

Korean Students' Code-Switching in Their Communications

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Ahn, Gil-Soon and Yang, Young-Hee. 2004. Korean Students' Code-switching in their communications. *The Linguistic Association of Korea Journal*, 12(2), 245-262. Code-switching can be found all over the world where bilingual speakers talk to each other in the form of words, phrases and clauses. This study aims to determine whether these uses present different levels of difficulty for ESL students and how they are used at the same time. The instrument consisted of the reading passages including 381 words. The participants (21 low-, 21 intermediate-, and 21 advanced-level ESL students from Korea) were instructed to read the passages and talk about the story in Korean. Statistical analyses of the participants' performances indicate the following: (a) The total use of code-switching increased as the participants' English proficiency level increased, which suggests that Korean students' use of code-switching follows a natural order—that is, words switching most frequently, phrases switching second and clauses switching last; (b) Length of stay in the U.S. does not affect code-switching use in the same order as proficiency levels; (c) the female speakers use more code-switching with phrases and clauses than males, which suggests that female L2 learners perceive language input as a whole.

Key words: code-switching, words switching, phrases switching, clauses switching, statistical analysis

1. Introduction

One of the trend of English uses is to shift from knowledge-based to use-oriented. The constant interaction between native and nonnative speakers often and obligatorily exerts pressure upon us to speak English or other languages to attain their objectives. Code-switching may be

considered as the transference of elements of one language to another at various levels including phonological, grammatical, lexical and orthographical (Berthold, Mangubhai & Batorowicz, 1997).

Nowadays Korean language learners usually study English as an instrumental motivation, not an integrative motivation. In other words, they learn L2 (English) to get a good job and a good score in TOEFL in order to study in U.S.A and other countries. For that reason to another, they have learned English a lot. This environment leads to produce many bilinguals in Korea. We are also exposed to English lexical words easily and frequently through mass media. They try to speak in English in their school classes or their work places. Especially, Korean Ministry Education has asked for school teachers to use English an hour every week. These environments is a potent influence to Korean native speakers. Even when they speak to someone in Korean, they sometimes use English lexical words during their conversation - that is, they borrow words from English language and change them to sound more natural in Korean.

The purpose of this study is to see how code-switching presents between different levels for Korean students during their conversations, and whether the length of stay in America affects code-switching, and which differences lie between males and females in using code-switching. To clarify the purpose, we only chose to focus on the phenomenon of code-switching in normal conversations amongst bilinguals because of its wide variety of elements. The following two hypotheses and one research question were developed for the purpose of this study.

1. The total use of code-switching will increase as the participants' English proficiency level increases.
2. The length of stay will affect code-switching use between the participants.
3. Are there any differences with regard to gender in using code-switching?

The first hypothesis is based on the assumption that English will facilitate the advanced level students to use code-switching. The second hypothesis presupposes that the more L2 learners are exposed in L2, the more they try to use code-switching. The third research question assumes that males process the L2 through an analytical mode - that is, words level, while females through a global and holistic mode - that is, phrases and clauses level as Oxford (1993) claimed. So far, there has been little research and no clear guidelines regarding putting the extent and the ways of code-switching. Via an analysis of recorded conversations and surveys of students, this study aims to provide some answers.

2. Review of literature

While perhaps all language researchers appreciate the importance of target language use in second language learning and teaching, there is, however, no consensus on how much code-switching would be used in adults' communications of a homogeneous L1. At the risk of overgeneralization, we try to take some examples on code-switching to help understand the related topic of this paper, and then define and consider code-switching in terms of its relationship according to some scholars.

An example of code-switching, from Korean to English in a single word level, is "*Gue-nun guenou-egae ROMANTIC-han pyounjee-eul ponaessda*" meaning 'He sent a romantic letter to her'. An example of phrases switching is "*Gue-nun guenou-egae ROMANTIC LETTER-eul ponaessda*." "*Gue-nun guenou-egae I LOVE YOU-lago malhaessda*" meaning 'He told her that he loved her' is an example of clauses switching. As can be seen clearly above examples, grammatical interference at a lexical level provides for the borrowing of words from one language and converting them to sound more natural in another (Berthold et al., 1977).

