement in postpositional particle production was not found after a one and-a-half month visiting enrollment by the other two children, who were English dominant and whose L1 Japanese seemed to be weak. As far as their Japanese syntax is concerned, it appears that this was an insufficient period of time for them to appreciably improve.¹²

Comparing the children's data with that of their parents gives some insight into the differences between L1 and L2 speech production. Based on the data, it can be stated that errors made by the children with the weakest Japanese exhibited both features of language acquisition and attrition.

The impact of brief periods of schooling in Japan seems more or less beneficial, depending on the starting Japanese level, at least within the measured time-frame. However, there is certainly a need for additional research. Hirai (2002) reports a positive impact from trips to the target language country even shorter than those in the current study. She found that such visits were effective in reversing incomplete acquisition or attrition of a child's L1 English.

Visiting enrollment involves a great deal of time and money in making the arrangements and may also entail uprooting children and parents. To confirm the efficacy of such undertakings, it is crucial to broaden the scope of this study and also to compare children who went to school in Japan with those who simply vacationed there, as well as with children who did not go to Japan.

The findings in this study are important because they give some insight into a possible way to effectively maintain the L1 ability of bilingual and language minority children, while at the same time suggesting that something more than short-term visiting enrollment may be necessary for children with limited minority language skills. Only further research can clarify the benefits of visiting enrollment in the complex phenomena of L1 acquisition as a minority language—research integrating L1 and L2 acquisition, and L1 attrition.

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NOTES

- ¹ This is a part of a larger longitudinal study which examined various measures of improvement in Japanese language proficiency due to visiting enrollment, including mean length of utterance (MLU), type-token ratio (TTR), codeswitching patterns, and matrix language frames.
- ² Postings on *Pata no uchi* (www.patanouchi.com), a website for people in international marriages or relationships, that were extracted on August 13, 2006, show that there were some instances in which applications for visiting enrollment were declined because of (the school's and/or the school district's) concerns that visiting enrollees might cause an extra burden on teachers and delay the progress of other students' studies. Also, in May 2005 and September 2006, parents at the Japanese Language School of Greater Boston discussed the logistic problems of such enrollment. For example, to be covered by the school disaster insurance and the National Health Insurance system while in Japan, one needs to transfer his or her certificate of residence (*jumin hyo*) from overseas to Japan. However, some prefectures pressured the parents to not transfer their certificates of residence if their stays were less than two months, resulting in further economic burden for the parents.
- ³ In this paper postpositional particle is used as a cover term for case particles and postpositions.
- ⁴ The functions proposed by Clancy (1986) are used here because her analysis is based on language acquisition data gathered from Japanese children.
- ⁵ Translations of categories of *ni* in Kabata (2001) are mine.
- ⁶ A morpheme is "the basic building block in words" (Myers-Scotton, 2006, p. 236). Most words consist of one or more morphemes. For example, *fu-shinsetsu* (unkind) is made of two morphemes, *fu* (not) and *shinsetsu* (kind).
- ⁷ A complementizer phrase is a clause with a complementizer, although this complementizer is often null. This term was created as the refinement of the notion of "sentence".
- ⁸ The model is called the 4-M model because morphemes are categorized into four kinds. For more information about the 4-M model, see Myers-Scotton (2006) and Schmitt (2000a, 2000b).
- ⁹ For details about the school, see Langager (2001).
- ¹⁰ This example of *to* is also analyzable as the discourse marker *and*, as in "[ellipsis] *and tea*." However, as a dislocation of the other postposition was also found, I regarded it as a postposition.
- ¹¹ A similar case of insertion of a filler is also reported in the speech of Japanese-English bilingual children whose Japanese is weak (Takagi, 2000).
- ¹² Sugimori (2003), which analyzed other areas of language development from the same data, showed improvement in the mean length of utterance (MLU) among all children's utterances, including Dan's and Sara's.

REFERENCES

- Azuma, S. (2001). Functional categories and codeswitching in Japanese/English. In R. Jacobson (Ed.), *Trends in linguistics: Codeswitching worldwide II* (pp. 91-103). Berlin and New York: Mouton de Gruyter.
- Brown, R. (1973). *A first language*. Cambridge, MA: Harvard University Press.
- Cazden, C. B. (1968). The acquisition of noun and verb inflections. *Child Development*, 39, 433-448.
- Clancy, P.M. (1986). *The acquisition of Japanese*. Hillsdale, NJ: Lawrence Erlbaum.
- Freed, B. (1995). *Second language acquisition in a study abroad context*. Amsterdam and Philadelphia: John Benjamins.

