

# Double Transitions: A Case Study of an Infant Japanese/English Bilingual Sachiyo Fujita Round

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As part of a longitudinal study of the simultaneous acquisition of English and Japanese by the child of a Japanese mother and English father who employed the one parent, one language strategy, this paper looks at two major transitions that occurred during a 5-month period preceding his second birthday. Just as the child was moving from the one-word to the two-word stage of language production, the family moved from England to Japan. Because English had been his dominant language during the one-word stage, the child had acquired a large number of English nouns. However, he moved to a Japanese-speaking community at the time when he normally would have learned noun inflections in English. His multi-word stage therefore developed along Japanese lines, with acquisition of more verbs and functors. Thus, he began mixing English nouns with Japanese particles and verbs in what appears to be Japanese syntax. This development is analyzed in light of the three stages of bilingual development outlined by Volterra and Taeschner.

## ＜偶然にも重なった2つの移行期：日本語・英語のバイリンガル幼児に関する事例研究＞

本論文は母親であり研究者でもある著者の息子の1;8（1才8ヶ月）から2;0までの5ヶ月間の言語発達を報告したものである。研究対象の「T」は同時バイリンガルとして育てられている幼児であり、日本人の母親とイギリス人の父親は生まれた時から「一人一言語」といわれる言語方策をとり、母親は日本語、父親は英語でTと接してきた。

本研究はTが同時バイリンガルとしていかに育っていくかという長期発達研究の一部であり、今回の論文ではTの初期の言語発達の上で偶然にも重なった2つの移行期について焦点を当てる。Tの1;8から2;0までの5ヶ月の間に「一語文」から「二語文」へ移行する時期に、それまで英語が優位となっていたTが英語圏のイギリスから日本語圏の日本へ移住しこの言語間でも移行が起こったというものである。1;8の時に英語の「一語文」が活発に出はじめていたTにとって、急に日常の英語使用が減ってしまったという環境的要因が後者の言語間の移行としてどのように現れたか。

とくに英語を話す地域から日本語の地域に移ったことは「一語文」から「二語文」への移行の時に発達した言語の内容にも影響した。その言語内容の中でも英語と日本語の品詞に注目し、Tの5ヶ月間のデータを分析した結果、「一語文」では英語の名詞が占め、「二語文」「三語文」でも名詞は英語が優位だが「複数文」で日本語の動詞が現れたことから日本語の助詞も発達した。ボルテラとタシェナー（1978）のバイリンガルの3つの段階を参考にしつつ、この2つの移行期を経て2つの言語を統制する統辞の点では日本語が優位だと判断し、上のバイリンガルの段階で第2段階目にあると想定できる。

## INTRODUCTION

This paper is a case study of my own son, T, a Japanese/English bilingual child. It analyzes his linguistic development between the ages of 1;8 (years; months) and 2;0. The informant is a simultaneous infant bilingual with a Japanese mother and a British father who applied the one person, one language strategy from his birth.

This paper is part of a longitudinal study of T's development as a simultaneous bilingual. It focuses on a 5-month period in the child's early language development when he went through two of the most important transitions in his language development: he was growing out of the one-word stage toward the two-word stage, and coincidentally, he moved from Britain to Japan at this time. The latter transition influenced the former, since T was suddenly removed from an English-speaking community to a Japanese-speaking community at 1;8. His exposure to English suddenly decreased just after he started his active one-word stage with English as his dominant language.

Using data collected during these 5 months, I have analyzed T's double transitions, examining development of his use of grammar to see how he made his transition from the one-word to the multi-word stage, as well as his transition from English to Japanese dominance.

## DEFINITION OF KEY TERMS

First I would like to define two terms I use throughout this paper: simultaneous bilingual and stages of bilingual development.

Bilinguals are often categorized as either "simultaneous" or "successive", depending upon whether they learn both of their languages at the same time or learn one before the other. McLaughlin (1984) suggests that to distinguish between these two types of language acquisition, the cutoff point for exposure to the second language is roughly about the age of 3. So, when the second language is introduced before the child is 3 years old, s/he is said to undergo simultaneous language acquisition,

while if exposure begins after the child is 3 years old, the language acquisition is termed successive. Many researchers agree with this boundary between "simultaneous" and "successive" bilingualism.

