SOME ASPECTS OF JAPANESE-ENGLISH CHILDHOOD BILINGUALISM:

Do Parental Input and the Stronger Language Affect the Child's Language Acquisition Patterns?

HIROMI MURANAKA

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Department of Linguistics University of Sydney

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CHAPTER 1
INTRODUCTION

The language output of bilingual children is thought to be influenced by a number of factors. "Parental/social input" and "the influence of the stronger language on the weaker language" are two of the most widely discussed influencing factors. Many researchers would agree that both of these factors contribute to the quality of language output, however the level of significance attached to these influences, taken separately or together, remains a matter of contention.

This study aims to investigate the language output of a simultaneously bilingual child (Japanese-English) in order to determine the relative influence of the above-mentioned factors. Parental/social input for this child comes primarily from the mother. The stronger language in this case is English, therefore it is the child's acquisition of Japanese (in a predominantly English-speaking environment) which will be investigated.

There are four hypotheses in this study in relation to the two influential factors (input and the stronger language):

1. If the child is primarily influenced by the mother's input, the child's speech should be similar to that of the mother.

2. If the child is primarily influenced by the stronger language, the effect of English should be strongly observed in her Japanese.

3. If the child is influenced by both factors, the more influential factor should emerge more strongly.

4. If neither of these factors is primarily influencing the child's speech, there may be other factors affecting the child's speech.

In second language acquisition studies, the influence of the stronger language is often referred to as 'language transfer'. A limited number of studies have investigated the influence from the stronger language on bilinguals. However, it needs to be clearly stated at the outset that not all of the findings from second language learners will be

applicable to bilingual children, although there is considerable similarity between them. The literature on the influence of the stronger language will be discussed in Section 2.4.

The main participant in this study is a Japanese/English bilingual child, Frances, who was born and raised in Australia. Data collection began when she was 5:01 years of age and continued until the age of 6:08. The other important participant is her Japanese mother, who has taught Frances Japanese from birth. As the mother is the only regular person who speaks Japanese to Frances, they are good candidates to test out the theory of input/output. Moreover, as Frances's English has been stronger than her Japanese throughout the period of this investigation, the influence from the stronger language is also testable. Detailed information about the participants will be presented in Sections 2.1 and 2.1.2.

Chapter 2 will provide an overview of the present study, including: the provision of necessary background information regarding the participants; an explanation of the procedures involved; and a critical review of the literature on language input and output.

Chapters 3 and 4 will focus on language mixing, a prominent feature of bilingual language patterns. Chapter 3: a) deals with the definition of terms for language mixing; b) provides the necessary background information regarding the theoretical framework; and c) discusses important points for consideration in the acquisition of Japanese bilingually. Chapter 4 examines Frances's language mixing patterns, evaluating them with respect to (i) the mother's input and (ii) the influence from the stronger language, English.

In studies of syntactic theories in code-switching, it seems to be considered a prerequisite to use fairly well-balanced bilinguals as informants. In this study, the main participant, Frances, was a reasonably balanced bilingual at the start (although English was her stronger language), but at later stages, the balance of the two languages changed to increasingly favour the stronger language. This change has

allowed an opportunity to investigate the mixing patterns of both a balanced and unbalanced bilingual child and the process of becoming an unbalanced bilingual. The balance of the two languages may affect the child's language mixing patterns, and this question will also be considered in Chapter 4.

Chapter 5 will examine the acquisition and use of Japanese particles (postpositions), from a monolingual perspective in the first instance, and a bilingual perspective in the second. Various patterns of use in a bilingual situation are identified, and compared with the findings of this study. Frances's use of Japanese particles is then evaluated with respect to her mother's usage patterns, and, finally, the level of influence of (i) the mother's input, and (ii) the influence from the stronger language, English, is assessed.

In Chapter 6, the conclusions of the study will be presented.

CHAPTER 2

THIS STUDY: AN OVERVIEW

2.1 Participants

The main participant in this study is a half Japanese, half Australian girl named Frances. She was born in Melbourne and raised in Melbourne and Sydney. Her father is Australian and her mother is Japanese. From the time of her birth, this family has adopted the 'one parent-one language' approach: her father has spoken English to her and her mother, Japanese.

Both parents are university educated to postgraduate level and they are serious about raising their child bilingually. The mother is a housewife and the father works as a professional. The mother's competence in spoken English is fairly high and she has no difficulties in communicating with native speakers of English. She has studied for a postgraduate degree at an Australian university and her proficiency in English is near native in terms of her use of grammar and the richness of her vocabulary. She has a slight accent. Her father has studied beginners' level Japanese, yet it is difficult for him to understand native Japanese. The parents speak English to each other.

2.1.1 The One Parent-One Language Approach and the Bilingual Success Rate

The 'one parent-one language' approach is the most common approach adopted by Japanese-English bilingual families in general, as opposed to mixing two languages or using the minority language at home (Yamamoto, 1995: 70). Billings' (1990, cited in Yamamoto, 1996: 66) data reveals that in the case of the 'one parent-one language' method, the outcome is that 53% of children will be active bilinguals and 47 % will be passive bilinguals.

According to Lyon's (1994: 106) Welsh-English study on 3-year-old children, if the mother speaks Welsh primarily and the father is a non-speaker of Welsh, the success

rate of their children's bilingualism[1] is 75%. If the roles are reversed, the success rate is 58%. If both parents mix the languages, only 30% of children become bilinguals.

The child in this study has been an active bilingual throughout this research period.

2.1.2 The Child's Japanese Language Background

Frances attended pre- and primary school (kindergarten or year 0 to year 1) in Sydney while the data was collected for this study. Both Melbourne and Sydney have reasonably sized Japanese communities, however the family has lived far from the areas where many Japanese people live, and Frances's contact with Japanese people has been limited to her mother's friends.

Frances attended pre-school between the age of 4 and 5, and then attended kindergarten (year 0) which is attached to a primary school. When Frances was attending pre-school, she still had Japanese speaking visitors regularly visiting her home although the number was small. The visitors were mainly her half-Japanese friends and their Japanese mothers. The common language amongst the half-Japanese children has gradually switched from Japanese to English since the time they started pre-school. Since Frances started kindergarten (year 0) at the age of 5:02, the time she has spent at home has been much reduced and contacts with other Japanese speaking people have been almost non-existent.

Frances has been to Japan for a visit on two occasions, but she was too young to remember them. She was 1 and 1.5 years old on these occasions. Thus the effect of these trips is not considered to be a significant factor in her current Japanese competence.

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[1] Lyon has not specified whether it is active bilingualism or passive bilingualism, however the implication is active bilingualism.

Frances has not received special lessons in Japanese, except for daily conversations with her mother. Her mother speaks normal overseas Japanese, which has some English words blended into Japanese, but the pronunciation of blended English words is mostly Japanese. Her mother's speech is natural in speed and she omits some particles as native speakers do. The mother reported that she was using Motherese when the child was younger.

When data collection started at the age of 5:01, both the parents were hoping that Frances would master the Japanese reading and writing system as well as the spoken language. She has learnt *hiragana* and *katakana* characters from her mother, yet she still has difficulty reading and writing them. On the other hand, her level of English proficiency is higher than average. Her primary school teacher reported that her English level was that of a third year primary school child when she started kindergarten (year 0), at the age of 5:02.

At home, the father is the main person reading books to Frances, therefore much of her reading input has been in English. Generally, it is only when her father is away on business trips that her mother reads to her in Japanese. As a result, Frances has had little opportunity to hear the (more formal) written Japanese forms; most of her forms have been acquired from the spoken language.

It has been argued that most bilinguals are not perfectly balanced bilinguals and one language will always be stronger (Nakajima, 1990: 12). "Language balance in children is a fragile phenomenon, subject to change under changing conditions" (Vihman and McLaughlin, 1982: 40). At this stage, Frances's stronger language is English and her English seems to be getting stronger since the time she started attending school.

No tests were given to the child to ascertain the balance of the two languages. However, it was apparent from a variety of factors that her English was stronger than her Japanese from the first meeting. One is that she was using many English words in her Japanese while the mixing of Japanese words into English was very rare. A lack

of vocabulary in one language is one of the many reasons for language mixing noted in the literature, and the nondominant language often contains frequent switches (see Lindholm and Padilla, 1977: 334; Petersen, 1988: 487). It was also noted that she had not acquired all of the grammatical features of Japanese by the age of 5:01. However, even monolingual children have not mastered all of the features by the age of six (Okubo, 1967: 169-170) and active syntactic acquisition is taking place up to the age of 9 or even beyond (Chomsky, 1969: 121).

English, on the other hand, seemed to have been acquired at a higher level, according to her parents. In English, she did not seem to be mixing Japanese words when she was speaking. This could be due to the fact that no one models the mixing of Japanese words into English, and English is a language which does not allow the mixing of foreign words as freely as Japanese. Irrespective of this, Frances can express herself well in English without mixing Japanese words. The father stated that he had not noticed Frances's mixing Japanese words into English (at least by the time this study had started when the child was 5:01). The mother, on the other hand, has since reported noticing that there is one Japanese word that the child uses while she is speaking in English even after turning 7 years of age, namely *gomu* (rubber band). The investigator has never spoken to the child in English, only Japanese, and the English data of the child on the tape is very limited as the mother mainly speaks Japanese to the child. The father's data in English was not collected since the aim of this study was to investigate the child's Japanese language acquisition.

As discussed above, it was determined that the child's stronger language was English, because: i) her mixing patterns with respect to the two languages indicates that some Japanese vocabulary may be lacking, ii) the comments from her parents and iii) the comment from one of her primary school teachers that Frances's level of English was of the same level as a third year primary school child when she was at the age of 5:02. This statement at least indicates that the level of her English is higher than the average child of the same age. Her Japanese, on the other hand, seems to be somewhat delayed in comparison to that of monolingual Japanese children mentioned in the literature.

2.2 Procedure

The data collection procedure used in this study involved visiting the participants' home every four weeks for 18 months when Frances was aged between 5:01 and 6:08. There were a total of 21 visits and 19 of these were tape recorded (approximately 19 hours of total recording time).

The research was conducted while the father was absent in order to provide a natural environment for the child to speak Japanese. Conversations were tape recorded while the mother, the child and the investigator were playing games or talking about various everyday issues. The tape recorder was not concealed at any stage of the project. Each visit lasted between one and two hours.

The tape recorder was also left with the participants to collect more conversations between the mother and the child and to remove the effect of having a visitor present. The data was then transcribed and analysed. Follow-up interviews were conducted with the mother and the father when it was necessary to clarify some issues.

For the analysis of language mixing, all the 19 tapes and other notes were used.

In the case of particle analysis, eight tapes were selected out of the data. The data for the particle analysis was collected when Frances was 5:01, 5:02, 5:05, 5:08, 5:11, 6:02, 6:06 and 6:08 years old. Both the mother's and the child's data were examined. The rest of the tapes was also examined when clarification was necessary.

2.3 Literature on Input and Output

The relationship between parental input and children's output is a well-discussed topic in the literature. Researchers have investigated the relationship with regard to various aspects of child language acquisition. Some have seen parental input as the direct cause of a child's particular speech patterns. Interestingly, there is no agreement in

the literature: if one study argues input is effective in a particular aspect of development of child language acquisition, another study concludes that it is not.

The two major hypotheses in the literature are: (1) the relationship between quality of input and output, and (2) the relationship between quantity of input and output. Both hypotheses have supporters and opponents.

2.3.1 The Relationship between the Quality of Input and Output

The quality of input is believed to be an important factor in order for children to master adult-like language. The focus of research in this area is what types of input children are receiving from their parents and what kind of interaction they have. For instance, there is a debate over whether child-centred conversation is the key to enable children to achieve active bilinguality.

Döpke is one of the earliest researchers in bilingualism who hypothesised the importance of child-centredness in interaction. Her hypothesis is that the greater the degree of child-centredness in the parent's interactional strategies, the greater the chance that the child will become an active bilingual (Döpke, 1986: 504-505). The overall idea is that *quality* is more important than *quantity* when it comes to interaction with the child (Lanza, 1997: 250-251). Lanza (1997: 251) states that "since free play lends itself to more child-centred speech, ... it would seem, then that the hypothesis could have equally been along the lines that the more the parent with the minority language engages in play with the child, the greater the chance the child will acquire/actively use the minority language".

"Language acquisition normally takes places in the context of a rich interaction between the child and his parents" (De Villiers and De Villiers, 1979: 97-98). Some researchers (Goodz, 1994: 78; Hoff-Ginsberg and Shatz, 1982: 22-23; MacKeon, 1994: 17-18) also emphasise the importance of quality input in the form of conversation. MacKeon states that "Language that emerges through shared activities

with the child, usually in the form of conversation, appears to provide critical input to the young language learner about how to use the language. One-to-one conversations which focus on topics of interest and concern to children maximise the opportunity to achieve shared understandings of the topics that are raised" (MacKeon, 1994: 17-18).

There is, however, a counter argument that child-centredness is not the only significant concern. The focus of this argument is that it depends on what kind of grammatical points the child is acquiring. Oshima-Takane, Goodz and Derevensky (1996) studied whether second-born children benefit from overheard conversations between caregivers and older siblings in learning personal pronouns. There are significantly more language interactions between mothers and older siblings than between mothers and younger children (Oshima-Takane, Goodz and Derevensky, 1996: 622). Therefore if the child-centredness is the only significant concern, older children should have advantages. They hypothesised that overheard speech is an important source of input from which children learn the correct meaning of first- and second-person pronouns, since a model for correct usage of these pronouns is not directly provided in speech that is addressed to the children (Oshima-Takane, Goodz and Derevensky, 1996: 623). They found that there was no indication that second-born children acquire their early language at a slower rate than first-born children. Furthermore, second-born children were more advanced than first-born children in personal pronoun production (Oshima-Takane, Goodz and Derevensky, 1996: 631).

Quality of input has also been proposed as a direct cause of children's output, such as language mixing by bilingual children (Döpke, 1998: 106; Arnberg and Arnberg, 1992: 477; Lanza, 1997; Goodz, 1989) and omission of Japanese particles (postpositions) (Nakamura, 1993).

Goodz (1989) examined parents in bilingual families (using the 'one parent-one language' approach) to ascertain whether they maintained a clear separation between parent and language when addressing their children. She examined four families and her data revealed that despite strong avowals to the contrary, no parent was able to maintain strict parent/language separation. Her findings include the fact that mothers,

especially, have a strong desire to communicate with their children and tend to use whatever device will capture the children's attention, thus strict one-person/one-language is not maintained. Goodz argues "if parents actually model mixed utterances, the children have no way of knowing that a strict separation of languages should be a goal" (Goodz, 1989: 41).

Lanza (1997) also supports Goodz's idea. Lanza (1997; see also Döpke, 1998) has investigated the relationship between young children's language mixing, parents' language choices and the parents' reactions to their children's mixing. Lanza's finding is that parental strategies do have an influence over their children's language choices, and therefore their mixing, which is a strong indication that parental input is a significant factor in children's output.

Nakamura (1993) studied a 3-year-old's use of particles (postpositions) in Japanese. She noted that much of the input the child received differed from standard adult speech, having the characteristics of child-directed speech in which particles are often omitted. In fact, the child in her study hardly used any particles at all, as her parent(s) also tended not to do when talking to her.

Interestingly, however, Goodz questioned in her later study how significant parent/language separation is in relation to children's language mixing (Goodz, 1994: 78). Her research indicates that the maintenance of parent/language distinction does not appear to be crucial, judging by the low rate of children's language mixing.

2.3.2 The Relationship between the Quantity of Input and Output

The quantity of input is also supported by many researchers as significant in terms of child language acquisition.

De Houwer, who studied a Dutch-English simultaneous bilingual child, concluded that "the results of analyses of the past verb forms used in the input show a very clear correlation between the frequency distributions in the Dutch input data and the child's Dutch output data on the one hand, and between those in the English input data and the child's English output data on the other. The most frequently occurring adult usage patterns are the ones appropriately used by the child. Taking this a step further, it can be hypothesised that the frequency of occurrence of syntagmatically defined morphosyntactic categories in the input is a strong guiding factor in the child's own use of these categories: no additional explanations besides the child's close attention to frequency characteristics of the input within each language are required here to interpret her language-adequate use of past VP's in Dutch and English" (De Houwer, 1997: 160-161). In another study of the Dutch gender system of a bilingual child, De Houwer stated that "the reason why particular forms are used rather than others, ... may be found in regularities existing in the adult system: initially only the most general cases, both in terms of distributional and absolute frequency, find expression in the child's system" (De Houwer, 1987: 71).

De Houwer's claim - correlation between the frequency distributions in the input and children's output - has been supported by Mayes and Ono's 1993 study of the acquisition of the subject marker *ga* in Japanese by examining one child longitudinally. They found striking similarities between the child's usage in the frequency of *ga* marking different subject types and the adult input (Mayes and Ono, 1993: 245). Moerk (1980) also claimed that parental input frequency was related to the frequency of children's output, and in general terms, a child who received less frequent input was slower in her language development (Moerk, 1980).

There is, however, opposition to this theory as well. Verhelst's (1999) study of young children's (aged 2:05) vocabulary acquisition in their second language revealed that frequency was not influential.

2.3.3 The Impact of Input on Child Language Acquisition

The impact of the input is not always evidenced directly in children's output. Some researchers argue that children actually process the input by looking at regularities and overgeneralise them. Bowerman has tested the hypothesis that children have an innate knowledge of the rules linking thematic roles to syntactic functions against the alternative hypothesis that linking regularities are learned on the basis of linguistic experience (= input). Her results constitute a serious challenge for any theory of language acquisition that invokes innate knowledge of canonical mappings to bootstrap the child into syntax. Yet, she also disagrees with the idea that children could simply learn the syntactic handling of each verb individually from the input. She believes that children seem to analyse their lexicons for linking regularities that apply across classes of verbs (Bowerman, 1990: 1285).

Some other research also suggests that children learn language by actively constructing principles for the regularities that they hear in the speech of others, such as parents, siblings, and those they interact with on a regular basis. Oshima-Takane, Goodz and Derevensky (1996: 632) state that "children are sensitive to different patterns in linguistic and nonlinguistic inputs and actively make generalisations about word meaning based on relevant information extracted from available input. Therefore children's output can differ from input."

Ito (1996: 171-172) also states that children do not acquire a language by copying adults, but that they choose expressions which suit their cognitive level. Ito pointed out that the corrections made by mothers are not always effective for children. Children might use adult forms when corrected, yet the corrections do not stay with the children for any length of time (Ito, 1996: 171-172).

The significance of the quality and quantity of input, however, cannot be ignored, as it is supported by many investigators. From the literature review, it would be fair to state that, in order to acquire one language at the native speaker level, various types of quantitative and qualitative input are necessary.

2.4 Literature on the Stronger Language Influence and Output

When one possesses competence in two languages, some influence from one language on the other may be observed. In second language acquisition research, the influence of the stronger language on output is a major concern. In the study of bilingualism, there is a debate as to whether bilingual children learn the two languages as monolingual children do, or like second language learners do. In order to tackle this theoretical question, Schlyter (1993) found it important to take into account the concept of stronger versus weaker languages in bilingualism research.

Schlyter studied 6 French-Swedish bilingual children: 3 were stronger in Swedish. and the other 3 in French and found that there was a difference between the bilingual acquisition of the stronger and weaker languages. She found that "one of the languages was always acquired without problems, and there is great variation as to the acquisition of the other language" (Schlyter, 1993: 295). Her conclusion was that 'the stronger language in bilingual child is exactly like a normal first language (acquisition) in monolingual children, whereas the weaker language in these respects has similarities with a second language (acquisition)' (Schlyter, 1993: 305).

In the literature on bilingualism, the influence of a stronger language may also be identified in the language mixing data.

Petersen (1988) has studied an English-Danish bilingual child in the United States. Her study led her to propose the Dominant-language Hypothesis, which stated that

> in word-initial code-switching, grammatical morphemes of the DOMINANT language may cooccur with lexical morphemes of either the dominant or the nondominant language. However, grammatical morphemes of the NONDOMINANT language may cooccur only with lexical morphemes of the nondominant language (Petersen, 1988: 486).

Lanza (1992, 1997) has studied two Norwegian-English bilingual children whose stronger language is Norwegian, focusing on their mixing utterances. She found that lexical morphemes from the weaker language (English) may co-occur with grammatical morphemes from the stronger language (Norwegian), but lexical morphemes from the stronger language (Norwegian) co-occur only with grammatical morphemes from the stronger language (Norwegian), and there is clear evidence in her study that the stronger language influences the syntactic form of the children's speech.

Ex. look (English lexicon) + e (Norwegian functor) = looke
hunsk (Norwegian lexicon = to swing) + s (English functor) = hunsks***

Swain and Wesche (1975) had also noted that their informant's English (his weaker language) was filled with French (his stronger language) functors, that is, French grammatical morphemes.

All the above findings support Petersen's (1988: 486) Dominant-language Hypothesis.

The balance of two languages seems also to influence the rate of mixing. Meisel (1994) analysed the mixing patterns of two German-French bilingual children in Germany, and found that children mix languages more when mixing into the weaker language. When children were mixing German (their stronger language) into French (their weaker language) German expressions were used more frequently in French, and they mixed less French into German. In the case of one informant, when she was using her stronger language, German, she hardly mixed French at all.

The concept of stronger and weaker language is not always easy to discuss, since it is not always clear which language is stronger. This is especially the case with children, where their relative competence in the two languages changes and the balance of the two languages can be overturned in a short period of time. Other factors such as the topic of conversation may influence which language is used more proficiently. However, not all bilinguals have a balanced proficiency in both languages, and, as noted in the previous research, the issue of the stronger language influence is one of the factors that may provide insight into the questions surrounding bilingual speech patterns.

CHAPTER 3
LANGUAGE MIXING: AN OVERVIEW

3.1 Introduction

With respect to language mixing, there is lack of consistency amongst different researchers on the use of the terminology. The terms 'code-switching', 'mixing' and 'borrowing' are all being used differently by different researchers. In this study, the term 'language mixing' will be used to cover all three phenomena. The word 'loanwords' will be used to represent foreign words (of mainly European origin) that are well integrated into Japanese, and which are used as part of everyday speech by monolinguals in Japan.

In Section 3.2, the terms 'code-switching', 'mixing', 'borrowing' and other related terms used by other researchers will be clarified. Section 3.3 will examine some of the theoretical frameworks used for language mixing research in the literature, and will present the framework to be used in this instance.

Some issues related to language mixing in Japanese will also be discussed in Section 3.4. These are: (1) loanwords in Japanese use in Japan; (2) Japanese used overseas by sojourners and first generation immigrants; as well as (3) Japanese used by second generation Japanese. This will be followed by an examination of Frances's language mixing patterns in Chapter 4.

3.2 Code-switching, Mixing and Borrowing - What are the Definitions of These Terms?

The terms 'code-switching', 'mixing' and 'borrowing' are used in different ways by different authors. There is no agreement on the meaning of these terms amongst researchers. This disagreement over the use of these terms occasionally causes misunderstandings because what is called 'code-switching' in Theory A could be called 'borrowing' in Theory B. As the present study's aim is not to test out syntactic theories of mixed utterances, only one term, 'language mixing', will be used in order

to avoid possible misunderstandings caused by the use of the three terms. It is however important to examine the three terms as used in other studies, in order to clarify how the term 'language mixing' will be used in this study.

3.2.1 Code-switching vs Mixing

The terms 'code-switching' and 'mixing' as used by various authors will be examined in this section. There seem to be at least two different ways of using the two terms:

(1) To differentiate their use in terms of whether the two languages have already been separated in the process of acquisition, or not, and

(2) To use the term (code-)mixing to refer only to a particular type of code-switching, namely intrasentential switching.

Earlier work has often employed the term 'language mixing' to refer to the "young bilingual child's seemingly indiscriminate use of both languages, implying thus a single system[2]" (Lanza, 1997: 3). "Whereas the term *language mixing* has been applied to the language use of infant bilinguals, the term *code-switching* has been restricted in use to the language contact in the speech of more mature bilinguals, who reputedly have 'separated' their linguistic systems" (Lanza, 1997: 3). Therefore, with this definition, the only difference is at what age or stage of acquisition they are using two languages concurrently, and both terms could refer to the same phenomenon. Such an implication has not been included in the use of the term 'language mixing' in this study. Lanza (1997) uses the term 'language mixing' as a "general term for all types of language contact". This study employs the same usage as Lanza.

A textually based approach was employed by Valdés Fallis (1976, cited in Appel and Muysken, 1987: 118) in distinguishing types of switches found in material such as narratives. In her definition, the term 'code-mixing' has been used for a particular type of switching, namely the 'intrasentential switch'.

Poplack and Sankoff (1988) have not used the word 'mixing', however they have distinguished code-switching from 'constituent insertion'. "Constituent insertion

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2 Meisel (1989) has suggested calling this type of mixing 'fusion'.

simply involves the insertion of a grammatical constituent in one language at an appropriate point, for that type of constituent, in a sentence of the other language" (Poplack and Sankoff, 1988: 1176).

It could be said that what Poplack and Sankoff call constituent insertion is similar to what Valdés Fallis calls code-mixing (i.e. intrasentential switches), even if it is not exactly the same.

As 'code-switching' and 'mixing' may represent the same phenomenon, or 'mixing' may be part of 'code-switching', it is not always necessary to distinguish the two terms. In this study, no particular need was found to distinguish the two terms, thus one term, 'language mixing', will be used to represent both.

3.2.2 Code-switching vs Borrowing

The terms 'code-switching' and 'borrowing' are also used in different ways by different researchers. Several methods have been proposed on how to distinguish the two terms. Some of the main issues discussed in relation to the use of the terms (code-switching and borrowing) include:

(1) the size of the switch;
(2) the users;
(3) the level of phonological integration; and
(4) the level of morphological integration.

3.2.2.1 Size and Code-switching vs Borrowing

"Few of the code-switching studies of the 1970s and 1980s consider the relationship between borrowing and code-switching and they simply treat all single embedded language lexemes as borrowing forms" (Myers-Scotton, 1992: 28). There are still some researchers who differentiate code-switching and borrowing in terms of the size of the switch. For instance, Muysken (1995: 179) distinguishes between code-switching and borrowing simply in terms of the size and type of elements inserted,

e.g. nouns as borrowing vs noun phrases as code-switching. Myers-Scotton's implication is that there are singly occurring code-switches (i.e. single word level code-switching), which is supported by some, but not by all researchers. In this study, both phenomena are called "language mixing" and are not distinguished.

3.2.2.2 Users and Code-switching vs Borrowing

It is believed by some researchers that "borrowing is a very different process from code-switching, subject to different constraints and conditions" (Poplack and Sankoff, 1988: 1177). One obvious fact is that 'borrowing' can be found amongst monolingual speakers, while code-switching forms are not found in monolingual language interactions (Poplack and Sankoff, 1988; Bentahila and Davies, 1983: 302). Gibbons distinguishes mixing from borrowing by saying that "borrowings are used by monolinguals, while mixing is bilingual intragroup behaviour" (Gibbons, 1987: 80). The term 'loanwords' used in this study is similar to the use of Gibbons, Poplack et al. and Bentahila et al.'s 'borrowing', if not exactly the same.

3.2.2.3 Phonological Integration and Code-switching vs Borrowing

Earlier works on code-switching and borrowing forms tended to use phonological integration as a clue (as to when) to distinguish them (e.g. Poplack, 1980; Bentahila and Davies, 1983: 303). Traditionally, borrowing forms are thought of as being phonologically integrated into the base language (Poplack and Sankoff, 1988: 1176). However, more recent works have noted that not all borrowing forms demonstrate integration into the base language, although there is a tendency that the most established borrowing forms are phonologically well integrated into the base language (Myers-Scotton, 1992: 31). However, the issue is more complex than this. There are at least two other factors which could determine the level of phonological integration.

Firstly, the size of the language mixing seems to be another key to predict the level of phonological integration. "The majority of B forms (= borrowing forms) in most data sets show a good deal of phonological integration into the recipient language, or that

multiple-word code-switching utterances rarely show much phonological integration in the ML (= Matrix Language)" (Myers-Scotton, 1992: 31).

The other factors which may affect the phonological integration of language mixing are psycho-sociolinguistic factors (Myers-Scotton, 1992: 31). Non-integration of borrowings tend to occur in situations where the borrowed elements are from "the language of a group with more socio-economic prestige" than the base language (Myers-Scotton, 1992: 31). Educated bilinguals may also use phonologically unintegrated forms by pronouncing "loans as close to the original as possible" (Myers-Scotton, 1992: 31). This is to practice "elite closure" which is different from the "masses" (Myers-Scotton, 1992: 31).

Phonological integration, thus, does not distinguish code-switching from borrowing.

3.2.2.4 Morphosyntactic Integration in Code-switching and Borrowing

If phonological criteria do not clearly distinguish borrowing and code-switching, what about morphosyntactic criteria? Two different explanations of morphosyntactic integration in code-switching and borrowing will be introduced in this section. In fact neither of the arguments seems to be strong enough to convince proponents of the other, since they are using different terms to refer to the same phenomena. In other words, their difference lies in the different use of terms, not in any difference regarding morphosyntactic integration.

The two hypotheses are as follows:

(1) Morphosyntactic integration determines whether the mixed elements are recognised as either code-switching or borrowing;

(2) Morphosyntactic integration does not help in distinguishing code-switching from borrowing.

Firstly, the former view labels the difference between code-switching and borrowing in terms of the "morphologic and syntactic integration" of mixed elements into the base language (Muysken, Kook and Vedder, 1996: 488-489; Poplack and Sankoff,

1988: 1176). In other words, if the mixed elements are integrated morphosyntactically into the base language, it is considered to be borrowing. If they are not integrated morphosyntactically, it is code-switching.

In Poplack and Sankoff (1984, cited in Muysken, 1995: 190), which summarises much of the earlier work, the following distinctions between code-switching and borrowing were listed. In their list below, 'borrowing' is morphologically integrated into the base language, while 'code-switching' is not. Not all researchers will agree, but this is a typical understanding of borrowing vs code-switching in earlier research:

		Borrowing	code-switching
no more than one word		+	-
adaptation:	phonological	+-/+	+-/-
	morphological	+	-
	syntactic	+	-
frequent use		+	-
replaces own word		+	-
recognised as own word		+	-
semantic change		+	-

The list shows that borrowed words are used as if they were the words of the base language, while code-switched elements are foreign and not frequently used.

Supporters of the second view argue that morphosyntactic integration does not determine whether mixed elements are instances of code-switching or borrowing since "single code-switching forms" and borrowing forms are "similar, if not identical" (Myers-Scotton, 1992: 37). In this hypothesis, both borrowing and code-switching may integrate into the base language morphosyntactically. Thus, morphosyntactic integration is not the key to distinguishing borrowing forms from code-switching forms.

Both hypotheses agree that multiple word mixing is 'code-switching' and has no morphosyntactic integration into the base language. The difference is the classification of singly occurring lexical mixing. In the hypothesis that

morphosyntactic integration determines whether the mixed elements are code-switching or borrowing, singly occurring lexical mixing is called 'borrowing', and in the hypothesis that morphosyntactic integration does not distinguish 'code-switching' from 'borrowing', singly occurring lexical mixing is called 'code-switching'. In other words, they have almost agreed that singly occurring lexical mixing integrates into the base language morphosyntactically, but the major point they do not agree upon is what to call singly occurring lexical mixing forms.

Among those who do not support morphosyntactic integration as a key to distinguish borrowing from code-switching, Scotton proposed the "Community and Social Function Frequency-base Definition" in which she tried to explain the difference between borrowing and code-switching in terms of the "'re-occurrence value', or what comes down to frequency" (Scotton, 1988: 159-160; Gysels, 1992: 53). Her argument is that "core borrowing forms arise originally as code-switching forms" (Myers-Scotton, 1992: 37). "Absolute frequency/relative frequency is the single criterion" in order to distinguish borrowing forms from "single code-switching forms" (Myers-Scotton, 1992: 30). "It is generally assumed that lexical borrowing occurs through code-switching: gradually new words are introduced into the lexicon of the receiving language through repeated use by more and more speakers and by morphosyntactic and phonological integration" (Muysken, Kook and Vedder, 1996: 488-489).

3.2.3 Nonce borrowing

Within the range of borrowing, there is a category called 'nonce borrowing', coined by Poplack and her associates (Poplack and Sankoff, 1988: 1176; Myers-Scotton, 1992: 32). The same category is called 'speech borrowings' by Grosjean and his associates (e.g. Grosjean, 1982: 309; Grosjean and Soares, 1986: 148). In this thesis, the term 'nonce borrowing' will be used to represent both terms.

"Nonce borrowing is very similar to borrowing in the traditional sense, not only because it involves single lexical items, syntactically and morphologically (if not always phonologically) integrated into the recipient language, but also because

eligible words are of the same type: largely nouns, with some representation of other content words (verbs, adverbs and adjectives), ... but no pronouns, articles, prepositions or other function words" (Poplack and Sankoff, 1988: 1176).

The difference between borrowing and nonce borrowing is whether it is an established loan (i.e. borrowing) or not (i.e. nonce borrowing). This means that nonce borrowing forms might occur only once and then never be used again (Poplack, Sankoff and Miller, 1988: 50).