- Fujimoto, Y. (1977). *Kodomo no kotoba no kenkyu* (I) [A study of children's language]. *Hokkaido Kyouiku Daigaku Kiyoo* (Dai-ichibu) [Hokkaido University of Education Annals], 28, 59-63.
- Fujiu, M. (2004). Case studies of English-Japanese bilingual children in New York: Parents' cultural attitudes and children's cultural identity. *Japan Journal of Multilingualism and Multiculturalism*, 10, 82 – 115.
- Fujiwara, Y. (1977). *Youji no gengo hyougen nouryoku no hattatsu* [Development of preschoolers' ability to express themselves in language]. Hiroshima, Japan: Bunka Hyoron Publishing. Cited in P. M. Clancy, (1986). *The acquisition of Japanese*. Hillsdale, NJ: Lawrence Erlbaum.
- Hakuta, K. (1982). Interaction between particles and word order in the comprehension and production of simple sentences in Japanese children. *Developmental Psychology*, 18, 62-75.
- Hashimoto, S. (1934). *Kokugoho yosetsu* [Outline of the Japanese language]. Tokyo: Meiji Shoin.
- Hirai, S. (2002). Longitudinal L2 attrition: A case study of a Japanese-English bilingual child. *Japan Journal of Multilingualism and Multiculturalism*, 8, 26-57.
- Horie, K. (1993). From zero to overt nominalizer NO: A syntactic change in Japanese. *Japanese/Korean Linguistics*, 3, 305-321.
- Kabata, K. (2001). *Tagijoshi "ni" no kenkyu to sono jugyo (he) no oyo* [Study of the multifunctional particle "ni" and its application in the classroom]. In M. Minami & Y.S. Alam (Eds.), *Gengogaku to nihongo kyoiku* II [Linguistics and Japanese language education II], (pp. 299-301). Tokyo: Kuroshio shuppan.
- Kamada, L. (1995). Report on bilingual family case studies in Japan: Significant factors affecting bilinguality. *Studies in the Humanities and Economics* 30 (3), 113-29. Hirosaki, Japan: Faculty of Humanities, Hirosaki University. Cited in M. G. Noguchi, Bilinguality and bicultural children in Japan: A pilot survey of factors linked to active English-Japanese bilingualism. In M.G. Noguchi & S. Fotos (Eds.), (2001) *Studies in Japanese bilingualism*. Clevedon, UK: Multilingual Matters.
- Kano, M. (2003). *Tabunka katei ni okeru esunikku bunka no keisho: Kanada Toronto-shi no itsutsu no keesu kara* [Japanese culture retention in intercultural families: Five cases from Toronto, Canada]. *Japan Journal of Multilingualism and Multiculturalism*, 9, 87-106.
- Kondo, K. (1997). Social-psychological factors affecting language maintenance: Interviews with *shin nisei* university students. *Linguistics and Education*, 9, 369-408.
- Kuno, S. (1973). *The structure of the Japanese language*. Cambridge, MA: MIT Press.
- Labov, W. (1972). *Sociolinguistic patterns*. Philadelphia: University of Pennsylvania Press.
- Langager, M. (2001). *Sojourning with children: The Japanese expatriate educational experience*. Doctoral dissertation, Harvard University.
- Martin, S. (1975). *A reference grammar of Japanese*. New Haven: Yale University Press.
- McGloin, N. H. (1985). NO-pronominalization in Japanese. *Papers in Japanese Linguistics*, 10, 1-15.
- Minami, M. (2003). Holding on to a native tongue: Retaining bilingualism for school-age children of Japanese heritage. *International Journal of Education Policy, Research, and Practice*, 4(2), 39-61.
- Miyagawa, S. (1989). *Structure and case marking in Japanese*. San Diego: Academic Press.
- Miyazaki, M. (1979). *The acquisition of the two particles wa and ga in Japanese: A comparative study of L1 acquisition and L2 acquisition*. Unpublished master's thesis, University of Southern California. Cited in P. M. Clancy. (1986). *The acquisition of Japanese*. Hillsdale, NJ: Lawrence Erlbaum.
- Montrul, S. (2002). Incomplete acquisition and attrition of Spanish tense/aspect distinctions in adult bilinguals. *Bilingualism: Language and Cognition* 5(1), 39-68.
- Myers-Scotton, C. (1993). *Duelling languages: Grammatical structure in codeswitching*. Oxford: Clarendon Press.
- Myers-Scotton, C. (1998). A way to dusty death: The matrix language turnover hypothesis. In L.A. Grenoble & L. J. Whaley (Eds.), *Endangered languages: Language loss and community response* (pp. 289-316). Cambridge, UK: Cambridge University Press.
- Myers-Scotton, C. (2002). *Contact linguistics*. Oxford: Oxford University Press.
- Myers-Scotton, C. (2006). *Multiple voices: An introduction to bilingualism*. Malden, MA: Blackwell.
- Myers-Scotton, C. & Jake, J. L. (2000). Four types of morpheme: Evidence from aphasia, code switching, and second-language acquisition. *Linguistics*, 38, 1053-100.
- Nakajima, K. (2001). *Bilingual kyoiku no hoho* [Methods of bilingual education]. Tokyo: ALC Press.
- Nishimura, M. (1986). Intrasentential codeswitching: The case of language assignment. In J. Void (Ed.), *Language processing in bilinguals: Psycholinguistic and neuropsychological perspectives*. Hillsdale, NJ: Lawrence Erlbaum.
- Oketani, H. (1995). *Subtractive to additive bilinguality – A study of relations among bilinguality, academic achievement, and socio-psychological factors in post-war second-generation Japanese Canadian youths*. Doctoral dissertation. University of Toronto.
- Oshima-Takane, Y. & MacWhinney, B. (Eds.). (1995). *CHILDES Manual for Japanese*, McGill University.