However one area that has not yet been determined by research concerns the process of becoming bilingual. Currently, there are two main theories about the mental processing of two languages in infants. They are called the "two-system model" and the "one-system model". Klausen, Subritzky and Hayashi (1993) define these two approaches as follows: "it is assumed in the two-system model that the child is able to separate the two different linguistic systems in her environment from early on", while "on the other hand, it is assumed in the one-system model that there are certain cognitive prerequisites for language differentiation both on the lexical level and the syntactic level". In other words, in the one-system model, it is assumed that very young children treat all language input as belonging to a single system, and do not realize that in fact, they are dealing with two different systems. [Editor's note: see Wanner article, pp. 20 - 40, for more on this debate.]

In the early stages of my longitudinal study of T's linguistic development, I found some evidence of a single linguistic system in terms of lexicon (Fujita Round, 1993). Since the data I have collected on T seems to fit this model, I will be analyzing T's linguistic development in terms of this theory.

Using this model, Volterra and Taeschner (1978) described the stages of the linguistic development of bilingual children. They outlined three stages of becoming bilingual:

- 1) The child has one lexical system which includes words from both languages.
- 2) The child distinguishes two different lexicons but applies the same syntactic rules to both languages.
- 3) The child has two linguistic codes, differentiated both in lexicon and in syntax, but each language is exclusively associated with the person using that language.

Since these three stages were suggested, they have been used and re-examined by other researchers (McLaughlin, 1984; Vihman, 1985; Saunders, 1988; Lanza, 1992; Klausen et al., 1993). Saunders (1988) suggests that Stage 1 lasts until the age of 2;0, based on his studies of his three bilingual children. According to his interpretation, in this stage, "the child regards the two languages as one system containing many synonyms, and in his or her small active vocabulary uses only one of the 'synonyms'". Lanza (1992), however, found evidence of the awareness of two languages and the ability to codeswitch contextually in a child who was only two years old.

In looking at the stages described by Volterra and Taeschner, Klausen et al. (1993) point out that "there is no transition between the stages as they are defined even though gradual development is a key issue in the model". They argue that the actual process of transitions between the stages in Volterra and Taeschner's study are not described precisely as to when they occur and how the informants in the study made the transitions between the three stages.

In my early study of T between 1;0 and 1;4 (1993), the data provided some evidence of Stage 1. However T's language production was fairly limited at the time. He was in the early one-word stage and there were no syntactic items in the data, so the actual distance between Stage 1 and 2 of T's bilingual development was not clearly traced in the study. In addition to my study, Vihman (1985) also states that her bilingual son's data between 1;1 and 1;7 "may safely be viewed as falling within Volterra and Taeschner's Stage 1, since words were not regularly combined until 1;8".

During this second phase of my longitudinal study, T was between Stages 1 and 2. The key point of this transition between these two stages seems to be related to the onset of syntax and the choice of the dominant language. The lexicon up to this point consisted mostly of nouns, but this transition, while leading to an expanded lexicon, was more concerned with complex grammatical acquisition. At this point, the emergence of mixed two-word and multi-word utterances is the central developmental fact in relation to bilingual language acquisition.

Let us now look at the subject and how he underwent these transitions.

## **SUBJECT**

The subject of this case study, T, is an only child who has been exposed to Japanese and English from birth. His parents decided to adhere to the one person, one language strategy, while between themselves they speak English. T was born in Japan, then moved to Britain at 0;5 and lived there until 1;8. After that the family came back to live in Japan.

Looking at T's language environment and his linguistic development during his first two years, we find:

- 1) 0;0 - 0;5: birth and life in Japan/prelinguistic stage.
- 2) 0;5 - 1;8: move to Britain/start of one-word stage (1;0), gradual development of English dominance.
- 3) 1;8 - 2;0: return to Japan/transition from one-word to multi-word stage overlapping sudden change from living in English-speaking community to life in Japan.

The sources of language input for T during these three periods were as follows:

- 1) 0;0 - 0;5 Home/grandparents/neighbourhood (Japan)
- 2) 0;5 - 1;8 Home/grandparents/neighbourhood/local baby clinic/creche (child-care centre) in the university/local play group (England)
- 3) 1;8 - 2;0 Home/grandparents/neighbourhood/local play group (Japan)

The only bilingual domain was the home<sup>(1)</sup>; otherwise, both speech communities were dominated by monolinguals.

