# Japanese－English Conversational Codeswitching in Balanced and Limited Proficiency Bilinguals <br> Sandra S．Fotos <br> Department of Economics，Senshu University，，Kawasaki，Japan 

This paper compares language alternation，or codeswitching，in two types of English－Japanese bilinguals：Balanced bilingual children and limited－proficiency bilingual Japanese university EFL learners．The type and frequency of items switched and the function performed by the switch in the discourse were examined，with the results of the two studies of very different Japanese－English bilinguals showing similar trends．In both data sets，switches were mostly grammatical regardless of the direction of the switch．Single items were most frequently switched，but both groups showed skill in switching dependent and independent clauses．Conversational codeswitching took place for the functions of emphasis，clarification，getting and holding attention，identifying particular topics，reporting speech， signalling that a repair to a previous utterance would follow，and making part of an utterance prominent and dramatic． These findings are consistent with the results of other studies of codeswitching in a variety of languages． Furthermore，even though the EFL learners were less proficient in their second language than the balanced bilingual children，they were able to switch successfully．Both the EFL learners and the children skillfully used codeswitching to make their speech salient to their interlocutors and to enrich and vitalize its quality．
＜言語能力に差がある 2 組の日本語一英語使用者グループのコード切り換え＞
この論文では，2組の日本語一英語使用者グループのコード切り換え（1 つの発話の中で言語の切り換えを行うこ と）を比較する。グループの一方は，日本語能力と英語能力がほぼ均等であるバイリンガルの子どもたちであり，も う一方は英語能力がそれほど高くない日本の大学のEFL（外国語としての英語学習者）である。切り換えられる項目 の種類と頻度，また談話におけるその機能について調査した結果，これらの非常に異なる 2 組のグループの間に類似 する傾向が見い出された。どちらのグループのデータについても，切り換えの方向（英語から日本語へ，あるいはそ の逆）にかかわらず，文法的に正しいものであった。単一の項目を単位とした切り換えが最も頻繁であったが，両グ ループとも，独立節および従属節を単位とした切り換えも巧みに行っていた。会話におけるコード切り換えの機能と しては，強調，意味の明示化，聞き手の注意の引きつけとその維持，話題の特定化，会話の引用，発話の訂正，発話 の一部の強調や印象づけなどが見い出された。本研究で見い出された結果は，他のさまざまな言語でのコード切り換 えを扱った先行研究の結果とも一致するものであった。またEFL学習者は，バイリンガルの子どもたちよりも英語能力が低いにもかかわらず，切り換えを問題なく行えることもわかった。EFL学習者もバイリンガルの子どもも，聞き手に対して自己の発話を強調したり，内容を豊かに生き生きとしたものにするのに，コード切り換えを巧みに行って いた。

## INTRODUCTION

It has been estimated that over half of the world＇s population is bi－or multilingual（Romaine，1989）， with one－third speaking English as a first or second language or learning it as a foreign language（Crystal， 1985）．Furthermore，the already high frequency of urban inter－language contact caused by migration and the growing impact of English as a world language is suggested to be on the increase at an even faster rate（Kachru，1994；Koll－Stobbe，1994）．As a result，the study of contact linguistics has become an important new field of sociolinguistic investigation（see Eastman， 1992 or Kachru，1994）．It is curious that， despite these compelling facts，the dominant paradigm in language instruction－traditionally derived from a monolingual perspective－has remained unchanged．Theories of language acquisition，language learning approaches and pedagogical methodologies continue to be built on the premise that the learner speaks only one language，hence the term＂second language acquisition．＂However，it is clear that a flexible multilingual perspective on language use and education is more representative of the real－world situation．As linguistic diversity becomes the recognized norm，there is an increasing need for all varieties of bi／multilingual research to inform the development of new approaches to language learning and maintenance in multilingual populations．

The following paper presents research on language alternation within the same utterance，or codeswitching．Although this aspect of bilingualism has been particularly confounding to many monolinguals，the practice of mixing languages is not only common and acceptable，but is an important communication strategy in multilingual communities（see Eastman，1992；Heller，1988；Myers－Scotton， 1992a，1993a；Nishimura，1992）．The setting for the research reported here is Japan，a country which
has traditionally-and erroneously-considered itself to be linguistically and culturally homogeneous (Maher \& Yashiro, ${ }^{1995}{ }^{1}$ ). As bi/multilingualism increases in Japan, it is important to develop an understanding of its various aspects, including the nature and function of codeswitching. The following report analyzes Japanese-English codeswitching in two types of bilinguals: those with equal proficiency in their two languages, and those with only limited proficiency in English. Before proceeding with the discussion of the study, however, it is felt useful to present a review of research on the nature of bilingualism, its effects on cognitive development, and the current understanding of the nature and function of codeswitching.

## LITERATURE REVIEW

## What is a Bilingual?

Researchers have proposed various definitions of the term "bilingualism" (see, for example, Baker, 1988; Cummins \& Swain, 1986; Grosjean, 1982; Hakuta, 1986; Heller, 1988; Myers-Scotton, 1993a; Romaine, 1989), but one of the simplest and most inclusive is given by Valdes and Figueroa (1994, p. 7): Bilingualism is the condition of knowing two languages rather than one. This definition is often thought to imply equivalently high levels of proficiency in both languages. However, such "balanced bilinguals" or "ambilinguals" are actually quite rare (Tickoo, 1993). Most bilinguals tend to be more proficient in one language than the other. Thus, researchers have come to accept that a person may be called bilingual even with very limited proficiency in the second language (Valdes \& Figueroa, 1994).

It is also recognized that bilingualism is not a unitary construct. It varies between individuals and even within individuals depending on the requirements of a particular situation, the language preference and the individual's perceived linguistic strength (Valdes \& Figueroa, 1994). This fact has not been appreciated until quite recently and, as one researcher notes, "many misconceptions about bilingualism have arisen because of failure to calculate the complexity of the bilingual phenomena" (Stefanakis, 1991, p. 139).

A number of typologies and classification systems for bilinguals have been proposed based on differences in the nature of the bilingual experience, particularly the age at which the second language is acquired and the reason for becoming bilingual. For a summary of research on this topic, the reader is referred to Valdes \& Figueroa (1994).

## The Effects of Bilingualism on Cognitive Development: The Historical View

From the early 19th century up to the mid 1950s, the common belief was that bilingualism had a harmful effect on intellectual development. Writing in 1890, one Cambridge scholar summed up the prevailing view of a bilingual person:

Unity of mind and character would have great difficulty in asserting itself. Intelligence and spiritual growth would not . . . be doubled but be halved . (Laurie, 1890, p. 15).