Crystal (1987) supplements the definition of code-switching thus far with the notion that it occurs when individuals who are bilinguals alternate between two languages during their speech with another

bilinguals, meaning that they make irregular use of a second language as well as they have considerable skill in a second language. According to Gumperz (1982), people use language alternation in order to provide an additional resource. In other words, bilinguals make use of language alternation to express a range of social and rhetorical meanings. This type of alteration, or code-switching, between languages occurs commonly amongst bilinguals and may take a number of different forms, including alteration of sentences, phrases from both languages succeeding each other and switching in a long narrative. Legenhausen (1991: 62) also viewed that code-switching is as a psycholinguistic phenomenon. That is, speakers code switch during a conversation when they have run into word-finding problems, or when the intended meaning can be expressed more precisely in other language.

There are a number of possible reasons for the code-switching from one language to another as presented by many scholars (Auer, 1984; Clark & Clark, 1977; Cristal, 1987; Gal, 1979). The first of these is the notion that code switching occurs when speakers may not be able to express themselves in their language to compensate for their deficiencies. This type of code-switching tends to occur when the speaker is upset, tired or distracted in some manner. Second, it occurs when an individual wishes to express solidarity with a particular social group. This type of switching may also be used to exclude others from a conversation who do not speak the second language. Third, it occurs when the speakers wished to convey their attitudes to the listeners. Where monolingual speakers can communicate these attitudes by means of variation in the level of formality in their speech, bilingual speakers can convey the same by code switching.

Cook (1991) found out that in normal conversations among bilinguals code switching consists of 84% single word switches, 10% phrase switches and 6% clause switching. Cook asserts that at code-switching of low level, students may use the second language for obtaining information from material such as a travel brochure or a phone message to answer comprehension questions in the first language. At advanced

level, they may be required to research a topic and provide a report in the first language. Shin & Milroy (2000) conducted a study to see why Korean-American school children employ code switching during their conversation. All participants acquired English as a second language during childhood and they make full use of English as a means of communication in their lives. They found that Korean-English bilingual children code-switched their conversation to give additional linguistic and interactive resource to their interlocutors.

From the above discussion, we can summarize the code switching as follows: (i) Code-switchers make irregular use of a second language as well as they have considerable skill in a second language; (ii) Code-switchers make use of language alternation to express a range of social and rhetorical meanings; (iii) Bilinguals use code-switching to express their emotions and attitudes; (iv) Bilinguals' use of code-switching follows a natural order - that is, they use words switching most frequently, phrases switching second and clause switching last.

Finally, despite the studies mentioned above, our review supports Cook's (2001) claim that overall students use code-switching as a foundation for the development of a second language and they use it as a different purpose according to proficiency level.

3. The Study

3.1. Participants

The participants are 21 low-, 21 intermediate-, 21 advanced-level ESL students from Korea. The 21 low-level students are from intensive English programs at several universities in the Oklahoma City, Oklahoma, USA metropolitan area. Most of them are college bound, but none of them have a TOEFL score above 500, as required by most colleges in the United States. Most of them have been in America for less than two years, and many of them have studied some English in their home countries. Their average length of English study is 1.02 years. Many of them speak English most of the time in

America, but some mostly speak their native language.

The intermediate and advanced students are undergraduate and graduate students attending a university in Oklahoma and Washington, USA metropolitan area. The intermediate students have a TOEFL score between 500 and 550. Their average length of stay in America is 2.45 years. The advanced students have TOEFL score above 550. Most graduate students were placed in advanced group. Their average length of stay in America was 3.85 years. Like low students, both the two groups speak English most of the time in America, but some mostly speak their native language.

3.2. Instrument and procedures

The instrument consists of the reading passage and the questionnaire in relations to code-switching. The two reading passages including 381 words (Appendix) were excerpted from *True stories in the news* (Sandra, 1996) and *Interchange* (Jack, 1997) for beginners. The two reading passages used were narrative text (Text 1) and expository text (Text 2). Text 1 was about the interesting story for adult students. Text 2 being similar to Text 1 was about introducing the American culture. To attain reliability, the reading passage is not too complicated for all participants to understand that is, they don't feel difficulty in their reading.

