

The Development of Code-Switching in Early Second Language Acquisition

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Abstract

This paper presents some of the findings of a longitudinal study of two Chinese-speaking children who moved into an English speaking environment before the age of three. A combination of participant observation, parental diary, tape-recording of children's speech and formal assessments was used to investigate various aspects of the children's language, including phonology, vocabulary, morphosyntax, and conversation. The focus of the present paper is on the development of code-switching in relation to the children's lexical and grammatical development. Information about the children's overall language development will be given as background, where appropriate. We argue that in early second language acquisition, formulaic sequences play an important role and they dominate the earliest instances of code-switching in children's speech. The "breakdown" of the formulaic sequences could be seen as the first sign of L1 attrition.

Introduction

This paper reports on a longitudinal study of two L1 Mandarin Chinese children who are growing up as Chinese-English bilinguals in Britain. Both children were born in China and came to Britain at around the age of two. There are a number of closely related aims of the study. We wish to identify 1) the developmental patterns of the children's early L2 (English) acquisition, and 2) the developmental patterns of L1 in an L2-dominant environment. We also aim to examine 3) the development of code-switching, especially how different types of code-switching that are evident in the children's speech are related to the overall grammatical development of the children, and whether particular types of code-switching could be seen as first signs of L1 attrition; and 4) we examine the role of formulaic language in these three related areas: early L2 acquisition, L1 attrition and the development of code-switching.

Although migration involving infants and toddlers, i.e. children under the age of three, is a common socio-demographic phenomenon, studies of bilingualism have not paid much attention to these children as a specific

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group. There is an arbitrary, but widely accepted, demarcation line between the so-called simultaneous and sequential acquisition of bilingualism, at the age of three (McLaughlin, 1984). Children who are exposed to more than one language before the age of three, no matter whether there is any difference in the precise introduction of different languages, are all considered to be “simultaneous”. Consequently, a child who is born into a bilingual family and is exposed to two languages from birth is considered in the same way as another who is born into a monolingual family and only migrates to another language community at, say, two years of age.

In our view, consecutive exposure to different languages at a very young age raises important theoretical questions in language acquisition research. For instance, what is the impact of exposure to another language on the first language, which is still developing and far from stable? Does the first language, however rudimentary it may be, have any effect on the newly exposed language? Fundamentally, it raises questions about the interaction of two different linguistic systems, with the added nuance of timing of exposure, in the developing child, a question that is central to bilingual acquisition research (Zhu Hua & Li Wei, 2005).

One specific evidence for the interaction of different linguistic systems in bilingual acquisition is code-switching, the alternative use of different languages in the same interactional episode. In a developing child under the age of three, this would usually mean single words and two-word utterances, with only occasional multi-word utterances. As research into the grammatical structures of adult bilingual speech shows, code-switching requires a certain level of grammatical knowledge in both languages. The study of the developmental patterns of code-switching in young children would shed light on their overall development of grammatical knowledge (see further Meisel, 1994).

In the present study, we have a particular interest in the use of formulaic sequences in code-switching. Formulaic sequences are unanalyzed, multimorphemic chunks which go well beyond the expected grammatical competence of the speaker. They appear to be stored and retrieved whole from memory at the time of use, rather than being subject to generation or analysis by the language grammar (Wray, 2002, p. 9). In other words, they are memorized and recalled as a whole, rather than generated from individual items based on linguistic rules. Myles (2004) suggests that although frequently occurring in initial L2 acquisition data, formulaic sequences are lexical chunks which are syntactically underspecified. They will need to be broken down over time in order for the learner to construct the L2 grammar. From a methodological perspective, these chunks need to be separated from other evidence if we were to achieve an accurate understanding of the representation of linguistic knowledge in the L2 initial state.