In the 1950s, an American psychologist wondered whether "speech facility in two languages is worth the consequent retardation..." (cited in Hakuta, 1986, p. 14).

These are strange remarks when we consider that the European aristocracy was traditionally multilingual and that the ability to read Greek and Latin and to chat in "cultured" languages was part of the curriculum of elite education systems for hundreds of years. However, the bilinguals referred to in the quotations above were not Anglo, but rather non-English speaking immigrants, particularly those attempting to enter England and the United States at the turn of the century. In contrast, language majority bilinguals (speakers of English as a first language) were not considered to be particularly disadvantaged (Cummins \& Swain, 1986). To be fair, it should be noted that the early research tended to support a negative view of bilingualism. However, this was the same type of research that suggested that people's cranial capacity, body build or head shape determined their intelligence, and deficiencies in sampling, testing, experimental design and data analysis have invalidated such early findings (Baker, 1988; Gould, $1981^{2}$ ).

From the middle 1950s, research on bilingualism entered a period characterized by more careful investigative procedures. Using improved methodology and controlling for socioeconomic variables such as class, education and income, it was found that monolinguals and bilinguals did not differ significantly in intelligence (Baker, 1988). Consequently, bilingualism was no longer thought to have a detrimental effect on cognitive development.

In the mid 1960s, another major shift in view occurred. Studies comparing French-English bilinguals with monolinguals showed very positive results (for example, see Peal \& Lambert, 1962). Such studies sugqested that the bilinguals had greater mental flexibility than monolinguals, were able to think more
abstractly and were therefore superior to monolinguals in concept formation. Furthermore, the bilingual environment was suggested to be more enriched, giving bilingual children extra stimulation and enhancing their IQ development. Finally, a positive transfer effect was suggested to occur between the two languages, this also benefiting cognitive development. However, it should be noted this research has been criticized as being overly optimistic (see Baker, 1988), and later findings are more cautious in their claims.

## Recent Perspectives on Bilingualism and Cognition

The current view of the cognitive abilities of bilinguals as compared to monolinguals is presented in research reviews by Ambert (1991), Baker (1988), Cummins \& Swain (1986), and more recently by
Valdes \& Figueroa (1994). The latter authors note that there has always been the assumption that bilinguals differ from monolinguals, whether positively or negatively. Summarizing current research, they report that differences have been found in three main areas: (1) In cognitive development; (2) in the nature of brain hemisphere involvement in the learning and processing of first (L1) and second (L2) languages; and (3) in the nature of information processing. However, studies to date are inconclusive and the exact nature of these difference has not yet been elucidated.

One of the most comprehensive explanations for the relationship between bilingualism and cognition has been presented by Cummins (1984) in his discussion of bilingual education and academic achievement. He holds that there may be both positive and negative consequences from being bilingual, and that the dominant effect will depend on the individual's level of proficiency in the two languages. Called the Thresholds Theory, Cummins' argument proposes that the bilingual's level of competence in the L2 is the critical variable in determining whether bilingualism is negative, neutral or additive in terms cognitive skills. A balanced bilingual is suggested to have a cognitive advantage over monolinguals, whereas a bilingual with limited proficiency in the L2 may not differ from monolinguals or may be disadvantaged if the L1 is also not well developed.

There is a large body of research on bilingual education, particularly in Canada and the U.S., but this is not the focus of the present report ${ }^{3}$. Here, only one aspect of bilingualism will be considered, and that is codeswitching, or the use of more than one language in a single utterance.

## Research on Codeswitching

Codeswitching has attracted considerable attention over the years because it "violates a strong expectation that only one language should be used at any given time" (Heller, 1988, p.1). During the 1950s, when research first began, it was assumed that codeswitching was random and was the sign of someone who couldn't talk fluently in either language-the so-called "semilingual." ${ }^{4}$ Switching was regarded as abnormal and bad in nearly every society in which it occurred, probably because of underlying ideologies of linguistic purity (Milroy, \& Milroy, 1985). However, 35 years of research has shown that codeswitching is systematic and rule-governed, and serves important sociolinguistic functions. Today, codeswitching is recognized to be a legitimate form of communication for people who live in multilingual communities and is investigated as an important urban contact phenomenon. ${ }^{5}$

Two main lines of research on codeswitching have developed. The first is linguistic research on the syntactic nature of the switch. Such research examines the part of speech which is switched, usually in relation to the speaker's linguistic proficiency, and also investigates the type of constraints on switching which function to maintain grammaticality during the switch. The general conclusion is that codeswitching is almost always grammatical (Myers-Scotton, 1993b) and, therefore, its nature is determined by the individual's fluency in the two languages. Less-proficient bilinguals tend to switch single items, such as nouns or idioms, because such switches are structurally less integrated into the discourse and do not require much proficiency (McClure, 1977; Poplack, 1980). On the other hand, proficient bilinguals are able to switch grammatically at the sentence level or even within a sentence. In general, though, it has been found that nouns and other single-item switches tend to be the most common, regardless of the languages used or the proficiency of the speakers (Meisel, 1994).

In contrast to the historical view of codeswitching as ungrammatical and haphazard, switching is now acknowledged to be so grammatical that it has become an important research tool for investigating rules of syntax, i.e., pronoun placement in different languages (Jake, 1994). Codeswitching is also used to study principles of Universal Grammar ${ }^{6}$, particularly grammatical constraints (see Belazi, Rubin \& Torivio, 1994 or Meisel, 1994). Several specific constraints on switching have been found (summarized in Belazi, Rubin \& Torivio, 1994 and also in Myers-Scotton, 1993b). One is the free morpheme constraint, which states that a switch cannot occur between a lexical item and a bound morpheme like -ing or the past tense -ed. A second is the equivalency constraint, which states that there should be the same type of word order around the switch in both languages. Although these constraints were found to hold in
switches of syntactically similar languages such as Spanish and English (Poplack 1980; 1981), studies of syntactically dissimilar language switching show that these and other local constraints are not always observed (Myers-Scotton, 1992b, 1993b ). However, switching always remains with in the framework of Government and Binding, constrained by the operation of Universal Grammar (Belazi, Rubin \& Toribio, 1994).

The second line of research on codeswitching studies the sociolinguistic function performed by the switch. At the group level, such research investigates switching for the establishment and maintenance of social relationships. This is called situational codeswitching (Dabne \& Billiez, 1986; McClure \& McClure, 1988; Myers-Scotton, 1992a; 1993a) and it is often analyzed through Speech Accommodation Theory (see Genesee \& Bourhis, 1982). Situational switching depends on the setting and the roles and relationships of the people involved. ${ }^{8}$ In some contexts, switching is normal and expected, and a phrase from linguistics is used to describe it: Switching is unmarked. In other contexts switching is unusual and unexpected, so it is marked (Myers-Scotton, 1992). In this case, the switch is deliberately used to send messages about social membership, status and power.