Each subject was asked to read the article and to talk about the story in Korean, and all of their talking was recorded by using a cassette recorder to see where/how the difference stood among the tested groups. In order to set up a natural environment and relieve the tension, the recordings and talking about the story were made in each subject's home.

For data analysis, we conducted a One-Way ANOVA to examine whether the three types are significant or not across the three levels, and also a post hoc Tukey test and paired sample t-test to determine the differences among the three groups and the use order in each of the categories.

4. Data Analysis And Discussion

After recording the participants' total talking about the story, we have chosen to calculate and reported the number of code switching that the subjects made. For that reason, we first counted every single word, phrase and clause switching, and then computed the subtotal for each of the three groups.

4.1. Comparison of means between groups

After tabulating the results of the participants' performances, we calculated the proportions of the code switching in each of the three types of use for each proficiency level group. The results are shown in Table 1.

Table 1. Percentage of each group's code-switching

Group	Total average words	Words	Phrases	Clauses	Total
Low	2100	2.23%	0.02%	0.01%	2.26%
Intermediate	2100	3.52%	0.04%	0.02%	3.58%
Advanced	2100	4.14%	0.07%	0.05%	4.88%
Total	2100	3.29%	0.04%	0.03%	3.36%

The first hypothesis was that the total use of code switching would increase as the participants' English proficiency level increased. Table 1 shows that the first hypothesis was proved at a glance. We then conducted an ANOVA as the proficiency level in each of the three types of use. The results reported in Table 2 shows that all types are significantly different.

Table 2. Results of ANOVA on the groups tested

Types	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>
Words	2	39.95	19.82	30.02 *
Phrases	2	2.50	1.25	4.41 *
Clauses	2	2.00	1.00	5.52 *

* $p < .05$

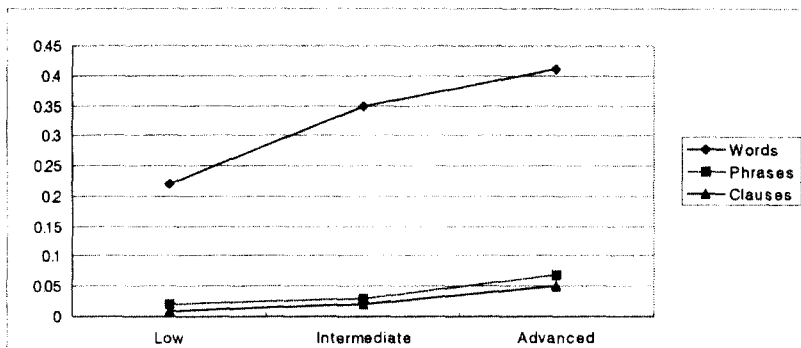
We then applied a post hoc Tukey test to examine where the differences lay among the three groups in each of the categories. The results are shown in Table 3 in subscript letters together with the groups' means. The group means with the same subscript letter indicate no significant difference between them, while means with different subscript letters indicate significant difference. Figure 1 also shows the differences between the groups in order to aid understanding.

Table 3. Tukey test results with Means and Standard Deviation¹⁾

Group	n	type		
		Words	Phrases	Clauses
Low	21			
M		2.23 _a	0.23 _a	0.09 _a
SD		0.76	0.43	0.30
intermediate	21			
M		3.52 _b	0.38 _a	0.23 _a
SD		0.74	0.49	0.43
Advanced	21			
M		4.14 _c	0.71 _b	0.52 _b
SD		0.91	0.64	0.52

1) Means with a common subscript are not significantly different by the Tukey test with $p < .05$

Figure 1. Comparison of means between groups



As shown in Table 3 and Figure 1, the total use of code-switching increased as the participants' English proficiency level increased, which suggests that Korean students' use of code-switching follows a natural order. In comparison of words switching between groups, there is a significant difference between groups. These results suggest that their using of code-switching seems to have increased remarkably until certain level.

Code-switching of phrases and clauses seems to have ceased improving significantly in low and intermediate levels, but increased remarkably in advanced level. These results suggest that Korean students' using of code-switching seems to have increased a little, not significantly from the low level to the intermediate level, but do increase significantly in the advanced level. In sum, Korean students' words switching use continues to make an across-the-board significant improvement from the low level to the advanced level whereas their phrases switching and clauses switching uses increase significantly after English proficiency passes the advanced level.