Some researchers do not find it necessary to distinguish nonce borrowing from borrowing (e.g. Nishimura, 1995; Myers-Scotton, 1992). The reason for this is that the "linguistic process involved is the same either way" (Nishimura, 1995: 141) and if one code-switching model can account for both code-switching and nonce borrowing, "no explanatory value is gained in exchange for adding another category" (Myers-Scotton, 1992: 32). In this study, 'nonce borrowing' is regarded as a form of 'language mixing'.

3.3 Theoretical Framework

This section summarises three well-used syntactic theories in language mixing which deal with intrasentential switches. The three theories include:

1) the Government-Binding Approach
2) the Word Order Constraint, and
3) the Matrix Language Approach.

A neutralisation strategy, known as the *do* constructions, will be also introduced, which is especially relevant to Japanese. This study will employ only one framework, namely the Matrix Language Approach. Special attention will be paid to the Matrix Language Frame model, and some terminology will be borrowed from the model. However, the other two theories will be briefly introduced. Firstly, the Government-Binding Approach, secondly the Word Order Constraint and finally the Matrix Language Approach will be discussed. After the introduction to the three theories, reasons why the Matrix Language Approach has been chosen for this study will be discussed.

3.3.1 The Government-Binding Approach

"Government as the constraining factor behind codeswitching facts was first proposed by Muysken, Di Sciullo, and Singh (1982)" (Halmari, 1997: 5), "using the government-binding theory of Chomsky" (Nishimura, 1997: 26). This approach takes the stand that there cannot be a switch between two elements if they are lexically dependent on each other (Appel and Muysken, 1987: 123). The restriction is that whenever constituent X governs Y, both constituents must be drawn from the same language. For instance, in "*to wait for somebody*", the verb *wait* subcategorises for the preposition *for* (Appel and Muysken, 1987: 123).

However, the Government-Binding Approach was "overlooked by much of the discussion on the syntax of codeswitching. Only a few researchers have seen the

Government Constraint as worth developing and/or seriously discussing. ...with few exceptions, the Government Constraint on codeswitching has either been ignored, misrepresented, proven not to be valid, or discarded as utterly wrong, since ... counter-examples to Di Sciullo *et al.*'s constraint can indeed be found, especially since Di Sciullo *et al.* proposed the Government Constraint as an absolute constraint" (Halmari, 1997: 5).

Halmari (1997) has modified Di Sciullo *et al.*'s model, and has suggested that "government is a probabilistic tendency" (Halmari, 1997: 6). In general, "it no longer is believed that grammar can explain all codeswitching phenomena universally" (Halmari, 1997: 5), therefore Halmari's suggestion makes sense. Halmari's study in the application of the Government-Binding Approach to Finnish/English code-switching concluded that "at least in Finnish-English codeswitching the Government Constraint could explain all the switches" (Halmari, 1997: 163). Her suggestion - the consideration of pragmatic and sociolinguistic aspects - is especially significant in making her work even more convincing:

> Certain pragmatic and sociolinguistic factors may occasionally - in the speech of certain speakers, or in certain speech situations - require the Government Constraint ...to be relaxed ...or downright ungrammatical switches, without any language carrier present, may occur (Halmari, 1997: 163).

Halmari's work is extremely significant, not only as evidence that the Government-Binding Approach does work to a great extent, but also as a reminder to all the researchers who are working in language mixing syntax that syntactic theories do not account for all language mixing data and that pragmatic and sociolinguistic aspects should also be considered.

3.3.2 The Word Order Constraint

The word order constraint was first developed by Poplack and associates (1981) (Nishimura, 1997: 22). The word order constraint sets out two constraints on switching, which are claimed to be universal or near-universal:

1) "the free morpheme constraint", and

2) "the equivalence constraint".

"The free morpheme constraint prohibits a switch between a lexical item and a bound morpheme unless the former has been phonologically integrated into the language of the latter" (Nishimura, 1997: 22-23). The equivalence constraint indicates that switching is only possible at points where the order of linguistic elements in both languages is the same (cf. Poplack, 1980, Appel and Muysken, 1987: 123, Nishimura, 1997: 22-23, Poplack, 1995: 223-224).

The equivalence constraint has already been tested by Nishimura, using her English/Japanese data. Nishimura has concluded that her English/Japanese data allowed language mixing at the sites which were prohibited by the equivalence constraint (Nishimura, 1986: 127-128):

> Studies of Japanese/English (Azuma, 1991; Nishimura, 1985), Arabic/French (Bentahila & Davies, 1983), Marthi/English (Joshi, 1985), Korean/English (Yoon, 1992), Spanish/Hebrew (Berg-Selingson, 1986), and African languages/English (Myers-Scotton, 1993b) have all shown that switches take place between two constituents even when their relative order is not shared by the two languages involved (Nishimura, 1995:124, also see Nishimura, 1986: 128).

One of the examples from Nishimura's paper is:

> Only small prizes MORATTA NE.
>
> (we) got PAT
>
> (we) got only small prizes, you know. (Nishimura, 1986: 128)

The above example seems to be the insertion of an English NP "only small prizes" into a Japanese sentence, thus it has not violated Japanese syntactic rules. However, this example has proven that code-switching takes place even when the word order of the two languages differs, namely SOV in Japanese, and SVO in English.

Poplack and her associates (Poplack, Wheeler and Westwood, 1989: 142-143) responded that most of the counter examples that look like a violation of the equivalence constraint are not code-switching, but nonce borrowing. Some researchers, such as Poplack, distinguish between code-switching and singly occurring lexical switching (i.e. borrowing in Poplack's terminology), while others do not (singly occurring lexical switching is part of code-switching). This disagreement may in part be a consequence of the differing use of the terms 'code-switching' and 'borrowing'.

3.3.3 The Matrix Language Approach

The Matrix Language approach argues that mixed sentences can be derived from the sentence structure of a base language it presumes identifiable, by formulating rules (Nishimura, 1997: 27). This approach has been supported by various researchers in order to examine intersentential switches in various language pairs, including totally different pairs of language groups, such as Japanese/English and Swahili/English.

Some researchers, like Joshi (1985), found that mixed sentences come specifically from one language, termed the Matrix Language, and that the mixed elements come from the other language, which is termed the Embedded Language. Nishimura (1997: 28), on the other hand, found mixed sentences belonging to two languages, these being Japanese and English.

a. His wife *ni yattara*,
dat.give(conditional)
"If (we) give (it) to his wife," (Nishimura,1986: 129)

b. What do you call it *nihongo de*?

Japanese P (Instrumental)

"What do you call it in Japanese?" (Nishimura, 1986: 130)

Nishimura's explanation of the above sentences is that Japanese is the Matrix Language in example "a" while English is the Matrix Language in example "b". Thus the Japanese community she studied had both Japanese and English as Matrix Languages.

3.3.3.1 Myers-Scotton's Matrix Language Frame Model

The Matrix Language Frame (MLF) model, which was derived from the Matrix Language Approach, was developed by Carol Myers-Scotton and her associates to account for intrasentential switches. This model claims, like the original Matrix Language Approach, that the two languages involved in language mixing do not participate equally. One language which is more dominant in ways crucial to language production is called the Matrix Language (ML). This language sets the grammatical frame for the units of analysis. The other language(s) is referred to as the Embedded Language (EL).

The ML or EL falls into one of three categories in intrasentential switches (Myers-Scotton, 1998a: 296, Myers-Scotton, Jake and Okasha, 1996: 14-16, Myers-Scotton and Jake, 1995: 982 and 988, Jake, 1994: 275, Myers-Scotton, 1997: 221):

1) Matrix Language Islands - Constituents consisting of only Matrix Language morphemes;

2) Embedded Language Islands - Constituents consisting only of morphemes from the embedded language; and

3) ML + EL constituents - Constituents consisting of morphemes from both the Matrix and Embedded Languages.

a) The prototypical ML + EL constituent constrains a singly occurring EL lexeme in a frame of any number of ML morphemes (Myers-Scotton, 1993b: 77),

b) Morpheme-Order Principle in ML + EL constituents - "In ML EL constituents consisting of singly occurring EL lexemes and any number of ML morphemes, surface morpheme order (reflecting surface syntactic relations) will be that of the ML" (Jake, 1994: 277, Myers-Scotton and Jake, 1995: 985) and

c) System-Morpheme Principle in ML + EL constituents - "The system-morpheme principle claims that, in ML + EL constituents, "active" system morphemes come only from the ML; this means that EL system morphemes which have no relations outside their head may occur, but that all syntactic relations in the constituent are signalled by ML system morphemes, although content morphemes may come from either the ML or EL. Relatively frequently, plural affixes from the EL occur on a singly-occurring EL noun in a mixed constituent" (Myers-Scotton, 1993a: 83, Myers-Scotton and Jake, 1995: 983, Myers-Scotton, Jake and Okasha, 1996: 16).

The following is Swahili/English language mixing data cited from Myers-Scotton (1993b: 81). The data contains "two EL islands (*last year* and *under Public Service Commission*) as well as many ML islands. *Manhali pa kufanya interview* 'place to do interview' is an ML + EL constituent" (Myers-Scotton, 1993b: 81). The dotted underlined examples are ML islands.

Ah	**si-vyo,**	**kawaida**	**hu-wa**	**kwa**	**gazeti.**
ah	NEG-MANN	usually	HABIT-COP	in	paper[s]

Kama ***last year***	**i-li-ku-w-a**	**gazeti**
as	CL 9-PAST-INFIN-COP-INDIC	paper[s]

under Public Service Commission.

Ma-jina	**i-li-to-lew-a**		**tu**	**hapo**
CL 6-*name*	CL 9-PAST-place-PASS-INDIC		just	there

na	**mahalip-a**	**ku-fanya** ***interview***
and	place	CL 16-of	to-do

'Ah, no, usually it's published in the papers. For example, last year it was in the papers under Public Service Commission. The names are just released [of persons to be interviewed] and the place of doing [the] interview' (Myers-Scotton, 1993b: 81).

The MLF model is a much more detailed model which can account for even rarely occurring language mixing examples. However, the focus of this thesis is not to test this theory, but to utilise the basic argument of an established theory to explain this study's Japanese language mixing data. Therefore, parts of the theory which are not used in this thesis, will not be discussed in this section.

3.3.4 *Do* Constructions in Language Mixing

What is known as '*do* constructions' in intrasentential language mixing data can be found in many language pairs, such as Panjabi/English, Japanese/English, Hausa/English, Shona/English (Myers-Scotton, 1993b: 113), Surinam Hindustani/Sranan, Surinam Hindustani/Dutch and Surinam Hindustani/English (Appel and Muysken, 1987: 126-127). A very frequent pattern of the '*do* construction' is the introduction of a 'helping verb', such as 'make' or 'do' (Appel and Muysken, 1987: 126), attached to a verb, often in the infinitive form of the guest language (cf. Myers-Scotton and Jake, 1995: 1005; Jake and Myers-Scotton, 1997: 35-36).

The *do* constructions can be explained by using the MLF model as an example of ML + EL constituents. The important point is that the ML is the one which assigns the syntactic rules such as tense/aspect, not the EL:

> The *Do* constructions consist of the ML verbs encoding *do* (or a similar auxiliary verb) inflected with all of the requisite ML system morphemes (tense/aspect, agreement, etc.) appearing with an uninflected EL content verb (often the infinitive). The structural properties of verbs (what constitutes an inflectible stem) are such that when these languages are MLs, these properties block the occurrence of an EL verb with ML inflections. Thus, if an EL verb best satisfies the speakers' intentions, a compromise strategy is to place it in a frame projected by the ML auxiliary, with the auxiliary taking all

verbal inflections (Myers-Scotton and Jake, 1995: 1005; see also Jake and Myers-Scotton, 1997: 35 and Myers-Scotton, 1993b: 112-113).

This phenomenon can also be observed in Japanese, in both monolingual and bilingual discourses.

3.3.5 Why Has the MLF Model Been Chosen?

The three syntactic theories introduced above all have many strong points and a few weak points. Any of the frameworks can explain the same language mixing phenomena in various ways (Halmari, 1997: 9). "... None of which is necessarily wrong, and none of which is necessarily the only right one" (Halmari, 1997:9). However, for the following reasons, this study will employ the Matrix Language Approach, especially the MLF model.

1) The Japanese language does not have the subject-verb agreement and other case agreements; determiners are not necessary, therefore government constraints are not as worthwhile to apply, unlike with many other languages, such as European languages.
2) Nishimura (1986, 1995, 1997) has already tested the word order constraint using her Japanese data, and has revealed that the word order constraint did not account for patterns in her Japanese data.
3) Supporters of the word order constraint have argued that the counter evidence proposed by many researchers was actually borrowing, not code-switching. This suggests that there could be disagreement as to what is code-switching and what is borrowing. Since my study has not distinguished borrowing from code-switching unlike the supporters of the word order constraint, this theory is of limited relevance to my study.
4) Since this study took place in an environment where the subjects should speak Japanese, the necessity of setting up the Matrix Language is already there. Therefore, it is necessary to use a theory which distinguishes the Matrix Language from the Embedded Language.

5) The MLF model is one of the theories which has been derived from the Matrix Language approach, needed in this study. The MLF model is a well-established theory and it has been used not only as a theory to account for language mixing in a community language, but also for individual cases (see Bolonyai, 1998).

For all of the above reasons, the Matrix Language approach has been chosen. The MLF model has been chosen from within the Matrix Language approach since it is a well-established and accepted theory. The aim of this thesis is not to examine syntactic theories, but to apply an established theory to this study's language mixing data, in order to explain the relationship between input and output, and the influence of a stronger language. Thus, only a part of the MLF model will be used.

3.4 Language Mixing and Loanwords - Based on Speakers

In this section, the following three issues will be discussed:

(1) Loanwords in Japanese used in Japan;

(2) The Japanese used overseas by sojourners and first generation immigrants; and

(3) The Japanese used by second generation Japanese.

The first two sections (Sections 3.4.1 and 3.4.2) discuss loanwords used in Japan, and how they are phonologically Japanised according to the Japanisation rules.

The third section (Section 3.4.3) examines Masumi-So's work, focusing on singly occurring language mixing outside Japan. This is the unmarked form of Japanese overseas, and these terms are not used in Japan. This is the language Frances's mother is using and what Frances is immersed in in everyday life.

The final section (Section 3.4.4) examines Nishimura's work on Japanese language mixing by second generation Japanese-Canadians. This is the Japanese language used by overseas born people of Japanese descent, therefore some similarities to Frances's language can be expected.

3.4.1 Loanwords in Japanese: Introduction

Since this study distinguishes singly occurring lexical mixing (i.e. one type of language mixing) and loanwords, it is necessary to define the term 'loanword', although the use of loanwords is limited in the child's data.

The Japanese language has been accepting foreign words ever since the first contacts with Chinese and Europeans. Nowadays loanwords are a vital part of the Japanese language, comprising approximately 10% of the Japanese lexicon (Sato, 1990: 448; Stanlaw, 1982: 173; Matsui, 1982: 162; Hanna, 1995: 45), while 13% of the words

that ordinary people use in daily conversations are foreign words (Honna, 1995: 45). Loanwords of English origin are about 8% of the entire lexicon in Japanese (Sato, 1990: 448; Stanlaw, 1982: 173; Yoshizawa and Ishiwata, 1985: iv), which indicates that English is the most influential language for Japanese as a source of loanwords.

There are approximately 25,000 to 33,500 loanwords in Japanese; however, only 6,000 to 7,000 are in common use (Arakawa, 1988; Sato, 1990; Yoshizawa, 1985).

3.4.1.1 The Definition of Loanwords

According to Wada and Kaneda (1985: 67), there are two definitions: (1) broad definition and (2) narrow definition. The broad definition holds that loanwords are words of foreign origin used as part of the Japanese lexicon. The narrow definition of loanwords excludes some early Asian loanwords from languages such as Chinese, Ainu and Korean, which have been fully integrated into Japanese.

In the *Concise gairaigo jiten* (Concise Dictionary of Loanwords, 1990: iii), Yoshizawa and Ishiwata (1985: iv) and Ishiwata (1994: 7) have employed the narrow definition in their work, which seems to reflect the most common method of defining loanwords in Japanese.

In accordance with this, the narrow definition will be used in this study. The differences between singly occurring language mixing and loanwords have been summarised below. The frame used in the table has been taken from Poplack, Wheeler and Westwood (1989: 150):

Loanwords[3]	*Singly occurring language mixing*[4]
Morphologically integrated	Morphologically integrated[5]
Syntactically integrated	Syntactically integrated
Phonologically integrated	(Phonologically integrated)
Recurrent (individual)	
Widespread (community)	
Accepted	

The major difference is how well a word is integrated into the Matrix Language (Japanese), and whether it is acceptable to be used in Japan.[6]

3.4.1.2 Historical Aspects of Loanwords

According to Sato (1990) and Matsumura (1986: 273-300), early contacts with Europeans started in 1543 when the Portuguese came to Tanegashima, an island in Southern Japan. *Pan* (bread) and *tabako* (cigarette) are examples of early Portuguese influence.

In the 17th century, contact with the Dutch was strengthened and words such as *koohii* (coffee), *biiru* (beer) and *koppu* (cup) were introduced.

After 1859, Japan developed ties with England, France, Germany and Italy and many words were brought into Japanese from those languages. Words regarding art, cooking and design from French, medicine, mountain climbing and skiing words from German, musical terms from Italian and others, and technical terms from English.

---

3 Poplack et al. (1989) call these words "established borrowing".

4 Poplack et al. (1989) call these words "nonce borrowing".

5 Morphological non-integration can also occur in singly occurring language mixing. The use of plural marker "s" in the English EL form in Japanese as the Matrix Language is an example.

6 There are words which can be judged as either loanwords or singly occurring language mixing, due to individual differences in perceptions.

3.4.2 Japanisation Rules of Loanwords

In the process of the Japanisation of English loanwords, some adjustments are observed semantically, syntactically and phonologically (Quackenbush, 1977; Stanlaw, 1982).

Quackenbush (1977, 1979, 1991, 1993) has attempted to explain the Japanisation rules of English loanwords in detail. The following is a brief summary of her work. Although the Japanisation rules are quite complex, Japanese native speakers have the capacity to use the rules without studying them. It is frequently observed that native speakers of Japanese who know a foreign language mix it with the Japanese language, applying the Japanisation rules. These Japanisation rules are applied not only to loanwords, but also to singly occurring instances of language mixing. This is not only observed outside Japan amongst Japanese migrants, but inside Japan among ordinary Japanese people.

3.4.2.1 Non-uniformity in the Japanisation Process

When foreign words are borrowed into Japanese, or when foreign words are used by Japanese within the Japanese language frame, the foreign words are Japanised phonologically and morphologically according to the Japanisation rules (Quackenbush and Fukuda, 1993: 3). The Japanisation process is not determined by a single rule, for instance,

(1) The rules may be contingent on whether the medium is written or oral; and

(2) The rules may be based on different types of English (e.g. American or British English).

A number of factors complicate the rules:

(3) Some words have been truncated (e.g. *depaato* [i.e. depart], /depa:to/, department store); and

(4) Abbreviations are common (e.g. OL /o:eru/, office lady).

(5) Some words come to have variant forms, depending mainly on whether the phonologically conservative or innovative form is used (e.g. /tʃi:mu/ conservative vs /ti:mu/ innovative for "team").

(6) Two loanwords which are derived from one English word can have different forms and meanings. These were words adopted into the Japanese language at different times, by introducing only a part of the whole meaning the word has. Different sets of rules were applied at different times, therefore they appeared in different forms in Japanese. Since one meaning was introduced each time, they ended up having different meanings in Japanese (e.g. /toroQko/, trolley and /toraQku/, lorry).

(7) There are some 'made-in-Japan' English loanwords as well (e.g. *naitaa* [nighter] = nighttime baseball game). Trends in Japanisation rules vary depending on when and how the words were adopted. This adds to the complexity of the Japanisation rules (Quackenbush, 1977, 1979, 1991, 1993).

In the case of language mixing, Rule (1) is only limited to the oral medium, and Rule (2) is applicable, but not the rest of the rules.

3.4.2.2 Syllable Restructuring

"The process of adaptation of English words to Japanese is by no means completely uniform. However the bulk of the borrowings tend to follow certain general rules. In other words, the majority of educated native speakers of Japanese would produce the same Japanised form of a totally new English word" (Quackenbush, 1977: 152).

Below is a summary of phonological adaptation rules of English loanwords introduced in Quackenbush 1977, 1979, 1991 and 1993.

There are four primary rules for syllable restructuring in order to account for the process of adaptation to Japanese syllable structure:

(1) Nasal Rules;

(2) Consonant Gemination Rules;

(3) Vowel Insertion Rules; and

(4) Glide Syllabification Rules.

In addition, there are two segment transfer rules which make English words conform to Japanese segmental phonology:

(5) Vowel Transfer Rules; and

(6) Consonant Transfer Rules.

(7) Devoicing Rule may be applied in addition to the above rules.

One of the principles of these rules is to use the most similar Japanese sounds to the original English words (c.f. Rules 1, 5 and 6 above). For instance, under Rule 1, English /m, n, ŋ/ are interpreted as allomorphs of the mora nasal /N/ in Japanese in certain cantonments. English /æ/ and /ʌ/ are replaced by Japanese /a/ (Rule 5) and English /θ/ will be replaced by Japanese /s/ (Rule 6).

The other three rules are characteristic of Japanese phonological rules (c.f. Rules 2, 3 and 4). Vowel insertion (Rule 3) is a common phenomenon in Japanese: all consonants except for nasals are followed by a vowel in Japanese. Therefore, this rule is also applied to the formation of loanwords (e.g. *hando* for "hand").

Consonant gemination (Rule 2) is a phenomenon which occurs quite frequently in the Japanese language. This phenomenon is most regularly observed in one-syllable words in which the consonant /p, t, k, b, d, g, ʃ, tʃ, j/ is preceded by a short vowel (e.g. *mitto* for mit).

Glide (/w/ and /y/) syllabification (Rule 4) is based on the native Japanese combinations of sounds: in Japanese, /w/ occurs only before /a/, and /y/ occurs only before /a, o, u/. When an English word is borrowed into Japanese, the English /w/ and /y/ are either deleted (/w/ before /u/, /y/ before /i/) or /w/ becomes /u/ and /y/ becomes /i/.

Devoicing Rules (Rule 7) mean that voiced consonants are devoiced when they appear at the second final position of a word, followed by a vowel. The figure below, for instance, shows the procedure of "dog" becoming *dokku* in Japanese (cf. Quackenbush and Fukuda, 1993: 134).

d	ɔ	g		English
	Q			(1) Gemination
			u	(2) Vowel addition[7]
	o			(3) Vowel adjustment[8]
d		g		(4) Consonant adjustment[9]
d	o	g		(5) Accentuation[10]
doggu (in katakana syllables in Japanese)				(6) Katakana orthography
dokku (in katakana syllables in Japanese)				(7) Devoicing (optional in this case)

Devoicing seems to be applied traditionally, yet some people, especially innovative or younger people, have started to use voiced patterns if they are the closest to the original sounds. Because of this flexibility of devoicing, two forms are sometimes available for some loanwords.

Each of the rules explained above has detailed subcategories, which are not the focus of this thesis. Thus, they will not be explained further.

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7 Adding a necessary vowel at the end of the word.

8 English vowels are replaced by Japanese vowels. In this case, the English vowel /ɔ/ as in [dɔg] is replaced by the Japanese vowel /o/.

9 English consonants are replaced by Japanese consonants, if necessary.

10 Appropriate Japanese accent is applied to the word.

In language mixing data, phonological adaptation is frequently observed. Employing Japanese pronunciation in language mixing data is more frequently observed than the use of pure non-Japanese pronunciation amongst Japanese adult immigrants and balanced bilinguals. The rules used in Japanisation are usually the same and do not vary among Japanese native speakers and bilinguals, although a few individual differences might be expected. The expected rules are the same as the syllable restructuring rules for loanwords introduced above.

3.4.3 Overseas Japanese Used by Sojourners and First Generation of Immigrants

The use of 'overseas loanwords' by Japanese sojourners and first generation immigrants in Melbourne, Australia, has been studied by Masumi-So (1983). Australia's Japanese communities are small especially outside Sydney and Melbourne and 56.1% of Japanese residents in Australia are sojourners such as businessmen, not permanent residents (see Hatano, 1997: 78).

The definition of 'loanwords' as used by Masumi-So is those words which fall into the following categories (Masumi-So, 1983: 43-44). They are what is called singly occurring language mixing in this study.

- lexical items in which both form and meaning appeared to be acquired in the Australian environment (e.g. *maiguranto* {migrant})
- lexical terms which are in common use as *gairaigo* (*gairaigo* is the same as loanwords as defined in this study) in Japan, but which appeared altered in pronunciation to approximate (Australian) English (e.g. *enjinia* pronounced as [èndziníə/ə] altered from the *gairaigo* pronunciation [éndzínia] - the difference is where to put an accent: the former has a stress on the last /i/, which indicates an influence from English. The latter has stresses on /e/ and the first /i/, which is the expected loanword/*gairaigo* accentuation).
- lexical items that are conventionally shortened in *gairaigo* (or loanword in this study) in Japan but as a result of contact with English are given their full length (*sutoraiki*, instead of *suto*).
- lexical items which are a combination of Japanese and English lexemes (e.g. yon-*beddoruumu* - four bedroom), and
- lexical items which are commonly used in Japan as *gairaigo* (or loanword in this study) but appear to have meanings influenced by (Australian) English (e.g. *mooteru* as in Australian motel: not a type of hotel used by dating couples in Japan).

Well established loanwords (i.e. *gairaigo* in Masumi-So's term) and English words pronounced in English were excluded in her definition of (overseas) loanwords, which

means that Masumi-So's study was focused on typical overseas Japanese use of uncommon borrowed words.

One characteristic of overseas Japanese was clearly observed from Masumi-So's study. Most of what she calls "loanwords (= singly occurring language mixing)" were pronounced by the subjects in the Japanese form (Masumi-So, 1983: 47-48) and they were used according to the Japanese morphosyntactic rules, as if they were normal Japanese words.

Masumi-So's study is relevant to this study, because the informant's mother, who is the primary person who gives Japanese input to the informant, is in the same category as the overseas Japanese people interviewed in Masumi-So's study. In fact, my informant's mother's Japanese usage is similar to that of Masumi-So's subjects, although my informant's mother may use more English pronunciation in language mixing data.[11]

Factors influencing the subjects' loanword (= singly occurring language mixing) usage were summarised as follows (Masumi-So, 1983: 75-76).

Factors 'promoting' the use of singly occurring language mixing are:

- length of residence
- family networks:
  - ◊ an English-speaking spouse-network - this network can be a 'promoting' factor if there is no other family network conducive to corrective behaviour or if there is no identity factor present; and
- An English-speaking work-network.

[11] This could be due to the fact that she is talking to her bilingual daughter while Masumi-So's informants are talking to an adult whose first language is Japanese, although she is also a bilingual.

Factors 'preventing' the use of singly occurring language mixing are:

- family networks:
  - ◊ a child-network - this network particularly affects the female subjects when an identity factor is present
  - ◊ a non-English-speaking mother-network, and
- an identity factor.

These points will be addressed in relation to the reasons for language mixing.

In total, 239 (overseas) loanwords were found in her study and only 10 cases (9 kinds) of English use were also found. Therefore it could be said that the use of phonologically and morphologically non-integrated English words is still rare among overseas Japanese, compared to the use of Japanised English words. The English words were used as forms of direct quotation of interlocutors and below is the list of English words used (Masumi-So, 1983: 83-84).

1. Good boy
2. Sorry (uttered twice)
3. OK (pronounced [o:kai], an imitation of the Australian accent)
4. Tomorrow
5. All right, all right.
6. No worry
7. Mummy
8. No, thank you.
9. Hi, mate!

Unfortunately, it was not explained whether these words were used as intersentential or intrasentential mixings, since the contexts surrounding the words were not explained in Masumi-So's thesis.

However, in interactions between Japanese, Japanese sojourners and first generation immigrants, the mixing pattern is to mix English words using the Japanisation rules

for borrowed words, i.e. to integrate English words phonologically and morphologically into Japanese. From my observations, some Japanese residents overseas occasionally adopt the English pronunciation of some words, especially for proper names and jargon. However their mixing pattern generally involves the insertion of foreign words into Japanese as the Matrix Language, which means that it is mostly singly occurring language mixing.

3.4.4 Overseas Japanese as Used by Second Generation Japanese Immigrants

Nishimura (1982, 1986, 1995, 1997) studied Japanese/English language mixing as practised by second generation Japanese (*niseis*), in the age range 50 to 60 years in Toronto, Canada. She studied how two languages, which are structurally so different, can be mixed in sentences. Her 1997 study also included some data from second generation Japanese in San Francisco, USA (Nishimura, 1997). She has found a number of similarities between the language mixing patterns used by the two communities (Nishimura, 1997: 2).

Nishimura's study is especially significant for the current study due to the common background between her participants and the participant in this study.

1. Most of Nishimura's subjects and the current subject were born outside Japan and learnt Japanese from their parents (in Frances's case, from just one parent).
2. Both parties' stronger language was English at the time of investigation.

Some differences to note are the following:

1. As adults, Nishimura's informants have already completed their acquisition of English to an adult level (and possibly Japanese), while my informant is a child who is still in the process of acquiring both English and Japanese.
2. The home is a Japanese speaking domain for Nishimura's informants, which is not the case for Frances when her father is present.
3. Communities are expected to have established patterns which influence community members' speech. *Niseis* have experienced hearing Japanese not only from native speakers of Japanese but also from other *niseis,* while Frances has received input only from native speakers of Japanese (first generation immigrants).
4. Nishimura's subjects have lived in a Japanese community while Frances's family lives far away from the location of most of Sydney's Japanese community.

5. Nishimura's subjects are ethnically Japanese, therefore they are Japanese-Canadians, while Frances is a half-Japanese, whose understanding is that she is half-Japanese, not a Japanese-Australian.[12]
6. Nishimura's subjects have experienced hostilities against Japanese-Canadians during WWII, while Frances has not experienced such negative reactions from other people for being half-Japanese, according to the parents.

These distinctions may be possible causes of differences in the data in Nishimura's study and the data in the current study.

Nishimura's informants possessed a high level of competence in both languages (Nishimura, 1986: 127). Their language choices are as follows:

- To a second generation Japanese - English
- To a native Japanese - Japanese
- In a group of both second generation Japanese and native Japanese -both English and Japanese.

The data in the current study is limited to the native Japanese language situation. Thus, in the Japanese environment there is an expectation to keep to the Japanese language when a native Japanese speaker is being addressed, no matter how well the native Japanese interlocutor speaks English.

Nishimura argues from her data that "there are three patterns found in *niseis'* Japanese":

1) basically Japanese variety (found when *niseis* talk to native Japanese);
2) basically English variety (found when *niseis* talk to other fellow *niseis*); and
3) mixed variety (when both native Japanese and *niseis* are around) (neither Language A or B predominates) (Nishimura 1995: 124-125).

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[12] Frances's mother reported that Frances had said in school that she was Japanese. Her mother corrected her and when the investigator asked the question whether she was Australian, Frances answered she was half-Japanese.

"In the basically Japanese variety, the use of English nouns occurs predominantly. In the basically English variety, Japanese phrases and expressions occur sporadically. In the mixed variety, switching of various syntactic items occurs in the sentence environment of both Japanese and English" (Nishimura, 1995: 139). Nishimura's conclusion is that the pattern found in the basically Japanese variety is borrowing, and that the pattern in the mixed variety is code-switching (Nishimura, 1995: 124-125). "Borrowing takes places when there is a base language in the discourse (Japanese in her case): code-switching takes places when two languages are both used" (Nishimura, 1995: 140). Nishimura does not, however, make any distinctions between borrowing and nonce borrowing (Nishimura, 1995: 141).

Within the mixed variety, there are structurally Japanese sentences, as well as structurally English sentences (Nishimura, 1995: 134). Nishimura argues that language mixing in the mixed variety involves various syntactic items, not dominated by single noun mixing as in the basically Japanese variety, thus the language mixing patterns found in the mixed variety are code-switching, not borrowing (Nishimura, 1995: 134).

Her findings (Nishimura, 1986: 141) include the observation that one language must be assigned to each Japanese/English language mixing sentence, and that the language may be Japanese in some cases, and English in others. What differentiates her study from previous studies such as Sridhar and Sridhar (1980) and Joshi (1985) is that evidence was found for assignment to either of the two languages involved in language mixing.

The following is a summary of Nishimura's work on Canadian *niseis*. Since this study focuses on the Japanese language environment, only "Switched Items in the Basically Japanese Variety" and "Japanese Sentence Environment in the Mixed Variety" will be discussed.

3.4.4.1 Switched Items in the Basically Japanese Variety

In basically Japanese speech patterns, English elements are classified into three categories: discourse markers[13] (including interjections) [61 - 34.1%], single nouns[14] [93 - 52.0%], and other syntactic items [25 - 14.0%]. Thus the use of nouns is dominant (Nishimura, 1995: 128). In other words, the examples are all word level language mixings.