The second type of sociolinguistic codeswitching is the focus of this paper: codeswitching at the individual level or conversational codeswitching. Here, researchers study how people use switching as a personal communication strategy to organize and enrich their discourse. In a conversation, codeswitching can perform a number of discourse-enhancing functions for the speaker. ${ }^{9}$ For example, a language switch can be used to indicate a particular topic. Bilinguals often tend to discuss certain topics only in one language and not in the other. They may also switch languages to signal that the topic has changed. Switching can be used to call attention to and dramatize key words during the course of a conversation (Auer, 1988; McClure, 1981; Valdes, 1976) and it can also be used to emphasize a statement by repeating important items in the other language. Bilinguals can use codeswitching for clarification by switching and elaborating on a confusing statement in the second language. Switches can also be used to set off reported speech, while codeswitched discourse markers can be used to attract and hold attention during speech in the other language.

Regarding this last function, it is interesting to note that even within monolingual speech, events or stories are often set off or "framed" (Goffman, 1986) by the use of short utterances such as 'well' or 'so' placed at frame boundaries (Gumperz, 1982; Tannen, 1984). In bilingual speech, the discourse markers which distinguish frames are usually codeswitched (Koike, 1987; Nishimura, 1995). It is even possible to emphasize the difference between personal feelings and objective issues within the same conversation or frame by discussing feelings in one language and factual or objective events in the other.

A number of interesting studies exist in this area, particularly on narratives. Such research shows how switching can increase the dramatic effect of a story by focusing and holding the audience's attention and moving the action along. ${ }^{10}$

## RESEARCH QUESTIONS

At present there are only a few studies of Japanese-English codeswitching (Azuma, 1987; Fotos, 1990; 1994a; Loschky, 1989; Nishimura, 1992; 1995), and several of these have been of Nisei, second generation Japanese-Americans (Azuma, 1987) or Japanese-Canadians (Nishimura, 1992; 1995). The findings have been similar to those previously discussed for switching in other languages: grammaticality is maintained and switching serves a number of sociolinguistic functions. ${ }^{11}$

A few years ago, the author conducted a limited study of codeswitching in four bilingual children determined to have high levels of proficiency in both English and Japanese. The study examined the direction of the switch, what part of speech was switched and what function the switching served in the conversation. It was found that the balanced bilingual children maintained grammaticality regardless of the nature or direction of the switch, and used switching for the common discourse functions identified in previous studies of conversational codeswitching.

Recently the author completed the data analysis for a second study of conversational codeswitching. Here the subjects were limited-proficiency bilingual Japanese university EFL learners who were audiorecorded as they performed communicative tasks in English class. This report presents the findings from a preliminary analysis of the EFL learners' switching and compares the two data sets, seeking to demonstrate that, regardless of the proficiency level of the speaker, Japanese-English switching is grammatical and serves useful discourse management functions in the conversation. The following three research questions are addressed:

1. What items were most frequently switched by the limited-proficiency bilingual EFL learners and was the switching generally grammatical?
2. What functions did the switches serve in the conversations of the EFL learners?
3. Were there significant differences in the switching patterns between the limited-proficiency EFL learners and the balanced bilingual children reported on previously (Fotos, 1990)?

## METHODS

## Balanced Bilingual Children

The subjects of the first study were two bilingual American older sister/younger brother sibling sets attending an international school in Tokyo. At the time of the study, the two sisters were 11 and the two brothers were seven. The children's performance on standardized English tests administered by the international school as well as their placement in the highest level of tracked Japanese language classes for native speakers in the school established that they were balanced bilinguals. The following is a brief description of the data collection and analysis (for further details, see Fotos, 1990).

Data was obtained on two occasions by leaving a tape recorder running in the rooms where the children were playing. Codeswitching was considered to occur whenever there was a language change, whether by the same speaker or by another. From four hours of audiotape, only 40 minutes of data was transcribed and analyzed: three narratives and one conversation for each age set. Transcription of the data was in standard English orthography, with glosses of Japanese utterances following the procedures of Cziko \& Koda (1986). For quantitative analysis, switches were coded into syntactic categories (i.e., noun, verb, dependent clause, etc.) following the categories used by Poplack (1980). Counts of switches in each of the categories were converted to percentages for tabular display. For the present report, the data displayed in Table 2 has been condensed and reformatted from the original table (Fotos, 1990).

One-way chi-square tests adjusted for continuity (Hatch \& Farhady, 1982) were used to determine the significance of differences in frequencies between the type of items switched and between the number of switches from English to Japanese and from Japanese to English. The alpha level was set at .05, p < . 05 .

To determine what function the switch performed in the conversation, the categories proposed in the research literature (switching to clarify meaning, to get and hold attention, to change or focus on the topic of discussion, to use special items culturally linked to one of the languages, to indicate reported speech, and to personalize or objectivize events) were used to examine representative switches. However, no attempt was made to code all of the switches into the functional categories because of the unavailability of an inter-rater to establish the reliability of the coding procedure. Coding ambiguities existed, since assignment into one category rather than another depended on the often arbitrary judgment of the researcher. For instance, some switches appeared to serve several functions at the same time (i.e., Example 20 in this report), whereas it was not clear what, function, if any, other switches performed. Nishimura (1995) experienced similar difficulty assigning switches to functional categories in her studies of codeswitching in Japanese-Canadian nisei.

In a study of negotiation interaction from which this data is a subset (Fotos, 1994b), the present researcher obtained reliability estimates for coded negotiation data by having a second researcher independently code the interactions into the various negotiation categories. The percent of agreement between the two codings was $89 \%$ and this figure was reported as an indicator of inter-rater reliability. In future studies of codeswitching, it is hoped that similar procedures can be used to support the reliability of qualitative analysis.

## Limited-Proficiency Japanese EFL Learners

The subjects of the second study were 53 first-year Japanese university EFL learners, most of whom were male. The learners had one required 90 -minute period per week of oral English with a nativespeaker instructor who, in this case, was also the researcher. The learners' English language proficiency level was established by administering a cloze test previously determined to be reliable and valid (Fotos, 1991). Whereas, under exact-word scoring procedures, five native English speakers scored an average of 37 points on the 50 -point cloze test, the Japanese EFL learners' average score was only 9.3 points. This
low score indicates that the learners were not balanced Japanese-English bilinguals, but had only limited proficiency in English.