- Sakamoto, M. (2000). *Raising bilingual and trilingual children: Japanese immigrant parents' child-rearing experiences*. Doctoral dissertation, University of Toronto.
- Sanches, M. (1968). *Features in the acquisition of Japanese grammar*. Doctoral dissertation, Stanford University.
- Schmitt, E. (2000a). The lost word: Language attrition among children. In S. C. Howell, A. Fish & T. Keith-Lucas (Eds.), *Proceedings of the 24th Annual Boston University Conference on Language Development* (pp. 645-656). Somerville, MA: Cascadilla Press.
- Schmitt, E. (2000b). Overt and covert codeswitching in immigrant children from Russia. *International Journal of Bilingualism*, 4 (1), 9-28.
- Shibata, S. & Koshiyama, Y. (2001). Social influences in the acquisition and maintenance of spoken Japanese as a heritage language. *The Japan Journal of Multilingualism and Multiculturalism*, 7 (1), 26-57.
- Sugimori, A. N. (2003). *L1 recuperation and codeswitching in English-Japanese bilingual children*. Unpublished paper. Boston University.
- Takagi, M. (2000). *Variability and regularity in code-switching patterns of Japanese/English bilingual children*. Unpublished doctoral dissertation, University of Newcastle upon Tyne, England.
- Takahashi, T. (1975). *Yojigo no rengoronteki na bunseki—Meishi no kaku no yoho* [Analysis of compounds by preschoolers—Usages of case]. *Kokuritsu kokugo kenkyujo, gengo takei kenkyubu daiichi kenkyushitsu* [National Language Research Institute, Language System Research Department]. Cited in P. M. Clancy. (1986). *The acquisition of Japanese*. Hillsdale, NJ: Lawrence Erlbaum.
- Tsujimura, N. (1996). *An introduction to Japanese linguistics*. Malden, MA: Blackwell.
- Ueno, K., Utsuo, T. & Inaga, K. (1991). *PVT kaiga goi hattatsu kensa* [PVT Picture Vocabulary Test]. Tokyo: Nihonkagakusha.
- Vainikka, A. & Young-Scholten, M. (2002). Restructuring the CP in L2 German. In B. Skarabela, S. Fish, & A. H-J. Do (Eds.), *Proceedings of the 26th Annual Boston University Conference on Language Development* (pp. 712-722). Somerville, MA: Cascadilla Press.
- Yamada, A. (1980). *The development of syntactic devices for communication in the early stages of the acquisition of Japanese: A case study*. Unpublished master's thesis, University of Hawaii. Cited in P. M. Clancy. (1986). *The acquisition of Japanese*. Hillsdale, NJ: Lawrence Erlbaum.
- Yamada, K. & Nakagawa, H. (1995). *Joshi, zero joshi, mujoshi* [Particle/zero particle/no particle]. *Technical report of the Institute of Electronics, Information and Communication Engineers (IEICE), Natural language understanding and models of communication*, 95(429), 31-38.
- Yukawa, E. (1998). *L1 Japanese attrition and regaining: Three case studies of two early bilingual children*. Tokyo: Kuroshio Publishers.