"Japanese lacks determiners (definite and indefinite articles). In addition, plural/singular marking on nouns does not exist." (Nishimura, 1995: 130). "66 of the 93 English nouns (71%) occur without the determiners or plural markings which would be required in English. With respect to 23 of the 93 English nouns, they are either mass nouns which do not occur with articles or nouns/noun compounds which are preceded by a Japanese demonstrative as in '*sono* idea (that idea)'" (Nishimura, 1995: 131).

It was common practice among Nishimura's informants to use English rather than Japanese for numbers and number-related expressions (Nishimura, 1995: 132).

Ex. Two, three *oru ya.*
There are two or three (kids).

Another interesting finding of note in her study is the use of "me" for oneself when *niseis* are speaking in Japanese (Nishimura, 1995: 131). This is a "common way" for *niseis* to refer to themselves, according to Nishimura. The pronoun "me" is used according to the Japanese syntactic rule: e.g. "Me *wa*... (I...)".

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13 An example of the use of a discourse marker (Nishimura, 1995: 129)
Author: *Doko o mita n desu ka.*
Which places did you see?
Sean: Well, *anmari ikanakatta ya.*
Well, I didn't get around much.

14 An example of the use of nouns (Nishimura, 1995: 130)
Film *o motte kita.*
(He) brought films.

3.4.4.2 Switched items in the mixed variety

From the mixed variety studied by Nishimura (1995: 134), a total of 517 mixed sentences were extracted, which include,

(1) 368 structurally Japanese sentences;

(2) 123 structurally English sentences;

(3) 11 Japanese topic-English comment sentences[15]; and

(4) 15 cases of 'portmanteau sentences'[16] (Azuma, 1993; Nishimura, 1985, 1986).

The mixed variety occurs when a second generation Japanese is talking in a group of native Japanese and second generation Japanese.

Categories (2), (3) and (4) were not found in Frances's data and the focus of this thesis is structurally Japanese sentences. Thus, only structurally Japanese sentences will be introduced in the following section.

A. Japanese Sentence Environment in the Mixed Variety

In the mixed variety, English nouns are the most frequently used, as in the Basically Japanese Variety. The difference is that (1) English Verb + *suru* (to do) (i.e. *do*

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[15] Ex. 1 She *wa*, took her a month to come *yo*.
she TOPIC
Talking about her, it took her a month to come home, you know.
Ex. 2 May 42 *ni wa*, we were in Alberta.
in TOPIC
In May 42, we were in Alberta.

[16] Portmanteau sentences involve a specific type of repetition: an English sentence and its Japanese equivalent are combined with a commonly-shared constituent. 'Portmanteau sentences' are SVOV: the first V is the English and the final V is Japanese (Nishimura, 1995: 139).
Ex. 1 We bought about two pounds *gurai kattekita no*.
S V O about bought
Ex. 2 There's children *iru yo*.
exist.
V S V

constructions)[17], (2) adverbs[18], (3) PP[19], (4) conjunctions[20] and (5) tags[21] were also used in the Mixed Variety, while they were not found in the Basically Japanese Variety.

Table 7. Syntactic categories of English elements in 368 Japanese sentence environments in the mixed variety (Nishimura, 1995: 134)

Noun & noun compound	225	(52.8)
Adj. + *na*, Adv + *ni*	12	(2.8)
Verb + *suru*	21	(4.9)
Numeral	59	(13.8)
Noun phrase (NP)	60	(14.1)
Adverb	20	(4.7)
Prepositional phrase (PP)	4	(0.9)
Sentence adverb	9	(2.1)
Conjunction	11	(2.6)
Tag	5	(1.2)
Total	426	*(100.0)

* The number of the switches exceeds that of sentences because some sentences contain more than one switch.

17 An example of the use of the *do* constructions (Nishimura, 1995: 136)
Watch-sareta
helping verb (passive + past)
(We) were watched.

18 An example of the use of an English adverb (Nishimura, 1995: 136)
Last time *itta toki.*
went when
When (I) went (to Japan) last time

19 An example of the use of an English PP (Nishimura, 1995: 136)
Right in the centre grow *shitara.*
helping verb
If (you) grow (the plant) right in the centre (of the field).

20 An example of an English conjunction (Nishimura, 1995: 136)
'Cause Dad *ga itta deshoo.*
'Cause Dad went, right?

21 An example of an English tag (Nishimura, 1995: 136)
Wakaranakattara, you know.
If you don't understand, you know.

3.4.4.3 Some Thoughts on Nishimura's Work

Since this study focuses on language mixing with Japanese as the Matrix Language, Nishimura's Basically Japanese Speech and Japanese Sentence Environment in the Mixed Variety will be examined in more detail.

One problem remains in the distinction between noun mixing in the mixed variety and in the Japanese variety. The same type of noun mixing is called borrowing in one type of environment and code-switching in the other. Azuma (1997) questions this approach by stating "if we follow JEC's (the title of Nishimura's book, Nishimura 1997) claim that noun switching in the Japanese variety [Japanese as the Matrix Language when *niseis* are talking to Japanese natives] are in fact borrowings, then are we willing to conclude that noun switching in the mixed variety [Japanese as the Matrix Language when *niseis* are talking to a group which consists of native Japanese and fellow *niseis*] are categorically code-switching? Aren't there some noun borrowings even in the mixed variety? Alternatively, isn't there some code-switching of nouns in the Japanese variety?" (Azuma, 1997: 122-123).

Nishimura stated that "in the mixed variety, switching of various syntactic items occurs in the sentence environment of both Japanese and English" (Nishimura, 1995: 139). She seems to distinguish nouns and NPs in the Japanese sentence environment in the mixed variety from nouns and NPs in the Basically Japanese Variety by looking at determiners and morphemes such as the plural marker "s" in English. Nishimura (1997: 90-91) states:

> "(in the Japanese variety) 66 out of 93 English nouns (71%) occur without determiners or plural markings which would be required in English....23 of the 93 English nouns are either mass nouns , which do not occur with articles, or nouns/noun compounds which are preceded by a Japanese demonstrative as in "*sono* idea (that idea)"[22].

[22] Remaining 4 examples are uses of 'me'.

Nishimura has not given examples of the use of nouns in the Japanese sentence environment in the mixed variety, but when full English NPs are used in that variety, they include determiners and plural markers (see Nishimura, 1997: 87-88, 96-98).

Not every researcher agrees that code-switching and borrowing can be distinguished by syntactic differences (especially determiners and the plural marker), however Nishimura's attempt to distinguish code-switching from borrowing, according to the language mode (monolingual mode: when they speak to native Japanese in Japanese, or when they talk to other *niseis* in English, or bilingual mode: when they speak to both native Japanese and *niseis*) is innovative.

CHAPTER 4
LANGUAGE MIXING: RESULTS AND ANALYSIS

4.1 Introduction

In this section, Frances's mixing patterns will be examined with respect to language input and the stronger language influence. The mother's mixing patterns will also be discussed as a source of language input.

This section includes six subsections: 1) Overview of the child's and the mother's mixing patterns, including their phonological aspects; 2) intrasentential mixing patterns; 3) intersentential mixing patterns; 4) which language is the child speaking?; 5) reasons for language mixing; and 6) the mother's correction strategies.

The expected Matrix Language in this study is Japanese, since Frances normally uses Japanese when the other people are speaking Japanese.

4.2 Overview of the Child's and the Mother's Mixing Patterns

4.2.1 Frances's Mixing Patterns

Frances's mixing patterns are similar to those of native Japanese speakers who use loanwords, especially from the syntactic point of view (i.e. most English words used in Japanese follow the Japanese syntactic rules, but not the phonological rules). The stronger language influence is readily observed in the child's Japanese, by her mixing various parts of speech from English. However her mixing patterns are still based on the Japanese syntactic system. The EL islands can be governed by English rules, rather than by the Matrix Language - Japanese. This phenomenon was predicted under the MLF model.

Phonologically she has adopted English pronunciation in most of her mixing, which is a noticeable difference between her and adult Japanese immigrants to Australia for whom Japanese is the first language (cf. Masumi-So, 1983). Most of her mixing consists of insertions of English words into Japanese sentences, including English verbs, adjectives and nouns. However, she also inserts phrases. Nouns are the most common parts of speech used in mixed utterances. Almost all of the mixing patterns are intrasentential switches while intersentential switches are rare. When intersentential switches occur, the switched sentences are English, syntactically and phonologically, and when the Matrix Language used is English, no mixing was found in the recordings.[23]

4.2.2 An Overview of the Mother's Mixing Patterns

Frances's mother's Japanese use is very natural in pronunciation and speed. The mother also attempts to control Frances's mixed utterances on occasion by using a variety of strategies to keep the child from using too many English words in Japanese. Sometimes the strategies are content based, whereby the mother allows the child to use English words, provided the child expresses herself well in terms of content. A more detailed review of the strategies used by the mother will be covered in Section 4.7.

Frances's mother's Japanese is a typical overseas version of Japanese. Many overseas Japanese, especially those who have lived in English-speaking countries for long periods and whose English proficiency is high, tend to use English words (mostly pronounced in Japanese, occasionally pronounced in English). Borrowed English words are used in the same format as established loanwords in Japanese, e.g. nouns often appear in their singular form, verbs in their nonfinite form, and adjectives in their bare form.

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[23] Her mother reported there is only one Japanese word Frances mixes when speaking in English: *gomu* (rubber band). The father reported she does not mix any Japanese words in English. There is no record on how the child uses the word *gomu* in English, i.e. syntactic details of its use, such as whether an English article is attached or not.

Noun and verb mixings were the most common mixing patterns used by the mother. No articles were found in her noun mixing. English nouns normally appeared in the singular form, no matter whether they were pronounced in the English or Japanese way. This is probably because the Japanese language does not have plural forms in most cases. There were, however, two occasions where the mother used the English plural forms. She was recorded using the plural form of English words after the child used them, thus it would seem to be the case that the mother does not use the English plural marker '-s' normally, unless she is repeating what the child has just said.

Ex. 1 Child: *Un,* near the trails.
Mother: Trails *no chikaku na no? Huun.*
Is it near the trails? I see.

Ex. 2 Child: *Kore,* autumn *nattara* leaves *wa kiiro, kiiro, orenji to* brown *naru no.* Winter *naru no.*
This, when autumn comes, leaves will turn yellow, yellow, orange and brown. Winter will come.
Mother: *Uintaa* leaves *tte yuu no.*
Are they called winter leaves?

Outside Japan, the Japanese used in Japan is not the norm, and it is unmarked to use some foreign words blended into Japanese[24].

The mother's Matrix Language was always Japanese in the cases of intrasentential switches and all the mixed utterances are insertions of morphologically Japanised English words.

The English lexicon the mother used took the form of Japanised words which normally omitted the English plural marker '-s'. Her use of English words in Japanese was typical of overseas Japanese when they are talking to other overseas Japanese people.

In the following example, the phrase 'the next-door neighbours' was simplified as '*nekusuto neibaa* (next neighbour)', as well as omitting the English plural marker '-s' and the definite article 'the'. The pronunciation was also Japanised.

Ex. 1	Mother:	*Nekusuto neibaa no nani?*
		The next-door neighbours' what?
	Child:	*Neko.*
		Cat.

The example below illustrates one of the many types of situations in which it is more appropriate to use Japanised English outside Japan.

Ex. 2	Investigator:	*Neko, Jinjii?*
		Cat, Gingie?
	Child:	*N.*
		Yes.
	Mother:	*Nakayoshi na no ne. Jinjaa karaa dakara, Jinjii.*
		She is a good friend of yours, eh? Because it is ginger colour(ed), it's (called) Gingie.

In Example 2, the mother is explaining why the cat is called Gingie. Without using the English word (pronounced in Japanese) '*jinjaa* (ginger)', it would be difficult to explain the origin of the name. Therefore it is more acceptable to use the English word rather than its Japanese equivalents.

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[24] Some people may still use marked choices motivated by various reasons. "Norms designate marked and unmarked choices, but speakers make choices" (Myers-Scotton 1998b: 31).

Mixed words would normally be Japanised in pronunciation in the overseas Japanese used by first generation immigrants, however, it has been observed that some Japanese people use non-Japanese pronunciation for proper names such as place names. The mother's pronunciation is mainly Japanese even when she uses loanwords or English words in her Japanese utterances. There were still some cases in which she used English pronunciation, however no clear rules were found as to when the mother adopts English pronunciation.

English verbs were used with the Japanese verb *suru* (to do), in the same manner as the Japanese borrowing pattern, i.e. using the infinitive form of English verbs with functors such as tense/aspect expressed by inflecting the *do* verb in the Matrix Language Japanese. English verbs were frequently Japanised in pronunciation as well, but English-like pronunciation was also adopted on some occasions. As stated above, no rules were found as to when English pronunciation was used.

The mother normally uses Japanese pronunciation even when stating proper names, such as *Erizabesu* (Elizabeth). A few exceptions in which English pronunciation was used were either uncommon proper names for Japanese, e.g. *Kirwin,* or cases in which the mother repeats the English words Frances has used.

The following are some examples of the mother's speech. Example 2 shows a case in which the mother used an English word, 'sing', immediately after the child's use. Example 3 shows a very common form of *do* constructions in Japanese. The pronunciation has been Japanised in accordance with the Japanisation rules and the phonologically Japanised verb is in its infinitive form.

Ex. 1 Mother: Die *shitara,* celebrate *suru no? Shinai yo.* Die *shite mo.*
If one dies, do we celebrate? We don't. If one dies.

Ex. 2	Mother:	Assembly *de nani suru no?*
		What do you do in Assembly?
	Child:	Singing *to* singing *suru no.*
		Singing and singing.
	Mother:	*Nani* sing *suru no?*
		What do you sing?
Ex. 3	Child:	(screams)
	Mother:	*Nan de sukuriimu suru no?*
		How come you scream?

4.2.3 Frances's Pronunciation of Mixed Utterances

Unlike her mother, words of English origin used by Frances were mostly pronounced as in English. This is the major difference found between Frances and her mother, since her mother normally adopts Japanese pronunciation for English words when speaking Japanese.

In this section, the following examples will be presented:

- the use of English pronunciations
- a mixture of Japanese and English pronunciations
- the use of Japanised pronunciation for English words.

Firstly, the following is a typical example of Frances's usage of English pronunciation. In the example below, the mother and child are comparing a Dalmatian dog soft toy and a picture of '101 Dalmatians'. The mother has pronounced the word 'collar' in Japanese (i.e. *karaa*), while the child has pronounced it in English.

Ex. Mother: *Demo, kore buruu no karaa shite ru desho.*
But, this is wearing a blue collar, right?
Investigator: *Un.*
Yeah.
Child: *Demo, kore* collar *shite nai sho.*
But this is not wearing a collar, right? (5:04)

There was one case found in which Japanese influence was present in her mixing of English words. In the example below, the child has used the English pronunciation of a Japanese loanword: *piinatsu* (peanuts) *bataa* (butter).

Ex. Mother: Jam sandwich. *XXX piinatsu bataa wa?* Just jam *dake?*
Jam sandwich. XXX how about peanut butter? Just jam?
Child: *Un.* peanuts butter.
Yeah, peanut butter. (5:01)

Frances has also used the English word 'peanut butter' in the recordings.

Secondly, some mixtures of Japanese and English pronunciations were found. Frances rarely mixes Japanese phonemes in the English lexicon. Especially in the later stages of this study, her phonological mixing rate has declined, and she has started to use English pronunciation more often when she mixes English words in Japanese. This may be due to the fact that she had started attending kindergarten (year 0), just a few meetings after she started participating in this research. As the research has progressed, she has had greater opportunities to speak English in kindergarten (year 0) and school (year 1 onwards), and Japanese influence was rarely found when English words were mixed into the Japanese language as the Matrix Language.

The following examples were all found before she was 5:05.

Ex. 1 Child: *Kyaa, shi-*lly [ʃíli] *yo.*
(screaming) It's silly. (5:01)

Ex. 2	Mother:	*Give shite nai no.*
		She doesn't give (milk).
	Child:	*Un.* Milk-*u.*
		Yeah, Milk. (5:01)
Ex. 3	Mother:	*Nani suki na no*
		What do you like?
	Child:	Bik-*uu* [báiku:]
		Bike. (5:01)
Ex. 4	Child:	*Ha ha haa. Fran, Frances* catch *natte, Hiromi-nee-chan*
		catch-*i* [katʃi].
		Ha ha ha. Fran, Frances (= I) will catch (you), you will catch
		(me), Hiromi. (5:05)
Ex. 5	Child:	*Frances,* tall-*u deshoo.*
		I am tall, aren't I. (5:05)

Example 1 above shows the mixing of the Japanese syllable '*shi*' (/ʃi/) and the English syllable 'lly' (/li/). When she uses the English word 'silly' in a Japanese context, she often uses the mixed pronunciation.

Examples 2 to 5 are examples of an additional vowel at the end of the word. All Japanese words end with a vowel unless the nasal consonant /n/ is used. Therefore, this is a typical Japanisation pattern. She also uses the English equivalents 'milk', 'bike' and 'tall' in Japanese. Example 4 is an example of attaching /i/ after /ʃ/, which is a normal Japanisation rule for loanwords. Frances seems to have learnt the rules for vowel insertions (see Section 3.4.2.2) correctly.

Example 6 below is neither English nor Japanese. The child still processes child pronunciations in both English and Japanese. 'Tissue ([tíʃu:])' in English and '*tisshu* ([tíQʃu])' in Japanese are so similar that it cannot be determined to which language Example 6, *tishu* ([tíʃu]), belongs.

Ex. 6 Child: Mummy, *tishu* ([tíʃu]) *kudasai.*
Mummy, please give me some tissues. (5:01)

Finally, Frances pronounced some English words in Japanese according to the Japanisation rules (See Section 3.4.2.2). There were no rules found regarding when she uses Japanese pronunciation for English words. The following are examples of Frances's use of Japanese pronunciation for English words. In each instance, they were pronounced in exactly the same manner as an adult Japanese immigrant would do.

Ex. 1 Mother: *Tsukue ni suwatte n no hitori, yuka ni suwatte ru no.*
Do you sit at the desk (alone?) or do you sit on the floor?
Child: *Uun.*
Mmm.
Mother: *O-benkyoo suru toki.*
When you study.
Child: *Uun. Desuku ni.*
Mmm. At the desk.
Mother: *A, soo.*
I see. (5:05)

Ex. 2 Mother: *Ja, Jiraan wa nani shita no?*
Then, what did Jiraan do?
Child: *Miin'na wa...*
Everyone...
Mother: *N.*
Yeah?
Child: *Onaji waaku shita noo.*
(Every one) did the same work. (5:05)

In both examples, the necessary verbs have been inserted and the English vowels have been correctly adjusted to Japanese. For instance, 'desk' has been phonologically Japanised in the following way:

[dɛsk]

↓ (Vowel Insertion)

[dɛsu̲ku̲]

↓ (Vowel Adjustment)

[de̲suku]

4.3 Intrasentential Mixing Patterns

In Nishimura's study of second generation Japanese Canadians (Nishimura, 1982, 1986, 1995, 1997), she found the following categories of language mixing in the environment where a second generation Japanese is talking to a native Japanese in Japanese (i.e. the Basically Japanese Variety in Nishimura's terms);

1. Discourse markers[25]
2. Single nouns
3. Other syntactic items.

On the other hand, in the environment where a second generation Japanese is talking to a group of both second generation Japanese and native Japanese (i.e. the Mixed Variety in Nishimura's term), the following five mixing patterns were observed in addition to the first three categories.

1. English verb + *suru* (*Do* construction)
2. Adverbs
3. PP
4. Conjunctions
5. Tags[26]

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25 Discourse markers were not found in Frances's mixing data.

26 English tags were not found in Frances's mixing data.

Nishimura has found evidence of different language mixing patterns depending on who the informants were talking to. In Frances's data, however, her intrasentential language mixing patterns did not make a clear change when she was talking solely to the investigator (i.e. the Basically Japanese Variety in Nishimura's study), to both her mother and the investigator (her mother could be counted as an in-group person, thus the Mixed Variety in Nishimura's study), or even to her mother alone.

The six kinds of intrasentential mixing patterns were all observed in Frances's intrasentential mixing: (1) verb constructions and VP mixing; (2) adjective (and AP) mixing; (3) noun (and NP) mixing; (4) adverb mixing; (5) conjunction mixing; and (6) prepositional phrase (PP) mixing.

4.3.1 Verb Constructions and VP Mixing

4.3.1.1 Verb constructions - Use of the *Do* Constructions

In order to use English words as verbs in Japanese, both Frances and her mother have been using the *do* construction, which is to insert English infinitive verbs and attach the appropriate Japanese *do* verb, *suru*. Japanese loanwords allow the insertion, not only of infinitive verbs, but also nouns. The use of phrasal verbs in the *do* construction is also common in overseas Japanese (e.g. *kyatchi appu suru* = to catch up).

In addition to *suru* (to do), Frances uses another *do* verb, *yaru*, in the place of *suru* occasionally. In Japanese, *suru* combines with a noun (usually of Chinese origin), and forms a new verb (Nishimura, 1982: 829), but not with *yaru*. Therefore the use of *yaru* is an extension of the use of *suru*. *Yaru* also means 'to do' and is a colloquial form, however *yaru* is not normally used in the *do* construction.

The Japanese *do* verb generally carries tense and negation, but not English words in the Embedded Language. This *do* verb pattern has also been discussed in many previous research papers (cf. Myers-Scotton and Jake, 1995; Appel and Muysken, 1987; Nishimura 1982, 1995). Examples of the use of various English parts of speech with the Japanese *do* verb were found in this study, although some parts of speech are rare. Most English verbs used in the *do* constructions were infinitive forms, in accordance with Myers-Scotton and Jake (1995: 1005).

The following are the three language mixing patterns the mother used in the *do* construction:

1) verb + *suru* (verbs are in infinitive forms only);
2) adjective + *suru*; and
3) adverb + *suru*

On the other hand, the child used far more different variations, and she has expanded her use.

1) verb + *suru/yaru* (verbs are in infinitive forms, gerunds, past participles, phrasal verbs and VPs)
2) adjective + *suru/yaru*
3) adverb + *suru/yaru*
4) noun + *suru/yaru*
5) PP + *suru/yaru*
6) English verb/VP endings without a Japanese *do* verb

The following are examples of 'English infinitive verb + Japanese *do* verb, *suru*' as used by the mother.

Ex. 1 Mother: Die *shitara,* celebrate *suru no? Shinai yo.* Die *shite mo.*
If one dies, do we celebrate? We don't. Even if one dies.

Ex. 2 Child: (Screams)

Mother: *Nan de sukuriimu suru no?*

How come you scream?

Ex. 3 Mother: *XXX Mashuu Patason ga Frances o tiizu shita tte yuu n de, kono ko wa ikinasai tte iwareta toki ni ikanakatta no.*

XXX because Matthew Patterson teased her, this child (= Frances) did not go when was told to do so.

English infinitive words were pronounced either in Japanese or English, but primarily in Japanese. Functions have been expressed by the *do* verb. For example, 'Die *shitara*' in Example 1 is the conditional form (i.e. 'if one dies') and '*tiizu* (tease) *shita*' is the past tense (i.e. 'teased').

The 'English infinitive verb + Japanese *do* verb, *suru*' construction had already emerged in Frances's language data when the current study began at the age of 5:01. The following are examples of 'English infinitive verb + Japanese *do* verb, *suru*' as used by Frances.

Ex. 1 Child: Clean *suru no.*

I am going to clean it. (5:01)

Ex. 2 Child: *Frances,* hear *shuru no.*

I'm going to listen to this [tape]. (5:01)

Ex. 3 Investigator: *O-too-san doko ni iku n daroo.*

I wonder where the father is going.

Child: *Anoo,* animals free *shuru no.*

Um, he is going to free the animals. (6:02)

Ex. 4 Investigator: 'Sack race' *tte nani?*

What is a sack race?

Child: Sack race *tte,* sack *ni haitte* bounce *shuru noo.*

Sack race means you get into a sack and bounce. (5:09)

Examples 2-4 above have a child form of the pronunciation of *suru*, which is *shuru*. This is one of the few Japanese pronunciations for which Frances still uses the child form at the age of 5 - 6.

The following are examples of 'English infinitive Verb + Japanese *do* verb, *yaru*' by the child. This usage of *yaru* is her own style. The mother has never used it in the *do* constructions in the recordings. The expected pattern is to add the *do* verb, *suru*. In Frances's speech, *yaru* carries functors such as the gerund (in Examples 1, 3, and 4), an auxiliary form expressing completion of an action or an event (Example 2).

Ex. 1 Child: Hide *yatte*[27] *n no.*
I am hiding. (5:01)

Ex. 2 Mother: *Frances wa Erizabesu to itchatta n deshoo.*
You went with Elizabeth, right?

Child: *Uun. To* Elizabeth, *Frances* partner *shite, to* Nathan Brain *Frances* choose *yatchatta*[28] *no.* (5:01)
Um. Elizabeth was my partner and Nathan Brain chose me.

Ex. 3 Child: *Buranko,* Mummy, push *yatte*.
Please push the swing, Mummy. (5:02)

Ex. 4 Child: Hair cut *yatte ru.*
I'm doing a hair cut (I'm giving a hair cut). (5:02)

Frances not only used infinitive forms in *do* constructions, she also used 1) past participles; 2) gerund forms; 3) phrasal verbs; and 4) VPs. They were not found in the mother's data.

Examples 1-4 below are instances of the past participle and gerund forms used by Frances.

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27 *Yatte* is the gerund for *yaru* (to do).

28 *Yatchatta* is *yaru*'s 'completed state of an action or an event' form.

Past participles are not generally used in Japanese loanwords, however in the following cases past participles have been used in the adjectival sense. Gerund forms can be found in established loanwords in Japanese.

Ex. 1	Mother:	*Miruku dasanaku natchatta no?*
		Has she stopped giving milk?
	Child:	*Un.*
		Yes.
	Mother:	*Dooshite?*
		Why?
	Child:	*Demo* Betty, Betty *wa* gone *shichatta no.*
		But Betty, Betty has gone. (5:01)
Ex. 2	Child:	*Ne, kore* burnt *shinai*[29]?
		Isn't this burnt, is it?
	Mother:	*Daijoobu deshoo. Iya nara, taberu no yamenasai.*
		It's OK, isn't it. If you don't want it, stop eating it. (5:09)
Ex. 3	Child:	*Ano, Frances,* merry go round *ni itta.* Ninty-ninty-six *ni itta no.*
		Um, I went to the merry go round. I went there in 1996.
	Investigator:	*Hontoo.*
		Really.
	Child:	*Frances* ninty-ninty-one *ni* born *shita no.*
		I was born in 1991. (6:06)
Ex. 4	Child:	*Kore* colouring *shita no yo.*
		I coloured this.
	Investigator:	*Hu, hu, hu. A, soo.*
		(laugh) I see.
	Child:	*Kore de* colour *shita no yo.*
		I coloured using this. (5:02)

[29] "*Shinai* (do not)" should be *shite nai* (has not been).

Frances has applied the *do* construction to phrasal verbs. Adaptation of phrasal verbs in the *do* construction can be found in both Japanese and overseas Japanese. The following usage, however, cannot be found in Japanese loanwords.

Ex. 1 Child: *Ja,* Mummy sit down *shitara, Frances wa* tall.
Well, if Mummy sits down, I will be tall(er). (5:05)

Ex. 2 Child: *Ushiro de* take in *shuru no.*
You will take it in behind. (5:05)

Ex. 3 Child: *Frances,* take off *shuru no.*
I'm going to take off (my slippers). (6:07)

Ex. 4 Child: Wrap up *shinai to.*
I have to wrap it up. (5:11)

Ex. 5 Child: *Kore wa* roll over *shite.*
Roll this over. (5:08)

Occasionally, VPs also appeared in Frances's *do* constructions. In that case, the word order of the objects and the verbs is English. This is predicted under the MLF model in that the EL island is governed by the rules of the Embedded Language. When English VPs are attached to *suru*, some elements such as English articles and the plural marker '-s' can be omitted, as in the examples below (cf. in Example 1, neither 'sing a song *shuru*', nor 'sing songs *shuru*'). In Example 2, an article, 'the', is missing from the English VP 'trying to chase the rabbit'. These VPs have not appeared at earlier stages of the recordings. They started to appear after Frances turned 6:00, and earlier data did not include phrasal level English mixing in Japanese (except for phrasal verbs which can be seen even in Japanese used in Japan).

Ex. 1 Child: Pokahontas *waa* Indian.

Pokahontas is Indian.

Investigator: *Indian kaa. Dakara itsu mo dansu shite n no? Koo dansu tte.*

Indian. Is that why she is always dancing? Dance, like this.

Child: *Un.*

Yeah.

Investigator: *Ee? Un tte?*

Ah? She says yes?

Child: Sing song *shuru.*

She sings songs. (6:00)

Ex. 2 Child: *Hiromi, ano kitsune to usagi,* hide *shiyoo ka. Ano Hiromi wa kitsune.*

Hiromi, um, fox and rabbit, shall we hide? Um, you are the fox.

Investigator: *Un.*

OK.

Child: *Ato, ano, Frances wa ano, usagi. Ato...*

And, um, I will be, um, the rabbit. And...

Investigator: *Un.*

Yeah.

Child: *Hiromi wa* trying to chase rabbit *shisuto*.[30]

You will be trying to chase the rabbit. (6:06)

Verbs are not the only parts of speech that can be used in *do* constructions in Japanese. Other parts of speech such as nouns can also be used with the Japanese *do* verbs in order to create verbs. A non-Japanese noun plus the Japanese *do* verb is a common pattern in the Japanese loanwords, however adjectives and adverbs are normally not used in *do* constructions in Japanese.

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30 *Shisuto* is a wrong form in Japanese. It was probably caused as a speech error and would not appear again, since this is the only example of *shisuto*. *Suru no* is the expected form here. Frances at least tried to attach a Japanese word at the end of the sentence.

The mother has not used nouns in *do* constructions, but she has used a few adjectives and adverbs in the recordings. The child used all of these parts of speech in the *do* constructions. The following are examples of Frances's uses of nouns in *do* constructions.

Example of nouns:

Ex. 1 Investigator: *Saikin nani shite ru no, gakkoo de.*
What are you doing at school these days?

Mother: Gold *no o-hanashi.*
The story of Gold.

Investigator: *Nani?*
What?

Child: Gold.

Investigator: Gold *no o-hanashi. De, nani sun no? Doo yatte...*
Gold story. And what do they do? How...

Child: A pan *shuru no.*
They do (= use?) a pan. (6:01)

Ex. 2 Investigator: *Gakkoo itte sa, o-hanashi suru n deshoo. Kyoo no o-hanashi tte, o-hanashi suru no, shinai no?*
You go to school and give a talk, eh? Do you give a talk like 'today's story', or what?

Child: News *shuru no,* Monday *ni.*
We do 'news', on Monday.

Investigator: *E?*
Huh?

Child: Monday *ni* news *shuru no.*
We do 'news' on Monday. (6:01)

Ex. 3 Child: Horse *wa kore,* hooves *naru, kore* hooves *shichau no.*
As for a horse, you will be the hooves, you will do (= wear) the hooves. (5:11)

In Example 1 above, an indefinite article 'a' has appeared with a noun. Attaching 'a' is very rare and was only found three times in the whole of the recorded data. In these cases, 'a' appeared either at the beginning of the sentences or in an English VP EL island.

Example 3 shows that the plural marker '-s' can also appear in the *do* verb construction. Examples 1 and 3 would be hard to understand even for overseas Japanese, since adults would use different types of Japanese verbs rather than the *do* verbs (e.g. instead of saying 'a pan *suru*', adult Japanese bilinguals would say 'pan *o tsukau* (to use a pan)'.

Adjective and adverb mixing in *do* constructions was rare in the mother's data' particularly adverb insertion, which was found only once in the recordings. Examples 1-2 show the mother's use of adjectives in *do* constructions. Example 3 is an example of an adverb.

Ex. 1	Mother:	*Kureyon nante, <u>shaapu suru</u> hitsuyoo nai tte kanji.*
		It seems that Crayons do not need to be sharpened.
		(lit. There is no need to make them sharp.)
Ex. 2	Mother:	Amy *to* Katie *dake yatta no?*
		Did only Amy and Katie do it?
	Child:	*Minna shita yo.*
		Everyone did it.
	Mother:	*Frances* <u>silly</u> *shite ru dake datta XXX.*
		You were only doing (= acting) silly XXX.
	Child:	*Shinai.*
		I don't (do that).
Ex. 3	Child:	*Koko ni* over *dekiru.*
		I can (go) over here.
	Mother:	<u>Over *dekinai.*</u>
		You cannot (go) over.

'*Shaapu suru* (to make sharp = to sharpen)' in Example 1 was previously used by the child in the same recording. The use of 'over *dekinai* (cannot <go> over)' in Example 3 was observed immediately after the sentence 'over *dekiru* (can <go> over)' by the child. Thus, these sentences could be considered to have originated from the child, and not from the mother.

The following are examples of the use of adjectives and an adverb with the *do* verb, *suru* by the child.