The learners were divided into groups of from three to four during performance of three interactive grammar problem-solving tasks at three-week intervals. The first task was on adverb placement, and took an average of eight minutes to perform. The second task was on indirect object placement, and took 23 minutes. The final task was on relative clause usage and took an average of nine minutes to perform. Two of the tasks ( $2 \& 3$ ) were information gap tasks, requiring each learner to read to other members of his group task card sentences showing correct and incorrect usages of the target grammar structure. The listeners had to decide which sentences were correct, and then write the correct sentences on their own task sheets. In addition, two tasks (1 \& 3) required the learners to generate their own grammar rules to explain the correct use of the target grammar structure. Detailed information on the design and use of these tasks is reported elsewhere (Fotos, 1993; 1994b).

All task performances were audiotaped, and this constituted the data corpus. A total of six and a half hours of audiotape consisted of the learners' utterances as they read task card information to their group members, discussed grammar rules and agreed upon solutions to the grammar problems. A balanced bilingual Japanese research assistant transcribed the tapes in full, writing out the Japanese utterances in romaji (Roman letters). The transcripts were then analyzed by the author. In this study, codeswitching was defined as a language switch within the same utterance by the same speaker. The many cases where a learner read an English task card sentence to group members, who then responded with Japanese comments, were not considered to be conversational codeswitching.

For quantitative analysis, switches were coded into the same syntactic categories used in the first study. One-way chi-square tests were used to determine the significance of differences in frequencies between the type of items switched, and between the number of switches from English to Japanese and from Japanese to English. Again, the alpha level was set at . 05 , p $<.05$.

To determine what function the switch performed in the conversation, the functional categories from the first study were used to examine representative switches. However, once again, no attempt was made to code all switches into the various functional categories because of the unavailability of an inter-rater to establish the reliability of the coding procedure.

This report addresses the type and frequency of the limited-proficiency EFL learners' codeswitching compared to the balanced bilinguals, and examines how both types of bilinguals used switching to organize their discourse.

## RESULTS AND DISCUSSION

## Switching in Limited-Proficiency Bilingual University EFL Learners

As shown in Table 1, the limited-proficiency bilingual learners made a total of 359 switches, a rate of only one switch per minute. This is rather low considering that French-English adult bilinguals in Canada made 10 switches per minute (Poplack, 1988), and the bilingual children made four switches per minute. The difference in rates is probably due to the relative differences in proficiency in the L2 among the three groups of bilinguals.

Using one-way chi-square procedures as a test of the significance of differences in frequency counts, significantly more total items were switched from English into Japanese (207 switches) than from Japanese into English (152 switches). For both single-item switches and longer switches, significantly more switches into Japanese were made. These results suggest that the learners were speaking mainly English-a likely occurrence since they had been instructed to use only English during task performance. However, in this preliminary report, no morpheme count was undertaken to determine whether English was, in fact, the matrix or dominant language. ${ }^{12}$

Table 1: Type and Frequency of Items Switched (EFL Learners)

|  | Switches into Japanese | Switches into English | Total Switches |
| :---: | :---: | :---: | :---: |
| Total | 207* | 152 | 359 |
| Single-ltem | 153* (74\%) | 123 (81\%) | 276 (76\% of total) |
| Nouns** | $\underline{\underline{21 *}}$ ( $14 \%$ ) | 109 (88\%) | 130 (36\% of total) |
| Verbs | 41* (27\%) | 3 (2\%) | 44 (12\% of total) |
| Other*** | 91* (59\%) | 11 (9\%) | 102 (28\% of total) |
| Multi-Word Item | 54* (26\%) | 29 (19\%) | 83 (23\% of total) |
| Dependent Clause | 9 | 3 | 12 (3\% of total) |
| Independent Clause | 3 | 2 | 5 (1\% of total) |
| Sentence | 31 | 17 | 48 (13\% of total) |
| Phrases as Asides | 11 | 0 | 11 (3\% of total) |
| Paraphrase of Task Information | 0 | 7* | 7 (2\% of total) |

* Differences between Japanese and English switches were significant at $\mathrm{p}<.05$, using one-way chi-square tests corrected for continuity.
** For English switches, this category refers to all single words from the tasks, including nouns and other parts of speech such as adverbs, relative pronouns or prepositions. Also included is the word "correct".
*** Switches in this category included adjectives, adverbs, fillers and tags. Japanese switches consisted of wa/ ga topic markers; the possessive no; conjunctions such as dakara (so, then); attention-getters preceding English task sentences, such as de (well), ja (well), or ikuyo (here I go); various exclamations and interjections such as nanda! (what!), yoshi! (well); and pronouns such as kore (this) and dotchi (which). Furthermore, a special class of negation item such as janakute or janai ya (that's not it!) said in or immediately following an English utterance served as a signal that repair of the previous utterance was about to take place. Switches into English included exclamations such as "wow", interjections such as "oh, great" and fillers such as "well", "uh" or "hm".

Single-item switches were by far the greatest, comprising $74 \%$ of the total number of switches; this result is in line with other codeswitching studies. However, only $40 \%$ of the single-item Japanese switches consisted of nouns and verbs, compared with $91 \%$ of the single-item English switches. ${ }^{13}$ Whereas nonnoun or verb switches in the category "Other" made up only 9\% of the switches into English, they constituted fully $60 \%$ of the single-item switches into Japanese. These switches tended to be insertions of Japanese discourse managers, such as ne (so, well), dakara (then, so), and ja (well), fillers, tags, possessives, and various exclamations and interjections, which were used to frame, emphasize or correct important English grammar-content utterances. This is interesting, because it suggests that the learners may have been using the discourse functions of switching as a type of strategy to deal with the difficult English language grammatical information.

Regarding grammatical constraints on switching, the free morpheme constraint and the equivalency constraint were sometimes compromised; this point will be discussed more fully in a subsequent section. The equivalency constraint was upheld when the switches were from English into Japanese -the majority of switches-because of the final position of the Japanese verb. However, in the three cases where the switch was in the other direction, with the English portion of the switch coming last, verbs were omitted and the utterances thus became ungrammatical.

## Switching in Balanced Bilingual Children

As shown in Table 2, a total of 153 switches was made, with no significant difference between the total number of switches from Japanese to English (81 switches) and from English to Japanese ( 72 switches). Language alternation was more balanced, suggesting that, for the children, switching was the normal,
unmarked choice in their conversation. This contrasts with the other data set, where significantly more switches were made from English into Japanese.