The data in this paper are based on period 3 above. They were collected from audio cassette recordings and the researcher/mother's notes. Five 60 to 90-minute cassette recordings were made between 1;8 and 2;0 at the breakfast table where the family sit down together. Conversation for 30 minutes from each was transcribed, the portions of 30 minutes being selected particularly for the moments of communicative interaction between T and his parents. The participants in the tapes are T, his Japanese mother and his English father, except on Tape 5 (2;0), where his father was missing and the child had to stick to his Japanese-speaking context with his mother.

Before the family returned to Japan, the father was a full-time parent whereas the mother was a part-time student. Then, in Japan, T's father started full-time work and his mother became a full-time parent. Due to this change of family situation, the pattern of the one person, one language strategy which his parents had aimed at from his birth was necessarily altered, as indicated by the situation in Tape 5. The family routine changed. In particular, T's exposure to English from his father dramatically decreased. The home was the only bilingual domain for T, but the same quality of bilingual situation was not maintained. These various changes due to the fact that the family moved from Britain to Japan influenced T's language development during the 5 months in which the data were collected.

Now let us look closely on T's double language transitions, from the one-word to the multi-word stage, and from English to Japanese dominance.

#### ONE-WORD STAGE TO MULTI-WORD STAGE

In the five months of study, T's language development shifted from the one-word stage to the multi-word stage. At 1;8, the majority of his utterances were single words, mostly nouns. He often pointed out objects, whether demanding food or drink, or remarking on what he saw around him. Thus, "Juice!" or "Door!" were typical utterances at this time.

Then, at 2;0, he began to add more specific information about the objects, saying, for example, "*Jusu, Tomo-no*" (Juice, Tomo's) or "Juice here". Nor was this expansion limited to objects. At 2;0, he was more explicit about what he wanted to say in general, (e.g., "More milk, Mummy"), thus producing more adult-like utterances.

This gradual increase in the length of T's utterances is depicted in Table 1. Not only did the number of his utterances grow constantly, but also, the increase in the types of utterances was notable. These numbers confirm T's language development.

**TABLE 1. Number of One-Word, Two-Word and Multi-Word Utterances Produced in Monthly Samples Between 1;8 and 2;0**

Age (Years; Months)	One-Word	Two-Word	Multi-Word	Total
1; 8	26	2	--	28
1; 9	33	6	--	39
1;10	31	17	5	53
1;11	31	30	15	76
2; 0	50	33	15	98

T's use of his two languages during this period is presented in Table 2 below. The figures were calculated as percentages of his total number of utterances as shown in Table 1.

In the one-word stage, it was easy to classify utterances as either Japanese or English. The only exceptions were Japanese loan words borrowed from English, and overextended words (words or sounds that the child tended to use in a way unique to him), which were assigned to the "Others" category. (See actual examples in Footnote 2). After T entered the two-word and multi-word stages, however, he produced mixtures of his two languages; e.g., "*Atchi, please*" (there, please) at 1;10, "*Here da*" (It's here)

and "Tomo, Daddy hot *achichi*." (Tomo found the toast hot, hot, Daddy) at 1;11. Of course he also combined words of the same language, e.g., "Mummy, yeah?" During the first month of this study (1;8), only 2 two-word utterances were recorded. Since they were both in English, there were not any mixed utterances at this point. From 1;9, however, T started to mix the two languages in his two-word and multi-word utterances.

**TABLE 2 . Language Distribution**

Age (Years; Months)	Japanese	English	Mixed	Others	Total
1; 8	17.8%	67.9%	0%	14.3%	28
1; 9	25.6%	51.3%	10.3%	12.8%	39
1;10	25.0%	55.8%	15.4%	3.8%	53
1;11	26.7%	38.7%	32.0%	2.6%	76
2; 0	45.8%	25.0%	22.9%	6.3%	98

At 1;8, T used mostly one-word English constructions. They comprised 67.9% of his utterances, whereas Japanese word constructions accounted for only 17.8%. Then, as time went on and the transition to the Japanese linguistic environment exerted its impact, the percentages of his use of the two languages gradually changed. This shift in dominance coincides with the time T started to produce two-word utterances. Then from 1;11 to 2;0, there is a drop in the mixing. The reason for this may have been that he did not happen to have an English interlocutor in that particular recording setting, and therefore he did not need to mix much English with his Japanese.