The present study

The present study was carried out in Newcastle upon Tyne, a metropolitan centre in North East of England. Although there are significant numbers of Arabic, Asian (Indian, Pakistani and Bangladeshi), Chinese, Jewish and European (e.g. Polish, Greek, Italian) immigrants in the area, the region as a whole is clearly English-dominant. Previous work on the language situation of the Chinese community in Newcastle focused primarily on the Cantonese L1 speakers and revealed a generational language shift from Cantonese monolingualism in the elderly population, to English-dominant bilingualism which is characteristic of the British-born generation (e.g. Li Wei, 1994). There were also signs of delayed L1 development and stagnation among some of the Cantonese-English bilingual children (Li Wei & Lee, 2001). In order to understand better the process of early second language acquisition and L1 development in an L2 setting, we decided to focus on Mandarin-speaking children who were born in China and had acquired some L1 before moving to an English L2 environment.

The two Mandarin-speaking children we studied are SX, male, born in December 1992, aged 2;3 when he arrived in Britain with his mother, and LN, female, born in November 1992, aged 2;6 when she came to Britain with her parents. SX was born in Hebei Province surrounding Beijing. His parents are both Mandarin speakers and received their higher education in Beijing. The father is a fluent English speaker and the mother had limited English. When SX was 1;4, the father came to Britain to pursue postgraduate studies and SX lived with his mother and maternal grandparents. LN was born in Beijing. Her parents were both born and educated in Beijing and spoke Mandarin and English. She went to a nursery, organized by her parents' employer in Beijing, for about three months before she came to Britain. Neither child had any English when they left China, except for a few formulaic phrases, such as 'hello' and 'bye-bye'.

A combination of participant observation, parental diary, tape-recording of children's speech and formal assessments was used to investigate various aspects of the children's language, including phonology, vocabulary, morphosyntax, and conversation. The focus of the present paper is on the development of code-switching in relation to the children's lexical and grammatical development. Information about the children's overall language development will be given as background, where appropriate. The children were studied over an 18-month period. Formal assessments of the two children were undertaken four times for each child during the period. The timing of these assessments was as follows:

Assessment	Timing	SX	LN
1	2/3 months after arrival in Britain	May 95	July 95
2	3 months after start of English nursery school	School start: September 95; assessment: late November 95	School start: September 95; assessment: early December 95
3	6 months after start of school	February 96	March 96
4	1 year after start of school	August 96	August 96

The researcher who carried out the assessments was a close friend of the two families and acquainted the children as soon as they arrived in Britain. Prior to the first assessment, the researcher had observed the children in a variety of contexts. Although audio-tape recordings were made of some of the interaction, the children were not explicitly told that they were being studied. For the formal assessments, however, the children were asked to do a range of experimental tasks and were told that the information would be used to examine their language development. They were asked to do these tasks to the best of their ability. Assuming that the children would use a wider range of their linguistic resources in the more natural and relaxed contexts, the data that were gathered through the formal assessments could be seen as evidence of the children's language ability at the minimum level. The researcher spoke only Mandarin Chinese to the children during the assessments, although the children were aware of the fact that he was also competent in English. The data were recorded on tape and transcribed by the researcher. Twenty percent of the data were later re-transcribed by a different researcher for reliability checks. We now report the findings of the assessments in turn. The data gathered from other contexts will be given as background information and supporting evidence, where appropriate.

Assessment 1

The primary aim of the first assessment was to establish the developmental stage of the two children's first language—Mandarin Chinese. This information was essential for subsequent investigations of any signs of language attrition in the children's speech. We also wanted to identify the general patterns of interaction between the children and their parents at home, as well as the kind of language input the children were receiving.

The children's phonology was assessed by picture naming and picture description tasks, and was compared to the normative data available of

monolingual Mandarin-speaking children (Zhu Hua, 2002). Their phonological development, both segmental and suprasegmental features, were deemed to be age-appropriate. The children's vocabulary development was assessed in part by a MacArthur CDI-style parental check-list (Zhu and Li, 1998). No normative data were available for vocabulary development of Mandarin-speaking children. The parents of both children in the present study believed that their children's vocabulary was within normal range. The children's lexical diversity was analysed, using data from story telling sessions which we shall discuss shortly. The children also showed good conversational skills, taking turns, marking preference, doing repairs and performing speech acts appropriately.

We now focus on the children's grammatical development. This was assessed by a story telling task. The children were given a Chinese picture book and asked to describe what happened in the pictures. Table 1 summarises the results of the analyses of the data.