Examples of adjectives:

Ex. 1	Child:	*Kore,* sharp *shuru n ja nai?*
		You can sharpen [crayons] with this, eh? (5:02)
Ex. 2	Child:	*Kore, sakki* bad *shitatta no.*[31]
		It did a bad (thing) just now.
	Investigator:	*Sakki nani shita no.*
		What did it do just now?
	Child:	Bad *shitatta no.*
		This did a bad (thing). (6:00)
Ex. 3	Investigator:	*Basasuto ittara sa, ano goorudo ga mieru no?*
		Can you see gold when you go to Bathurst?
	Child:	*Un.*
		Yeah.
	Investigator:	*Un.*
		Yeah.
	Child:	Water *no XXX shite,* deep *shite,* pan, pan *shite,*
		water *no naka ni ato* gold *deru no.*
		You do XXX water, do deep (put it in deep?), do a pan (use a pan?) and later in the water, gold will appear. (6:01)

[31] Should be '*shichatta no*', not '*shitatta no*'.

Example of adverb:

Investigator: *Jaa hebi wa?*
How about the snake?
Child: *Hebi ittara, koko* down *suru no.*
If you go to the snake, you have to go down here. (5:02)

Even prepositional phrases have been attached to the Japanese *do* verb to make a verb in Japanese in the child's data. This form has not been seen in the mother's data in *do* constructions. The word order of the PP is English as predicted by the MLF model. The use of PPs in the *do* construction is quite rare in the child's data and it is not found in Japanese loanwords or adult language mixing.

Ex. Investigator: *Doo sun no, sono ha.*
What are you going to do with the tooth?
Child: *Nn,* under pillow *shuru no. Ato* tooth fairy *kuru no.*
Mm, I will do under pillow (put it under the pillow).
Later the tooth fairy will come. (6:02)

Again, the English article 'the' has been omitted in the PP.

4.3.1.2 Expressing Functions in the *Do* Constructions

As mentioned previously, functions such as the past tense, volitional forms, negative forms and potential forms were usually expressed by conjugating the Japanese *do* verb, rather than conjugating English verbs. The following are examples from the child's speech.

The fact that the tense of the verb is normally determined by the Japanese *do* verb is evidence that Japanese is the Matrix Language for the child. In the next set of examples, the past tense has been expressed by the Japanese *do* verb, *shita.*

Ex. 1 Mother: *Misesu XXX ni sutoorii riidingu ippai shita yo tte iwanai to ne.*
You have to tell Mrs. XXX that you have done lots of story readings.

Child: *Un, Frances ippai* story reading *shita.*
Yeah, I did lots of story readings. (5:05)

Ex. 2 Child: Disappear *shita yoo.*
I have disappeared. (5:05)

The next set are examples of potential forms in Japanese from Frances's language data. She has used *dekiru* (potential form of *suru*) or *dekinai* (negative potential form of *suru*).

Ex. 1 Mother: *Okkiku nattara, tsukuru?*
Are you going to cook when you grow up?

Child: *Uun...okkiku nattaa* cooking *dekiru yo.*
Um, when I grow up, I will be able to cook. (5:05)

Ex. 2 Mother: *Koko, watarenai deshoo. Koko dame deshoo. Taberarechau kara.*
You can't cross here, right? It's no good here, eh? Because you will be eaten.
Koko itte. Koko ikenai yo. Koko, Frances koo yuu huu ni itcha ikenai yo.
Go here. You can't go here. Here, you can't go like this.
Koko no michi toorenai deshoo.
You can't go along this road, eh?

Child: *Koko ni* over *dekiru.*
You can go over here. (6:02)

Ex. 3 Talking about doll's legs.

Child: Bend *dekinai deshoo.*
You can't bend them. (5:02)

The following is an example of the use of a negative form for *suru* in the gerund, which is *shite nai* (has not been).

Ex. 4 Child: Belinda *wa* milk *wa* give *shite nai no.*
Belinda has not been giving milk. (5:01)

Volitional forms were expressed by attaching *shiyoo*, the volitional form of the *do* verb, as in the example below.

Ex. 5 Child: *Hiromi, ano, kitsune to usagi,* hide *shiyoo ka.*
Ano, Hiromi wa kitsune.
Hiromi, um, fox and rabbit, shall we hide then?
Um, you are the fox.
Investigator: *Un.*
OK. (6:06)

4.3.1.3 V/VP Mixing without the Japanese *Do* Verb

Frances generally uses Japanese *do* verbs to make Japanese verbs out of English verbs. However, in the following examples, she has used English verbs to end the sentences. In Example 1) she has ended the sentence with an English verb. The English verb used was Japanised in pronunciation by attaching '*i*' at the end. This could be a case of an omission of the request form *shite* (please do) at the end of the sentence.

In Example 2) the past tense of the verb 'sink' has been used, without attaching the past tense of the Japanese *do* verb (i.e. sink *shita*). Example 2) is the only example in which she has added the tense to the English component 'sank'. One explanation would be that the Matrix language has changed from Japanese to English, and the Japanese noun *o-kaa-san* was inserted into an English sentence. Another possibility is that Frances might be more familiar with the past form 'sank' than the present form 'sink' in English. Either explanation is only a possibility for this rare example of Frances's use of an English verb carrying tense.

Ex. 1 Child: *Ha ha haa. Fran, Frances* catch *natte, Hiromi-nee- chan* catch-*i*.
Ha ha ha. I, I will catch (you), you will catch (me), Hiromi. (5:05)

Ex. 2 Child: *Mite mite mite. Aaaaa* sank.
Look, look, look! Ah, she sank.

Investigator: *A, honto ni? O-kaa-san wa?*
Oh, really? How about the mother?

Child: *O-kaa-san* sank.
The mother sank. (6:02)

The past participle 'gone' was also used without the *do* verb in Frances's data. In the following examples, 'gone' was used in the place of *tabeta* (ate) in Example 1) and *nakunatchatta* (have lost) in Example 2). Example 1) seems to be a partial translation of the Australian English phrase 'all gone', which is used when children finish food. Frances may have learnt this expression at pre-school or from her father.

Ex. 1 Child: *Frances, zenbu* gone.
I (= Frances) have all gone (= I have eaten [it] all up).
Mother: (Imitating Frances)
"*Frances, zenbu* gone."
"I have all gone."
Child: (laugh).
Mother: "*Zenbu tabeta*".
(You say) "I have eaten (it) all up". (6:03)

Ex. 2 Mother: *Neisan wa?*
How about Nathan?
Child: *Zenbu aru no, mada.* Brook *wa hitotsu* gone *yo,* tooth.
He still has them all. As for Brook, one has gone, a tooth.
(5:08)

VP mixings or any other phrase or sentence mixings are rarer than word mixings in Frances's data, especially in the earlier stages. Phrase mixings without the Japanese *do* verb were found only after she turned 6:00 and even they were very rare. In the following cases, English articles were also included in the verb phrases.

Ex. 1 (Watching a video 'Kimba')
Investigator: *E? Doo yatte?*
Huh? How?
Child: *Ko yatte,* swim out of the window.
Like this, swim out of the window. (6:02)

Ex. 2 Child: Sovereign Hill *no* gold mine.
Sovereign Hill's gold mine.

Mother: *Hora, mite.* Sovereign *hiru ne.*
Here, look. Sovereign Hill, eh?

Child: *De, Frances wa* run over by a train. *Demo are wa* run over *ja nai no.*
And I (was) run over by a train. But that is not 'run over', (I tell you). (6:03)

In both examples, the VPs contain infinitive verbs, without carrying function words or English morphemes, such as tense, the subject-verb agreement (i.e. the third person singular morpheme) and the passive morpheme. In the case of Example 2, even the be-verb is missing. The Matrix Language of the above sentences is still Japanese because the VPs do not possess functors. The Japanese *do* verbs have been omitted in the above sentences, for instance *suru no* (do/does) or *shita no* (did) for Example 1 and *sareta* (*do* verb - passive-past) for Example 2.

4.3.2 Adjective/AP Mixing

Adjective mixings are not found as often as noun mixings or verb constructions in the mother's data. All the English adjectives are bare forms and the pronunciation can be either in Japanese or in English. All adjectives were used following the Japanese syntactic rules, frequently followed by a copula. The following are examples from the mother's data.

Ex. 1 Child: *Ichigo,* yummy.

Strawberries are yummy.

Investigator: *Ichigo,* yummy. *Huun.*

Strawberries are yummy, eh?

Child: *Ichigo tabechaau.*

I'm going to eat strawberries.

Mother: *Ichigo* yummy *da ne.*

Strawberries are yummy, aren't they. (5:03)

Ex. 2 Child: *Pantsu to.*

My pants as well.

Mother: *Ato, pantsu haku no ne. Ato, sono jaketto ne.*

You want to wear the pants, too. That jacket as well, right?

Child: *Kore waa?*

How about this?

Mother: Nice *desho.* (To the investigator)

Aren't they nice? (5:10)

Ex. 3 Child: *Kyoo XXX asobo ka.*

Today XXX shall we play?

Mother: *Nani? Sanii dakara, ikanaide. O-soto ikanai de.*

What? Don't go please, because it's sunny. Don't go outside. (5:05)

Ex. 4 Child: *Kore mite.* Cute.

Look at this. (It's) cute.

Mother: *Soo soo. Kore* cute *deshoo.*

Yes, yes. This is cute, isn't it. (6:03)

Ex. 5 Mother: Mummy, *nechau yo.*

I'm falling asleep.

Child: *Doshite.*

Why?

Mother: Mummy, tired, *tsukarechatta, Frances to asonde itara.*

I'm tired <in English>, tired <in Japanese>,

because I was playing with you. (5:11)

There are two types of adjectives in Japanese: *i*-adjectives and *na*-adjectives. *Na*-adjectives are also called adjectival nouns. These are important distinctions because they represent different syntactic forms. The following are examples of an *i*-adjective and a *na*-adjective in Japanese, as well as a Japanese noun. English adjectives are generally regarded as *na*-adjectives. There are only a few exceptions.

	i-adjective *yowai* (weak)	*na*-adjective *kiree* (pretty)	noun *Nihonjin* (Japanese person)
non-past	*yowa-i*	*kiree da*[32]	*Nihonjin da*
	(She) is weak.	(She) is pretty.	(She) is Japanese.
Past	*yowa-katta*	*kiree datta*[33]	*Nihonjin datta*
	(She) was weak.	(She) was pretty.	(She) was Japanese.
Negative	*yowa-ku nai*	*kiree ja nai*[34]	*Nihonjin ja nai*
	(She) is not weak.	(She) is not pretty.	(She) is not Japanese.
Become	*yowa-ku naru*	*kiree ni naru*	*Nihonjin ni naru*
(*naru*)	(She) will be weak	(She) will be pretty.	(She) will be Japanese.
Prenominal	*yowa-i hon*	*kiree* ***na*** *hon*	*Nihonjin* ***no*** *hon*
	a weak book	a pretty book	a book on Japanese people, a book which belongs to a Japanese person

As shown above, the patterns used for the *na*-adjective and the noun are the same, except for the prenominal uses where *na* is inserted for the *na*-adjective, and *no* for the noun.

32 *Da* is the non-past form of copula (i.e. is, am, are).

33 *Datta* is the past tense of copula (i.e. was, were).

34 *Ja nai* is the negative, non-past form of copula (i.e. is not, am not, are not).

The following example shows the mother's use of an English adjective, *huroppii* (floppy), in Japanese. The pronunciation is Japanised. The expected sentence is "*Huroppii na no mo iru deshoo*", as it is a prenominal use of a *na*-adjective. However, '*na*' is missing in-between '*huroppii*' and '*no*' (indefinite pronoun 'one'). This sentence was found in a normal speed conversation. Thus dropping of some components is possible amongst native speakers, especially function words. There is no other prenominal use of adjectives in the mother's data.

Talking about dogs' ears:

Ex.	Mother:	*Mijikai no mo aru desho.*
		There are short (eared) ones as well, right?
	Investigator:	*Ko yuu no inai? Kono ue ni neko-san mitai ni.*
		Aren't there some (dogs) like this? On the top of this,
		like a cat.
	Child:	*Koo yatte....mo aru yo.*
		There are some...like this, too.
	Mother:	*Huroppii no mo iru deshoo.*
		There are floppy ones as well, eh?

One example of adjectival phrase was also found in the mother's data.

Ex. 3	Child:	Campbeltown shopping centre *wa?*
		How about Campbeltown shopping centre?
	Mother:	Far away *deshoo.*
		It's far away, isn't it.

Some English adjectives were found in Frances's mixed utterances. Most of the adjectives are bare forms, however there was one instance of the comparative form.

Pronunciations are all in English except for one case: *shi*-lly (silly) ([ʃíli:], not [síli]). *Shi*-lly is one of her favourite words. It could be a mixture of Japanese syllable and an

English syllable. Her mother reported that she teases the child when she uses it, because it sounds like *o-shiri* [oʃiɾi][35] (bottom) in Japanese.

From Example 3 below, it can be observed that Frances is not using the English syntactic pattern, either. The syntactic pattern remains Japanese.

Ex. 1 Child: *Kore, atarashii ne. Kore* better.
This is new, isn't it. This is better. (5:01)

Ex. 2 Child: *Kyaa, shi-*lly *yo.*
(Screaming) It's silly. (5:01)

Ex. 3 Child: *Mangoo* soft.[36]
This mango is soft. (5:01)

Generally speaking, borrowed adjectives are treated as *na*-adjectives (adjectival nouns) and the next three examples indicate that Frances has indeed been using the adjectives as *na*-adjectives. In Example 2, she has expressed the past tense by using *datta,* the past tense of the Japanese copula, and in Example 3, she has used *ja nai,* the negative form of the Japanese copula[37].

Ex. 1 Child: *Ano, kotchi no ha,* weak *ni natte ru.*
Um, this tooth has become weak. (6:03)

Ex. 2 (Talking about her friend Yasmin's birthday party)
Investigator: *Doo datta?*
How was it?
Child: Nice *datta no.*
It was nice. (5:11)

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35 Japanese does not distinguish /l/ and /r/.

36 The pronunciation of the English word "mango" is very similar to the Japanese pronunciation, and it is difficult to determine whether she used the English "mango" or the Japanese "*mangoo*".

37 As found in the above examples, a copula is not necessary in the case of non-past, non-negative sentences in a conversation.

Ex. 3 Mother: *Chanto tabenaXXX.*
Eat properly.
Child: *Frances wa* hungry *ja nai.*
I'm not hungry. (5:08)

The next example, however, suggests that the child is using the same syntactic pattern for joining two nouns (i.e. using *no*), as for modifying a Japanese noun with an English adjective. As discussed previously, English adjectives are regarded as *na*-adjectives, therefore a noun and an adjective must be joined with *na*, rather than *no*, as in the case of two nouns being joined.

Ex. Investigator: *Frances-chan no o-too-san nani shite ru no?*[38]
What does your father do?
Child: *Uun, are wa o-shigoto itte ru.*
Mmm, that (= he) has gone to work.
Investigator: *O-shigoto iku no? O-shigoto wa nani shite ru no? Shitte ru?*
Does he go to work? As for his work, what does he do? Do you know?
Child: *A,* tricky ***no*** *o-benkyoo shite iru.*
Um, he is doing tricky study. (5:08)

Although her choice of the particle '*no*' was incorrect in the above example, her intuition that she needs to insert some particle between 'tricky' and '*o-benkyoo* (study)' is correct. Since the NP is governed by the Japanese rule by having the Japanese word '*o-benkyoo*' as the head, the English adjective 'tricky' must be used under the Japanese syntactic rule, which requires an insertion of a particle *no*. Thus the English syntactic pattern 'tricky *o-benkyoo*' is incorrect.

[38] This sentence can also mean "What is he doing?".

4.3.2.1 The Use of English 'just'

The use of 'just' is not generally found in the speech of first generation immigrants. Its use here could have originated from Frances or her mother. Both of them use it at the beginning of sentences, pronouncing it in English. The mother's use is normally in the format of 'just + Noun/Sentence + *dake* (= only)'. *Dake* (only) is a well-used word in Japanese and in the case of Okubo's monolingual informant (Okubo, 1967: 216), an example of *dake* had already appeared at the age of 1:10. *Dake* is sometimes used in the pattern '*tada* + Noun/Sentence *dake* (just - only)'. The child, on the other hand, generally uses the 'just + Noun' pattern although she has used 'just - *dake*' or '*dake*' as well. The Japanese equivalent '*tada* (just)' is not used by the child.

The mother's use of 'just' was much less than Frances's in terms of frequency. The use of 'just' does not really fit in well with the Japanese mixing system even if it is adjusted phonologically. This usage may have been initiated by the child rather than the mother, especially given that the frequency of use is much higher in the child's data and 'just' seems to be one of the child's favourite words. The mother uses the pattern 'just + Noun + *dake*' frequently. The child, however, not only uses the pattern as her mother does with *dake*, but also uses the 'just + Noun' pattern (see Example 2 below, for instance). The latter is used more frequently than the former. These phenomena would suggest that the mother's Japanese has been influenced by the child's use.

The following are Frances's examples:

Ex. 1 Mother: *Nan no o-hanashi datta no?*

What story was it?

Child: *Nan no hanashi tte?*

What do you mean by saying what story it was?

Mother: *N, sukuuru. Nan no o-hanashi datta no?*

Um, in school. What story was it?

Child: What do you know, what I think. Just *sore na no.*

What do you know, what I think. Just that.

Mother: Just *sore dake na no?*

Just only that?

Child: *N.*

Yeah. (5:04)

Ex. 2 Mother: Gun *atta no? Dare no* gun *atta no?*

Did they have guns? Whose guns were they?

Child: Just toy gun *atta no.*

There were just toy guns. (5:01)

Ex. 3 Mother: *Aisu kuriimu kudasai deshoo.*

Please give me some ice cream, right?

Child: *Kudasai.*

Please give me.

Mother: *Jaa chotto matte.*

Just a moment, then.

Child: *Frances wa XXX* just strawberry *dake.*

I XXX just only strawberry. (5:08)

The following are the mother's examples:

Ex. 4 Child: *Kotchi ippiki wan-chan ja naai noo.*

This is not (hundred and) one dog (= Dalmatian).

Mother: Just *ippiki wan-chan ne.*

It's just 'one' dog.

Ex. 5 Investigator: *Iisutaa banii purezento, ano, motte konai n desho.*
Easter bunnies wouldn't bring, um, presents, would they?
Mother: Just *chokoreeto eggu dake motte kuru n desho.*
They bring just only chocolate eggs.

4.3.2.2 The Use of English 'too'

In Japanese, the predicate needs to be conjugated with the Japanese word *sugiru* in order to produce the meaning of English 'too' (e.g. *atsu-i*, hot => *atsu-sugiru,* too hot). This pattern seems to be difficult, even for monolingual children. This word has not appeared in Okubo's study (1967) in which she examined her own daughter up to the age of six[39], or in Fujitomo's list of basic vocabulary for Japanese children aged 4-6 (Fujitomo, 1995: 48). Frances does not seem to have mastered the equivalent of the English word 'too' in Japanese and she uses only the English pattern, i.e. 'too' plus an adjective in Japanese as well as in English.

Ex. 1. Child: *Kyoo* bubble *shicha ikinai*[40] *no yo. Kyoo,* too windy *kara.*
We can't bubble today. Because it's too windy today. (5:08)
Ex. 2 Mother: *Dooshite minto pii kirai na no?*
How come you don't like mint peas?
Child: Too minty. (5:09)
Ex. 3 (The investigator is looking at the child's slippers)
Investigator: *Watashi mo hakeru kana.*
I wonder if I can wear them, too.
Child: *Are, dekinai.* Too, s, *chiisai no yo.*
That, you can't. (They are) too small. (6:07)

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39 Okubo (1967) stated that her data probably included 60-70% of her informant's total vocabulary. According to Okubo, it is extremely difficult to gather all of the vocabulary used by a child (Okubo, 1967: 9).

40 Should be *ikenai,* not *ikinai.*

The first two examples above are examples of 'too' plus English adjective combinations. Therefore they are EL islands and can be predicted under the MLF model. Frances's mother also confirmed that Frances does not use the '*sugiru*' form in her Japanese.

The third example, on the other hand, is an example of 'too' plus a Japanese adjective. This is not an example of typical ML + EL constituents, since the syntactic rule and word order is governed by the EL, English. This would seem to be an ungrammatical utterance, given that Frances switched languages in the middle of the constituents after some hesitation. After the word 'too', '-s' was pronounced with a pause (hesitation). She was about to say 'too small', and then suddenly switched back to Japanese using '*chiisai*'. It could be that '*chiisai* (small)' in Japanese is a more commonly used word in her everyday conversation and she is probably more comfortable using it on this occasion. Words like 'minty (*minto no aji ga suru* in Japanese)' and 'windy *(kaze ga tsuyoi)*', on the other hand, may be more familiar to her in English. This is one possible reason why she reverted to the use of '*chiisai* (small)' on this occasion.

One may concur that Frances might have switched to Japanese because she was talking to the Japanese-speaking investigator, and not to her mother, whose English proficiency is known to Frances. This explanation is also possible for this particular example. However, this does not seem to be as convincing as the first hypothesis for the other examples. Frances normally uses the same (or very similar) intrasentential language mixing patterns to either her mother or the investigator. The mother, however, commented that Frances does try to use more Japanese words when addressing the investigator than when addressing the mother, but Frances can manage this only when the Japanese word is familiar enough. The mother also noted that Frances might not be paying too much attention to her language mixing because her focus is on communication.

The major difference for her use of language mixing is that Frances employs intersentential switches to her mother more frequently than to the investigator. In other words, Frances's language mixing patterns tend to be quite consistent no matter who

she is speaking to, as long as it is an intrasentential switch. This tendency has become more apparent as the research progresses and Frances's English becomes stronger.

4.3.2.3 The Use of English 'no'

Japanese negations are expressed by conjugating predicates, while English negations can include the use of noun modifier 'no'. The use of 'no' is not commonly observed in the language of Japanese living overseas, and this is also the case with Frances's mother.

Frances, however, has used the English 'no' for negation purposes in her language data, although this occurred only once in the recordings.

Ex.	Child:	*Kore, Frances no?*
		Is this mine?
	Mother:	*Un.*
		Yeah.
	Child:	No jam *yo.*
		(It has) no jam.
	Mother:	*Jamu tsukeru no?*
		Do you want to put some jam on? (6:01)

There is a well-known developmental sequence for ESL negation. "Learners from a variety of typologically different first language backgrounds have been observed to pass through four major stages: *no* + X, *no/don't* V, aux-neg, and analysed *don't*" (Larsen-Freeman and Long, 1991: 94).

The following is an extract from Larsen-Freeman (1991: 94).

Table 4.2 Developmental Sequence for ESL Negation

Stage		*Sample utterance*
1.	External	No this one/ No you playing here.[41]
2.	Internal, pre-verbal	Juana no/ don't have job.
3.	Aux. + neg.	I can't play the guitar.
4.	Analysed don't	She doesn't drink alcohol.

The use of 'no' by Frances is categorised as Stage 1 in the above table, which is the earliest form of negation. There is no equivalent of pre-nominal negation in Japanese. Expected forms for Japanese negation would be as follows:

1. Jam *nai* (It has no jam)
   jam ADJ-NEG
2. Jam *tsuite* *(i)nai* (Jam has not been put on)
   jam PUT-gerund V-NEG

These are examples of post-nominal negation and post-verbal negation, respectively. These forms would be expected to appear at an early stage of development in monolingual Japanese children. For instance, the *nai* form (I don't have) is reported at the age of 1:07 in Okubo's study of a monolingual child (1967: 143), and a gerund form plus verb negation (*katte nai,* I haven't bought it) is reported at the age of 1:08. The Japanese equivalent of the verb 'put' has both transitive and intransitive forms. Therefore the pattern found in Example 2 above is not as easy as *katte nai* given the fact that a speaker must choose between the transitive or intransitive forms. In Okubo's study (1967), however, both transitive and intransitive forms for the Japanese equivalent of 'put' appeared in the gerund form reasonably early; at the age of 2:04 (intransitive) and 3:05 (transitive), although they were not in the negative forms.

[41] Other examples include "No book", "No is happy", and "No you pay it".

The use of English 'no' appeared at a later stage of the current research, when the child was 6:01. Frances has exhibited at least the first Japanese 'N + *nai*' pattern in her use of Japanese, therefore there would be no need for her to replace this Japanese pattern with the English 'no + N' pattern.

4.3.3 Noun/NP Mixing

4.3.3.1 Noun and NP Mixing

Single English noun mixings are the most common mixing pattern for this child. When single nouns were inserted, English articles (i.e. *the* and *a*) were never used in the mother's data and rarely used in the child's data in conjunction with Japanese nouns. The following are examples by the child:

Ex. 1 Child: *Nani (mo)* colour *nai no.*
It has no colour. (5:01)

Ex. 2 Child: *Hiromi-nee-chan no* turn.
It's your turn, Hiromi. (5:05)

Ex. 3 Mother: *Nani shite asobu no.*
What are you going to play with?
Child: *N?* Cubby house.
Uh? Cubby house. (5:01)

Ex. 4 Mother: Kitty shop *doko ni aru no.*
Where is the Kitty shop?
Child: *Uun.* city.
Um, In the city. (5:01)

Ex. 5	Mother:	Ashley *wa o-hanashi shita no?*
		Did Ashley give a talk?
	Child:	Gun *atta no.*
		There was a gun.
	Mother:	*N?*
		Eh?
	Child:	*Nan ka,* gun *atta no.*
		There was some kind of a gun. (5:01)
Ex. 6	Mother:	*O-soto de nani shite asonda no?*
		What did you play outside?
	Child:	Bike *dake.*
		Only the bike.
	Mother:	*Sunaba wa?*
		How about the sand pit?
	Child:	*Shite nai.*
		I haven't.
	Mother:	*O-mizu wa?*
		How about water?
	Child:	*O-mizu, nakatta no.*
		We didn't have water.
	Mother:	*Soo.*
		I see.
	Child:	*Un,* paint *mo aru no.*
		Yes. We have paint as well. (5:01)
Ex. 7	Mother:	*Berinda, doo shita no.*
		What happened to Belinda?
	Child:	Belinda?
	Mother:	*N.*
		Yes.
	Child:	Belinda *wa* milk *wa* give *shite nai no.*
		Belinda hasn't been giving milk. (5:01)

Ex. 8 Child: *Nani* table *de kore shite ru no?*
What, are you doing this on the table? (5:01)

Ex. 9 Mother: *Mangoo to nani taberu no?*
What are you eating besides mango?

Child: *Mangoo to* cake.
Mango and cake.

Mother: Cake! *Sandoitchi wa?*
Cake! How about a sandwich?

Child: Sandwich *atta.*
I had a sandwich. (5:01)

Ex. 10 Investigator: Gingie*?*

Child: *Un.* Next-door neighbour *tte, kore.*
Yes. (Gingie belongs to) the next-door neighbour. This. (5:01)

A compound noun made of a Japanese noun and an English noun was also found.

Ex. Investigator: *Terebi doko de katta no?*
Where did you buy the TV?

Child: *Terebi* shop.
TV shop. (5:05)

The expected form is *terebi-ya* (TV shop) in Japanese, in the above example.

Both the definite English article 'the' and the indefinite English article 'a' were found only twice in the whole intrasentential data, and they are extremely rare cases for this child. Both cases have been found not in the middle of sentences, but at the beginning of the sentences, except for within English VPs. (See also the verb construction data in Section 4.3.1.3).

Ex. Mother: *XXX koka koora nonda deshoo.*

XXX you had some coca cola, eh?

Child: Elizabeth *no* second party *ni nonda no.* The first party *shite nai no.*

I had some at Elizabeth's second party. I didn't do it at the first party. (5:09)

The English plural marker '-s' was found to be optional, just as Myers-Scotton's MLF model predicted (cf. Myers-Scotton and Jake, 1995: 985), and there was no rule detected as to when to use the plural marker (and when not to use it). In Example 4 below, Frances has used both the singular and the plural form for *fingers.* The mother uses much less '-s' with English nouns in Japanese, and many uses of the '-s' were immediately after the child's use of '-s'. In the case of Japanese loanwords, the English plural marker is normally omitted, except for a few cases. The Japanese language, on the other hand, does not always have plural forms, except for a few nouns.

Ex. 1 Child: Three Easter Bunny *mitsukechitta no.* Three Easter Bunnies.

I found three Easter bunny. Three Easter bunnies. (6:06)

Ex. 2 Child: *Mummy, tishu kudasai.*[42]

Please give me some tissues. (5:01)

Ex. 3 Mother: *Dotchi itta no?*

Which way did they go?

Child: *Uun.*

Um.

Mother: *Ari-san, nante itta no?*

What did the ants say?

Child: Blinds *ni itta no.*[43]

They went to the blinds. (5:01)

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42 The pronunciation was neither English nor Japanese.

43 English noun + modifier.

Ex. 4 Child: Frances, finger.
They are my fingers.
Mother: Frances, XXX.
Child: *Kotchi,* Frances *no* fingers.
These ones are Frances's fingers. (5:01)

Ex. 5 Child: *Kore* tents *ni iku no.*
This (= they) will go to the tents.
Investigator: *Doko ni iku no?*
Where are they going?
Child: Tents.
Investigator: *Tensu?*
Child: Teeents.
Investigator: *A, tento ni iku n daa.*
Ah, they are going to tents. (6:02)

Ex. 6 Child: *Inu no* whiskers.
Dog's whiskers. (5:02)

The Japanese genitive particle *no* has been used to link two English nouns in Frances's speech, reflecting the Japanese syntactic pattern. This evidence supports the Matrix Language Approach, given that Japanese is the ML in this situation.

Ex. Child: Witch *no* poison apple *aru no.*
There are witches' poison apples. (5:01)

There was only one example found in which an English preposition was used to connect two English nouns.

Ex. Child: *Kore,* stocking for present.
This is (a) stocking for (a) present. (5:02)

Some English nouns were modified by English numerals or English adjectives to form NPs.

Ex. 1 Child: *Frances wa* first one.
I am the first one.
Mother: *Un, soo soo soo.*
Yeah, that's right.
Child: *Frances wa* first girl *kara koko ni iru no.*
I am here because I'm the first girl. (5:01)

Ex. 2 Mother: Cubby house. *Dooshite konna no Frances suki na no?*
Cubby house. Why do you like such a thing?
Child: *Demo* nice cubby house.
But it's a nice cubby house. (5:01)

Ex. 3 Mother: *Yokatta nee. Zenbu yometa no?*
Good on you. Were you able to read it all?
Child: *Kore tte* big words *datta no.*
This had 'big words'. (5:05)

Ex. 4 (They are playing a game called 'pass the parcel').
Child: *Demo* Mummy, *nani mo nai no naka. Mada* blue thing *aru no.*
But Mummy, there is nothing inside. There is still a blue thing. (5:11)

Ex. 5 Child: *Kame-san wa...*
The turtle is...
Mother: *Dare ga mitsuketa no?*
Who found it?
Child: Lion *mikuseta*[44] *no.*
The lion found it.
Mother: *Huun, doko ni kakurete ita no.*
I see. Where was it hiding?
Child: Turtle?
Mother: *Un.*
Yeah.
Child: *Are waa,* funny place *ni. Ha ha.*
That was...in a funny place. (laugh) (5:08)

In Example 3 above, the mother thought the child said that the book was printed in a large font, but another interpretation would be the book was difficult, written in big words (difficult words).

The mother on the other hand used this pattern (English adjective + English noun) only once in the whole recording. Thus it would be unwarranted to claim that this usage is initiated by the mother. Again, it would seem likely that the mother's use of such a pattern has been influenced by the child.

Ex. Mother: *Jiran tte atama ii no? Jiran tte* good boy? *A, soo.*
Is Jiran smart? Is Jiran a good boy? I see.

In Frances's data, there was one instance of an attempt to use a Japanese adjective to modify an English noun. However, it was grammatically incorrect.

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[44] Should be '*mitsuketa* (found)'.

Ex. Child: *To shiro, shiro* flowers *atta.*
And, there were white, white flowers. (5:01)

The Japanese word *shiro* (white) is a noun, therefore it must be joined with a following noun using the genitive particle *no*, i.e. *shiro no flowers atta* (there were white flowers). Another option is to use an adjective, *shiroi* (white), i.e. *shiroi flowers atta.*

Proper names were all pronounced in English by Frances, although the mother was often using Japanised pronunciations.