Table 2: Type and Frequency of Items Switched (Bilingual Children)

|  | Switches into Japanese | Switches into English | Total Switches |
| :---: | :---: | :---: | :---: |
| Total | 72 | 81 | 153 |
| Single-Item | 54 (75\%) | 52 (64\%) | 106 (69\% of total) |
| Nouns | 14 (19\%) | 11 (14\%) | 25 (16\% of total) |
| Verbs | 6 (8\%) | 3 (4\%) | 9 (6\% of total) |
| Other* | 34 (48\%) | 38 (46\%) | 72 (47\% of total) |
| Multi-Item | 18 (25\%)** | 29 (36\%) | 47 (31\% of total) |
| Dependent Clause | 1 | 7 | 8 (5\% of total) |
| Independent Clause | 4 | 2 | 6 (4\% of total) |
| Sentence | 9 | 15 | 24 (16\% of total) |
| Subject + Topic Marker | 1 | 0 | 1 (0.6\% of total) |
| Backchannel Agreement | 3 | 5 | 8 (5\% of total) |

This table was adapted from Fotos, 1990. The original table displayed the switches by language according to whether they were intrasentential or intersentential. Single-item switches were presented separately according to their location.

* Similar to Table 1, switches into Japanese in this category included adjectives, adverbs, fillers; tags; wa/ga topic markers; the possessive no; conjunctions such as dakara (so, then); attention-getters preceding English discourse, such as ano (uh, well); ja (well), or ne (then, well); various exclamations and interjections such as nanda! (what!), yoshi! (well); and pronouns such as kore (this) and dotchi (which). Switches into English included similar utterances in English
** Differences between Japanese and English switches were significant at $p<.05$, using one-way chi-square tests corrected for continuity.

Nonetheless, the overall switching pattern of the two groups was quite similar. $16 \%$ of the children's total switches was of entire sentences, compared with $13 \%$ for the learners. Furthermore, a significant number of single-item switches were made, $69 \%$ of the total for the bilingual children, compared with $74 \%$ for the EFL learners. These two types of switches (single-items and sentences) accounted for $85 \%$ of the total switches of the bilingual children and $87 \%$ of the EFL learners' total switches.

In addition, the children switched more single items in the category "Other" in both directions than in the categories of nouns or verbs combined. $63 \%$ of the Japanese single-item switches and $73 \%$ of the English single-item switches were in this category. As in the case of the EFL learners, the category "Other" for switches into Japanese included adjectives, adverbs, topic markers and various discourse managers such as tags, fillers, attention getters preceding sentences such as such as ne, (so, well) or dakara (then, so), exclamations such as honto (really!) and interjections. Switches into English consisted of similar items. However, the bilingual children's switching was more balanced, with $48 \%$ of all single-item switches made into Japanese and $46 \%$ of switches made into English. This is in contrast to the learners, who overwhelmingly switched such non-noun/verb single items into Japanese.

Significant differences between switching directions were also found for multi-word item switches, with the children making more switches into English, especially sentences. In contrast, the EFL learners switched significantly more multi-word items into Japanese, particularly phrases expressing personal feelings or noting that the preceding English utterance was incorrect and would be revised.

The differences between frequency counts for the balanced bilingual children and the EFL learners in the two cases of Japanese single-item and multi-item switches are suggested to be related to learning strategies employed by the EFL learners rather than an indication of their more limited L2 proficiency. Such switches will be discussed in more detail in the section on functional analysis.

Regarding the grammatical constraints, violations of both the free morpheme constraint and the equivalency constraint existed in this data set, as well, and examples will be discussed in the following section.

In summary, it might be supposed that the bilingual children, young as they were, would nonetheless exhibit the greater ability to carry out codeswitching. Yet, the data does not suggest that this was so. In fact, although the bilingual children's switches were more balanced in terms of language choice, the overall switching patterns were similar, even though the learners had lower levels of spoken English proficiency.

## Grammatical Constraints on Codeswitching

The following consideration of constraints and switches in the different functional categories will treat both data sets combined. Examples of switches made by the children are marked with an asterisk, while English translations of the Japanese parts of each switch are given on the right side of the page.

## The Free Morpheme Constraint

Examples 1 and 2 are among the many cases in both sets of data where the free morpheme constraint was not upheld. Very often, Japanese subject-bound topic markers wa and ga were attached to English nouns in otherwise grammatical English sentences. Example 1 illustrates this.

1. correct wa / is "secretary reported problem"

Here the EFL learners were discussing which task-card sentences were correct-information which was essential for task completion. The use of wa seems to emphasize the important preceding English task term "correct." It is suggested that the use of wa or ga in English utterances is a discourse strategy for attracting and focusing the listener's attention on the preceding information.

Example 2 is taken from the children's data (Fotos, 1990). Here there was a tendency for the children to attach English morphemes to Japanese nouns, making them plural or possessive, for example, hebi-s (snake-s). There were also cases where English verb suffixes were attached to Japanese verb bases, as shown below.
*2. and then she got yukai-ed kidnap

In determining what motivated the switch, it should be recalled that these were American children who knew the English word "kidnap." Thus, the switch was not made because of a lexical gap in the matrix language. When the verb was switched into the other language, the switch functioned to emphasize and dramatize the action.

## The Equivalency Constraint

The next three examples show how both the learners and the bilingual children were able to maintain grammaticality while switching within the sentence. The children usually negotiated the syntactical difference in the normal sentence structure of the two languages-SOV in Japanese, and SVO in English-by switching independent clauses, as shown in Example 3, where one of the girls told the other how to meditate:
*3. you put your hands like this me o tojitel and sit there
close (your) eyes
Example 4, from the data for the EFL learners, shows the tendency for this group to solve the grammar problem by ending the utterance in Japanese, thus maintaining verb-final syntax. In talking about where indirect objects can be placed in English sentences, one learner said:
4. after verb and front/ ni mo aru ka in (front) too, I think

Example 5 shows what happened when the language order was reversed (with English used to end the sentence). The learners were talking about which task-card sentences were correct.
5. kore both correct
this

In this type of switch, the verb was omitted and thus the sentence was ungrammatical. However, there were only three such utterances in the learners' data.

## Discourse Functions of Conversational Codeswitching

This section addresses the use of codeswitching as a device for discourse management. The following conversational functions will be considered and illustrated by examples from the two data sets: switching to indicate topics; switching for emphasis and clarification; switching to frame and to attract and hold attention; switching to express personal feelings within objective utterances; switching to report the speech of others; and switching to set off or dramatize part of the utterance. An additional function was common in the data from the learners but did not appear in the children's data: switching to signal that a mistake had been made in the previous English utterance and that a repair would follow.

## Switching to Indicate Topics

In the learner data set, switching occurred when task-related terms came up. These were always said in English, as shown in Example 6.