Tables 1 and 2 suggest that as T made the transition from one-word to multi-word utterances, his early two-word utterances were mostly combinations of two English nouns, such as "Daddy, door" (1;9). However, by 1;11, the proportion of two-word utterances was roughly equal to that of his one-word utterances, and the proportion of mixed utterances had also increased. This is the time when T started to actively learn parts of speech other than nouns in Japanese. Therefore, he still used English nouns but combined them with other parts of speech from Japanese.

In the next section, I would like to look at detailed grammatical constructions from the data.

### EARLY GRAMMATICAL CONSTRUCTIONS

Clancy (1985) found that "Japanese child language at the one- and two-word stages is more frequently grammatically complete and correct than would be the corresponding utterances of an English-speaking child". However, she did mention that the reasons are partly that the Japanese language is dependent on situation and context, and has frequent ellipses which are considered grammatically correct usage. For this reason, the course of acquiring Japanese and English cannot be compared directly and its evaluation seems to be a difficult task.

It can be noted, however, that whereas Japanese children usually acquire verb inflections for tense, aspect, negation and mood first (Clancy, 1985) the early grammatical constructions English children usually acquire are noun inflections for number and possession and verbal inflections for aspect and tense (Brown, 1973; Munson and Ingram, 1985, cited in Klausen et al.).

Examining T's lexical development during the period of this study, we find that the majority of items in his lexicon was still nouns. This can be explained by him still being in the one- word stage at this period of the study. Table 3 below shows the distribution of various parts of speech as percentages of the total number of utterances in the data. The presence of Japanese functors appears to clearly show the transition of T's lexical dominance from English to Japanese. However, the emergence of functors in this table might also be linked with the particular situation for the recording at 2;0, when the English interlocutor was absent. In this context, the Japanese functors appeared mostly at 2;0, when T had to stick to Japanese throughout the recording period because his English father was not present.

In this period of five months, T's English lexicon was predominantly composed of nouns and adjectives. It is assumed that this is because he had already acquired many nouns in English at his one-word stage before he moved to Japan. Therefore, throughout this period, contentives (nouns, verbs and adjectives) are dominant and 97% of his lexicon in this area is in English. On the other hand, with the appearance of Japanese particles, the percentage of functors increased in Japanese. On the whole, it is obvious that T had only acquired a few functors in English, and that he acquired his functors mainly in Japanese.

**TABLE 3. Grammatical Analysis of T's Utterances During the Research Period**

	Japanese	English	Total Nos.	Japanese	English
<u>Contentives</u>					
Nouns	18	27	45		
Verbs	11	1	12		
Adjectives	7	5	12		
Subtotal	36	33	69	75%	97%
<u>Functors</u>					
Adverbs	4	1	5		
Determiners	0	0	0		
Pronouns	1	0	1		
Particles	6	0	6		
Conjunctions	0	0	0		
Copula verbs	1	0	1		
Subtotal	12	1	13	25%	3%
Total	48	34	82		

**Note:** Classification system borrowed from Lanza (1992).

In examining the emergence of T's use of English functors during the 5-month period under review, I would like to compare his use of high-frequency English words with that of English monolingual children. Gopnik (1981) made a study of nine English children between 1;0 and 2;0 to determine frequently used words and phrases. Table 4 shows the most commonly used 20 words and the prevalence of their use, along with notation of whether or not T used these words.

**TABLE 4. Use of High-Frequency English Words: Comparison of T and Monolingual Children**

Use by Children in Gopnik Study	Word Number	Word	Use by T
All 9 used	1	down	+
	2	gone	
	3	that	+
8 of 9 used	4	there	+
	5	no	+
	6	in	+
7 of 9 used	7	up	+
	8	bye bye	+
	9	yes	+
	10	more	+
	11	on	
6 of 9 used	12	oh, dear	+
	13	here yare (=here you are)	+
	14	off	+
5 of 9 used	15	fall	
	16	hello	+
	17	again	
	18	out	
	19	look	
	20	go	

Among these 20 frequently used English words and two-words phrases, 13 also appeared in T's data, whereas 7 items were missing. Those that did not appear in T's data were "gone", "on", "fall", "again", "out", "look" and "go". They are all prepositions, adverbs or verbs --in other words, English functors. Thus, T's lexicon had developed to include a fair amount of common English terms at his age, except in the realm of functors.