Ex. 1 Mother: *Rainen, koko no gakkoo ni iku no. Seera Reddofaan ni iku ne.*
She's going to this school next year. Going to Sarah Redfern, eh?
Investigator: *Seera Reddofaan. Huun*
Sarah Redfern. Hmm.
Child: *Kore, aa, koko ni kaita ru.* Sarah Redfern.
This, um, it's written here. (5:01)

Ex. 2 Child: Nathan Hyde.
Investigator: *Neisan Hai tte yuu no.*
His name is Nathan Hi, huh? (5:01)

Ex. 3 Child: *Frances wa* first girl.
I am the first girl. (5:01)

Ex. 4 Child: Katie *wa kuma-san no hanashi yatta no.*
Katie did a bear story. (5:01)

Ex. 5 Child: *To* Kayla *wa* always bump, bump, bump.
And Kayla always goes bump, bump, bump. (5:01)

Ex. 6 Mother: *Sutoorii no namae, nan te yuu no? O-hanashi no dai wa?*
What is the name of the story? What is the title of the story?
Child: Belinda.
Mother: *Belinda. Nan no o-hanashi?*
Belinda. What is it about?
Child: Belinda the cow. (5:01)

Ex. 7 Mother: *Itsumo Erizabesu to issho na no?*
Are you always with Elizabeth?
Child: *To,* Elizabeth *wa Frances suki mono.*
Um, because Elizabeth likes me. (5:01)

Ex. 8 Child: Sluffy, Sluffy, Sluffy.
Mother: Sluffy *tte nani?*
What is Sluffy?
Child: Kitty *wa* Sluffy *yo.*
Kitty is Sluffy. (5:01)

Ex. 9 Mother: Daddy *doko de katta no?*
What did your daddy buy this?
Child: Kitty shop.
At the Kitty shop. (5:01)

One proper noun was modified by a Japanese numeral and Japanese classifier: *hutari Nathan* (two Nathans). The word order was the same as in English (the Japanese word order is "Nathan *hutari*"), although Frances has used the Japanese classifier to count people. She also omitted the English plural marker '-s' for Nathan. In Japanese, numerals should be placed after the nouns, as is the case in the following example. The mother's use of word order has been also influenced by Frances's utterance, as shown below.

Ex. Investigator: *Aa, hutari iru n da.*
Oh, there are two.
Child: *Hutari* Nathan.
Two Nathans.
Mother: *Aa, san-nin Neisan.*
Ah, three Nathans. (5:01)

4.3.3.2 Loanwords

Many English words that have been borrowed into Japanese are very well established and very well integrated into Japanese. They are used in everyday conversations by ordinary monolingual Japanese people. The child's usage of English loanwords on the other hand, is limited, since she usually uses English words rather than established loanwords, and pronounces them mostly in English.

There are two categories of loanwords: (1) those which can be regarded as loanwords used in Japan after being adjusted phonologically, and (2) those which are regarded as loanwords used in Japan after being adjusted phonologically, morphologically and semantically.

Words in the first category would be regarded as normal English words if they are not adjusted phonologically, as in the examples below.

Ex. 1 Child: *Tenisu raketto aru yoo.*
I have a tennis racket. (5:02)

Ex. 2 Mother: *Doo yatte, doo suru Frances, setsumee shite ne.*
How do you, how do you do it, Frances. Please explain.
Pea no kaado ga attara...
If you have cards in pairs...
Child: *Pea no kaado ga attara, dasu no.*
If you have cards in pairs, you will take them out. (5:02)

Words in the second category do not occur frequently in her examples. These are some of the examples.

Ex. 1 Child: *Pantsu mienai yo.* (5:01)
We can't see the underpants.

Ex. 2 Mother: *Chotto minaide. Kore, zubon haite yaranakya.*
Don't look in. We have to wear pants and do this (game).
Child: *Frances dake, jubon.*[45]
I'm the only one (in) pants. (5:03)

Ex. 3 Child: *Mummy, toire.*
Mummy, toilet. (5:03)

In Example 1 above, the Japanese word '*pantsu*' does not mean 'pants' as in Australian English, but underpants. Thus, it cannot be pronounced in English since the English meaning is different from Japanese.

4.3.4 Adverb Mixing

Adverbs are rarely used in mixing. In the mother's data, no examples were found in the recordings. There were two English adverbs used in the child's mixed utterances, and they were used either with Japanese verbs *iku* (to go) or *suru* (to do). In the Japanese loanwords, foreign adverbs must be used in the Japanese syntactic system, by attaching *ni*. Therefore the way Frances used English adverbs appears to be her own style.

Ex. 1 Frances: *Kore hebi ta,* down *itchau no.*
If (you hit) this, the snake, you will have to go down.
(5:02)

Ex. 2 Frances: *Koko,* latter. *Koko ni itara* latter up *iku no.*
Here is a ladder. If you go here, you can go up the ladder.
(5:02)

[45] The correct pronunciation is *zubon* for pants.

4.3.5 Conjunction Mixing

Conjunction mixings have not been seen in the mother's data and are rare in Frances's data. In Frances's data, the mixing is limited to the use of the English word 'or' as well as only one example of the use of 'and'. There is an equivalent word to 'or' in Japanese, which is *soretomo*[46], but it is often omitted, especially in spoken Japanese.

Ex. 1	Child:	*Jaa, orenji to* pink, *chigau? Jaa,* pink *to* pink *chigau.*
		Well, are (this) orange and (this) pink different? Then, (this) pink and (this) pink are different.
	Mother:	*Chigau.*
		Different.
	Child:	Pink *to* pink *wa onaji* or *chigau?*
		Are (this) pink and (this) pink the same or different?(5:05)
Ex. 2	Child:	Real Easter *wa* Easter Sunday*?*
		Is Easter Sunday the real Easter?
	Mother:	Easter Sunday *no asatte, nani suru no?*
		What are you doing the day after tomorrow, which is Easter Sunday?
	Child:	*Nn.* Egg Hunt.
		Um. Egg Hunt.
	Mother:	Egg Hunt.
	Child:	*Ano,* Egg, Good Friday *ni suru* or Easter*?*
		Um, are we going to do egg hunting on Good Friday or Easter? (6:05)

In Example 1, the child has used 'or' to join two predicates (*onaji* [same] and *chigau* [different]). In Japanese, in order to join two predicates, no conjunctions are required.

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[46] *Soretomo* (= or) is used to join two sentences or predicates. In order to join two nouns, *ka* (= or) is used in Japanese.

Thus, the expected sentence would be "*Pink to pink wa onaji? Chigau?* (Are this pink and this pink the same or different?)".

The sentence "Egg, Good Friday *ni suru* or Easter?" in Example 2 requires not only deleting the English 'or', but inserting a verb at the end of the sentence. The expected form should be "Egg, Good Friday *ni suru,* Easter *ni suru?* (As for egg [hunting], are we doing it on Good Friday, (or) doing it on Easter?)".

The above examples are rare instances of Frances's use of English syntax while she is speaking Japanese.

The English 'and' was also used on one occasion. Frances normally uses the Japanese conjunction '*to* (and)', but in the following example she used English 'and'. This phenomenon was observed when she was 6:05, one year and four months after the first recording and two months before the final recording was done. At that stage, her use of English words had increased in terms of number, but also in terms of parts of speech. At an earlier stage, two English words would still have been joined with the Japanese conjunction '*to* (and)'.

Ex. (Frances is working on her homework).

Child: *Kore mite,* nice clouds. *Ato* big cloud and huge cloud.
Look at this, nice clouds. And also big cloud and huge cloud.
(6:05)

4.3.6 Prepositional Phrase Mixing

Prepositional phrase (PP) mixing was very rare in the mother's data and when it occurred it was used in the Japanese syntactic frame. The phrase *ahutaa ranchi* (after lunch) was followed by a Japanese particle *no*, to be joined with an English noun 'Assembly', meaning 'after lunch Assembly (the Assembly held after lunch)'. This

example suggests that a PP is treated as [+N] in the Japanisation rule, since the PP (*ahutaa ranchi* - after lunch) and the noun (Assembly) were joined by using '*no*', which is a particle used to join two nouns.

Ex. Child: Fairy *no* practice *shite ta no.*
I was doing my 'Fairy Practice'.
Mother: *Huun. Jaa ahutaa ranchi no* Assembly,
fairy *no renshuu shita no?*
I see. Did you do fairy practice in the Assembly
after lunch then?

Prepositional phrase mixings include temporal and positional expressions. The two characteristics of Frances's use of English prepositional phrases in Japanese are (i) prepositional phrases being grammatically simplified by omitting articles (Examples 2-4), and (ii) prepositional phrases being marked by a Japanese positional particle *ni* (Examples 2-3). None of the examples were used prenominally in her mother's data.

Ex. 1 Mother: *Nani shita no?*
What did you do?
Child: After recess *shita no.*
I did after recess.
Mother: *Ahutaa riisesu nani shita no?*
What did you do after recess?
Child: Kindergarten *itta no.*
We went to the kindergarten. (5:09)
Ex. 2 Mother: *Doshite, dooshite mitsukerarenai no?*
Why, why can't you find it?
Child: *Are wa* under bed *ni itta toki ni* under bed *ni nakatta no.*
That is, when I went to under bed, it was not under bed.
Mother: *Mo ichi-do sagashite mitsukete kite.*
Search again and find it, please. (5:11)

Ex. 3 Mother: *Ha, motte itchau no ne.*

She takes the tooth with her, right?

Child: *Un.*

Yeah.

Mother: *Sono kawari, o-kane oite iku no.*

In its place, she leaves (some) money.

Investigator: *Honto ni?*

Really?

Child: *O-kane,* under pillow *ni.*

(She leaves) the money under pillow.(6:02)

Ex. 4 Child: *To, hitotsu wa ano* behind candle stick, behind.

And, one was, um, behind the candle stick, behind.

Investigator: *Nani,* behind, *nani shita no?*

What, behind, what did she do?

Child: Candle stick.

Investigator: Candle stick *no ushiro ni atta no?*

Was it behind the candle stick?

Child: *Un, koko.*

Yeah, here.

Investigator: *A, sore. Sore sugu wakaru ne.*

Oh, that. You can find it easily, can't you.

Child: *Ato,*

And also,

Investigator: *Sore kara?*

And then?

Child: Inside flower basket.

4.4 Intersentential Mixing Patterns

There was a very small number of intersentential switches observed in the mother's utterances. The following two are such examples:

Ex. 1	Mother:	*Mummy, Mummy, dare? Frances,* ask. *"Hiromi-nee-chan wa?"*
		Me? Me? Who? Frances, ask. "How about you, Hiromi?"
	Child:	*Hiromi-nee-chan, 9 aru?*
		Do you have 9, Hiromi?
Ex. 2	Mother:	*Kore chokoreeto datta yo.* What chocolate?
		This was (= is) chocolate.
	Child:	Banana chocolate.

There was no pattern observed as to what may have caused a change to English in the mother's data in these instances.

Intersentential switches were also fairly rare in Frances's data. She seems to know that she is to speak Japanese when she is addressed in Japanese, and therefore the use of English sentences do not occur frequently in the data. Frances is more conscientious in keeping this rule when she is speaking to the investigator rather than to her mother.

Notwithstanding this, there were nine examples of intersentential switches found.

Ex. 1	Investigator:	*Kuma-san no hanashi, nan te itta no?*	
		The bear's talk, what did she say?	
	Mother:	*Kuma-san, nante itta no?*	
		What did the bear say?	
	Child:	My dad buyed the bear from the toy shop.	(5:01)
Ex. 2	Child:	(Sneeze). Oh, wet, wet.	(5:01)

Ex. 3 Mother: *Nan no o-hanashi datta no?*

What story was it?

Child: *Nan no o-hanashi tte?*

What do you mean by saying what story it was?

Mother: *N, sukuuru. Nan no o-hanashi datta no.*

Um, school. What story was it?

Child: What do you know, what I think. Just *sore na no.*

What do you know, what I think. Just that.

Mother: Just *sore dake na no?*

Is it just only that?

Child: *N.*

Yeah. (5:04)

Ex. 4 Mother: Hiding place *tte doko na no?*

Where is the hiding place?

Child: Near the trails.

Mother: Trails *no chikaku na no? Huun.*

Near the trails? I see. (5:08)

Ex. 5 The mother and the child are playing a game.

Mother: *Wakannai deshoo.*

You don't understand, do you.

Child: (laugh) One, two, three, yay, I'm higher than Mummy, I'm higher than Mummy. (6:01)

Ex. 6 Investigator: *Buta-san.*

A pig?

Child: *Un, sore.* A wild pig.

Yeah, that. A wild pig. (6:02)

Ex. 7 Mother: Alyse *mitsukete,* Alyse.

Find Alyse, Alyse.

Child: *Koko,* Alyse *no* toy. She is hiding the table, because I was trying to get Alyse as XXX dog.

Here is Alyse's toy. She is hiding the table, because I was trying to get Alyse as XXX dog. (6:06)

Ex. 8	Mother:	*Oku-san tte iru no?*
		Does he have a wife?
	Child:	*Nn?*
		Huh?
	Mother:	*Oku-san.*
		Wife.
	Child:	*Oku-san tte nani?*
		What is 'oku-san'?
	Mother:	Wife.
	Child:	No, no, no. (6:07)
Ex. 9	Mother:	Jessica *wa?*
		How about Jessica?
	Child:	*Aa,* Jessicaaa, made in China.
	Mother:	*A, soo. Jaa Frances wa?* Made in China.
		I see. How about you then? Made in China?
	Child:	Nooo! Made in Australia. (6:07)

As the data collection progressed, it was noted that the child had started to use more English words when she was talking alone with her mother without the investigator present.[47] It was noted that from the age of 6:01, and by the age of 6:02 her use of English sentences also increased. By the age of 6:06, she had started to use English sentences (language mixing at the sentential level or intersentential switches) when speaking to the investigator. During the last recording session at 6:08, it was noticed that the mixing of English words into Japanese had increased greatly.

The reasons for the language mixing discussed above will be investigated in Section 4.6.

[47] This may be due to the topics of the conversation, not simply to the interlocutors.

4.5 Which Language Is She Speaking?

4.5.1 Is this English or Japanese?

As Frances gets older, her opportunities to use English increase. She has already started to use more English words in her Japanese as a result of spending more time in school and learning new concepts in English. While her Japanese input still comes mainly from her mother, her English input comes from a variety of sources. The common pattern is still to use the Japanese language as the Matrix Language frame, but there is an increase of insertions of English content words, as the following examples demonstrate:

Ex. 1 (The child was asked why she was wearing nice clothes today.)

Child: Fairy wand *wa kore* dress *ni* change *shita no.*
The fairy wand changed it to this dress. (6:06)

Ex. 2 Investigator: *Ne, motto kawaii Kitii-chan inai no?*
Um, aren't there any cuter Kitties?

Child: *Aru no. Kore, kawaii noo.*
I have. This is cute.

Investigator: *Datte, sore tsuburete ru mon. Kao ga gucha gucha.*
But it has been squashed. The face is messy.

Child: *Demo,* face cute *yoo.*
But the face is cute. (6:00)

Ex. 3 Mother: *Jaa Mashuu to issho ni yatta no?*
Did you do it with Matthew then?

Child: Matthew, year two. Matthew *wa* own table *shita no.* Matthew different table *ni iru no.*
Matthew is year two. Matthew did own table (= Matthew had his own table?) Matthew is at a different table. (6:03)

The examples above follow Japanese syntactic rules and English functors such as articles are omitted.

The next example shows a rare case of ML + EL constituents (very bite *o shichatta* - someone has very bitten this) which do not seem to be governed by either Japanese or English. 'Very bite' is definitely not English in terms of syntax and the Japanese translation does not make sense, either (*totemo kanjatta****). The ML frame is still Japanese. 'Very bite' is used as [+N] since it is followed by an object marker particle *o*.

Ex. Child: *Kore, dare ka* bite *shichatta.*
Someone has bitten this.
Mother: *Nani shita no?*
What has s/he done?
Child: Bite. Very bite *o shichatta.*
Bite. S/he has bitten (this) very (= hard?). (6:07)

The following is an example of the application of the English influenced conjunctive '*to* (and)' to the ML + EL constituents ("*are wa Frances no* bed, top *ni nereru kara* [because I can sleep on top of my bed]" and "fun *no* [it's fun]"). The Japanese word '*to* (and)' does not function like the English 'and'. '*To*' is only used to join two nouns, while 'and' can join nouns, adjectives and sentences. In the following example, Frances has incorrectly joined two sentences using '*to*', which indicates an influence from the English conjunctive 'and'. Otherwise, the ML is still Japanese.

Ex. Investigator: *Nande ni-kai no aru o-uchi ni sumitai no?*
How come you want to live in a two-story house?
Child: *Aan, are wa, Frances no* bed, top *ni nereru kara, to* fun *no.*
Um, that is.... because, I can sleep on top of my bed and it's fun. (6:05)

This section has examined three varieties of language mixing patterns:

(1) the general pattern using Japanese as the Matrix Language, with numerous English lexemes,

(2) Japanese as the Matrix Language, with EL lexemes which do not belong to either Japanese or English syntactically, and

(3) use of Japanese conjunctions with English syntax.

Frances was found to use pattern (1) in exactly the same manner as her mother does when language mixing. However, the frequency of language mixing is much higher in Frances's data. Occurrences of patterns (2) and (3) were not found in the mother's data, but were present in that of Frances. It is not possible, therefore, to attribute any influence from the mother's input in these instances. The third pattern suggests that there is some influence from the stronger language, English, although this could also be attributed to overgeneralisation, i.e. the Japanese conjunction '*to* (= and)' can be used to join any parts of speech and phrases/sentences, although '*to*' in fact should be used to join two nouns only.

4.5.2 Word Order

Word order is a good indication of influence from another language. Japanese, however, is fairly flexible with word order, provided the constituents are marked by case particles (postpositions). The verb is often placed at the end of the sentence. Frances's word order is generally similar to adult forms, especially if the sentence is intransitive. In the case of transitive sentences, the object is occasionally placed after the verb in her speech, as in the example below. 'Show *suru* (to show)' is the verb and 'dance' is the object in the following sentence. This pattern is known as 'afterthought'. The most common word order in Japanese is to place the object before the verb. However, since the word order in Japanese is flexible enough to allow the following type of word order, it cannot be claimed that this is necessarily the influence of English. In either case, this is a common word order in the child's data throughout the study.

Ex. Child: Computer *ni* show *suru no,* dance.
computer in show do PART dance
I'm going to show the dance on the computer. (6:05)

Afterthoughts can be found not only for objects, but also for complements. In the example below, Frances has used the afterthought first (News *shuru no,* Monday *ni* [We do 'news', on Monday]), then she corrected it to fit the common word order (Monday *ni* news *shuru no* [We do 'news' on Monday]).

Ex. Investigator: *Gakkoo itte sa, o-hanashi suru n deshoo. Kyoo no o-hanashi tte, o-hanashi suru no, shinai no?*
You go to school and give a talk, eh? Do you give a talk like 'today's story', or what?
Child: News *shuru no,* Monday *ni.*
We do 'news', on Monday.
Investigator: *E?*
Huh?
Child: Monday *ni* news *shuru no.*
We do 'news' on Monday.

The word order of '*ni* flags (two flags)' in the following example, on the other hand, seems to be influenced by English. In Japanese, numbers normally come before the verb '*tsukutta* (made)' (i.e. after the noun) and the number should be followed by a classifier. In this case the classifier is *-hon*, which is used to count long objects. Thus the acceptable adult form would be "*Eeto, flags ni-hon tsukutta no* (Well, we made two flags)". At Frances's age, even monolingual Japanese children may be using the wrong classifier, but they probably will not be using a bare number as this child does.

This type of example is quite rare for Frances[48], but the fact that it occurs at all is interesting.

Ex. Mother: *Jaa, Itaria-go nani shita no?*
Then, as for Italian, what did you do? (What did you do in the Italian class?)
Child: *Eeto, ni* flags *tsukutta no.*
Well, we made two flags. (6:07)

4.5.3 Double Comparative

The Japanese word *motto* is equivalent to the English 'more'. There is no equivalent of the English suffix '-er' in Japanese and the Japanese comparative requires only the word *motto* (more) preceding an adjective. When the child uses the comparative forms, the format generally includes the Japanese word *motto* (more) and an English word, often with a suffix -er. The English suffix seems to be optional for her, although she generally attaches it.

Ex. 1 Child: *Kondo, motto* higher *shite.*
This time, do (= lift me up) more higher. (5:08)
Ex. 2 Investigator: *Dotchi ga wakasoo?*
Who looks younger (your teacher or your mother)?
Child: *Anoo...*
Um...
Mother: *Un.*
Yeah.
Child: *O-kaa-san wa motto* taller.
My mother is taller. (6:03)

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[48] Frances can use some classifiers correctly, such as for people (*hitori, hutari* = one person, two people) and times (*ikkai, ni-kai* = once, twice).

Ex. 3 (The child's first tooth came out while she was playing with a soft toy named Jessica. Now she has the second tooth about to come out. And the investigator made the following comment).

Investigator: *Ne, chotto Jeshika to asondara sa, toreru n ja nai?*
Um, if you play with Jessica a bit, (your tooth) will come out, won't it?

Child: *Motto* weak *ni naranai to.*
It must become weaker. (6:03)

Example 3) is predicted under the MLF model, however Examples 1) and 2) need to be examined more closely here. The pattern '*motto* higher (more higher)' in Example 1) has been used quite frequently, and her mother commented to Frances that it should be '*motto* high (more high = higher)'. Under the MLF model, the use of the system morpheme '-er' in the Embedded Language - 'higher (Example 1)' and 'taller (Example 2)' - is not predicted in the ML + EL constituents ("*Motto* higher *shite* [do more higher]" and "*o-kaa-san wa motto* taller [my mother is more taller]"). Double comparatives could be just a variation of child grammar, but this pattern is not predicted under the MLF model.

In Halmari's Finnish-English data, she found double morphology, i.e. 'mountain + s+ *ei* (= PL) + *lle* (+ ALL) (to the mountains)' (Halmari 1997: 87). According to Halmari, Myers-Scotton's MLF model hypothesises that this type of double morphology is caused because the EL lemma and the plural morpheme are treated as a single unit (Halmari 1997: 88). "According to this hypothesis, plural morphemes would thus behave differently from other system morphemes" (Halmari 1997: 88). This hypothesis is also applicable to the data in this study: '*motto* higher (more higher)' and '*motto* taller (more taller)'. If the English morpheme '-er' is also hypothesised as the EL lemma and the comparative morpheme is treated as a single unit, then the MLF model would be able to account for this case.

The double comparative does not appear in the mother's data. This type of construction, in which an English functor appears in the Japanese environment, is quite

rare in Frances's data. The occurrence of the English morpheme '-er' has never appeared with a Japanese content word. Another English morpheme used in Frances's data, the English plural marker '-s', has also never appeared with a Japanese content word. Therefore, Patersen's (1988) Dominant Language Hypothesis could not be confirmed in this study (See Section 2.4).

4.5.4 Onomatopoeia

English onomatopoetic expressions were used in the form of tripling a word. It is hard to tell whether the ML is Japanese in the following examples, since the sentences have two components in them: the Japanese topic to start with, and then the attached tripled English onomatopoetic words.

These patterns were observed at the beginning of the study, when the child had just turned 5, but they were not found after 5:03.

Ex. 1 Child: *Kore tte* ping, ping, ping.
this PART ping, ping, ping (sounds of shifting a piece for the game)
Investigator: *A, koko ni ittara.*
Um, once we get to here...
Mother: *Iro iro foroo* (= follow) *suru no yo.*
We follow them in various ways. (5:03)

Ex. 2 Child: *To* Kayla *wa* always bump, bump, bump. (5:01)
And Kayla PAT always bump, bump, bump (sounds of jumps)

The above examples suddenly appeared while every participant in the interaction was using Japanese as the Matrix Language. This data may suggest the possibility of an alternation of the Matrix Language in the middle of the sentence, rather than having only one ML in a sentence. This pattern was not found in the mother's recordings.

4.6 Some of Reasons for Language Mixing

In this section some of the reasons for Frances and her mother's language mixing will be examined. First, Section 4.6.1 will introduce the framework for analysis used for Frances's language mixing data. Then Section 4.6.2 will examine some factors affecting her mother's language mixing patterns, and thirdly Section 4.6.3 will discuss Frances's language mixing patterns with respect to the reasons for it. Finally, 4.6.4 summarises the reasons found for Frances's language mixing patterns.

4.6.1 The Framework for Analysis Used for Frances's Data

There seems to be several reasons why the child would switch to English while she is speaking Japanese. As it is not appropriate to ask a 5-year-old girl why she used some English words or sentences in Japanese, the analysis presented here is instead the result of careful investigation of the child's recorded language data. This data includes conversations between both the child and her mother, and the child and the investigator.

The following framework for analysis has been set up in accordance with previous work done by several researchers, in order to fully account for Frances's data. This framework contains not only criteria from Infant Bilingualism research, but also from Community Bilingualism. The framework to be used only includes factors apparently appearing in Frances's data. Other factors are also mentioned at the end of this section, although they were not found to be significant in Frances's data.

There are fourteen factors which were considered to be possible reasons for Frances's use of language mixing. These are:

- Self-Determined Factors –

1. An absence in the child vocabulary (Lindholm and Padilla, 1978: 42-43; Goodz, 1994: 76; Saunders, 1983: 195)
2. Familiarity or saliency of various words or phrases (Lindholm and Padilla, 1978: 42-43) - the term 'familiarity' will be used in this thesis.
3. The balance of two languages - most mixing occurs when using a non-dominant language (Goodz, 1994: 77; Hamers and Blanc, 1989: 100; Goggin and Wicking, 1971: 457).
4. Limited access to terms (e.g. English academic terms are not accessible to students in Cantonese. See also 'topic', 'domain' and 'language of education' in the section below: Factors Influenced by the Environment.) (Gibbons, 1987: 84)
5. Emphasis (Gibbons, 1987: 80)
6. Quotation (Gibbons, 1987: 80; Valdés Fallis, 1976: 58)
7. Habit
8. Self-talk
9. Attention Getter

- Factors Influenced by the Environment –

10. Interlocutor

10-a. The speaker adapts his/her language to that of the speech partner (Clyne, 1982: 106)

10-b. The level of ability of participants in a social encounter to speak the language (Gibbons, 1987: 32)

11. Triggering (caused by the interlocutor's intersentential switch) (Clyne, 1982: 106; Valdés Fallis, 1976: 58)
12. Topic (Clyne, 1982: 106; Gibbons, 1987: 32; Döpke, 1992: 193; Valdés Fallis, 1976: 58)
13. Language of Education (Gibbons, 1987: 88)
14. The child's communication experiences - Frances has always been exposed to language mixing: this is due to the environment in which she lives. No one around her speaks the Japanese spoken in Japan, but rather overseas Japanese, in which a lot of English words are blended. See also 'habit' in the Self-Determined Factors above. (Lindholm and Padilla, 1978: 42-43)

The most significant reasons for Frances to mix languages were found to be: (1) Absence in vocabulary, and (2) Familiarity/limited access to certain terms, due to (3) The topic/language of education. (4) Habitual use of language mixing, (because it is easier to use one form than another, and her mother also does it) seems to have

encouraged her to lose some previously acquired Japanese vocabulary and to replace it with English equivalents to compensate for the loss.

(5) Quotations and (6) Self-talk are examples of the use of English sentences, rather than the use of singly occurring instances of language mixing.

The following fifteen factors were not apparent in Frances's data:

- Self-Determined Factors -

1. Apposite terms, avoidance of confusion (Saunders, 1983: 198; Gibbons, 1987: 85)
2. Momentary loss of vocabulary in the retrieval process (Lindholm and Padilla, 1978: 42-43; Saunders, 1983: 195)
3. Copying the other (= Repetitions in Gibbons' terminology) (Gibbons, 1987: 85)
4. A word acquired only in one language, but the child assumes that it is also the word in the other language (Saunders, 1983: 197)

- Factors Influenced by the Environment -

5. Venue (Clyne, 1982: 106)
6. Type of interaction (business, friendly interaction etc) (Clyne, 1982: 106)
7. Channel of communication (Clyne, 1982: 106)
8. Role relationship (Clyne, 1982: 106)
9. The style of conversation - formal vs. informal (Gibbons, 1987: 37 and 39)
10. Identity of the interlocutor (ethnicity, family membership, education of the interlocutor) (Gibbons, 1987: 32)
11. Interlocutor's age - peer group (Gibbons, 1987: 32)
12. Idioms (Gibbons, 1987: 86)
13. Taboos (Gibbons, 1987: 87)
14. Identity Marking (Gibbons, 1987: 88; Masumi-So, 1983: 75-76)
15. Domain (Clyne, 1982: 106).

Language mixing has not been used as a strategy to 'avoid confusion'. Secondly, 'momentary loss of vocabulary' is hard to prove from Frances's data, and examples of 'copying the other' were not found in Frances's data, but rather in the mother's data.

These examples will be introduced in the section on her mother's correction strategies (See Section 4.7). Frances's mother occasionally echoed the terms Frances used immediately after Frances had said them.

With regards to Factor 4, evidence of the child's assumption that a certain word belongs to the other language was not found in Frances's data. As Saunders (1983: 197) himself noted, this type of language mixing tends to occur for children younger than Frances.

Other environmentally-influenced factors, such as 'venue', 'type of interaction', 'channel of combination', 'interlocutor's age' amongst others, do not seem to influence Frances's language mixing patterns.

4.6.2 Some Factors Affecting the Mother's Language Mixing Patterns

Masumi-So's (1983) work on singly occurring language mixing among Japanese sojourners and first generation immigrants is directly related to her mother's situation. Therefore, Frances's mother's data will be examined using Masumi-So's factors.

Masumi-So found three factors which promote an increase in the frequency of occurrence of language mixing in everyday speech:

- length of residence
- family networks:
  - ◊ an English-speaking spouse-network - this network can be a 'promoting' factor if there is no other family network conducive to corrective behaviour or if there is no identity factor present; and
- an English-speaking work-network.

An English-speaking work-network is not applicable to the mother in this study, since she is a housewife. Another consideration, then, would be whether 'length of residence' directly influences the production of mixed utterances. Both the available literature and this study's results would suggest that 'length of residence' does not directly affect

language mixing patterns. What is affecting the mixing pattern in this case is more likely to be the English proficiency level of the speaker. This can be seen in the way that Frances uses more intersentential switches when she talks to her mother, than when she is addressing the investigator. As Frances has the impression that the investigator does not speak English well, she consciously uses Japanese more often as the Matrix Language. In interactions with her mother, however, there is more of a precedent for language mixing, as both are aware of the English language proficiency of the other. The mother's English language proficiency may well be linked to her length of residence in an English speaking country.[49]

The three factors 'preventing' the use of singly occurring language mixing found in Masumi-So's study are:

- family networks:
  - ◊ a child-network - this network particularly affects the female subjects when an identity factor is present
  - ◊ a non-English-speaking mother-network, and
- an identity factor.

The child network is affecting the mother to some extent, because the Matrix Language is still Japanese. Although the mother wants Frances to master the Japanese language, the identity factor is weak, since they are Australian residents who have no plan to settle in Japan in the future. Therefore, the child-network is not preventing her mother's use of language mixing much. The identity factor needs to have a clear goal to be strong (e.g. going to Japan to live), otherwise it does not work as a preventative factor in language mixing. Language mixing is a communication strategy for both the mother and the child.

A non-English-speaking mother's network (i.e. Frances's Japanese grandmother) is not applicable in this family.

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[49] Frances has seen the investigator speaking English with her father and she looked surprised. However the conversation was short. There is another reason why Frances might have thought that the investigator did not speak English well. Quite frequently the investigator did not understand Frances's pronunciation in English, because it was still in the child stage.

4.6.3 Frances's Language Mixing Examples

4.6.3.1 An Absence in the Child's Vocabulary

Some of the reasons for language mixing were reasonably apparent from the data. In many instances, Frances was most likely using English words to cover for words lacking in her Japanese vocabulary. This was identified as the prime reason for subjects to mix languages in Goodz's (1994) and Lindholm and Padilla's (1978) childhood bilingualism studies. However, in Frances's case, this was not the only reason for her to use so many English words in her Japanese utterances.

The data below indicates that, when Frances did not know some of the equivalent words in Japanese, she simply inserted an English word into a Japanese sentence. When she was asked to translate her English sentence "My dad buyed[50] the bear from the toy shop", she still used the English word 'toy shop' in her Japanese translation.

(Talking about Frances's friend Katie's story at school).

Investigator:	*Kuma-san no hanashi, nan te itta no?*
	The bear story, what did she (= Katie) say?
Mother:	*Kuma-san, nante itta no?*
	What did the bear say?
Child:	"My dad buyed the bear from the toy shop".
Mother:	*Nihon-go de itte goran. Nan te yuu no.*
	Try to say it in Japanese. How do you say it?
Child:	*O-too-san wa kuma-san wa* toy shop *de katta no.*
	Her father bought the bear at the toy shop. (5:01)

It is also suspected that Frances does not know how to say 'a wild pig' in Japanese, since she has never used the Japanese equivalent in the recordings, although she has used lots of other animal names in Japanese.

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50 This is the actual utterance and 'bought' was not used in this data.

Ex. Investigator: *Buta-san.*
A pig?
Child: *Un, sore.* A wild pig.
Yeah, that. A wild pig. (6:02)

Some of her primary language learning has been from English books or English CD Roms, therefore she may not know the equivalents in Japanese. Also, she cannot read much Japanese, so almost all of her reading is in English. 'Witch' is one of these examples.

Ex. Child: *Kore,* witch!
(This is a witch.) (5:01)

4.6.3.2 Familiarity

The next set of examples show that Frances mixes not only to supplement words she does not know but also words for which she does know the Japanese equivalents. The first example below shows that she knows the Japanese word, but that she answers in English anyway.