## 6. task recording haitteru ?

is (it) being recorded?
The bilingual children also had language choices for different topics and these often appeared to be culturally-linked. Because they attended an international school, where instruction was in English, schoolrelated terms were usually discussed in English. Japanese-language computer-game terms or references to Japanese money, on the other hand, were given in Japanese as shown in Example 7.
*7. this bracelet was for san byaku en three hundred yen

## Switching for Emphasis

Both groups frequently used codeswitching for emphasis. This usually took the form of a switched repetition of the important utterance, as seen in Example 8 by the EFL learners, where important English task information was repeated in Japanese.
8. place adverbs between noun and noun
meishi to meishi no aida
between noun and noun
Example 9 shows a switched repetition made by the bilingual boys discussing a character in a computer game.
*9. the hammer was in the hand like this
kou iu fuu ni
like this

## Switching for Clarification

The next discourse function, clarification, may or may not involve repetition, but it always includes elaboration, with the phrase after the switch containing more information than the original utterance. This is shown in Examples 10 and 11 by the EFL learners.
10. my English ability is very short/ I don't say well. iitai koto ga ienai
(I) can't say what (I) want to say This switch does not use a repetition but the elaboration of the English thought is clear. The next example is interesting because the elaboration is in English. There is a repetition with additional information also given.

## 11. nagai / very long sentence

long
Example 12 is one of the best illustrations of clarification by elaboration in either data corpus. The balanced bilingual girls were talking about a friend who bought imitation Reebok shoes. The initial codeswitched elaboration was itself elaborated by a repetition including the addition of an adverb and a change in the Japanese verb ending.
*12. they were really fake/ but they were exactly like Reeboks.
honmono mitai
(they) look like the real thing
zettai ni honmono ni mite iru

> (they) absolutely look like the real thing

## Switching to Frame Discourse

The next function is switching to attract and hold the listener's attention. In narratives, this type of switch frames the discourse, occurring at boundaries as an intensifying strategy to emphasize the utterance, hold the listener's attention and move the action forward (Koike, 1987). In both data sets, the body of the discourse tended to be in English, framed by short Japanese switches. Usually the switch was the Japanese coordinating conjunction dakara (so, then) or the words ja or ne, which are similar to the English "well" or "then." Studies of monolingual Japanese speakers (Maynard, 1989, as cited in Nishimura, 1995) report that "ne" as a sentence-final particle is used more frequently than any other particle and tends to be a request for agreement or confirmation. Nishimura (1995) noted this type of use for ne in her study of Japanese-Canadian codeswitching. However, in the codeswitching data for the present study, ne and similar particles usually occurred at the beginning of utterances, as shown by Examples 13.

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13. ja/ I read number three sentence
well
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The tag dayo (it is) was more frequently used at the end of utterances to provide emphasis at the end of the thought, as shown by Example 14, where the bilingual girls were talking about a movie.
*14. I saw MoonWalker MoonWalker was so weird/ dayo it is

## Switching to Separate Feelings from Facts

A very interesting discourse function for codeswitching is contrasting personalization and objectification. As mentioned above, this refers to the tendency to talk about personal feelings in one language and factual, objective events in the other. There were examples of this in both sets of data. However, where the EFL learners nearly always talked about their feelings in Japanese and used English for factual, task-related utterances, the children showed the opposite tendency, using English to express their feelings and Japanese for factual information. Example 15 is by one of the learners while Example 16 is by one of the children.
15. possible place of adverbs is
nanda/ wakkaranai
what! I don't know

Here the switch sets the speaker's feelings apart from the grammatical information.
In Example 16, one of the bilingual girls told the other that she wanted a bracelet and bought it. Her feelings were given in English, whereas the objective fact of making the purchase and the preceding coordinating conjunctions, serving to frame the action, were switched to Japanese.
*16. I wanted it
soshite/ soshitara/ katta and, and so, (I) bought (it)

## Switching to Signal Repair

The next discourse function for codeswitching appeared mainly in the learner data, and was probably a result of the demands of the situation: English language task performance by Japanese speakers. Here the switch indicated that the previous utterance was incorrect and that a repair would follow. The signal was usually some version of a Japanese negation with the general meaning of "that's not it," as shown in Example 17, where the speaker even uses an elaboration in the repair signal.

## 17. she looked/ oh / I mistake / look janaku te <br> it is not so <br> cooked/ she cooked a delicious dinner

## Switching to Report Speech

This common function for codeswitching was found mainly in the children's data, probably because of their more informal conversational situation and longer interaction period. In Example 18 the boys discussed another boy.

## Switching to Emphasize or Dramatize a Single Item

The final discourse function to be considered is the use of a switch to focus on a particular word within the utterance. Its occurrence was mainly limited to the children's data. This function is particularly ambiguous. Many researchers who encounter such forms assume that the switch is caused either by the fact that the speaker does not know the lexical item in one language and has to switch to the other, or by the fact that the item represents an object or concept which is new to the matrix language culture or is somehow culturally unique. Thus, the explanation advanced for the switch is the presence of some type of lexical gap (Myers-Scotton, 1992). However, in the following example, one of the balanced bilingual boys deliberately used the English word "boring" to make the fact of boredom prominent. Here there was no possibility that the switch was due to a gap in the child's Japanese lexical knowledge, to the lack of an equivalent concept in the Japanese culture, or to the culturally specific nature of the item.

## *19. mou asobanai hou ga ii maybe (we) shouldn't play anymore <br> boring dakara because it is (boring)

In the final example, one of the boys talked about his bad day at school, a topic usually discussed in English. The first utterance was emphasized by a switch, yet the key school-related items were maintained in English, perhaps because they were topic linked. The result is a dramatic emphasis of the original utterance.
*20. my day was awful
boku no day wa awful datta no ne my day was awful
To assume that such switches are motivated by lexical inadequacy or the presence of a cultural gap is to lose sight of the dramatizing function switching can perform within a conversation, even for a seven-year old.

In summary, a variety of functional switches characterized the speech of both types of bilinguals. Because the frequency of switches in each functional category was not established, it cannot be determined whether the low occurrence of switches for repair in the children's data and switches for reported speech and dramatization in the learners' data were statistically significant. However, even if the differences were significant, it is possible that they may have been more related to the nature of the activity taking place at the time of data collection than to the level of the speaker's L2 proficiency. Accuracy in use of the L2 during task performance was a great concern for the EFL learners, so they were careful to repair faulty utterances, whereas this was not important in the children's play situation. Similarly, the learners were not involved in chatting informally with each other over a period of several hours, a situation where reporting the speech of others and dramatization of narratives would be likely to occur as discourse strategies.

## CONCLUSIONS

The results of the two studies of very different Japanese-English bilinguals show similar trends. In both data sets, switches were mostly grammatical regardless of the direction in which the switches were made. Single items were most frequently switched, but both groups showed skill in switching dependent and independent clauses. Conversational codeswitching took place for the functions of emphasis, clarification, getting and holding attention, identifying particular topics, reporting speech, signaling that a repair to a previous utterance would follow, and making part of an utterance prominent and dramatic. These findings are consistent with the results of other studies of codeswitching in a variety of languages. Furthermore, even though the EFL learners were less proficient in their second language than the bilingual children, they were still able to switch successfully.