Table 1. MLU and TTR at the First Assessment

Child	SX	LN
Sex	Male	Female
Age at Assessment	2;5	2;8
MLU	3.08	3.64
TTR	.335	.39

Mean Length of Utterance (MLU) in morphemes was counted, to enable us to make a numerical measure of the syntactic complexity of the two children. 100 utterances were selected randomly from the formal assessment (story telling) sessions for each child. We used morpheme, or the spoken equivalent to a written Chinese character, as the basic unit of calculation. Mandarin Chinese words are predominantly two-morpheme combinations (4 in 5), although many single morphemes can also function alone as words. As we can see in Table 1, both children were at the two-word stage, which, according to the limited data available on grammatical development of Mandarin-speaking children, was age-appropriate. LN had longer MLU than SX. The longest utterance produced by SX had 6 morphemes and that by LN had 9.

Type-Token Ratio (TTR) was calculated to assess the children's lexical diversity, which was deemed as the basis of syntactic development. 200 morphemes were analysed for each child. The 200 morphemes were from the 100 utterances used for the MLU analysis. LN showed greater variety of vocabulary than SX.

Further qualitative analyses revealed that both children could use compound words, as well as modals such as *neng* and *hui* (both meaning 'can'). The use of negative *bu* ('not') and aspect marker *le* (marking present perfect) was mostly correct. And a clear SVO word-order had appeared in both children's speech. In sum, the children's L1 was developing at a level appropriate for their age.

Over the first assessment period, neither of the children had any English, apart from a few set phrases such as *hello*, *bye-bye*, *thank you*, *yes* and *no*, which were explicitly taught by the parents. LN was also taught to say *How are you?* and *I'm LN*. They were keenly aware of the fact that they were living in an English-speaking country, and started watching cartoon films in English on television which was the main source of their English language input. The parents spoke Chinese between them and to the two children. Code-switching occasionally occurred but was clearly Chinese based.

Assessment 2

The second assessment took place around the two children's third birthday (November for LN and December for SX), three months after the children started an English nursery school. By then, SX had been in Britain for about nine months and LN seven. During the interim period, the children had exposure to English via the media and informal interactions with neighbours and family friends. But they did not receive any structured instruction in English. The nursery schooling was based on play. Children learned to paint and do other arts-and-crafts work in small groups. There was also a short, daily story session when the teacher read stories to the children. The two children in the present study happened to attend the same nursery school. The aim of the second assessment was to find out what effect, if any, attending the English nursery and interacting with English-speakers had on the children's L1.

As in the first assessment, data were collected regarding the children's phonological, lexical, grammatical and conversational development. Analyses of the data showed that the children's phonology was progressing very well, at an age-appropriate level as their monolingual peers. Their conversational skills were also developing smoothly. Both children were capable of having extended conversational turns with adults and other children. The data on lexical and grammatical development were based on story telling as in the first assessment, although different picture books were used. Table 2 shows the results of the analysis. One hundred utterances were selected randomly for the story telling data for each child and MLU in morphemes was counted. Compared with the results of the first assessment, the children's MLU appeared not to have grown significantly since their arrival in Britain. There was no significant difference in terms of MLU between the two children. TTR was measured using 200 morphemes for each child. SX showed some development in his lexical diversity, but, noticeably, LN had hardly expanded her lexical variety.

Table 2. *MLU and TTR at the Second Assessment*

Child	SX	LN
Sex	Male	Female
Age at Assessment	3;0	3;0
MLU	3.68	3.82
TTR	.385	.4

However, qualitative analyses of the data showed that both children had entered into the embedded (VP → V + S) and simple compound sentence (S → S + 5) phase, although conjunctions were not always explicitly expressed. Subordinate conjunctions such as *yinwei* ('because') began to appear. They were able to use most common modals and serial verbs, such as *lai* ('come'), *qu* ('go'), *bang* ('help') and *rang* ('let') correctly. Three term sentences with agent, action and patient became common. In sum, the children's syntax was developing, even though their MLU showed no significant change from the first assessment. The most noticeable feature was the lack of progress in the children's lexical diversity.