Ex. 1 Mother: *Sanoba wa doo shita no?*
What happened to Sanoba?
Child: Sick. (5:01)
Mother: *Shikku tte, Nihongo de nan te yuu no?*
How do you say 'sick' in Japanese?
Child: *Byooki no*
Sick.

Ex. 2 Child: *Kore, Mummy, kore mite. Kore* autumn *nattara* leaves *wa kiiro, orenji to* brown *naru no.* Winter *naru no.*
Mummy, look at this. When autumn comes, leaves turn yellow, orange and brown. Then winter comes.

Mother: *Uintaa* leaves *tte yuu no? Nihongo shabette choodai. Aki wa? Aki? Huyu wa?*
Are they called winter leaves? Please speak Japanese. How about autumn? Autumn? How about winter?

Child: *Huyu natta...raaa,*
When winter comes,

Mother: *Huyu ni nattara XXX*
When winter comes XXX

Child: *Anoo, uun. Ki no happa wa orenji to kiiro to chairo naru no.*
Um, mmm. Tree leaves turn orange, yellow and brown.

4.6.3.3 Emphasis

The following is an example of the use of language mixing to emphasise a point.

Ex. Child: *Frances wa atsui no,* hot *kore. Aaa.*
I'm hot (in Japanese), this (= I or it) is hot (in English).
Ah. (5:10)

The interlocutors were both native Japanese speakers, therefore Frances did not have to use the English word to convey the message. However she used the English word 'hot' after correctly using the Japanese word *atsui* (hot) to emphasise her point.

4.6.3.4 Quotation

Citations of what other people said or what Frances said/is going to say in English, have been re-expressed in English. In Example 1, she is telling her mother what she intends to talk about in the story-telling time in school. She normally pronounces the investigator's name 'Hiromi' in Japanese [hiròmì, which has a Low, High, High intonation pattern] but, in the following case, she pronounced it in English [hiróumi] as well.

Ex. 1 Mother: *Nan no hanashi suru no? Sutoorii no jikan wa? Minna chanto o-hanashi suru n deshoo?*
What story are you going to tell? The story time?
Everyone tells a story properly, eh?

Child: Mummy's friend came to visit.

Mother: *A, soo.*
I see.

Child: Hiromi [hiróumi] (in English). (5:05)

Ex. 2 Investigator: *Kuma-san no hanashi, nan te itta no?*
The bear story, what did she say?

Mother: *Kuma-san, nante itta no?*
What did she say about the bear?

Child: My dad buyed the bear from the toy shop. (5:01)

Ex. 3 Mother: *Nan no o-hanashi datta no?*

What story was it?

Child: *Nan no o-hanashi tte?*

What do you mean by saying what story?

Mother: *N, sukuuru. Nan no o-hanashi datta no.*

Um, school. What story was it?

Child: What do you know, what I think. Just *sore na no.*

What do you know, what I think. Just that.

Mother: Just *sore dake na no?*

Is it just only that?

Child: *N.*

Yeah. (5:04)

4.6.3.5 Habit

It seems to be Frances's norm to mix languages, since it is the only Japanese she has experienced. Every Japanese who has lived in Australia for any length of time mixes languages, and even those who have stayed in Australia for only a short time may blend some English into their Japanese.

'Just' is a good example of her habit of how to start a sentence. This has been functioning as a stopgap to give her time, to think what to say, like English 'um' or 'well'.

Ex. Mother: *Gakkoo de sansuu no o-benkyoo suru no. Na, doo yuu...*
Do you study arithmetic in school? What kind of...
Child: *Shinaii.*
We don't.
Mother: *Shinai no?*
You don't?
Child: Just,
Mother: *N.*
Yeah.
Child: Just,
Mother: *Eigo no benkyoo dake?*
Only English studies?
Child: *N,* just, just,
Mother: Counting *shinai no?*
Don't you do counting? (5:05)

4.6.3.6 Self-Talk

Frances also uses English for self talk, or when she talks to her soft toys, which she may regard as English speaking. In the following example, she is talking to her soft toy named Jessica.

Ex. 1 Child: *Frances,* Jessica *ni* ride *suru.* Jessica, turn this way.
I'm going to ride Jessica. Jessica, turn this way. (6:07)

Ex. 2 (The mother and the child are playing a game.)
Mother: *Wakannai deshoo.*
You don't understand, do you.
Child: (laugh) One, two, three, yay, I'm higher than Mummy,
I'm higher than Mummy. (6:01)

Ex. 3 Child: (Sneeze). Oh, wet, wet. (5:01)

4.6.3.7 Attention Getter

An intersentential switch was used by Frances possibly in order to get attention from her mother and the investigator. In this example, the adults started to talk about someone else, and did not pay attention to Frances. Frances normally uses Japanese as the Matrix Language, but in this instance she switched to English completely.

Ex. Mother: Alyse *mitsukete,* Alyse.
Find Alyse, Alyse.
(Frances's mother and the investigator started talking about Alyse and, as a result, they did not pay attention to Frances.)
Child: *Koko,* Alyse *no* toy.
Here is Alyse's toy.
She is hiding the table, because I was trying to get Alyse as XXX dog.

4.6.3.8 The Level of Ability of Participants

The following is an example in which Frances changed the use of an English word to a Japanese loanword, according to her assessment of the interlocutor's ability. Frances attempted to use an English word, 'cake', to start with. After repeating the word many times, she gave up and used the Japanese equivalent '*keeki* (cake)', since the interlocutor did not understand her.

This is a good example of Frances's mixing patterns. No matter who the interlocutor is, Frances normally does not hesitate to mix English words into Japanese sentences, simply presuming that the interlocutor will understand her. The ability level of the participants becomes apparent when the interlocutor does not understand her. In the following example, Frances started by using the English word 'cake' and finally changed it to its Japanese equivalent. The investigator has never pretended that she did not understand Frances in order to get her speak more Japanese. The following example

is a natural conversation.

Ex. (Showing plastic bricks).

Child:	*Dochi no* cake *iru?*
	Which cake do you want?
Investigator:	*Dotchi no,* what*? Nani?*
	Which...what? What?
Child:	Cake.
Investigator:	Key?
Child:	Cake.
Investigator:	Cake!. *Kore,* 'cake' *tte yuu no?*
	Cake. Is this called 'cake'?
Child:	Cake.
Investigator:	*Nani?*
	What?
Child:	*Keiki* [kéiki].
	Cake.
Investigator:	*Keeki* [ké:ki]*?*
	Cake?
Child:	*Un.*
	Yeah.
Investigator:	*Aa, keekii.*
	Oh, cake!!! (5:03)

This factor, the ability level of the interlocutor, also determines Frances's choice of Matrix Language, since she uses English as the Matrix Language to her mother (a good English speaker in Frances's assessment) more often than to the investigator (a poor English speaker in Frances's assessment)[51].

[51] The mother has reported that she normally uses Japanese as the Matrix Language when she talks to Frances, even when the father (an English speaker) is present.

4.6.3.9 Triggering

Triggering is defined as a bilinguals' pattern of switching over to another language when prompted by a triggering word: "words at the intersection of the two language systems, such as proper nouns, lexical transfers (including established "loanwords" from English in the standard language), compromise forms, and bilingual homophones." (Clyne, 1982: 106).

Saunders (1988: 86) has added to this definition 'a quoted word' from the other language which can trigger a language switch.

The next sample set contains utterances from the data which were caused by triggering. In Examples 1 and 2, the mother used an English word which has worked as a trigger for the child to start answering in English.

Ex. 1	Mother:	*Oku-san tte iru no?*
		Does he have a wife?
	Child:	*Nn?*
		Huh?
	Mother:	*Oku-san.*
		Wife.
	Child:	*Oku-san tte nani?*
		What is oku-san?
	Mother:	Wife.
	Child:	No, no, no. (6:07)
Ex. 2	Mother:	Jessica *wa?*
		How about Jessica?
	Child:	*Aa,* Jessicaaa, made in China.
	Mother:	*A, soo. Jaa Frances wa?* Made in China?
		I see. How about you then? Made in China?
	Child:	Nooo! Made in Australia. (6:07)

Example 3 is an instance of 'sandwich words'. When a word or phrase is sandwiched in between potential trigger words (i.e. EL words, 'big cloud' and 'huge cloud' in Example 3), this word/phrase may be expressed in the Embedded Language (Saunders 1988: 88). In Example 3, 'and' was expressed in English.

Ex. 3 Child: *Kore mite.* Nice clouds. *Ato* big cloud and huge cloud.
Look at this. Nice clouds. And also big cloud and huge cloud.
(6:05)

4.6.3.10 Topic

The three related factors discussed in this section include

1. Limited access to terms (Gibbons, 1987: 84)
2. Topic (Clyne, 1982: 106; Gibbons, 1987: 32; Döpke, 1992: 193)
3. Language of Education (Gibbons 1987: 88).

The term 'topic' will be used to represent the three factors in this section. There are three topics which influence the quantity of Frances's language mixing: 'school', 'Australian related concepts' and 'time expressions'. These three topics might be interrelated as well, e.g. the concept of time might have been obtained from school education.

Frances has learnt some words in pre-school and school for which she does not know the equivalents in Japanese, or is more familiar with them in English. As she gets older, the number of English words she learns at her English-speaking school increases, and as a result she has started to mix in more English words to explain the complex things she has studied in school. The following examples are all from the school domain:

Ex. 1 Investigator: *Nani kore, nani kore, nani kore.*
What's this, what's this, what's this?
Child: *Ha,* hand print. (5:01)

Ex. 2 Investigator: *Gakkoo de nani oshiete moratte ru no?*
What have you been learning in school?
Child: *A, ano,* deserts, grass lands, rain forests.
U, um, deserts, grass lands and rain forests.
Investigator: *He?*
Ah?
Child: *Ano,* Blue Mountains.
Um, the Blue Mountains. (6:06)

Ex. 3 Mother: Hiding place *tte doko na no?*
Where is the hiding place?
Child: Near the trails.
Mother: Trails *no chikaku na no? Huun.*
Near the trails? I see. (5:08)

Australian related concepts are generally expressed using English words.

Ex. Mother: *Kyoo dooshite gakkoo ikanai no?*
Why don't you go to school today?
Child: Good Friday *daara.*
It's Good Friday.

Time expressions except for 'yesterday', 'today' or 'tomorrow' are usually expressed in English. The mother commented that it was still difficult for the child to use time expressions such as days of the week in Japanese. Time expressions could be a difficult topic to discuss for a 5 or 6-year-old child. Some of the expressions were marked by the Japanese temporal postposition *ni* (see Examples 1 and 2 below).

Ex. 1 Investigator: *Ue no ha toreta no?*

Has the top tooth come out?

Child: *Un. Toreta yo. XXX ni.* Weekend *ni.*

Yeah, it came out. In XXX. On the weekend. (6:07)

Ex. 2 Child: *Ano, Frances,* merry go round *ni itta.* Ninety-ninety-six *ni itta no.*

Um, I went to the merry go round. I went there in 1996.

Investigator: *Hontoo.*

Really.

Child: *Frances* ninety-ninety-one *ni born shita no.*

I was born in 1991. (6:06)

Ex. 3 Child: *Frances, XXX no* class, *ano* last year *itta resho. Frances sugu ni* year one *natte, tara, Frances wa* year two *natchatta.*

I went to the XXX class, um, last year, eh? Soon after I became year one, I became year two. (6:03)

Ex. 4 Mother: *Erizabesu wa? Ha toreta? Erizabesu no ha.*

How about Elizabeth? Has her tooth come out?

Elizabeth's tooth.

Child: Elizabeth, *san kurai shita no yo.*

She did about 3.

Mother: *Soo.*

I see.

Child: *N.* Long time ago.

Yeah. Long time ago. (5:08)

Ex. 5 Child: *Anoo,* Saturday *nattara, ano,* PLC *iku?*

Um, are we going to go to the PLC when Saturday comes?

Nishimura's *nisei* informants also used English for numbers and number related expressions. Some of these included time expressions such as '1946' and 'three weeks'. The Spanish-English bilingual child in Fantini's study (1985), who was raised in the United States, also used time expressions such as time, seasons, days of the week in English, not in Spanish. Fantini argues that this is not a simple lexical borrowing, but is

motivated by the manner in which the child learned notions of time, i.e. through an English-speaking world that mainly involves school and the media (Fantini, 1985: 175).

In Frances's case, she was learning how to say days of the week and seasons in Japanese at home before she started year zero (kindergarten), however she was too young to fully master these concepts. In other words, her cognitive level had not reached the stage of understanding time expressions at that stage. At one stage (at around the age of 5), she could use Japanese seasonal terms accurately, however at later stages she could not remember the Japanese terms well. This is mainly to do with her school education (and maybe the media, as Fantini predicted). Since she is spending more time in school, as she gets older and learns not only time-related concepts but many other things in English, it is getting more difficult for her mother to teach Japanese equivalents at the same time as she learns these new concepts.

Another possible reason for Frances's difficulty in acquiring the counting system in Japanese is the complexity and irregularity of the Japanese counting system itself.

(1) Japanese has two sets of numerals: Japanese numerals and Sino-Japanese numerals (Tohsaku, 1994: 130; Backhouse, 1993: 120).
(2) Numerals themselves are not so complex, but Sino-Japanese numerals require post-nominal classifiers.
   (a) "There are so many varieties of classifiers that even native speakers do not know all of them" (Muranaka, 1996: 1)
   (b) "One object does not always have one classifier" (Muranaka, 1996: 1).
   (c) Some classifiers change their pronunciation depending on the numerals preceding them (Muranaka, 1996: 1).

This complex system could have been the reason why Frances prefers to use the English counting system.

4.6.4 A Summary of the Reasons for Frances's Language Mixing

In short, it could be said that Frances's language mixing has been motivated mainly to cover the vocabulary gap (lack of easy access leads to her habit of mixing English words). The three main environmental factors affecting her language mixing are (1) 'school related issues', (2) 'interlocutor's level of English' and (3) 'interlocutor's language'. Other factors may affect her mixing patterns, however they are rather insignificant.

Frances does not hesitate to use English words blended into Japanese to talk about what she has studied in school, and even her mother uses English words if the topic is school related. It is her mother's intention that Frances should be encouraged to talk even if she mixes the two languages, and that focusing on content is more important than correcting Frances's Japanese grammar all of the time.

It was also noted that Frances's mother mixes not only certain school-related terms, but also some everyday words, such as 'windy'. From a follow-up interview, it was found that the mother is using some English words in Japanese as a habit, by judging that some Japanese words are more difficult to use (e.g. 'windy' in English vs '*kaze ga tsuyoi* [= windy]' in Japanese). Her mother feels 'windy' is easier to say. At least it is shorter than the Japanese equivalent. This is why she prefers to use this word over the Japanese equivalent.

Her mother told the investigator that Frances was trying to use more Japanese words when talking to the investigator. This may not be simply because of Frances's assessment of investigator's lower English proficiency. Other factors may have been involved in this case (e.g. Frances wants to play with the investigator, so she speaks Japanese to please the Japanese-speaking investigator).

The interlocutor's level of English is another factor apparently encouraging Frances to change her speech patterns. It was apparent that she avoids using some Japanese words and loanwords, and uses English words instead, as long as the interlocutor understands

her. In other words, if the interlocutor does not understand her, she would use the Japanese equivalent (if she is familiar with it). Frances also tries to use some English sentences when she speaks to her mother, as opposed to when speaking to the investigator. This tendency has increased as she grows older and she has even started to use more English sentences when speaking to the investigator.

The interlocutor's language also affects Frances's language choice. She switches to English if she is talked to in English. There is a mutual understanding between Frances and the investigator that the language of communication between them is Japanese, since the investigator never speaks English to her. Even when there are other English speakers around, Frances speaks Japanese to the investigator, or vice versa. Frances would probably speak English to the investigator, if the investigator started using English sentences, as has happened in situations with the Japanese mothers of Frances's half-Japanese friends.

4.7 Some of the Correction Strategies Used by the Mother

Various strategies for correction were found in the mother's utterances. Frances's mother sometimes attempts to prevent Frances from using too much language mixing, and other times she prefers to concentrate on the content of Frances's utterances rather than correcting her language mixing. Follow-up interviews indicate that the mother seems to have a reasonably clear idea of what she wants Frances to say in Japanese and in what areas Frances can mix languages.

The framework in this section has been taken from Lanza's parental discourse strategies towards child language mixing (Lanza, 1977). As Lanza's study examines much younger infants (2 year olds), investigating how the parent of an older child responds to her child's language mixing will involve additional strategies not identified by Lanza.

Therefore, the following modified version of Lanza's parental strategies has been adopted:

(1) Minimal Grasp Strategy (Ochs, 1988: 133-134; Lanza, 1997: 262) - The child is asked to repair mixed utterances (i.e. English in this study). Typical request forms are 'I don't understand', 'Say it again' and 'Wh-questions' in the target language (i.e. Japanese in this study).

(2) Expressed Guess Strategy (Ochs, 1988: 134-135; Lanza, 1997: 262) - The parent asks a yes-no question, using the equivalent word in the target language (i.e. Japanese) to the mixed word that the child has used (i.e. in English).

(3) Japanese Translation - The parent uses the equivalent word in the target language (i.e. Japanese) to the mixed word that the child has used (i.e. in English) in a statement. Lanza (1997: 264) calls this 'Repetition'.

(4) Repetition - The parent repeats the mixed utterance which the child has used, normally in a statement. This is a subtle warning from the mother that what the child has used is not the best utterance and another correction strategy generally follows.

(5) Move On Strategy (Lanza, 1997: 265) - The parent continues the conversation without correcting the child.

(6) Code-Switching[52] (Lanza, 1997: 266) - The parent switches to the language the child has used (i.e. English), intersententially and intrasententially.

Strategy 4), Repetition, is an item additional to Lanza's list and the meaning of 'Repetition' used in this study is different from her original meaning. Strategy 5) 'Move On Strategy' and 6) 'Code-Switching' are not correction strategies.

The other strategies above are all post-corrections. However 'Code-Switching' is also applicable to pre-corrections. Another strategy found as a pre-correction is 7) English translation, provided by the mother before or after appropriate Japanese words.

In the following sections, some examples of each strategy outlined above will be provided.

4.7.1 Pre-Corrections - Code-Switching

English was used not only for the words Japanese does not have equivalents for (e.g. tooth fairy, Easter Bunny), but also for some more general words (e.g. *Okkii* boy = big boy). The general words could appear either in Japanese or English, without any set rules, as normal overseas Japanese people often interchange equivalent words between English and Japanese. The domain particularly affecting the mother within the Australian context is the school domain. She uses more English words (often phonologically modified into Japanese) when talking about topics related to the child's school than when talking about any other topic. The following examples were found when the child was doing her homework or discussing school or pre-school.

[52] The term 'Code-Switching' refers to a parental discourse strategy towards child's language mixing, not the same as 'Language Mixing' used in this study.

Ex. 1 Mother: *Ja, hai, koko. Nana-juu-roku ni* how many tens?

Here we go, then. How many tens in 76?

Child: *Nn. Nanatsu?*

Mm, 7?

Ex. 2 Child: *Uun. Are doko ka ittaa shoo.*

Mmm. That, we went somewhere, eh?

Mother: Excursion *desho?*

Excursion, isn't it?

Child: Excursion.

Investigator: *Araa, Possamu Kuriiku itta noo.*

Oh, did you go to Possum Creek?

Mother: *Yoochien ne.*

In pre-school.

Investigator: *Hee, yoochien no toki ni?*

I see. When you were in pre-school (in Japanese)?

Mother: Pre-school *ne.*

In pre-school (in English), eh?

Ex. 3 Mother: *Nan-nensee made iku no? Ni-nensee made?* Kindergarten *to ichi-nensee to* one year *to* two year*?* Year three *wa konai no?*

Students up to which year are going? Up to year two? Kindergarten, year one (in Japanese), year one (in English[53]), and year two? Aren't year three coming?

Ex. 4 Mother: Any one continent. *Daijoobu ne.* Just *kakeba ii ne,* continent. Continent*, hitotsu zutsu kaite ikeba ii desho?* Continent *kaite, soko no* continent animal *nani mitsukerareru?*

Any one continent. It's OK, isn't it. You only have to draw continents. You only have to draw continents one by one. Draw one continent and, what animal can you find on that continent?

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53 The word order was the same as Japanese.

4.7.2 Pre-Corrections - English Translation

It is observed frequently that Frances's mother provides some English translations in her Japanese utterances. In the following examples, the mother used English words pronounced either in Japanese or English first, and then provided the appropriate Japanese words. This strategy helps the child to understand the context in English before she hears the equivalent Japanese words. It is a useful strategy when introducing a difficult Japanese word.

Ex. 1	Mother:	*Sutoorii no namae nan te yuu no? O-hanashi no dai wa?*
		story[54] PART name story[55] PART title
		What is the name of the story? The title of the story?
Ex. 2	Child:	Hiding. *Hitotsu waa.*
		Hiding. One was.....
	Mother:	*Doko ni. Doko ni* hide, *kakurete ta?*
		Where? Where were they hide (in English), hiding (in Japanese)?
Ex. 3	Mother:	*Mummy, nechau yo.*
		I will go to sleep.
	Child:	*Doshite.*
		Why?
	Mother:	*Nemui kara. Mummy* tired. *Tsukarechatta, Frances to asonde itara.*
		Because I'm sleepy. I'm tired (in English), I'm tired (in Japanese), since I was playing with you.

The mother also used English after she used Japanese words which the child does not (seem to) know. For instance, the Japanese word '*hata* (flag)' was judged to be difficult by the mother for Frances, and the English equivalent was given.

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54 '*Sutoorii*' is an English word pronounced in Japanese.

55 '*O-hanashi*' is a Japanese word.

Ex. Mother: *Hata ageta no?*

Did they hoist the flag?

Child: *Nani?*

What?

Mother: *Hata.* Flag-*u.*

Flag (in Japanese). Flag (in English with a Japanised ending)

Child: *N.* Flag-*u atta.*

Yeah. There was a flag.

4.7.3 Post-Corrections - Minimal Grasp Strategy

The mother also used the Minimal Grasp Strategy, requesting Frances to repair her mixed utterance. Asking Frances to say it again in Japanese is a much-used Minimal Grasp Strategy by the mother, as in the following example.

Ex. 1 Mother: *Kuma-san, nan te itta no?*

What did the bear say?

Child: My dad buyed the bear from the toy shop.[56]

Mother: *Nihongo de itte goran. Nan te yuu no?*

Try to say it in Japanese. How do you say it?

[56] The child is citing what her classmate said.

4.7.4 Post-Corrections - Expressed Guess Strategy

The mother has also used the Expressed Guess Strategy.

Ex.	Child:	Belinda *wa* milk *wa* give *shite nai no.*
		Belinda is not giving milk.
	Mother:	Give *shite nai no.*
		She is not giving milk.
	Child:	*Un,* Milk-*u.*
		Right. Milk.
	Mother:	*Miruku dasanaku natchatta no?*
		She is no longer producing milk?
	Child:	*Un.*
		Yeah.

In the above example, Frances used a mixed sentence 'give *shite nai no* (is not giving)'. The mother repeated the child's utterance before she gave an appropriate Japanese equivalent '*miruku dasanaku natchatta* (she is no longer producing milk)'. The mother's correction was made in a yes-no question format (*Miruku dasanaku natchatta no?* [She is no longer producing milk?]), using a Japanese equivalent to Frances's language mixing.

4.7.5 Post-Corrections - Japanese Translation

Some Japanese translation was provided by the mother after Frances used English words in a Japanese sentence.

Before the mother provided the expected words in Japanese, she repeated the English words used by the child. In Example 1, the mother repeated the word 'flowers' used by the child, before she presented the Japanese equivalent '*hana* (flowers)'. The child did not just copy the mother's correction, but attached *o-*, an appropriate honorific marker to the provided Japanese word '*hana* (flowers)'.

Ex. 1 Child: *To, shiro, shiro* flowers *atta.*

And, there were white, white, flowers.

Mother: *Soo,* flowers *atta no.*

I see, there were flowers.

Child: *Un.*

Yeah.

Mother: *Hana.*

Flowers (in Japanese).

Child: *O-hana.*

Flowers (in Japanese with a polite prefix).

The mother occasionally judged that some words were still too difficult for the child, and provided Japanese equivalents. In Example 2, the mother uses the Minimal Grasp Strategy, asking Frances "*Poizun appuru tte nihongo de nan te yuu no?* (How do you say 'poison apple' in Japanese?)", then used the Japanese translation '*doku ringo* (poison apple)', judging that Frances would not know the equivalent in Japanese.

Ex. 2 Child: Witch *no* poison apple *aru no.*

There is the witch's poison apple.

Mother: *Poizun appuru aru no. 'Poizun appuru' tte nihongo de nan te yuu no? Muzukashii ne. Doku ringo.*

There is a poison apple? How do you say 'poison apple' in Japanese? Difficult, isn't it. Poison apple (in Japanese).

Child: *Toku ringo.*

(incorrect pronunciation)

Mother: *Doku.*

Poison.

Child: *Doku ringo.*

Poison apple.

4.7.6 Post-Corrections - Repetition

This strategy of 'Repetition' has been used by the mother before she uses other correction strategies, such as 'Japanese Translation' in Example 1, 'Expressed Guess Strategy' in Example 2, and 'Minimal Grasp Strategy' in Example 3.

The 'Repetition' strategy is different from 'Code-Switching' in Frances's mother's case, since the mother has repeated the child's mixed utterances to express that this is not the most preferable utterance. Although the message is not very strong until the mother starts using other strategies to correct the child's utterance, there is a subtle indication to the child through the 'Repetition' that she should not be using the mixed utterances.

Ex. 1	Child:	*To, shiro, shiro* flowers *atta.*
		And, there were white, white, flowers.
	Mother:	*Soo,* flowers *atta no.*
		I see, there were flowers.
	Child:	*Un.*
		Yeah.
	Mother:	*Hana.*
		Flowers (in Japanese).
	Child:	*O-hana.*
		Flowers (in Japanese with a polite prefix).

Ex. 2	Child:	Belinda *wa* milk *wa* give *shite nai no.*
		Belinda is not giving milk.
	Mother:	Give *shite nai no.*
		She is not giving milk.
	Child:	*Un,* Milk-*u.*
		Right. Milk.
	Mother:	*Miruku dasanaku natchatta no?*
		She is no longer producing milk?
	Child:	*Un.*
		Yeah.
Ex. 3	Child:	Witch *no* poison apple *aru no.*
		There is the witch's poison apple.
	Mother:	*Poizun appuru aru no. 'Poizun appuru' tte nihongo de nan te yuu no? Muzukashii ne. Doku ringo.*
		There is a poison apple? How do you say 'poison apple' in Japanese? Difficult, isn't it. Poison apple (in Japanese).
	Child:	*Toku ringo.*
		(incorrect pronunciation)
	Mother:	*Doku.*
		Poison.
	Child:	*Doku ringo.*
		Poison apple.

4.7.7 Move On Strategy

The mother does not always correct the child's utterances. She is generally more interested in the content expressed by Frances rather than in the child's grammar. The mother has stated that she tries to get the child to keep talking, rather than disturbing the flow by providing corrections. This has been observed as the most used strategy by the mother, especially as Frances gets older and the content of the conversations gets more difficult.

Ex. 1	Child:	Mummy, *kore* try *shite.*
		Mummy, try this, please.
	Mother:	*Chotto matte ne.*
		Please wait a moment.
Ex. 2	Mother:	*Ashita nani suru no?*
		What are you going to do tomorrow?
	Child:	Computers.
	Mother:	*Ashita wa nan no hi?*
		What is tomorrow?
	Child:	School holiday.
	Mother:	*Ashita* Good Friday *deshoo.*
		It's Good Friday tomorrow, isn't it.
	Child:	*Ashita* Good Friday?
		Is it Good Friday tomorrow?

4.7.8 Code-Switching

It has also been observed that the mother often uses English words in her Japanese after Frances uses them. The code-switching instances found in the mother's data are all intrasentential switches.

For instance, in Example 1, the mother repeated the word the child used - 'gun' in English - and did not correct the child. The mother kept using the word in order to expand the topic by asking one more question.

In Example 4, the mother has used the PP after Frances used it. Phrasal level language mixing is uncommon for first generation immigrants, unless it is used as an imitation of someone else's utterance, like the examples found in this section.

Ex. 1	Child:	*Nani ka,* gun *atta no.*
		There was some kind of a gun.
	Mother:	Gun *atta no? Dare no* gun *atta no?*
		There was a gun, huh? Whose gun was it?
Ex. 2	Child:	Yucky *datta no,* yucky.
		It was yucky, yucky.
	Mother:	Yucky *datta no? Doo yuu huu ni* yucky *datta no?*
		Was it yucky? How was it yucky?
Ex. 3	Child:	*Un,* near the trails.
		Yeah, near the trails.
	Mother:	Trails *no chikaku na no? Huun.*
		Is it near the trails? I see.
Ex. 4	Mother:	*Nani shita no?*
		What did you do?
	Child:	After recess *shita no.*
		I did after recess.
	Mother:	*Ahutaa riisesu, nani shita no?*
		What did you do after recess?

4.7.9 Correction Strategies - Discussion and Conclusion

It was found from Frances's mother's data that there are two types of corrections: pre-corrections and post-corrections.

The two strategies found as pre-corrections, 1) Code-Switching and 2) English Translation, both provide English words to Frances, so that she can easily understand what is being said, thus keeping her from misunderstanding or getting lost in the conversation. The English words provided by the mother seemed to be mainly ones the mother thought would be difficult for Frances to comprehend in Japanese, and many of them are school related terms. In other words, the mother is fairly consistent with what words should be used in Japanese and what words should be used in English.

Post-corrections used in the mother's data include:

1) Minimal Grasp Strategy;
2) Expressed Guess Strategy;
3) Japanese Translation; and
4) Repetition.

The first three strategies were particularly found at earlier stages of this investigation, but as the child got older, the mother tended to concentrate more on the content of the child's speech rather than the form used by the child. Therefore, the use of corrections was not consistently found when the child mixed languages.

The 'Repetition' strategy, on the other hand, was found in later stages as well. It expresses a subtle warning from the mother that some of the words or grammar that Frances has used were not right. Appropriate 'Repetition' was often followed by a correction, but this was not always the case. 'Repetition' may just appear by itself. Post-corrections may disturb the flow of conversation, but 'Repetition' does not influence the flow as much as other types of corrections. This could be the reason that 'Repetition' has been used even at later stages, as the mother was more interested in developing the content of the child's conversation rather than the form of speech at this time.

Non-correction strategies which appear after Frances's language mixing include 1) 'Move On Strategy' and 2) 'Code-Switching'. They were found more often as Frances got older, since the topics talked about were more often school-related and the mother allowed Frances to use such terms in English even while they were speaking Japanese. The mother's 'Code-Switching' strategy after Frances's language mixing is limited to intrasentential switching.

The analysis would indicate that, although she has used various strategies in response to Frances's language mixing, the mother's main aim is to focus on the content of the child's speech and not to correct Frances's language mixing. The mother herself uses some language mixing[57] depending on the topic, in order to communicate with the

[57] However, the mother's use of language mixing is not very frequent in comparison to the immigrant standard.

child clearly and easily, and she also regards some English words (e.g. school-related words) as being acceptable for use in Japanese.

In a follow-up interview, the mother expressed her concern that she is not sure whether it is a good strategy to correct the child's mixing all the time, providing Japanese translation, since she predicts the child might stop speaking Japanese if she intervenes all the time.

Despite the fact that the child is mainly receiving input from her mother, who uses standard overseas Japanese, and that the mother uses some post-correction strategies, the frequency of mixed utterances by the child is still much higher than the mother's at this stage.

4.8 Discussion - Language Mixing

Throughout this investigation, it has been apparent that the mother does mix languages, but her mixing pattern is in line with that of a native speaker[58]. Borrowed words are used in accordance with the standard Japanisation rules. These Japanisation rules are applied not only phonologically, but also grammatically.

Since the mother mixes languages, it was predicted that the child will also mix languages (see Goodz, 1989: 41). This is indeed the case but the patterns of mixing are somewhat different. The child has not only used patterns similar to those found in her mother's data, but also patterns that are quite unlike those of a native speaker.

A summary of these findings is shown in the table below.

Table 4.1: Comparison of the Mother's and Frances's Mixing Patterns

	Mother	Frances
Pronunciation	mainly Japanese (some English)	Mainly English (some Japanese) Mixing of Japanese and English phonemes was also found in the early stages
Verb Constructions	1) verb + *suru* (verbs are used in infinitive forms only)	1) verb + *suru/yaru* a. infinitive forms of verbs b. gerunds c. past participles d. phrasal verbs e. VPs

[58] The term 'native speaker' includes monolingual Japanese speakers, sojourners and first generation immigrants, and can be summarised as a speaker who possesses a monolingual speaker's level of proficiency in Japanese.