The examples presented in this report illustrate that, regardless of the proficiency of the speaker, Japanese-English codeswitching is not random and is not a sign of linguistic inadequacy. Both the limitedproficiency bilingual university EFL learners and the balanced bilingual children skillfully used codeswitching to make their speech salient to their interlocutors and to enrich and vitalize its quality.

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## NOTES

1. This paper is the lead article in a recent theme issue of The Journal of Multilingual and Multicultural Development (1995, Vol 16: 1 \& 2) titled 'Multilingual Japan'. In their introduction, the authors note the urgent need for vigorous research on bi-multilingualism in Japan to dispel a "chronic dependency on the invented tradition of monolingualism and monoculturalism (p. 2)." For additional treatments of language use in Japan, see Iwasaki (1994) and the theme issues of the Journal of Asian Pacific Communication (1994, Vol. 5, Numbers 1 \& 2), and World Englishes (1995, Vol. 14, Number 1).
2. See Gould's classic, The Mismeasure of Man (1981), for a detailed discussion of the numerous flaws in early research methodology.
3. For information on bilingual programs in Canada, see Cummins \& Swain, 1986, or Genesee, 1987. For information on bilingual education in the U.S., see Hakuta, 1986; Simoes, 1976; and Trueba \& Barnett-Mizrahi, 1979. For a more recent perspective, see Ambert, 1991; Paulston, 1992; and Valdes \& Figueroa, 1994. An early general work which is still useful is Grosjean, 1982.
4. As defined by Milroy (1987:211), the term describes bilinguals who do not know either of their two languages "well enough to sustain the advanced cognitive processes which enable them to benefit from mainstream education." The term has been used by educational psychologists such as Cummins.
5. For detailed treatments, see books edited by Jacobson (1990) and Heller (1988) and the recent theme issues of the Journal of Multilingual and Multicultural Development, (1992, Vol 13, Numbers 1 \& 2) and World Englishes (1994, Vol 13, Number 2). For analysis of examples from multilingual African contexts, see Myers-Scotton, 1993a.
6. See Chomsky (1993) for a statement of the current UG view.
7. For a detailed discussion of grammatical constraints on codeswitching in a number of languages, see Myers-Scotton, 1993b.
8. The concept of situational language varieties was proposed in a classic paper by Blom and Gumperz (1972). The authors suggested that the use of different linguistic varieties was linked to particular social contexts. Language choice thus embodied the "social situations, roles and statuses and their attendant rights and obligations, expectations and assumptions" (Heller, 1988; p. 5) and use of a particular language variety thereby became a metaphor for social meaning. For a recent discussion of language choice as a political strategy, see Heller, 1992 and MyersScotton, 1993a. Other interesting examples of codeswitching to signal ethnic identity in multilingual African situations are reported in Koll-Stobbe, 1994.
9. For an early treatment of Spanish-English switching, see Valdes, 1981. See Poplack, 1988 and Auer 1988 for additional studies of the discourse-enhancing functions codeswitching can serve in a conversation.
10. The pioneering work on narrative analysis is Labov's 1972 study of Black English Vernacular narratives. A paper by Koike (1987) presents a good analysis of a Spanish-English speaker's narrative, using a Labovian analytical framework. For further discussions of of codeswitching during narratives in different languages, see Eastman 1992, Koll-Stobbe, 1994, and Myers-Scotton, 1993a.
11. In her study of codeswitching in bilingual Japanese-Canadian Nisei (1995), Nishimura stressed the multifunctional nature of switching and identified three types of switch: (1) Switching related to the participants in the interactions; (2) switching related to the individual's structuring of his/her discourse, particularly switches which intensify the individual's involvement; and (3) switching to create a "stylistic" effect; for example, using switching to set apart reported speech. Nishimura also found a number of switches which were functionally neutral; that is, it was not possible to determine what purpose they served in the conversation.
12. Myers-Scotton (1992; p.19) has defined the matrix language as "the language which sets the morphosyntactic frame for codeswitching utterances." It is determined by counts of morpheme frequency for all languages used within the data set. The matrix language is the one having the majority of morphemes. Additional languages are termed embedded or donor languages.
13. Even taking into account the fact that the frequency count in the category of English noun switches was inflated by the inclusion of task words such as "correct", the difference between Japanese and English switches was still remarkable.

## REFERENCES

Ambert, A. (Ed.). (1991). Bilingual education and English as a second language: A research handbook, 1988-1990. New York: Garland.
Auer, J. (1988). A conversational analytic approach to codeswitching and transfer. In M. Heller (Ed.). Codeswitching: Anthropological and sociolinguistic perspectives (pp. 187-214). The Hague: Mouton de Gruyter.
Azuma, S. (1987). Conversational code-switching in Japanese/English. JACET Bulletin, 18, 1-20.
Baker, C. (1988). Key issues in bilingualism and bilingual education. Clevedon: Multilingual Matters.
Belazi, H., Rubin, E. \& Toribio, A. (1994). Codeswitching and X-bar theory: The functional head constraint. Linguistic Inquiry, 25, 221-237.
Blom, J. \& Gumperz, J. (1972). Social meaning in linguistic structures: Code-switching in Norway. In J. Gumperz \& D. Hymes (Eds.). Directions in sociolinguistics: The ethnography of communication. (pp. 407-434). NY: Holt, Rinehart \& Winston.
Chomsky, H. (1993). A minimalist program for linguistic theory. In K. Hale \& S. Keyser (Eds.) .The view from Building 20: Essays in linguistics in honor of Sylvain Bromberger (pp. 417-454). Cambridge, Mass: MIT Press.
Cummins, J. (1984). Bilingualism and cognitive functioning. In S. Shapson \& V. D'Oyley (Eds.). Bilingual and multicultural education: Canadian perspectives. Clevedon: Multilingual Matters.
Cummins, J. \& Swain, M. (1986). Bilingualism in education. New York: Longman.
Crystal, D. (1985). How many millions?-The statistics of English. English Today, 1,7-9.
Cziko, G. \& Koda, K. (1987). A Japanese child's use of stative and punctual verbs. Journal of Child Language, 14, 99-111.
Dabene, L. \& Billiez, J. (1986). Code-switching in the speech of adolescents born of immigrant parents. Studies in Second Language Acquisition, 8, 309-325.
Eastman, C. (1992). Codeswitching. Clevedon: Multilingual Matters.
Fotos, S. (1990). Japanese-English code switching in bilingual children. JALT Journal, 12, 75-98.
Fotos, S. (1991). The cloze test as an integrative measure of EFL proficiency: A substitute for essays on college entrance examinations? Language Learning, 41, 313-336.
Fotos, S. (1993). Consciousness raising and noticing through focus on form: Grammar task performance versus formal instruction. Applied Linguistics,14: 385-407.
Fotos, S. (1994a). Japanese-English codeswitching in EFL classrooms. Presentation, JALT Annual Conference. Matsuyama, Japan. October 10.
Fotos, S. (1994b). Integrating grammar instruction and communicative language use through grammar consciousness-raising tasks. TESOL Quarterly, 28, 323-351.
Genesee, F. (1987). Learning through two languages: Studies of immersion and bilingual education. Cambridge, Mass: Newbury House.
Genesee, F. \& Bouris, R. (1982). The social psychological significance of code switching in cross-cultural communication. Journal of Language and Social Psychology, 1, 1-27.
Goffman, I. (1974). Frame analysis. New York: Harper and Row.
Gould, S. (1981). The mismeasure of man. New York: W.W. Norton.
Grosjean, F. (1982). Life with two languages: An introduction to bilingualism. Cambridge, Mass: Harvard University Press.
Gumperz, J. (1982). Conversational codeswitching. In. J. Gumperz (Ed.). Discourse strategies (pp. 59 -99). Cambridge: Cambridge University Press.
Hakuta, K. (1986). Mirror of language: The debate on bilingualism. New York: Basic Books.
Hatch, E. \& Farhady, M. (1982). Research design and statistics for applied linguistics. Rowley, Mass: Newbury House.
Heller, M. (Ed). (1988.) Codeswitching: Anthropological and sociolinguistic perspectives. Amsterdam: Mouton de Gruyter.
Iwasaki, Y. (1994). Englishization of Japanese and acculturation of English to Japanese culture. World Englishes, 13, 261-272.
Jacobson, R. (1990). Codeswitching as a worldwide phenomenon. New York: Peter Lang.
Jake, J. (1994). Intrasentential code switching and pronouns: On the categorical status of functional elements. Linguistics, 32, 271-298.