### **Noun Inflection**

As previously mentioned, one of the early grammatical constructions normally acquired by English-speaking children is noun inflection for number and possession. In my data, there are no English noun inflections in T's lexicon. This fact can be interpreted to mean that T had not developed the concept of noun inflection in English yet. In other words, although he had learned English nouns, he was still in his one-word or early two-word stage of development in English.

As far as the concept of numbers is concerned, T used a Japanese numeral quantifier at 2;0, combining the Japanese counter "-sai "(years old) with an actual number "ichi "(one) successfully, as shown in Example 1.

#### Example 1

**Situation:** *Mother tries to get T's attention and talk to him while he refuses to let her change his nappy.*

- M: *Itai-ne. Itai, itai. Tomo, kae-yo.* ([Your bottom is] sore, isn't it? It is, it is. Tomo, let's change it [the nappy].)  
T: *Mummy, yada.* (Mummy, I don't want to.)  
M: *Hora, Tomo ikutsu?* (Look, Tomo, how old are you?)  
T: *Is-sai.* (One year old.)  
M: *Is-sai?* (One year old?)  
T: *Uhh.* (Yeah.)  
M: *Kyode nis-sai da -yo.* (Today you are two years old.)

Japanese, the language T used to count in, does not have the same plural system as English. There are many numeral quantifiers (like the counter for years in the example above) which attach only to numbers. They do not attach to the actual noun as English determiners do. At this point, it was questioned if this absence of noun inflections in English could be a transfer from the uninflected Japanese noun. T advanced to the two-word and multi-word stage by 2;0, and he also showed a transition from English to Japanese as the dominant language. Thus, he increasingly acquired verbs and functors in Japanese, not English.

It seems possible to interpret this as meaning that he could apply the Japanese grammatical system to English, but not the other way round. This is similar to what Volterra and Taeschner described in their bilingual Stage 2, where they asserted that the same syntactic rules are applied to the lexicons of both languages. In this sense, acquiring morphological elements like noun inflection is one of the key elements for Japanese/English bilingual children in differentiating between English and Japanese.

### **Verbs and Verbal inflection**

T did not acquire many verbs in English during his one-word stage while he was in England. Verbs were gradually acquired at the end of the one-word stage toward 2;0. There are 12 verbs in the recorded data, and they are all Japanese except for one English verb. Moreover, most Japanese verbs are inflected for negation, tense and mood. These verbs and the inflections T produced are shown in Table 5.

The only English verb T used during this period is "walk". However, in actual usage, this "walk" was used conditionally in combination with "park". "Walk park" was one of T's regular phrases and the words functioned together as a set phrase with a specific meaning. Thus "walk" seemed to function more like a nominal for him.

In looking at the verbs T used in my data, another unique feature is his verbal inflections. His only English verb in the list, for example, is not inflected, whereas, of the other 11 verbs, all are inflected except the two verbs which are used as baby talk in Japanese.

**TABLE 5: Use of Verbs**

Example Number	Age When First Used	Verb With Inflection	Ages When Used Again	Meaning in English
1	1;8	<i>atta</i>	1;9, 1;10, 1;11, 2;0	exist-ed
2	1;9	<i>hainnai</i>		enter-ed
3		<i>inai</i>		exist-not
4		<i>ita</i>		exist-ed
5	1;10	<i>oide</i>		come+ <i>te</i> form=please come
6	1;11	<i>kaita</i>		wrote
7	2;0	<i>asobo</i>		play+ <i>o</i> form=let's play
8		<i>chodai*</i>		give me (baby talk)
9		<i>mite</i>		look+ <i>te</i> -form
10		<i>nenne*</i>		sleep (baby talk)
11		<i>haitta</i>		enter-ed
12		walk [English]		

To negate a verb in Japanese as in example 2 in Table 5, T had to drop the "*ru*", which is the basic inflection attached to the verb stem "*hai*", and then inflect the verb by attaching the negative ending "*nai*", thus creating "*hairana*". In example 11 in the table, he uses the same verb but adds the past tense marker "*ta*". For mood, he used two forms, the imperative *te*-form and the volitive *o*-form, in examples 5, 7 and 9. Given these examples, my data supports the view that verbal inflections for tense, aspects, negation and mood are early constructions in Japanese (Clancy, 1985; Klausen et al, 1993). At the same time, as far as T's verbs in the data are concerned, it can be said that T followed the course of Japanese monolingual children acquiring verbs, rather than English children. However, whether T eventually learns English verbs or not is another question.