Another important feature in the children's speech over the second assessment period was their emerging English. Both children were able to say a few words, phrases and sentences in English in conversations with the researcher and to their parents. However, during the more formal assessment, i.e. story telling sessions, both children managed to tell the stories without using any English word. In fact, they did not produce any intra-sentential code-switching at all in either casual conversation or the formal assessment. The English expressions the children produced were largely formulaic phrases which they apparently learned as wholes. For example, SX said on a number of occasions '*Stop it, you two*' when he was clearly addressing one person only. LN's favourite phrases included '*Are you listening?*' and '*Well done*' which she apparently learned from her nursery teacher.

The parents of the two children encouraged them to speak more English, although they continued to address the children in Chinese. Unlike over the first assessment period, however, the parents began to code-switch more frequently in front of the children, as they would with other bilingual adults.

Assessment 3

Six months after the two children started English nursery schooling, a third assessment was administered. The children were both aged 3;3 (SX in March, '96 and LN February, '96). Their phonology was well developed; they had the complete phonemic repertoire, and they were using tone sandhi rules and weak stress correctly. Their conversational

skills were also well developed; they were able to sustain fairly long conversational exchanges on one topic and to initiate and change topics appropriately. They also showed signs of awareness of the stylistic requirements in different registers.

As in the previous two assessments, the children's lexical and grammatical development was assessed through story telling, using age-appropriate picture books. Table 3 shows the results of the analysis.

Table 3. MLU and TTR at the Third Assessment

Child	SX	LN
Sex	Male	Female
Age at Assessment	3;3	3;3
MLU	3.88	4.06
TTR	.42	.46

We can see that the children's MLU in morpheme had increased only slightly from the second assessment. Given the relatively short interval between the two assessments (three months), this may not be particularly remarkable although in the normal circumstances monolingual children may show more rapid progress. The children's lexical diversity as measured by TTR also showed some progress, but again this was not very significant. There was no significant difference between the two children.

Qualitative analyses of the children's speech samples show that both children could use complex sentences, but not all conjunctions were explicitly expressed. They were also able to describe several events/actions in one single extended sentence in a sequential manner. The past experiential aspect marker *guo* was evident in both children's sample. Time adverbials were also used. Both children showed awareness of topicalisation, although they could not yet produce topicalised structures with ease. On the whole, therefore, the children's Chinese continued to develop, although the progress was rather slow.

In the meantime, the amount of English in the children's spontaneous speech had noticeably increased since the last assessment. We analysed the use of English words in the children's story telling samples. Table 4 gives the results.

Table 4. Use of English Words (Number of Tokens in 100 Utterances)

	SX	LN
Total number of English words	25	18
Nouns	5	4
Pronouns	6	4
Verbs	4	3
Adjectives	5	4
Adverbs	0	1
Prepositions	2	1
Others	3	1
Total number of English utterances	6	5

Table 4 shows the number of tokens. The 'others' category includes phrases like 'OK'. It is important to point out that the total number of English words and the type of words are affected by the total number of utterances in English. If pure English utterances were excluded, we would have a rather different picture. In fact, SX only produced two English words in otherwise Chinese utterances (*Shi ge baby*. 'It's a baby. '; *Ta yao smack ta*. 'He wants to smack him. ') and LN only one (*Ta shy*. 'She's shy. '). These three utterances were examples of the earliest intra-sentential code-switching evident in the children's speech samples. They showed clear Chinese morphosyntactic frame. The embedded items from English were all content morphemes.

Over the assessment period, the parents were very aware of the fact that their children began to code-switch. They made no attempt to stop the children from doing so, and their speech to the children often had code-switching in it.

Assessment 4

The fourth assessment was carried out about a year after the children started English schooling (August 1996) six months after the third assessment. They children were aged 3;8 (SX) and 3;9 (LN) respectively.

Parental records showed that English had become the children's preferred language of communication: the children spoke English most of the time with other children (both Chinese and non-Chinese children) and often insisted on speaking English with adults (for example, they would respond to an adult's question in English). They had extensive exposure to English, through the nursery, neighbourhood and television. They were beginning to read story books in English. Their exposure to Chinese, on the other hand, was becoming very limited. The only substantial Chinese language input was from their parents, who often code-switched when they were speaking to the children. Although Chinese language books were available at home, the parents had little time to read them with the

children. The families were occasionally visited by their Chinese friends, who would speak Chinese to the children. But these were of very limited duration, and the children were involved in only some of the activities.