	Mother	Frances
Verb Constructions	2) adjective + *suru* (could be an influence from Frances) (!) 3) adverb + *suru* (could be an influence from Frances) (!)	2) adjective + *suru/yaru* 3) adverb + *suru/yaru* 4) noun + *suru/yaru* 5) PP + *suru/yaru* 6) English verb/VP endings without *do* verbs (!)
Noun/NP Mixing	(1) the English plural marker 's' is normally omitted. It can be used when following the child's examples (2) no articles were found (3) an English NP was found only once (!)	(1) plural 's' is optional (2) the use of articles is rare. When they are used, they appear at the beginning of the sentence (or in VPs) (!)
Adjective/AP Mixing	A small number of adjectives appeared in the infinitive form only. One instance of AP was also found.	Adjectives appeared mostly in the base form. Comparative forms were also found.
PP Mixing	Only one example was found (!)	Some PPs appeared in simplified forms without articles.
Intersentential Switches	very rare (two examples) (!)	rare (nine examples)
Adverb Mixing	N/A	rare (two examples) (!)
Conjunction Mixing	N/A	'or' and 'and' 'And' was used only once in order to join two English NPs (!)

The extremely rare examples are marked with (!) and may not be established patterns for the speaker. These examples do not occur in a systematic fashion.

4.8.1 Pronunciation of Mixed Utterances

Where the mother mixes English, her pronunciation is generally Japanese, although she still uses English pronunciations occasionally. There were no rules found as to when she uses English pronunciations.

Frances, on the other hand, mainly used English pronunciations, although Japanese pronunciation was also found (see Section 4.2.3). The mixing of Japanese and English phonemes was also found, especially at the earlier stages. At the later stages of the investigation, she mainly used English pronunciations to pronounce English words in Japanese.

Pronunciation is one of the examples of output which, on the surface, does not reflect the mother's input. Frances knows the Japanisation rules reasonably well (see Section 4.2.3), however she does not always apply those rules to her utterances. The rules were obviously learnt from her mother's input, however she does not practise them all of the time. At the later stages especially, she has tended to adopt more purely English pronunciations for English words. This is not due to her inability to Japanise the pronunciation; rather it has become her habit to pronounce English words in English while she is speaking Japanese. She does not try to use the Japanised pronunciation of English words, or to substitute Japanese words, unless her interlocutor does not understand her. One such example is '*keeki* (cake)' which was introduced in Section 4.6.3.5. She did not use the Japanised word *keeki*[59] to start with and kept on using the English word 'cake'. She repeated 'cake' many times and only used the Japanese word '*keeki*' after she apparently came to the conclusion that the investigator did not understand her.

[59] Frances pronounces it '*keiki*'.

4.8.2 Expansion of Input

Moreover, Frances's output does not always reflect the mother's input morphologically and syntactically. Frances's tendency is to expand the Japanisation rules by introducing further English elements into Japanese. For instance, Frances uses English articles (at the beginning of sentences only), while her mother never uses them at all.

Frances also tends to extend the mother's mixing patterns to a wider range of grammatical structures. Her use of verb constructions constitutes a good case study when examining this process.

In Frances's data on verb constructions, she used six different kinds of verb construction patterns, while her mother used only three. The six patterns Frances used were:

1) English verb + *suru/yaru*
2) English adjective + *suru/yaru*
3) English adverb + *suru/yaru*
4) English noun + *suru/yaru*
5) English PP + *suru/yaru*
6) English verb/VP endings without Japanese *do* verbs

The mother, on the other hand used only:

1) English verb + *suru*
2) English adjective + *suru*
3) English adverb + *suru*

The verb construction rules adopted by native Japanese speakers in Japan generally include the 'verb + *suru*' and the 'noun + *suru*' patterns only, but Frances's usage includes even the 'PP + *suru*' pattern, which was not seen at all in the mother's data.

The 'adverb + *suru*' and some examples of 'adjective + *suru*' in the mother's data could have originated with Frances, since they do not follow the standard Japanisation rules

and since the mother used some of the examples after Frances used them in the same recordings.

If we look at the 'verb + *suru*' patterns closely, another extension of the verb construction patterns can be observed.

The mother used only infinitive forms of English words with the Japanese *do* verb, *suru*, according to the standard Japanisation rules, while Frances's data included the following five patterns:

1) infinitive forms of verbs + *suru/yaru*
2) gerunds + *suru/yaru*
3) past participles + *suru/yaru*
4) phrasal verbs + *suru/yaru*
5) VPs + *suru/yaru*

The phrase level mixings, such as 'VP + *suru*', appeared at later stages, mostly after turning 6:00, while the mother did not use phrasal level mixing at all in the verb construction data.

From the result of *Do* constructions, it was found that the type of parental input did not reflect Frances's output. Instead, she analysed the mother's patterns and applied the generalised regularities to her output (cf. MacKeon, 1994: 17; Cook-Gumperz, 1986: 51; Oshima-Takane, Goodz and Derevensky, 1996: 632; Bowerman 1990: 1285).

4.8.3 Who Is the Input Giver?

There is some evidence that the mother's speech can be influenced by Frances's speech. Examples of this include the use of the English plural 's' on borrowed nouns and the use of the word 'just'.

The mother generally avoided using the plural marker 's' when inserting English words into Japanese, and she used it on only two occasions in the recordings. Both instances were found immediately after Frances used the words. Therefore, the English plural marker insertions probably originated with Frances, and not the mother.

The use of the English word 'just' is also suspected to be an influence from Frances. The reasons for this assumption are that the word has been used more extensively by Frances, and both the mother and Frances pronounce the word in English, suggesting that it originated from Frances. In addition to this, Frances uses it in the format of 'just + Sentence' more frequently than the more Japanese format of 'just + *dake* (only)', while the mother uses the latter more than the former (see Section 4.3.2).

4.8.4 The Influence of the Stronger Language

The influence of the stronger language was observed mainly at the lexical level. The strategy that Frances and her mother employ in their mixing patterns is to insert English words or phrases into Japanese syntactic frames. In other words, English influence was rarely found syntactically.

A few cases in which Frances used English words resulted from Frances's avoidance of some of the Japanese grammatical patterns. Such examples include the use of 'no' and 'too' in English. In the case of 'too', it could be said that she used it because she has not mastered the Japanese equivalent. However, what is common between the use of 'no' and 'too' in English is that their patterns are syntactically easier than the equivalent Japanese patterns. 'No' and 'too' can be used by simply attaching nouns and adjectives respectively, while both of the Japanese equivalents involve verb conjugations. Therefore, it is supposed that Frances is choosing the easier pattern.

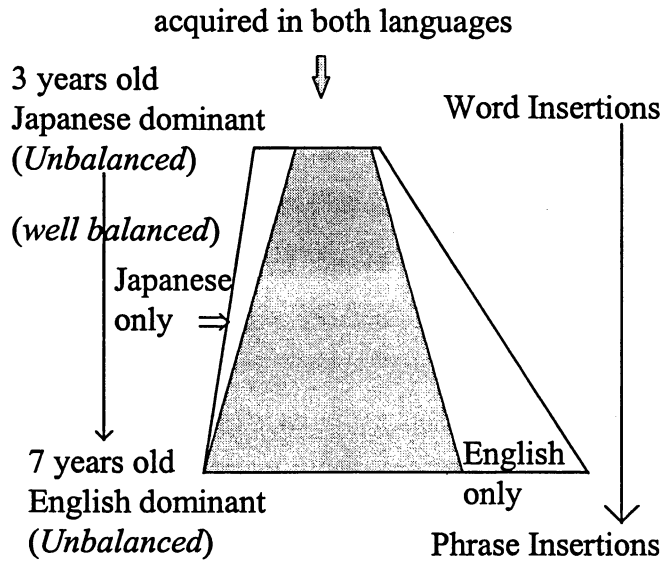
4.8.5 The Balance of the Two Languages and Mixing Patterns

Another significant point to note is that the mixing patterns of the child have changed as she grows up. One may predict that her mixing patterns would become similar to those of her mother. However, the fact is that the child's mixing patterns were very similar to those of the mother's when this research started at the age of 5:01; but, as Frances gets older, she has started to use different patterns from those of her mother. The most prominent feature of this is in the child's insertion of a range of English phrases into Japanese, while the mother's phrase insertions are limited to AP, PP and NP insertions (each example appeared only once). Phrase insertions in the *do* constructions in particular have not been found in the mother's recorded samples.

From the results of this study, the following hypothesis has been made with respect to bilingual language mixing: language mixing patterns may be affected by the balance of the stronger and the weaker language, and not simply by the level of fluency of the speaker in each of the two languages[60]. For instance, when I started recording the child at the age of 5:01, her English seemed to be slightly stronger than her Japanese (or she seemed to feel a bit more comfortable in using English) and her mixing patterns were similar to that of her mother in that she was inserting only short words or phrases into Japanese.

[60] This hypothesis does not target adult second language learners, who consciously use their second language.

Figure 4.1: Balance of the Two Languages and Mixing Patterns[61]



However, as Frances started year zero at school, her English grew stronger while her Japanese did not progress as much as her English did. Therefore the extent of difference between her English and Japanese competence has increased. As she got older, she not only inserted more single English words, but also started to insert longer sequences. She has started to use intersentential switches as well. In other words, although her Japanese has not deteriorated (her proficiency has in fact improved), the proficiency balance between the two languages has changed in favour of English. It is this feature that appears to be influencing the changing patterns in her language mixing the most.

4.8.6 Language Mixing - Conclusions

The language mixing data suggests that the influence of the stronger language is mainly at the lexical level and it very rarely affects Frances's mixing patterns at the syntactic level to any significant extent.

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[61] This figure is based on the follow-up interviews with the mother.

Another internal factor which might predict Frances's mixing patterns was found instead: this is the effect of the balance of the two languages on her mixing patterns. As the gap in the proficiency level between the two languages widens, the effect of the stronger language influence begins to emerge more strongly. In Frances's data, phrasal level ELs started to emerge, rather than just word level influence. This hypothesis would need to be tested in further research in order to be substantiated, as the sample size of this study is limited to one subject.

The mother's input, on the other hand, has not been reflected in Frances's output in language mixing to any significant extent. It was found that the mother's mixing patterns and France's mixing patterns were similar in nature when the current investigation started. However, as the research progressed, patterns which were not in the mother's data started to emerge in Frances's data. This phenomenon indicates that Frances has expanded on her mother's usage by overgeneralising the Japanisation patterns. Clearly, the mother's Japanese input must be significant as it enables Frances to overgeneralise the Japanisation rules. This finding suggests that the child has somehow analysed the system of the language by herself and is applying its rules in her communication. Now that she has learnt how to create Japanised forms of English words, it has been noted that she has been using this technique to overcome the deficiencies in her Japanese lexicon and grammar (see *Do* Constructions in Section 4.3.1.1, the use of English 'too' in Section 4.3.2.1 and the use of English 'no' in Section 4.3.2.2). One disadvantage of this strategy is that the flexibility of the Japanese language and Frances's mastery of the overgeneralisation technique might actually prevent her from making progress in her acquisition of the lexicon and more complex grammatical points of Japanese.

CHAPTER 5

THE USE OF JAPANESE PARTICLES BY THE CHILD

5.1 Introduction

Frances's use of Japanese particles (postpositions) will be examined in this chapter. Unlike the study of language mixing, the study of particles has not been limited only to bilingual children, but numerous studies of Japanese particle use have also dealt with monolingual children (e.g. Okubo 1967; Clancy 1985). Since English has prepositions, many of which function like Japanese particles, it is possible to examine whether the use of Japanese particles could be influenced to some extent by English in the case of a bilingual.

The use of particles also provides a good basis for examining the influence of input, since it can be tested from both the quality and quantity perspective.

The Japanese language has a large number of particles, some of which function like English prepositions, as mentioned above, while others behave in a totally different fashion from English. Particles are not the easiest part of the Japanese language to master and even monolingual Japanese children often make mistakes with them (Hayakawa, 1991: 10). However, Clancy (1985: 387) argues that "in general, Japanese children acquire case particles easily and without much apparent difficulty".

It has been suggested by some researchers that first language acquisition by children and second language or bilingual acquisition are similar in many respects (Romaine, 1995: 235). In the case of second language acquisition by an adult learner, first language influence is commonly observed (Arnberg, 1987: 29). In the case of bilingual children, the use of prepositions (postpositions in Japanese) is frequently cited as an example of interference from another language at the grammatical level (Hoffmann, 1991: 97-98). On the other hand, Krashen argues that first language influence is rare in child second language acquisition (1988: 66) and in the most general of terms, bilingual children tend to follow the patterns of language

development observed in monolingual children (De Houwer, 1990: 50; Taeschner 1983: 227; Fantini 1985: 128). Leopold's study (cited in Hakuta, 1986: 50) on his bilingual daughter revealed that deviations from the adult standard were due not to interference between the languages but more to the general processes of simplification and substitution that are systematic and can also be found in monolingual children.

In the case of the child in this study, the language mixing patterns covered in Chapter 4 revealed that English influence is frequently observed at the lexical level, however her syntactic patterns are mainly governed by Japanese rules. This chapter now aims to investigate 1) the influence of the stronger language over the acquisition of the child's particles, and 2) the effect of the mother's input on the child's output in the use of Japanese particles.

5.1.1 Acquisition of Japanese Particles by Monolingual Children

Many researchers agree that Japanese particles are generally acquired quite early by monolingual children.

Basic grammatical particles such as *wa* (topic), *mo* 'also' and the case particles *ga* (nominative), *no* (genitive), *de* (instrument), *ni* (locative/dative), *to* (comitative), *kara* (source), *e* (goal), and *o* (accusative) emerge between approximately 1:08 - 2:06 years of age (Clancy, 1985: 387). These particles are normally acquired within one to two months after they first emerge (Okubo 1967: 107). Sentence final particles also emerge early (Okubo, 1967: 84-85; Miyahara, 1974: 285).

Miyahara (1974: 285) claims that "acquisition of most of the particles used in Japanese takes place mainly between 1:06 and 2:00" and Okubo (1967: 107) and Yokoyama (1998: 132-133) claim that the main particles are normally acquired by the age of 3 for monolingual Japanese children. However, individual differences were also noted as to when particles emerge (Okubo 1967: 84-85).

Errors were also found in monolingual particle acquisition. The most common errors were substitutions of particles for other particles (78.0%), followed by attaching an unnecessary particle, such as *no* (genitive) (20.5%) (Yokoyama, 1998: 135-136).

Typical substitutions have been summarised into three categories (Ito, 1996: 64):

(1) Marking the first N(P) in the sentence using *ga* (nominative);

(2) Inserting *ni* in front of a verb;

(3) Mixing up *ni* (to) and *kara* (from).

The first type of error is due to overgeneralisation. Children tend to mark the first N(P) using the nominative case particle *ga*, since many sentences start with a subject marked by *ga* (Ito, 1996: 64). The second type of error is also due to overgeneralisation, as many verbs are preceded by a particle *ni* (Ito, 1996: 64), such as locative, dative, temporal, directional/goal and purpose. And the third type of error occurs because children have misunderstood the directions (Ito, 1996: 64).

The mastery of the adult usage of particles seems to be later than 3 years of age, especially in terms of frequency. For instance, monolingual Japanese children reach the adult frequency level at the age of 4 with *ga* (nominative), but even 9 year-old children have not reached the adult frequency level with *wa* (topic) (Nakamura, 1993: 87). Nakamura has provided two reasons for this: (1) children's particle omissions are due to the input they have received, and (2) children's cognitive level has not reached the adult level, therefore, due to their short term memory capacity, children tend to leave out unimportant words, including particles (Nakamura, 1993: 87). Okubo also noted that frequently used particles tend to be acquired early (Okubo, 1967: 84-85).

5.2 Analysis of the Data

The particles used by the child in this study include:

Postpositional Particles

(1) *wa* (Topic Marker Particle)
(2) *o* (Accusative Case Particle)
(3) *ga* (Nominative Case Particle)
(4) *to* (Quote Marker Particle)
(5) *tte* (Conversational Quote Marker Particle)
(6) *no* (Genitive Case Particle)
(7) *ni* (Locative, Dative, Temporal, Directional/Goal, Purpose)
(8) *de* (Locative, Instrumental Case Marker)
(9) *to* (Enumerative, Comitative/Joint Action)
(10) *mo* (Inclusive)
(11) *made* (Ending Point/Terminal Point)
(12) *kara* (Starting Point/Source, Reason).

Sentence Final Particles

(13) *no* (Illocutionary Particle)
(14) *yo* (Illocutionary Particle)
(15) *ne* (Illocutionary Particle)
(16) *ka* (Question Marker Particle)

Phrasal expressions such as *ni naru* (to become) and *jibun de* (by oneself) are not included in the analysis. Frances has used all of the particles that her mother has used in the recordings, although Frances has not used as many phrasal expressions as her mother.

5.2.1 The Influence of the Stronger Language: Is There Any?

Some particles such as the Topic Marker Particle *wa*, the Accusative Case Particle *o*, and the Nominative Case Particle *ga* cannot be directly translated into English (see Tsujimura, 1996), while many others can. Those that can be translated into English are often the equivalents of English prepositions. The particles used by Frances will be divided into two categories: particles which are directly translatable into English and those that are not. The aim of this classification is to see whether there is an influence from her stronger language, English, and whether the non-translatable particles are more difficult to acquire than the directly translatable particles.

5.2.2 Particles with no Exact Translations in English

This section will cover the following nine particles:

- *wa* (Topic Marker Particle)
- *o* (Accusative Case Particle)
- *ga* (Nominative Case Particle)
- *to & tte* (Quote Marker Particles)
- *no & yo* (Illocutionary Particles)
- *ni* (Dative Case Particle)
- *ka* (Question Marker Particle)

These particles cannot always be translated directly into English. English expresses the functions of some of these particles by word order. For instance, the Topic Marker Particle *wa*, the Accusative Case Particle *o*, the Nominative Case Particle *ga* and the Question Marker Particle *ka* are examples of particles whose functions are expressed by word order in English. To some extent, the functions of the Japanese Dative Case Particle *ni* are also expressed by word order in English. The others, such as illocutionary particles, have no exact English equivalents: they could be replaced by words, not by prepositions.

There were four patterns observed in Frances's use of untranslatable particles: (1) adult forms of usage, (2) particle substitution, (3) syntactic simplifications, and (4) overuse of particles. Although every particle was used correctly at least once, they were not categorised as conforming to adult usage forms unless almost no errors were found.

5.2.2.1 Adult Forms of Usage

The particles used by Frances which are included in adult usage forms are the Quote Marker Particles *to* & *tte*, the Illocutionary Particle *yo,* the Question Marker Particle *ka* and the Dative Case Marker *ni*. No errors were recorded in the use of these particles.

Firstly, the child's use of Quote Marker Particles is the same as the adult Japanese forms and she uses both *to* and its colloquial form *tte*. *To* is a particle which marks a quotation, a sound or the manner in which someone/something does something (Makino and Tsutsui , 1992: 478). English does not have a preposition which is an equivalent to the Japanese particles *to* and *tte*.

Ex. *Doa wa sugu baan to iku kara, soko, shii tte.*
The door goes bang easily, so [the wind comes in] "shii". (5:03)

Frances sometimes pronounces *tte* [Qte] as *te* [te], which is the not unusual phenomenon of her omitting double consonants in Japanese.

The frequency of the use of *to* is much lower than *tte*. *To* was found on only two occasions in the data, while *tte* was found five times as often. This may be because *tte* is more colloquial and all of the data was gathered in the form of casual conversations.

Secondly, the Illocutionary Particle *yo* indicates the speaker's (fairly) strong conviction or assertion about something that is assumed to be known only to the speaker (Makino and Tsutsui, 1992: 543). The child has learnt this form naturally and uses it quite often. There were no mistakes found in the use of *yo* and she seems to have acquired the adult form of the usage.

Ex. *Moo tsukareta yo, counting.*
I am already tired of counting. (5:07)

Thirdly, the Question Marker Particle *ka* is a sentence final particle which indicates that the sentence is interrogative. The Japanese interrogative sentences have the same word order as that of the corresponding declarative sentence and *ka* is simply attached to the sentence unless it is very informal (Makino and Tsutsui, 1992: 167-168) in which case, intonation alone serves to express the interrogative illocutionary force. Thus *ka* is syntactically quite simple and no errors were detected in the child's usage.

1. *Genki desu ka.*
   How are you? (5:02)
2. *Kiite ii desu ka.*
   Can I listen to it, please? (5:02)
3. *Kotte shiyoo ka.*
   Shall we do like this? (5:11)

Finally, the Dative Case Particle *ni* was used only three times and it was omitted on other occasions. In the spoken language, the Dative Case Particle can be omitted. There is no basis for deciding whether the omission is appropriate or not, as individual differences tend to be the main factor determining appropriateness.

1. *Katie, Frances ni kureta.*

   Katie gave it to me. (5:02)

2. *Frances, Katie ni hayaku yasai tabete tte itta no.*

   I told Katie to eat the vegetables quickly. (5:04)

3. *Frances ni flower dress.*

   (Give) the flower dress to Frances (= me). (5:10)

5.2.2.2 Particle Substitution

The particles *ga* (Nominative) and *o* (Accusative) correctly appeared only four times each out of the entire recorded set of 21 meetings. They were replaced by other particles at other times, if not omitted altogether.

The following are some examples of the use of *ga* (Nominative) and *o* (Accusative).

Examples of *ga*

1. *Tooth fairy ga totte itchatta no.* (6:03)

   The tooth fairy took it away.

2. *O-too-san ga kureta no.* (6:05)

   My father gave (it to me).

Examples of *o*

1. *Bite, very bite o shichatta.* (6:07)

   Bit (it), bit (it) very much.

2. *Tonari no hito wa uchi o ugokashita no.* (5:05)

   The next door neighbours moved the house.[62]

3. *Nani o shita no?* (6:00)

   What did she do?

4. *Kondo, nani, XXX Mummy, nani o XXX.* (5:08)

   This time, what, XXX Mummy what XXX.

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[62] By using the wrong verb, Frances said in effect that the house itself was moved, though it was clear that her meaning was that the neighbours had moved to another house.

The typical errors were

1) to replace *ga* (Nominative) and *o* (Accusative) by the Topic Marker Particle *wa* inappropriately;
2) to replace *o* (Accusative) by *ni*[63] (at least one instance); and,
3) to replace *ga* by the Genitive Case Particle *no* (at least two instances).

1. *Frances wa shiisoo ni shite ru no.* (The *ni* should be *o*).
   I am doing seesaw. (5:08)
2. *XX kono Michelle no kureta no.* (The *no* should be *ga*).
   XX, this, Michelle gave me. (6:06)

Doi and Yoshioka's study (1987) on L2 learners of Japanese found that the Topic Marker Particle *wa* is acquired before the Nominative Case Marker *ga* and the Accusative Case Marker *o*, however they have not mentioned which particle is mastered first: *ga* or *o*. Okubo's (1967: 84-85) data on a monolingual Japanese child also suggests this acquisition order. Clancy's findings on monolingual Japanese children, however, are that the Nominative Case Marker *ga* is acquired before the Accusative Case Marker *o* (Clancy, 1985: 436). *Ga* is acquired at about 2 years of age while *o* is acquired in the first half of the third year (Clancy, 1985: 436).

A close look at Okubo's study (Okubo, 1967) reveals that the two particles *o* and *ga* appeared within a very short time of each other; *o* at 1:07 and *ga* at 1:08. In Miyahara's data (1974: 285) the order of the emergence of *o* and *ga* was reversed: *ga* appeared first at the age of 1:08 and *o* from about 1:11. In the case of Frances, it is hard to determine which particle was acquired first since the data are too limited to confirm that she has mastered them.

[63] It is difficult to determine which use of *ni* it is, as *ni* has many functions.

Particle substitution is not a common practice by Frances. Except in the case of the use of the Topic Marker Particle *wa* replacing *ga* (Nominative) and *o* (Accusative), there was not enough data to predict other patterns of replacement.

5.2.2.3 Syntactic Simplifications

Frances's use of the Illocutionary Particle *no* is often in the category of syntactic simplifications.

The particle *no* is used by a female speaker or a child to indicate an explanation or emotive emphasis (Makino and Tsutsui, 1992: 322). Thus, this is not translatable by an English preposition. It can be used either in a question or an affirmative sentence. The child uses *no* appropriately in both questions and affirmative sentences.

Ex. (1) *Kore, atsui no?* (Is this hot then?) (5:02)
(2) *Witch no poison apple aru no.*
(There are witch's poison apples, you see.) (5:02)

No has a much more complex syntactic pattern compared to other Illocutionary Particles, such as *yo*. The latter does not require any form of the copula for nouns and adjectival nouns, while *no* requires the insertion of *na* between a noun/adjectival noun and the particle *no*.

Ex. 1 *Nihon-jin yo.* (She is Japanese)
2 *Nihon-jin no.* ***
2' *Nihon-jin na no.* (She is Japanese)

The example below indicates syntactic simplification, in that the child has been using just one rule by simply attaching *no* to any part of speech.

Ex. *Koko ni kita dake no.*** (Should be "*Koko ni kita dake na no*".)
It came just here. (5:07)

Dake (just, only) is a predicate particle (Ono, 1996: 82) in Japanese, and an insertion of *na* between *dake* and the particle *no* is necessary.

5.2.2.4 Overuse of Particles

The Topic Marker Particle *wa* and the Illocutionary Particle *no* will be discussed in this section.

Firstly, the Topic Marker Particle *wa* generally appears after a noun at the beginning of the sentence and is one of the most frequently used particles in Japanese.

Ex. *Kore wa ookii hito no go-hon.*
This is a book for big people. (5:05)

Wa is Frances's favourite particle and she uses it frequently. In fact, Frances tends to overuse it. Nakamura (1994: 88-89) states that monolingual Japanese children tend to underuse *wa* by omitting it and even a 9-year-old child's usage of *wa* is about 88% of that of an adult native speaker. Such a tendency was not found in this bilingual child's data. She used *wa* 91 times in the eight tapes and omitted *wa* 132 times where an adult would have used it, therefore her omission rate was 59.2%, which is lower than her mother's. The mother's data will be examined in Section 5.3 'The Input from the Mother and the Output from the Child'. There are many occasions when it is appropriate to omit the Topic Marker Particle *wa*, such as when both parties know what the topic of the conversation is, or when the topic has already been introduced.

Frances's use of *wa* does not seem to be different from the adult norm, since it is grammatically correct. However, there is a tendency for her to start a sentence with 'N(P) *wa*', such as '*Frances wa* (I [am], I [do])', although the topic is not always necessary in Japanese. *Wa* was also used to replace some particles she has not mastered yet, as discussed in the previous section.

About 80% of her use of *wa* is grammatically correct, although she tends to use it more intensively than the adult norm. In about 10% of cases it has been used inappropriately as a replacement for the Nominative Case Particle *ga*. In the remaining 10%, it has been used inappropriately as a replacement for the Accusative Case Marker *o*, for which she does not seem to have mastered the adult forms of usage. In adult speech, *wa* can be used in place of *o* and *ga* when they are topicalised; however, this does not explain these instances of substitution. The following is an example where she used the Topic Marker *wa* in place of the Accusative Case Particle *o*.

Ex. *O-too-san wa kuma-san wa toy shop de katta no.****
Her father bought a bear in a toy shop. (5:02)
(Should be *O-too-san wa kuma-san o toy shop de katta no.*)

Non-native speakers of Japanese are often confused by the use of the Nominative Case Particle *ga* and the Topic Marker Particle *wa*. They tend to substitute the particles one for the other. This kind of confusion has not been seen in the child's speech, since she does not interchange the two particles (she is not really using the Nominative Case Particle *ga* yet).

One of the reasons non-native speakers of Japanese are confused with *wa* and *ga* is that both of them can be used after subject NPs. Stockwell, Bowen and Martin (1965: 282-287) support the idea that the most difficult pattern for SL learners is having two alternatives in L2 where there is no choice in L1. The distinction between *ga* (Nominative) and *wa* (topic) is the case of having two alternatives in L2. Ito's data shows overuse of *ga* by monolingual Japanese children. It was found that some

monolingual children use *ga* to mark the first NPs in a sentence, in place of the Accusative Case Particle *o* or the Dative Case Particle *ni*. This occurs when the particles *o* (Accusative) and *ni* (Dative) appear in the first slot of the sentence, which is often taken by a subject marked by *ga*. However, no instance of mixing of *wa* and *ga* was found (Ito, 1996: 63-64). In my study, this type of overuse was observed in the use of *wa,* not with *ga.*

The Illocutionary Particle *no* was discussed in the previous section. As noted previously, because of its syntactic complication, Frances has been simply attaching *no*, without inserting other necessary elements. In this section, some examples of unnecessary insertions of *no* will be shown, which is used as if it were a sentence ending marker.

The use of *no* indicates an explanation or emotive emphasis (Makino and Tsutsui, 1992: 322). In the following examples, native adult speakers would avoid attaching *no*. The following are, therefore, examples of the overuse of *no.*

1. Mother: *Frances, Katie no o-bentoo tabeta?*
   Did you eat Katie's lunch, Frances?
   Child: *Shite nai no.* (*No* is not necessary).
   I didn't. (5:09)
2. Mother: *Indian tte yuu n deshoo.*
   She is called Indian, isn't she.
   Child: *Indian no.**** (*No* should not be attached).
   Indian. (6:00)

3. Investigator: *Sovereign Hill tte yuu no?*
Is it called Sovereign Hills?
Child: *Un. Kore mite, shashin.*
Yes, look at this, a photo.
*Grandma no.*** (*No* should not be attached).
My grandmother. (6:03)

4. Mother: *Sanoba wa doo shita no?*
What's up with Sanoba?
Child: *Sick.*
Sick (in English).
Mother: *Shikku tte Nihongo de nan te yuu no?*
Sick...how do you say it in Japanese?
Child: *Byooki no.*** (*No* should not be attached).
Sick (in Japanese). (5:01)

In Example 1, the use of *no* makes the negation too strong and it is not necessary. Example 1, however, is syntactically fine, while the other three examples reveal that the usage is not only syntactically wrong (see Section 5.2.2.3), but semantically unnecessary. *No* is one of Frances's favourite particles and she uses it very frequently. Most usages were correct, but 7.8% of the usage was unnecessary or incorrect. She seems to attach *no* at the end of an utterance, especially when the utterance is only a noun or a noun phrase.

5.2.3 Particles with Equivalent Translations in English

In this section, eight particles which are translatable into English and used by the child will be discussed: *ne, no, ni, de, to, mo, kara* and *made.* Most of the particles in this group have more than two meanings or functions. For instance, the particle *ni* was used for five different functions by Frances.

The table below shows the translatable particles for which she has mastered the semantically correct forms.

Table 5.1: Translatable Particles Used by the Child[64]

particle	Meanings/functions	
ne	isn't it?, right?	Confirmation, Tag questions
no	of, for	Genitive
ni	1. for	Purpose
	2. to	Directional, Goal
	3. in, at	Temporal
	4. on	'Inner' locative
	5. in, at	'Outer' locative, Location of existence
de	1. in, at	'Outer' locative, Location of action
	2. with, by	Instrumental
to	1. and	Enumerative
	2. with	Comitative, Joint action
mo	too, as well	Inclusive (topic)
kara	1. because, so	Reason
	2. from	Ablative, Starting point, Source
made	up to, to	Ending point, Terminal Point

She has used most of the particles correctly (semantically, functionally and grammatically), yet some of her forms of usage were not those of native adult speakers in the grammatical sense.

There were four patterns observed in her use of translatable particles: (1) adult forms of usage, (2) particle substitution, (3) syntactic simplifications, and (4) positional disorder.

[64] For a more detailed classification of particles, see Ono (1996).

5.2.3.1 Adult Forms of Usage

Many particles were used by the child in the same way as used by adult native speakers of Japanese. Such particles include *ne* (confirmation), *no* (genitive), *ni* (purpose, directional/goal, temporal, outer locative), *de* (outer locative, instrumental), *to* (comitative/joint action) and *kara* (starting point/Source).

Examples are shown below.

1. Confirmation
   Child: *Pantsu, miechatta ne.*
   We could see his underwear, couldn't we? (5:02)
2. Genitive
   Child: *O-uchi no naka.*
   Inside the house. (5:02)
3. Purpose
   Child: *Kore, nani ni tsukau no?*
   What do you use it for? (5:01)
4. Directional/Goal
   Child: *To, aka-chan to buta-san, ikanai sho, gakkoo ni.*
   And, babies and pigs don't go to school. (5:07)
5. Temporal
   Child: *Kurisumasu ni kore, moatta*[65] *no.*
   I got this at Christmas. (5:05)
6. Outer locative
   Child: *Are wa Melbourne ni iru hito datta no.*
   That was a person who was in Melbourne. (5:05)
7. Outer locative
   Child: *Koko de asobo ka.*
   Shall we play here? (5:03)
8. Instrumental
   Child: *Kore de asobo ka.*
   Shall we play with this? (5:03)
9. Comitative/Joint action
   Child: *Mummy to toosuto tabetai tte.*
   She said she wants to have some toast with you, Mummy. (5:11)

[65] '*Moatta*' should be '*moratta*'.