In my study, half of T's Japanese verbs were produced in 2;0 (examples 7 to 12). It must again be stressed that in this particular recording situation, T's father, the only medium of English in his environment at the time, was not present, and the input of English, either from his father or from communication between his parents, did not exist. Therefore, it could be expected that T would have more readiness to use the Japanese language. Thus, in this recording, almost half of his utterances (45.8% out of 98 utterances in Table 2) were exclusively in Japanese. Thus, the absence of an English interlocutor might have affected the distribution of languages in his utterances here.

However, the fact that T used Japanese verbs in his two-word and multi-word utterances at this time could indicate that Japanese syntax had become dominant, since he did not have equivalent verbs in English. If that is the case, then this Tape 5 at 2;0 might be showing a shift from bilingual Stage 1 to 2, in that he was applying Japanese syntactic rules to both languages. Taeschner (1983) also pointed out that verb development is crucial for bilinguals and it occurs at the end of the first stage and throughout most of the second.

### Postpositional Particles

The closest English equivalent of the Japanese particle is the preposition. Japanese particles, however, come after the item and are therefore post positional. Clancy (1985) found that particles are among the earliest acquired grammatical constructions among monolingual Japanese children. As with verbal inflections, T's data was consistent with her findings for Japanese infants. Indeed, T's use of particles illustrated his rapid Japanese development and shows the shift in his dominant language during the period under investigation.

In Table 6 above, of the four particles in the data, "*-ne*" and "*-yo*" are sentence final particles. They are simply attached at the end of the sentence. In particular, "*-ne*" is flexible, being the equivalent of a tag question. In general, "*-ne*" expresses the speaker's request for confirmation or agreement from the hearer (as in the English, "Isn't it" or "You know"). "*-No*", on the other hand, is a particle that modifies the preceding noun or noun phrase to indicate possession or location (meaning "---'s", "in ---", "at ---", etc). In my data, T's use of "*-no*" is usually possessive. "*-Mo*" is a particle which is the equivalent of "also", "---, too" or, in a negative construction, "not, ---either".

**TABLE 6. Frequency of Japanese Particle Use**

Month	1;8	1;9	1;10	1;11	2;0	Total
Particles & Number of Times Used	- <i>ne</i> 1		- <i>yo</i> 2 - <i>no</i> 1 - <i>wa</i> 1	- <i>yo</i> 2 - <i>no</i> 1	- <i>ne</i> 1 - <i>yo</i> 5 - <i>n</i> 3 - <i>mo</i> 3	2 9 5 4
Monthly Total	1	0	4	3	12	20

If we consider each particle to be one word, the use of these particles in the data is counted as two-word utterances. T's use of particles with other words is shown in Table 7.

**TABLE 7. Two-Word Utterances Involving Particles**

Nouns (Possessive Meaning)	Verbs	Adjectives
Tomo- <i>no</i> Mummy- <i>no</i> Percy- <i>no</i> No-my- <i>yo</i> (not mine!) Truck- <i>mo</i>	<i>asobo-ne</i> (let's play)	<i>nai-yo</i> (it's not here!) <i>ii-yo</i> (it's all right!) <i>itai-yo</i> (it hurts!) hot- <i>yo</i> here- <i>mo</i> (already here)

T produced combinations of particles and both English and Japanese words. One of T's multi-word utterances is actually a compound particle: Mummy-*mo-yo* (2;0). However, in my data I found that T did not inflect nouns for number or possession in English, though he used Japanese quantifiers for numbers, and the Japanese postpositional particle "-*no*" is the equivalent for English noun inflection for possession.

Despite the difference in the grammars of the two languages, the purpose of communication to achieve meaning must be similar. Itoh (1990) pointed out that the particles "-*yo*" and "-*no*" are acquired in the early stage of Japanese language acquisition because they are necessary for communication. The reason is that these particles usually appear in children's demands, particularly when they insist on something. In contrast, inflections are not needed to formulate demands in English, and this may be the reason they are acquired later in that language.

This assertion appears to be supported by T's data. His use of the particles "-*yo*" and "-*no*" is seen in the examples below, all of which were recorded at 2;0.