As in the previous assessments, data were collected on the children's phonological, lexical, grammatical and conversational development in Mandarin Chinese. In addition, data of the children's use of English were collected. Analyses of the data showed that the children's Chinese phonology continued to be native-like, with complete phoneme and tone repertoire, appropriate use of tone sandhi and weak stress. Additional tests on tonal perception showed that they were able to discriminate tones correctly as well. Their conversational skills were also developing smoothly. However, one noticeable difference was the children's reluctance to speak in Chinese: they often responded to questions from their parents and the researcher in English and they rarely initiated a conversational turn in Chinese. As for their Chinese lexical and grammatical development, Table 5 shows the results of their MLU and TTR, based on story telling.

Table 5. MLU and TTR at the Fourth Assessment

Child	SX	LN
Sex	Male	Female
Age at Assessment	3;8	3;9
MLU	4.86	5.02
TTR	.48	.50

Both children's MLU showed significant growth from the last assessment, but their lexical diversity, as analysed by TTR, did not seem to increase very much. In fact a few Chinese speakers who had come into contact with these two children noticed in spontaneous conversations that the children's range of vocabulary was rather limited and they often resorted to English when they had difficulties finding the right words in Chinese.

Table 6 shows the use of English words in the children's story telling samples. We can see that the total number of English words in 100 utterances had increased significantly compared with the last assessment. Although the total number of 'pure' English utterances was also higher than that in the last assessment, the range of English lexical items used by the children was much broader and they mixed English into otherwise Chinese-based utterances more readily and frequently, as they did in spontaneous speech.

Table 6. Use of English Words (Number of Tokens in 100 Utterances)

	SX	LN
Total number of English words	79	57
Nouns	24	18
Pronouns	8	9
Verbs	20	12
Adjectives	5	9
Adverbs	1	3
Prepositions	6	4
Auxiliary	2	0
Others	3	2
Total number of English utterances	12	8

The following are some of the examples of their code-switching:

- (1) *Thank you le ma?*
PERF. PA?
'Have you said thank you?'
- (2) *Ta you huge car.*
He have
'He has (a) huge car.'
- (3) *Ta mama shuo ta shi silly little girl.*
Her mother say she BE
'Her mother says she is (a) silly little girl.'
- (4) *Gangcai hai zai under the table.*
Just now still at
'(It was) under the table just now.'
- (5) *Wo bu xiang play outside.*
I NEG. want
'I don't want to play outside.'
- (6) *Ta bu listen to neige ayi.*
He NEG. that auntie.
'He doesn't listen to that auntie.'

All the utterances listed here have a Chinese morphosyntactic frame, that is, Chinese is the matrix language. Example 1 is an elliptical sentence whose full version may be either 'Have you said thank you?' or 'Have you thanked (him/her)?'. If the second version was the target, it would seem that the child had learned 'thank you' as a formulaic sequence and instead of using 'thank' as a single item? she used the whole phrase and

marked it with a Chinese aspect marker. In both examples 2 and 3 the articles are missing. This is likely to be due in part to the congruence of a mixed code utterance, and in part to the children's awareness of the requirements and difficulties of Chinese classifiers. It is compulsory in Chinese to have a classifier with a noun and the form of classifier is determined by the semantics of the noun it classifies; for example, the classifier for 'car' would be *hang*, for 'girl' *ge*, for 'tree' *ke*, and for 'book' *ben*, etc. Normally developing monolingual children find classifiers difficult to learn. Our previous studies of the Cantonese-speaking children in Tyneside suggest that classifiers present one of the most difficult problems for bilingual children who often use avoidance strategies and switch to English where classifiers would be required (Li Wei & Lee, 2001).