10.Starting point/Source

Investigator: *Doko kara hajimeru no?*
Where do you start from?
Child: *Koko kara.*
From here. (5:05)

These particles are syntactically simple; they are attached to a noun phrase, except for the Illocutionary Particle *ne*, which is attached at the end of the sentence.

5.2.3.2 Particle Substitution

Some particles have not been acquired yet, and those particles were replaced by other particles that are more familiar to her, although these cases are rare. These particles include *ni* (inner locative, agent/source), and *de* (reason).

Below is an example of the use of the particle *de* in place of Inner locative *ni.*

Ex. *Doko de kaku no?****
Where do I write? (5:03)

In the above example, she is asking where (which room or which section of the room) she should be in when she writes (outer locative sense), but what she meant was "*Doko ni kaku no?* (where shall I write, inner locative sense)".

However, she has also used the inner locative '*ni*' correctly in another example, although this use may have been prompted by the preceding question.

Ex. Investigator: *Doko ni kaku no*
Where do I write?
Child: *Koko ni.*
Here. (5:07)

Secondly, mixing up the outer locative *ni* (place of existence) and *de* (place of action) was found only four times, while 21 cases of *ni* and 5 cases of *de* were correctly used. In 3 out of the 4 errors, *ni* was used in the place of *de*, and the last case was to use *de* in the place of *ni*. This is a common mistake both by second language learners and monolingual children, so it is hard to determine whether these types of errors occurred because of the influence of the dominant language (as English does not distinguish place of existence and action), or if this occurred as a natural part of the child's language acquisition.

Finally, *ni* as an Agent/Source Marker and *de* as a reason have not been used in her recorded speech. In one example, the agent/source marker *ni* was replaced by *to* (with), and *de* (reason) was replaced by *ni* (outer locative).

Ex. (1) *Kurisumasu ni kore, moatta no. Santa Claus to.****
(Should be *"Santa Claus ni."*)
I got this at Christmas. From Santa Claus. (5:05)
(2) *Minna grass ni mienai yo.*
(Should be *"Minna grass de mienai yo."*)
People cannot be seen in the grass. (5:09)

The second sentence in which she was trying to explain an English story she heard at school appears to be a direct translation from English to Japanese. Direct translations are rare in her speech.

5.2.3.3 Syntactic Simplifications

It was found that her syntactic patterns are governed by a series of single, simplified grammatical rules. These include rules associated with the use of *to* (enumerative) and *kara* (reason).

The Japanese particle *to* was used as an equivalent to the English word 'and' by the child. The difference is that the Japanese *to* is limited in adult speech to use with nouns only, while English 'and' can be used to connect not only nouns but also sentences, verbs, and so on.

The following are examples of the child's use of *to*.

Ex. (1) *Kotchi to kotchi.*
This one and this one. (5:05)

(2) *To, Kayla wa always bump, bump, bump.****
And Kayla always bumps, bumps, bumps. (5:01)

(3) *Are wa, Frances no bed top ni nereru to fun no.****
That is...I can sleep on top of the bed and it's fun. (6:05)

The first example is the use of *to* in joining two nouns. This is the expected use of the particle *to*. The second example is ill-formed, since she has used *to* at the beginning of the sentence just like in English. The second case is the most prominent in her pattern of errors. The third example shows how she joins two sentences using *to*, which is grammatically incorrect in Japanese. The use of Example 2) type *to* and 3) type *to* is about 16% of her total usage. Thus, she is still using the particle correctly most of the time. The second and the third types of usages may be the result of English language influence.

Her use of the connective particle *kara* (reason) illustrated her simplification of a somewhat complex adult system. *Kara* has a complex syntactic system, i.e. the plain form of the copula *da* must be inserted in between a noun/adjectival noun and *kara,* while other parts of speech can be followed by *kara* directly.

In the use of *kara* as a reason, there were four sentence categories found in the child's speech:

(1) with a Japanese verb;
(2) with a Japanese noun, including loanwords;
(3) with an English noun; and
(4) with an English adjective.

The following examples show her use of *kara* expressing reason in each category.

Ex. (1) *Demo kore wa beautiful ja nai te itta kara ban tte doa, dakara beast natchatta.*
But this said, [he] was not beautiful, so the door went bang, so he became a beast. (5:03)

(2) *Kore, paachii kara yo.****
Because it's a party. (6:01)

(3) *Elizabeth no birthday party kara datta desho.****
Because it was Elizabeth's birthday party, right? (5:11)

(4) *Kyoo bubble shicha ikinai no yo. Kyoo 'too windy' kara.****
We mustn't play bubble today. Because it's too windy today. (5:09)

One half of her use of *kara* occurs after Japanese nouns. The third example reveals her preference for the use of a noun with *kara*. The sentence has a copula in the past tense: *datta*. Therefore *kara* should be inserted after *datta* in the normal order, as shown below.

Elizabeth no birthday party datta kara desho.

Elizabeth PART birthday party was because isn't it

The rule she has adopted here is to attach the plain form of any part of speech directly to *kara*. Verbs and adjectives should be attached in this way. However, nouns and adjectival nouns require *da*, the plain form of the copula, before *kara*. Adjectives borrowed from English (see Example 4) are regarded as adjectival nouns in Japanese. Therefore, these should also be followed by *dakara*, not directly by *kara*.

5.2.3.4 Positional Disorder

Some particles were used in an inappropriate position. These examples include *mo* (too, as well) and *made* (to, until).

Mo can be attached after any constituent in a sentence, but not in the final position. This differs from the use of the English 'too/also'. *Mo* can also replace the Topic Marker Particle *wa* and the Accusative Case Particle *o*, as well as the Nominative Case Particle *ga*.

All of the sentences in which she used *mo* were correct as long as the sentence had either a subject or an object only.

Ex. *Paint mo aru no.*

We also have paint. (5:02)

However, she placed the particle *mo* incorrectly when the sentences had both subject and object.

Ex. Investigator: *De, o-kaa-san no uma-san wa nani suru no.*
And, what does the mother horse do?
Child: *Are ga kore mo haku no.* (Should be *Are mo kore o haku no.*)
That wears this, too. (6:00)

In the example above, she has marked the subject by *ga* and the object by *mo*. In fact, the subject should be followed by *mo*, not the object, because what she meant was "The mother horse also wears this", not "The mother horse wears this also". Taking into account previous examples of her use of the Accusative Case Particle *o* (see Section 5.2.2.2), it can be said that Frances has not yet mastered the use of *o*, which might affect her selection of particles when a sentence has both a subject and an object.

Made (up to) can co-occur with a verb in the plain form or a noun. Four examples were found of the child's use of *made*. All of them were with a noun.

Ex. *Koko made kita no.*
I came up to here. (5:05)

Her use of *made* is usually correct, however one example of a non-adult form was found in the data.

Ex. *Mummy no height made koko deshoo.****
Your height is up to here, isn't it, Mummy. (5:07)

The example above should be

Mummy no height, koko made deshoo.
Your height is up to here, isn't it, Mummy.

Her word order was reversed, probably affected by the English word 'height'. This may have happened because she did not use the Topic Marker Particle *wa* to mark '*Mummy no height* (your height)'. Therefore the next particle, *made*, was fronted.

Mistakes in word order are not a common occurrence in Frances's data. Thus the above two examples with *mo* and *made* could be isolated occurrences only.

5.2.4 Summary and Discussion

It was found from the data that the child has already grasped most of the semantic functions of Japanese particles, but has difficulties with some syntactic patterns. In other words, syntactically complex particles such as *no* (Illocutionary Particle) and *kara* (reason), which require the insertion of words depending on parts of speech, have not been fully acquired yet (i.e. *na no* for the Illocutionary Particle and *dakara* for reason, instead of simply attaching *no* and *kara* respectively). All of the particles which she used correctly were syntactically simple and it did not make any difference whether the particle was translatable into English or not.

Frances also substituted particles for other particles. There was, however, no strong evidence that she felt that some particles were more difficult simply because there is no equivalent in English. The particles replaced in these instances were the ones which she has not yet fully mastered, such as *ga* (Nominative), *o* (Accusative) and *ni* (Agent/Source).

The overuse of particles was also found with *wa* (Topic Marker Particle) and *no* (Illocutionary Particle). They represent Frances's favourite pattern for starting a sentence (with *wa*), and finishing a sentence (with *no*). There is no strong evidence that these are affected by English since there is no equivalent of *wa* or *no* in English, rather it has simply become her habit to use them.

There was only one suspected case of direct translation from English. The sentence "*Minna* grass *ni mienai yo**** (People cannot be seen in the grass)" was an extract from an English story, thus the original sentence was in English. This may be the reason why she used an English translation of the Japanese particle. The correct Japanese sentence is "*Minna* grass *de*[66] *mienai yo* (People cannot be seen because of the grass)".

Postpositional disorders with little evidence of influence from the stronger language were also found to have occurred. However, these cases are rare.

Frances's use of the Topic Marker *wa*, the Nominative Case Particle *ga* and the Accusative Case Particle *o* exhibit some similarities to that of monolingual Japanese children, but does not seem to have much correlation with L2 learners. Firstly, she frequently omits particles, especially *ga* and *o*, which is a common phenomenon amongst native speakers. Secondly, she does not interchange *wa* and *ga*, as L2 learners do. However, Frances overuses *wa* while monolingual children overuse *ga* (Ito, 1996: 63-64). The frequency of the use of *ga* is the most prominent difference between her language output and that of monolingual Japanese children. Monolingual children use *ga* the most after 2:01 (Okubo, 1967), however, Frances uses *wa* the most and the use of *ga* is very limited even at the age of 6:08.

Overall, there is little evidence in this investigation's data to support the idea of English influence over the acquisition of particles. The particles where she tends to use non-adult form include those which are syntactically difficult. To compensate for the limitations of these particles, she uses the simplest possible syntactic patterns and overgeneralises their usage. She also substitutes some particles, although this pattern is not as commonly observed as overgeneralisation.

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[66] *De* = reason

5.3 The Input from the Mother and the Output of the Child

5.3.1 Introduction

The stronger language does not seem to be the major influence over the child's acquisition of Japanese particles. How about the input from her mother then?

The mother has been the main source of Japanese input for Frances, especially since she started kindergarten (year 0) at the age of 5 years and 2 months. Thus, it is pertinent to investigate the mother's usage of particles in order to determine whether, and to what extent, her mother's influence has affected her output of particles. Frances is a suitable subject on which to test the effect of such input, given that her contact with other native speakers of Japanese is very limited. The child has been receiving child-centred input, which, according to Döpke (1986: 504-505), is beneficial input for the child to be an active bilingual. The child was in fact an active bilingual throughout the term of this investigation.

5.3.2 Analysis of the Data

The mother used 779 particles correctly (73.5%), omitted 280 particles (26.4%), and there was only one case of speech error (0.1%). The child used 584 particles correctly (64.2%), omitted 282 particles (31%) and made 43 errors (4.7%). Omission of particles is natural in conversation, and it is sometimes more natural to omit particles. The issue of whether particular particle omissions are correct or not will not be discussed here, because there are individual differences in this matter. The types of particles used were almost the same for the mother and the child, although the mother used phrasal expressions more often than the child.

5.3.2.1 A Comparison of the Most Frequently Used Particles

The five most frequently used particles among the correctly used particles are:

Table 5.2 The Five Most Frequently Used Particles

	Mother		Child	
1	*no* (illocutionary)	173 (22%)	*no* (illocutionary)	154 (26.4%)
2	*no* (genitive)	93 (11.9%)	*yo* (illocutionary)	103 (17.6%)
3	*ne* (illocutionary)	89 (11.4%)	*wa* (topic)	91 (15.6%)
4	*tte* (quotation)	67 (8.6%)	*no* (genitive)	49 (8.4%)
5	*wa* (topic)	65 (8.3%)	*to* (enumerative)	41 (7%)
total		487 (62.5%)		438 (75%)

The mother used 779 particles correctly, and the five most frequently used particles constituted 487 (62.5%) of these instances. The child used 584 particles correctly and the five most frequently used particles constituted 438 (75%) of them.

Both the mother and the child have used the Illocutionary Particle *no*, the Genitive Case Particle *no* and the Topic Marker Particle *wa* intensively. However, the Illocutionary Particle *no* and the Topic Marker Particle *wa* can be used in both declarative sentences and questions. Further analysis revealed that the reason why the mother uses these particles so frequently is because she asked questions frequently, while Frances uses the particles *no* and *wa* in declarative sentences. The table below shows the ratio of use for declarative sentences and questions for *no* (illocutionary) and *wa* (topic).

Table 5.3: Questions vs Declaratives (in the cases of *wa* and *no*)

	Mother		Child	
	Question	Declarative	Question	Declarative
wa (topic)	63.1%	36.9%	6.6%	93.4%
no (illocutionary)	71.7%	28.3%	1.9%	98%

In questions, the mother is using *wa* 63.1% of the time, and *no* 71.7%, while Frances only uses *wa* 6.6% of the time, and *no* 1.9%, respectively.

The mother also makes more use of the Illocutionary Particle *ne,* compared to Frances. *Ne* is a particle which indicates the speaker's request for confirmation or agreement from the hearer about some shared knowledge (Makino and Tsutsui, 1992: 286), just like English tag questions. This strategy makes the sentences sound rather harmonious and unselfish by sharing the statement agreed between the two parties. This indicates that when the mother was talking, she was often seeking agreement/confirmation/involvement from the child about things which are shared between them. Frances, on the other hand, used *ne* only 9 times (1.5%) in the 8 tapes used for the analysis, which means it is not in the top 10 list of her most used particles.

Compared to her mother, Frances used the Illocutionary Particle *yo* much more frequently. *Yo* indicates the speaker's (fairly) strong conviction or assertion about something that is assumed to be known only to her (Makino and Tsutsui, 1992: 543). Frances uses *yo* frequently, but is not overusing it. She talks about herself, her friends and what happened at school, i.e. things which are not known to her mother or the investigator. The reason why she uses *yo* more frequently than her mother seems to be this type of sentence content.

5.3.2.2 Omitted Particles

It is often more natural to omit particles in spoken Japanese than to use them, unlike English prepositions. The omission of some particles is a common phenomenon by native speakers of Japanese and Frances's mother omits them frequently. Clancy (1985: 387) argues that in case of monolingual children,

> The typical course of acquisition is from failure to use a particle where appropriate to a gradually increasing rate of production until the child's frequency approximated adult usage.

This process is probably hindered by the optional omission of certain particles in casual conversation, especially the ones marking basic grammatical relations, such as *o* (direct object), *ga* (subject), and *ni* (indirect object/locative goal).

In this section, 5 particles (Accusative *o*, Nominative *ga,* Topic *wa*, Dative *ni* and Directional [Locative Goal] *ni*) will be examined, with respect to Clancy's investigation above. The following table indicates the percentage of omission rate of the 5 particles in the data.

Table 5.4: Omission Rate of Particles 1[67]

	Mother		Child	
	Omitted	Used	Omitted	Used
Ga (nominative)	58.8%	41.2%	97.3%	2.7%
O (accusative)	92.4%	7.6%	98.3%	1.7%
Wa (topic)	61.3%	38.7%	59.2%	40.8%
Ni (direction)	38.9%	61.1%	35.5%	64.5%
Ni (dative)	0%	100%	25%	75%

The data above shows that the omission rates between the mother and child are comparable with the exception of the Nominative Case Particle *ga*, where the rate of omission is much higher for the child.

The Dative Case Marker *ni* has never been omitted in the mother's recorded samples, although it was predicted (Clancy 1985: 387) that it is one of the particles which is optionally omitted.

[67] 'Omission' refers to the complete dropping of a particle, and 'used' refers only to instances of correct use. Errors have been eliminated from these results.

The available literature suggests that it is a common practice to omit *ga* (Nominative) and *o* (Accusative). Miyahara (1974: 285) and Hakuta (1982: 70) claim that *o* is frequently omitted or often optional in colloquial adult speech. It was also found in Miyazaki's study (cited in Clancy, 1985: 387) that in a mother's speech to a 2-year-old, *ga* was omitted 30% of the time.

The data in this study confirms these earlier findings, with the mother's use of *o* (Accusative) also quite low (7.6%). The mother's use of *ga* (Nominative) was also low (41.2%), with an omission rate of 58.8%, quite a bit higher than in the study done by Miyazaki.

Okubo (1967: 89) states that the omission of *o* (Accusative) is more frequent amongst children than adults, which is also found in this study, however the difference is not so great.

Omission of *ga* (Nominative), however, seems to decrease as a child grows older. Okubo (1967) found in her study of monolingual Japanese children that after the age of 2:01, *ga* was used more often than *o* (Accusative), even more than the particle *wa* (Topic). This tendency has not been confirmed in this study, as Frances does not use *ga* often.

It seems to be the case that Frances's acquisition of *ga* (Nominative) and *o* (Accusative) has been delayed in comparison to monolingual children. Monolingual children in Japan seem to start using *ga* and *o* at approximately 1:08 - 2:06 years of age, and normally acquire them by the age of 3:00 (Clancy 1985: 387; Miyahara 1974: 285; Okubo 1967: 107). In the case of Frances, the particle *o* emerged for the first time in the adult form when she was 5:05, and her use of the nominative *ga* in the adult form was not found in the recordings before the age of 5:08.

In Table 5.5 below, it is shown that Frances's use of *ga* (Nominative) is significantly lower than her mother's use of *ga*. The child's use of the particle *o* (Accusative) reflects her mother's usage. Her mother omits the particle 92.4% of the time and

Frances's omission rate is 98.3%. Frances uses the particle *o* correctly on only one occasion in the 8 selected tapes, which is not unexpected given that the mother models this use for her only 8 times in the data. The rate of omission for *wa* (Topic) would seem to reflect the mother's pattern, although Frances's usage rate is slightly higher. This may be an indication of her tendency to overuse the particle *wa*, as noted previously.

Table 5.5: Omitted vs Used (*ga, o, wa*)

	Mother		Child	
	Omitted	Used	Omitted	used
ga (nominative)	45 cases	39 cases	67 cases	2 cases
o (accusative)	97 cases	8 cases	57 cases	1 case
wa (topic)	103 cases	65 cases	132 cases	91 cases

(See Table 5.4 above for % rates)

From the data in the 8 selected tapes, the most significant difference can be found in the use of the particle *ga* by mother and child. Frances's usage rate is much lower than that of her mother. She also omits *o* most of the time, but then so does her mother, however this is not the case for *ga*. The mother uses *ga* quite frequently, but the child rarely uses it.

The Nominative Case Particle *ga* has two functions: marking a subject or marking an object. When predicates are transitive adjectives or stative transitive verbs, the elements which correspond to the direct object in English are sometimes marked by the Nominative Case Particle *ga* (Makino and Tsutsui, 1992: 120; Koizumi, 1993: 197-198).

Table 5.6: Object Marking vs Subject Marking

	Mother		Child	
	Omitted	used	omitted	used
ga (marking an object)	12 cases (92.3%)	1 case (7.7%)	5 cases (100%)	0 cases (0%)
ga (marking a subject)	45 cases (53.6%)	39 cases (46.4%)	67 cases (97.1%)	2 cases (2.9%)

The table above reveals that Frances has not used *ga* much at all (only 2 times in the 8 selected tapes and 4 times in 21 meetings. See examples below), either as an object marker or a subject marker, while her mother, on the other hand, frequently uses *ga* as a subject marker, but not as an object marker. On each occasion Frances used *ga* only as a subject marker, so there are no examples of use of the Nominative Case Particle *ga* as an object marker in her data.

Ex. 1 *Waa, hebi ga kitaa.*
Oh, the snake has come. (5:08)

Ex. 2 *Are ga kore mo haku no.*
That wears this as well. (5:11)

Ex. 3 *Tooth fairy ga totte itchatta no.*
The tooth fairy took it away. (6:03)

Ex. 4 *O-too-san ga kureta no.*
My father gave it to me. (6:05)

The analysis of the data reveals that the output of the child does not always reflect the mother's input in terms of frequency. Frances uses the necessary particles to express herself and does not follow the same pattern of speech as her mother (e.g. the child does not ask many questions). However, she has used all of the particles that her mother has used. Therefore it could be said that most likely a variety of input has affected the output of the child.

The overall omission rate of the mother has been mirrored in the child's speech. Frances has learnt which particles can be omitted and which ones are not normally omitted.

Table 5.7: Omission Rate of Particles 2

	Mother		Child	
	Omitted	used	omitted	used
Four most omitted particles *ga, o, wa, ni* (direction)	271 (66.7%)	135 (33.3%)	274 (70.6%)	114 (29.4%)
Other particles	9 (1.4%)	644 (98.6%)	8 (1.7%)	470 (98.3%)

The top row of Table 5.7 shows the omission rates of the 4 most omitted particles in the data. The mother's overall omission rate is 66.7%, while Frances's is 70.6%. The bottom row of the table shows the results from particles other than the main four above, and the omission rate in this case is 1.4% for the mother and 1.7% for Frances.

The omission strategy has also been applied to the particles that Frances has not mastered yet, such as *o* (Accusative) and *ga* (Nominative). The mother uses a lot of *ga,* but Frances does not. Since she also prefers to use the Topic Marker Particle *wa* in the place of *ga,* she has been able to avoid using *ga.* The use of *ga* and *o* is highly significant in some sentences, since they are often the only keys to understanding the meaning of what is expressed. For instance, the following sentence was used by Frances, omitting a particle:

O-too-san (PART) katta no.
father (PART) bought PART

This sentence could have three meanings.

1. My father bought it (with an attachment of the Nominative Case Particle *ga*).
2. I bought it for my father (with an attachment of the Dative Case Particle *ni*).
3. I bought my father (with an attachment of the Accusative Case Particle *o*).

The third reading could not occur in this sentence due to semantic prevention.

Omitting case particles can be confusing under some circumstances and it is sometimes necessary to include them in order to adequately convey the meaning of some sentences. My data suggests that such necessity does not affect the acquisition order of particles. In other words, even though some particles are highly significant in terms of conveying the meaning of a sentence, they do not always seem to be the first ones to be acquired.

As the mother has been the only regular speaker of Japanese, some particles might have been habitually left out, since Frances and her mother have a lot of shared knowledge and so can communicate with each other quite effectively without using them. Another reason for Frances's tendency to frequently omit particles, especially case particles such as *ga* (Nominative) and *o* (Accusative), is probably the lack of input she receives from reading. Since her mother does not use *ga* as an object marker or *o* (Accusative) frequently, one may argue that this is simply due to the lack of input from the mother, but this pattern is the most natural input in spoken language. Frances does not often read Japanese books, and her mother does not often read them to her. In written Japanese, particles are not omitted as often as they are in spoken Japanese. The quantity and quality of input that Frances receives differentiates her from monolingual Japanese children who are brought up in Japan: they not only have more input sources including other children, but they also have access to TV, various Japanese songs and children's books. Frances has much more limited resources, which could be the primary reason why she has not acquired the use of *ga* and *o* to the level of monolingual children.

5.3.3 Discussion

The data revealed that there are some correlations between the mother's input and the child's output. The two major similarities are: 1) the variety of particles in the input is reflected to a large extent in the output of the child, and 2) the omission rates of

particles are similar between mother and child (i.e. the four most omitted particles *ga*-Nominative, *o*-Accusative, *wa*-Topic and *ni*-Directional/Goal).

One may argue that the reason the child is omitting the four particles is because she has already found out the Japanese rules that allow some particles, especially the ones marking basic grammatical relations, to be deletable. However, since the child has not received a significant amount of input from people other than her mother, it would be fair to judge that her generalisation came from the mother's input only.

The quantity and type of input is undoubtedly important, however it does not seem to be a major influence over the child's output in my data. The reason for this seems to be that the conversational patterns are different for the mother and child, i.e. the child does not ask as many questions as the mother does, for instance. Therefore the child does not use the particles for asking questions that the mother uses, as often as her mother does.

Quantity of input does not reflect the child's output as much as the difficulty of particles. In other words, some particles are difficult to acquire, regardless of how much input she receives from her mother. For instance, the child has not been using *ga* (Nominative) much. Her strategies are to omit it or to replace it with *wa* (Topic). Her mother, on the other hand, used *ga* 41.2% of the time, while the child has used it only 2.7% of the time. The use of *ga*, as well as *o* (Accusative), seems to be difficult for the child, which is not the case for monolingual children. Thus, the quantity of the mother's input does not seem to be reflected in the child's output, in the case of the particle *ga*.

To sum up, input is highly significant for the child's output, and there are definite similarities between the mother's input and the child's output in terms of the variety of particles used and the overall particle omission patterns. However, the mother's input alone does not predict all aspects of the child's output.

The most significant finding is that the child does not learn complex particles simply from the amount of input. In Frances's case, *ga* seems to be difficult to master, therefore she has created an avoidance strategy. Other examples of such strategies of syntactic simplification were introduced in the sections on the influence of the stronger language (Sections 5.2.2.3 and 5.2.3.3). Here Frances has used simplified versions of *kara* (reason) and *no* (illocutionary) for instance, although the mother has never simplified their syntactic rules in the recorded data.

5.4 Particles - Summary and Conclusions

The child's use of Japanese particles is mostly natural and accurate and she generally knows when and what particles can be omitted.

There were some cases, however, in which she has mastered only a part of the functions of a particle. For example, she seems to know many of the usages of the particle *ni*, but she has made some errors with the use of *ni* as an Agent/Source Marker and has used *to* (with) instead. However, the data set is not large enough to confirm that she has not mastered the particle *ni* yet.

The evidence of influence from English was found on only one occasion when she tried to translate from an original English sentence into Japanese. However there were no other obvious links found between the child's output and the dominant language.

The mother's input, on the other hand, has more direct correlation to the child's output. However, the mother's input alone could not explain every aspect of the child's output.

The most sensible hypothesis is that Frances's usage is governed by adopting the simplest pattern available. This is a common practice when she uses syntactically complex patterns. Avoidance strategies, such as omission and replacement, were also found for the particles which are syntactically easy but pragmatically difficult. It was

noted that her acquisition of particles seems to be slower than that of monolingual children, but this is an expected outcome given her circumstances of acquisition.

One important difference in the acquisition of particles between monolingual Japanese children and Frances, is that Frances has had much more difficulty in mastering basic grammatical particles, such as *ga* (nominative), *wa* (topic) and *o* (accusative), while in the literature monolingual children do not seem to have had such problems. Frances also overuses *wa*, while monolingual children are reported to overuse *ga*. Past research suggests that bilingual children generally follow the patterns of language development observed in monolingual children (Romaine, 1995: 235; Krashen, 1988: 66; De Houwer, 1990: 50; Taeschner 1983: 227; Fantini 1985: 128), but this is not the case in Frances's acquisition of some particles. My hypothesis is that this is primarily due to the type of input she is receiving, as well as to the avoidance strategy she has employed. The lack of input sources other than parental input seems to be the primary reason for the delay in Frances's acquisition of certain particles. This would not be the case with every bilingual child. This question should be further tested in research with other bilingual children who receive their input from a variety of sources.

CHAPTER 6
CONCLUSIONS

Four hypotheses were proposed in relation to the two influential factors considered in this study: language input and the influence of the stronger language. These are:

1. If the child is primarily influenced by the mother's input, the child's speech should be similar to the mother's.

2. If the child is primarily influenced by the stronger language, the effect of English should be strongly observed in her Japanese.

3. If the child is influenced by both factors, the more influential factor should emerge more strongly.

4. If neither of these factors is primarily influencing the child's speech, there may be other factors affecting the child's speech.

The analysis of the data found that the child's language output was influenced to some extent by both the mother's input and the influence of the stronger language. However, they were not found to be the major factors in determining the child's language use. In addition to this, they were shown to influence her language usage in distinctly different ways.

The stronger language (English) predominantly influenced Frances's speech at the lexical level. Frances's syntactic patterns were mainly governed by Japanese rules and the most common pattern observed in her speech was to insert English words into Japanese syntactic frames. Therefore, English does not seem to have affected her acquisition of particles significantly, since particles are function words (parts of the syntactic system). The influence of the stronger language at the syntactic level, although rare, seemed to have occurred when the child had not yet mastered the equivalent Japanese grammar, or when the English syntactic pattern was simpler than the Japanese equivalent (See Sections 4.3.2.2 and 4.3.2.3). The Dominant-language Hypothesis (Petersen, 1988. See

Section 2.3) could not be confirmed in this study, since Frances did not apply any English morphemes to Japanese words.

The mother's input, on the other hand, showed some similarities to the child's usage. These similarities were observed both qualitatively and quantitatively, depending on which grammatical point was being examined.

From the language mixing data, it was observed that the child uses Japanisation patterns similar to those of the mother in terms of quality. Frances used almost all the mixing patterns that her mother used in the recordings. Some of the child's uses in the data, however, could not be explained by the mother's input. When Frances was 5:01, her mixing data were quite similar to that of her mother's. In contrast to this, as she got older, especially after she turned 6:00, she started to insert not only more English words, but also more English phrases into her Japanese. Throughout this study her mother's mixing patterns (typical of overseas Japanese) remained constant, however Frances's mixing patterns changed significantly over this period.

The results from the study of the use of Japanese particles also indicated some similarities between the mother's input and the child's output in terms of quality: Frances used almost all the particles that the mother used and, on the whole, used them correctly. More striking similarity was found in terms of quantity: the omission rates of particles were comparable between mother and child. However, high quantity of input was not shown to be effective in Frances's acquisition of *ga* (Nominative). While the particle was used reasonably frequently by the mother, the child only used the particle correctly four times in the whole data set (See Section 5.3.2.2).

Thus, both data sets (Language Mixing and Particles) suggest that parental input is not the absolute indicator of the child's output. There are an additional two findings which have arisen from the results of this study.

One observation is that Frances's Japanese seems to be governed primarily by implementing the simplest pattern available. This was mainly found in her use of particles (see Sections 5.2.2.3 and 5.2.3.3). However, this phenomenon has also been found in her general language mixing patterns. She systematically applies one pattern to several parts of speech, e.g. in order to create new verbs and other parts of speech. The idea that children overgeneralise grammatical patterns, often finding regularities, is not new, and was introduced in Section 2.3.3. This phenomenon indicates that she is still at the stage of acquiring Japanese, preceding the mastery of more complex language.

Another observation is that there seems to be correlations between the type of language mixing and the balance of the two languages. Frances had a similar pattern to her mother when she was 5:01 when both of her languages were at a lower proficiency level, but reasonably well-balanced. At the age of 6:08, her language proficiency in both languages had improved, but her English had increased in proficiency in certain topic areas much more than her Japanese. As the gap between her English and Japanese widened, she started to use different mixing patterns from her mother's input, i.e. inserting phrasal level English EL islands into Japanese.

This study also highlighted the possibility that the mother's language output is also influenced by the child's utterances to some extent (Section 4.8.3). For instance, the use of the English plural 's' appeared in the mother's data only immediately after an instance of usage by Frances and the use of 'just' in Japanese was also suspected to have originated from Frances.

Frances's acquisition of Japanese syntax seems to be, in general, similar to that of monolingual children. For instance, her error rate in the acquisition of particles was only 4.7%, and there was not enough evidence to link some of her particle acquisition patterns to English influence. However, the particle data set also indicated that there were some notable differences between Frances and monolingual children (as discussed in the literature). For instance, this study did not find the same result as Clancy's (1985) claim

that monolingual children acquire basic grammatical particles generally without errors. For Frances, object marking (which is included in the list of basic grammatical particles), seems to be difficult.

To sum up, this study revealed that influence of the stronger language does not always appear at the syntactic level. The effect of the mother's input is observed at all levels: phonologically, lexically and syntactically. However, input does not fully predict the child's output. The most prominent factor affecting her language use apart from input is Frances's strategy of using the simplest possible patterns, by applying and overgeneralising the rules systematically, as is found in both first and second language acquisition.

Some bilingual children go on to possess a high level of proficiency in both languages in their adulthood. Frances is still in the process of acquiring the two languages and she has the potential to be fully bilingual. However, it is also possible that she might stabilise at this point, both in the comprehension and production of Japanese, depending on her future linguistic environment.

In order to become a highly proficient bilingual, Frances would need to modify her strategy of using the simplest syntactic patterns possible and cease to overgeneralise the Japanese syntactic systems. She would also need to curb her habitual use of the English lexicon in Japanese, and would need to be exposed to a greater variety of input. She has learnt Japanese primarily from her mother in the form of conversation, and has not had significant input from reading and writing. Particles are good examples of parts of speech which may not be learned fully without reading, since it is the norm to omit many of them in a casual conversation.

As Frances grows up and begins to use more English in her Japanese (e.g. by inserting English phrases in her Japanese), a radical change in her language input and greater interaction in Japanese will be needed to maintain her active bilinguality.

This study poses a number of research questions to be investigated in further studies.

Firstly, this study suggests that there is a correlation between the balance of the two languages and the mixing patterns of the bilingual child investigated. However the data involves only one subject. This hypothesis should be tested with a larger sample of bilingual subjects.

Secondly, this study also suggested the importance of a wide variety of input, including reading and writing. This hypothesis should be examined with bilingual children who have received various input patterns.

Finally, this study investigated only one of the languages this bilingual child speaks. Her other language (English) also needs to be examined in order to compare and contrast it with her level of acquisition of Japanese, so that further insights into child bilingualism can be gained.

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