Uses of "-*no*"

"Mummy-*no*" ([It's] Mummy's [not Daddy's])  
"Tomo-*no*" ([It's] Tomo's [not anyone else's])

Uses of "-*yo*"

"No-my-*yo*" ([It's] not mine (emphasising his denial))  
"*Itai-yo*" ([It's] painful [emphasising the degree of pain])

If one looks at the verbal inflections and postpositional particles that tend to occur early in Japanese language acquisition, they appear to be more connected with children's feelings rather than with the course of language acquisition itself, and thus fit into Itoh's theory emphasizing communication needs. Whether children are bilingual or monolingual, in the process of acquiring language/s it seems that they will learn the communicative role of language by expressing their demands and trying to get their messages through to the adults around them.

### Lexical Mixing

Until now, I have concentrated mostly on the morphology in T's grammatical development. Before I conclude my description of T's language development in this study, I would like to examine how T mixed words from his two languages in order to consider T's syntactic development.

As we have already seen, T's one-word utterances were predominantly English. To gain a better understanding of how his languages were used during this double transition stage, I excluded his one-word utterances and focused on mixing in his two-word/multi-word utterances. To do this, I divided his utterances of two or more words into three categories: Japanese, English and Mixed utterances. The results are given in Table 8.

**Table 8. Language Context in Two-Word / Multi-Word Utterances**

Age	Japanese	English	Mixed	Subtotal
1;8	0	2	0	2
1;9	0	2	4	6
1;10	4	11	7	22
1;11	8	16	21	45
2;0	20	6	21	47
Total	32	37	53	122

Table 8 makes it clear that after T started to construct two-word/multi word utterances, the number of mixed utterances increased. To get an even clearer picture of his mixed utterances, I subdivided each of the language contexts to indicate two-word and multi-word utterances. The results are shown in Table 9.

**Table 9. Language Context in Two-Word and Multi-Word Utterances**

Age	Japanese		English		Mixed	
	Two-Word	Multi-Word	Two-Word	Multi-Word	Two-Word	Multi-Word
1;8			2			
1;9			2		4	
1;10	3	1	10	1	5	2
1;11	5	3	15	1	10	11
2;0	15	5	5	1	16	5

The time when T began using multi-word utterances is also when he started producing Japanese particles and verbs. The beginning of Japanese syntax acquisition becomes quite clear when his two-word/multi-word utterances are categorized according to the way he combined his languages in these utterances. To clarify this stage of his language acquisition, I categorised his two-/multi-word utterances into three types, as shown below.

Type 1	JAPANESE NOUN + ENGLISH WORD "MORE"	Age
1-1	Japanese noun + "more" e.g.) <i>Manma</i> more. (Rice, more.)	1;10
1-2	"More" + Japanese noun e.g.) More <i>nyunyu</i> . (More milk.)	2;0

Type 2	ENGLISH NOUN + JAPANESE FUNCTOR/S	Age
2-1	English noun + Japanese verb e.g.) Mummy <i>nenne</i> . (Mummy wants to sleep.)	2;0
2-2	English noun + Japanese particle e.g.) Here- <i>mo</i> .(Here, too.)	2;0
2-3	English noun + Japanese verb + Japanese particle e.g.) Daddy, <i>nenne-ne?</i> (Does Daddy sleep? Is he still sleeping?)	2;0
2-4	English noun + Japanese compound particles e.g.) Mummy- <i>mo-yo</i> .(Mummy, too! [definitely])	2;0
Type 3	TRANSLATING FROM ENGLISH TO JAPANESE	Age
3-1	Translating in the middle of the utterance e.g.) Please, oh-no, <i>hai-yo</i> . (Please [have this/hee-we-are], oh-no, here-we-are.)	1;10
3-2	Translating/general mixing e.g.) Two, three, <i>titotsu</i> .(Two, three, one.)	1;11

In T's development of two-word/multi-word utterances, Type 1 combinations tended to occur when his English was still dominant (in Table 2). Actually, Type 1 is a model which is often interpreted among linguists as "telegraphic speech" and "pivotal grammar". It occurs in a similar way with English monolingual children in the two-word stage. Type 1 appeared mostly in T's two-word utterances at 1;10. There the syntactic rule might be explained as English.

The use of Type 1 combinations dropped off at 1;11 and 2;0, although they had comprised 6 of his English and mixed utterances at 1;10. This decrease may be seen to indicate the shift of dominance to Japanese. However, in her study of a Spanish/English child, Deuchar (1994) reported that words like "more" ceased to be used when utterances became longer and verbs were acquired. In T's data, the decline in use of Type 1 combinations overlaps with the period when T started using verbs. Thus, the use of Type 1 combinations in T's two-word stage can be viewed as only temporary and being replaced through the acquisition of Japanese verbs and particles.