Kachru, B. (1994). Englishization and contact linguistics. World Englishes, 13, 135-154.
Koike, D. (1987). Code switching in the bilingual Chicano narrative. Hispania, 70, 148-154.
Koll-Stobbe, A. (1994). English in code-alternations: Towards an integrated study of codeswitching. World Englishes, 13, 203-214.
Labov, W. (1972). Language in the inner city. Philadelphia: University of Pennsylvania Press.
Laurie, S. (1890). Lectures on language and linguistics methods in the school. Cambridge: Cambridge University Press.
Loschky, M. (1989). A syntactic analysis of English-Japanese intrasentential code switching. Presentation, JACET Annual Convention, Kyushu. November.
Maher, J. \& Yashiro, K. (1995). Multilingual Japan: An introduction. Journal of Multilingual and Multicultural Development, 16, 1-17.
Maynard, S. (1989). Japanese conversation. Norwood, New Jersey: Ablex.
McClure, E. (1977). Aspects of code-switching in the discourse of bilingual Mexican-American. In R. Duran (Ed.). Latino language and community behavior (pp. 69-94). Norwood, NJ: Ablex.
McClure, E. \& McClure, (1988). Macro- and micro-sociolinguistic dimensions of codeswitching in Vingard (Romania). In M. Heller (Ed.). Codeswitching: Anthropological and sociolinguistic perspectives (pp. 25-52). Amsterdam: Mouton de Gruyter.
Meisel, J. (1994). Code-switching in young bilingual children: The acquisition of grammatical constraints. Studies in Second Language Acquisition, 16, 381-412.
Milroy, J. \& Milroy, L. (1985). Linguistic change: Social network and speaker innovation. Journal of Linguistics, 21, 339-384.
Milroy, L. (1987). Observing and analyzing natural language. Oxford: Basil Blackwell.
Myers-Scotton, C. (1992a). Common and uncommon ground: Social and structural factors in codeswitching. Language in Society, 22, 475-504.
Myers-Scotton, C. 1992b. Comparing codeswitching and borrowing. In C. Eastman (Ed.). Codeswitching (pp. 19-40). Clevedon: Multilingual Matters.
Myers-Scotton, C. 1993a. Duelling languages: Grammatical structure in codeswitching. Oxford: Clarendon Press.
Myers-Scotton, C. 1993b. Social motivations for codeswitching: Evidence from Africa. Oxford: Oxford University Press.
Nishimura, M. (1992). Language choice and in-group identity among Canadian Niseis. Journal of Asian Pacific Communication, 3, 97-113.
Nishimura, M. (1995). A functional analysis of Japanese/English code-switching. Journal of Pragmatics, 23, 157-181.
Paulston, C. (1992). Sociolinguistic perspectives on bilingual education. Clevedon: Multilingual Matters.
Peal, E. \& Lambert, W. (1962). The relationship of bilingualism to intelligence. Psychological Monographs, 76, 27: 1-23.
Poplack, S. (1980). Sometimes I'll start a sentence in English $Y$ termino en espanol: Toward a typology of code-switching. Linguistics, 18, 581-618.
Poplack, S. (1988). Contrasting patterns of codeswitching in two communities. In M. Heller (Ed.). Codeswitching: Anthropological and sociolinguistic perspectives (pp. 215-244). Amsterdam: Mouton de Gruyter.
Romaine, Suzanne. (1989). Bilingualism. Oxford: Basil Blackwell.
Simoes, A. (Ed.). (1979). The bilingual child: Research and analysis of existing educational theories. San Francisco: Harcourt Brace Jovanovich.
Stafanakis, E. (1991). Early childhood education: The effects of language on learning. In. A. Ambert (Ed.). Bilingual education and English as a second language: A research handbook, 1988-1990 (pp. 130170). New York: Garland.

Tannen, D. (1979). What's in a frame? Surface evidence for underlying expectation. In. R. Freedle (Ed.). New directions in discourse processing 2. Norwood, New Jersey: Ablex.
Tickoo, M. (1993). When is a language worth teaching? Native languages and English in India. Language, Culture and Curriculum, 6, 225-240.
Trueba, H. \& Barnett-Mizrahi, C. (Eds.). Bilingual multicultural education and the professional: From theory to practice. Rowley, Mass: Newbury House.
Valdes, G. (1981). Codeswitching as deliberate verbal strategy: A microanalysis of direct and indirect requests among bilingual Chicano speakers. In R. Duran (Ed.). Latino Language and Communicative Behavior (pp. 95-107). Norwood, NJ: Ablex.
Valdez, G. \& Figuroa, R. (1994). Bilingualism and testing: A special case of bias. Norwood, NJ: Ablex.