Example 4 shows another compromise strategy by the children, with two prepositions, one in Chinese *zai* and one in English 'under'. The 'pure' Chinese version of Example 5 would require an adverbial phrase *zai waibian*, indicating place and it should be placed before the verb *war* 'play'. This is evidently not as economical as the English phrase 'play outside', and the children opted for the easier version, which also retains the structure of the English verb phrase. Example 6 is similar in that it retains the English phrasal verb 'listen to' as a whole (as opposed to just the verb 'listen'). In fact, this is one of the most important differences in the code-switching exemplified in the children's speech between Assessment 3 and Assessment 4. Earlier the children used only single lexical items, not phrases, in code-switching. Now the children's code-switching consisted mostly of phrases. This qualitative change in code-switching may be the first sign of L1 attrition in progress.

Remarkably, the English language data we collected from the children, via story telling using a different, English culturally oriented picture book, showed no code-switching to Chinese at all. Parental diary reports also confirmed that the children did not use Chinese words when they were talking in English spontaneously.

Summary and conclusion

This paper has reported only some of the findings from a longitudinal study of two Mandarin-speaking children who moved into an English speaking environment before the age of three. The findings of the study highlight the close interrelationship between the children's overall lexical and grammatical development and their code-switching patterns. The first English words and phrases used by the children tended to be content words and formulaic sequences of a fairly limited range. As their exposure to English increased, they began to code-switch more frequently, and the intra-sentential code-switching evident in the children's speech became very complex. On the whole, the children

tended to switch whole phrases, rather than single lexical items, and they showed awareness of the grammatical (in)compatibility between the two languages. The direction of the children's code-switching was one way: English words and phrases in Chinese-based utterances. Neither of the children used Chinese in their English utterances.

In the meantime, the children's L1, Mandarin Chinese, began to show signs of stagnation. In particular, their lexical diversity in L1 did not increase very much after they started English schooling and their grammar grew very slowly. They were also becoming increasingly reluctant to speak Chinese to those they knew could understand and speak English. However, their phonology seemed to have remained intact.

Whilst further investigations are needed in order to understand fully the processes of early second language and first language attrition, the present study highlights the important role code-switching plays. The development of code-switching is clearly closely related to the overall lexical and grammatical development of the children. It should be noted that most of the earliest English phrases in the children's spontaneous production were formulaic phrases. Like Myles (2004), we wish to point out that although many of these phrases show very complex syntactic structures, they cannot be used as evidence for the grammatical knowledge of the children at the time. They were simply learned and used as whole.

More information is also required on the development of different aspects of language, e.g. phonology, vocabulary, syntax and conversation. Most of the existing studies of bilingual children tend to focus on only one aspect of their language development. As the present study shows, different aspects of a bilingual child's language may be developing at very different rates and levels; there may be signs of language attrition in one aspect of their language (e.g. vocabulary or syntax) but maintenance in another (e.g. phonology). A satisfactory account of language attrition needs to consider all aspects of bilingual children's language development.

References

- Li Wei & Lee S. (2001). L1 Development in an L2 environment: The use of Cantonese classifiers and quantifiers by young British-born Chinese in Tyneside. *International Journal of Bilingual Education and Bilingualism* 4, 6, 359-382.
- Li Wei (1994). *Three Generations Two Languages One Family: Language Choice and Language Shift in a Chinese Community in Britain*. Clevedon: Multilingual Matters.
- McLaughlin, B. (1984). *Second Language Acquisition in Childhood*. Vol. 1: Preschool Children. Hillsdale, NJ: Lawrence Erlbaum.
- Meisel, J. M. (1994). Code-switching in young bilingual children: The acquisition of grammatical constraints. *Studies in Second Language Acquisition*, 16, 4, 413-439.

- Myles, F. (2004). From data to theory: The over-representation of linguistic knowledge in SLA. *Transactions of the Philological Society*, 102, 2, 139-168.
- Wray, A. (2002). *Formulaic Language and the Lexicon*. Cambridge: CUP.
- Zhu Hua (2002). *Phonological Development in Specific Contexts: Studies of Chinese-Speaking Children*. Clevedon: Multilingual Matters.
- Zhu Hua & Li Wei (1999). Stylistic variation in the early lexical development of young Putonghua-speaking children. *Asian Pacific Journal of Speech Language & Hearing*, 4, 39-51.
- Zhu Hua & Li Wei (2005). Bi- and multilingual language acquisition. In M. Ball (Ed.) *Clinical Sociolinguistics* (pp. 165-179). Oxford: Blackwell.

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