In place of Type 1 combinations, Type 2 appeared more frequently in both two-word and multi-word utterances at 1;11 and 2;0. In Type 2, it is clear that T was more dependent on Japanese verbs and postpositional particles, that is, Japanese functors. As we saw in the section on verbs, T's Japanese verbs were mostly inflected, except when he used baby talk verbs. The point here is that Type 2 combinations show the cross-linguistic difference between Japanese and English. In Japanese, the negation (e.g. "*hainnai*", 1;9) is inflected in the verb as one chunk of word, whereas in English, the negation is not inflected, but more separate and flexible. Therefore, in dealing with negation, the number of words could be counted as two in English but not in Japanese. Type 3 combinations occurred when T addressed his mother, a Japanese speaker. The direction of the language switch in these combinations, from English translated into Japanese, indicates T's awareness that he is switching languages. The Type 3 utterances in my data cannot be said to be codeswitching because T did not have enough translation equivalents in his two languages to choose a particular language or switch from one language to other on purpose. However, these Type 3 combinations certainly hint that T had started to translate and have an awareness of two different languages. I might even speculate that T might have been choosing his language according to the interlocutor. However, in the period covered by my data, it is still too early to say that he could distinguish between his languages and use separate syntactic rules according to the interlocutor.

In 1983, Taeschner added to her 1978 description of bilingual development, noting that in Stage 2 the child in her study began to produce translation equivalents and gradually to build up two lexical systems. This elaboration of Stage 2 would help to explain T's lexical mixing as evidenced in his Type 3 combinations. Thus, toward the end of 2;0, he can be said to have made a transition from bilingual Stage 1 to Stage 2, as well as the other transitions he went through.

## CONCLUSION

Between the ages of 1;8 and 2;0, the subject increasingly acquired Japanese grammar as he moved from the one-word stage to the multi-word stage and his environment changed from an English-speaking one to a Japanese community. Due to the fact that he acquired more Japanese functors, particularly verbs and postpositional particles, his utterances took on Japanese sentence structure as he moved onto his multi-word stage. Although he still had to mix in English nouns in order to complete sentences, the syntactic rules he used in his two-word/multi-word utterances became dominantly Japanese. The

coincidence of this transition and the growth of his two- word stage brought about T's mixing because he had no chance to develop equivalent functors in English after he moved back to Japan. At this point, mixing occurred because of his lack of English verbs and functors. Thus, he was seen to have had enough English nouns with which to express himself in one-word utterances, but not in two-word/multi-word utterances without mixing.

In the comparison of the recording at 1;11, when he was conversing with both of his parents, and that made at 2;0, when he only had a Japanese speaker, his mother, to converse with, we saw how the subject managed to keep to the Japanese language most of the time. Even in the mixed utterances in this data, the evidence of his use of Japanese functors suggests that the syntactic rules are mostly Japanese. This may not only be seen as a sign of shifting dominance, but also be seen to indicate that he had started to use the same syntactic rules for both languages, as described in Volterra and Taeschner's bilingual Stage 2. While my data showed how T built up two lexical systems during the transition from the one-word to two-word/multi-word stage, they do not show the development of syntactic systems in two languages yet.

When a bilingual child has acquired two equivalent lexical systems and also two syntactic systems, as described in Volterra and Taeschner's Stage 3, the lexical mixing in these utterances can be clearly investigated as the child's language choice, or evidence of codeswitching. That will be the next developmental issue for T as a Japanese/English bilingual child.

## NOTES

1. The definition of "domain" includes T's contacts with people as well as associations with places and situations he is put in.
2. In the data from these five tapes, there are eight overextended words; awa (another one), baba (bird), Bill (alligator), da (that, there), dadada (ice cream), no-my (not me, not mine), tutu (train), tututu (cutting). Also, there are 16 words that were originally English but are now used in everyday Japanese conversation as loan words. It is quite easy to discriminate loan words from the original English words, however, because of the phonological differences, particularly the shifting from English /l/ to Japanese /r/. Thus out of 16 possible cognates, I recognised 6 as Japanese words: juice/*jusu*, banana/*banana*, byebye/*baibai*, toast/*tosuto*, table/*teburu*, ball/*boru*.. All had shifted from English to Japanese during the period of my study.

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