Given that the ANOVA showed a significant difference among the three category means, we conducted a pairwise t-test of the three groups' means of code-switching uses to determine if there is a significant difference between each possible pair. The results in Table 4

show significant differences between all pairs.

Table 4. Results of pairwise t-test

Pair	<i>df</i>	<i>SD</i>	<i>MS</i>	<i>t</i>	<i>Sig</i>
Words vs. Phrases	62	1.14	2.85	19.75	.00 *
Words vs. Clauses	62	1.09	3.01	21.76	.00 *
Phrases vs. Clauses	62	0.65	0.15	1.93	.05 *

* $p < .05$

As shown in Table 4, all pairs are show significant differences. The significant differences in turn suggest a hierarchy of difficult among the three code-switching use, with clauses switching use being the most difficult followed in order by phrases switching and words switching. The finding that words switching is the most frequent supports Cook's (1991) study. Theoretically, the discovery of words vs. clauses use being the highest t-score suggests that the correlation of between words and clauses switching is comparatively stronger than those of the others.

4.2. Comparison of Means with the Lengths of Stay in America

After tabulating the results of the participants' performances, we calculated the propositions of the code switching in the three types of use for each group according to their length of stay. The results are shown in Table 5.

Table 5. Percentage of each group's code-switching

Group	Total average words	Words	Phrases	Clauses	Total
1	2100	2.58%	0.03%	0.01%	2.26%
2	2100	3.86%	0.04%	0.02%	3.93%
3	2100	3.42%	0.06%	0.05%	3.51%
Total	2100	3.30%	0.04%	0.02%	3.36%

The second hypothesis was that the length of stay will affect the code switching use between the participants. Table 5 shows that the second hypothesis was proved at a glance except for words switching. However, the group of the second length of stay used synthetically more code-switching than the group of third length of the stay the total use of code-switching. In other words, the participants' overuse in these three categories increased as their stays were long from 1 level to 2 level, and then such use began to decrease as their stays increased further.

In Table 5, 1 means within 1 years' stay in America. 2 is above 1 and within 3 years and 3 is above 3 years. We then conducted an ANOVA as the length of stay level in each of the three types of use. The results reported in Table 6 shows that words switching and clauses switching are significantly different.

Table 6. Results of ANOVA with length of stay

Types	df	SS	MS	F	Sig
Words	2	17.55	8.77	8.53	.00 *
Phrases	2	0.98	0.49	1.59	.21
Clauses	2	1.23	0.61	3.19	.04 *

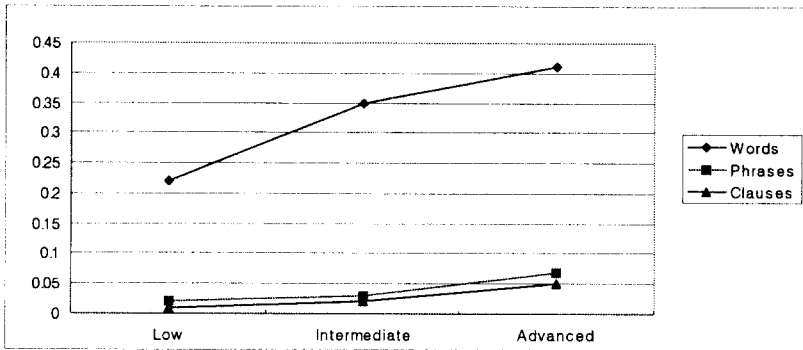
* $p < .05$

We then applied a post hoc Tukey test to examine where the differences lay among the three groups in each of the categories. The results are shown in Table 7 in subscript letters together with the groups' means. The group means with the same subscript letter indicate no significant difference between them, while means with different subscript letters indicate significant difference. Figure 2 is also provided to help illustrate the differences between the groups.

Table 7. Tukey test results with Means and Standard Deviation

Length	n	Type		
		Words	Phrases	Clauses
1	21			
M		2.61 _a	0.33 _a	0.14 _a
SD		1.20	0.48	0.35
2	21			
M		3.90 _b	0.38 _a	0.23 _a
SD		0.83	0.49	0.43
3	21			
M		3.38 _b	0.61 _a	0.47 _b
SD		0.91	0.66	0.51

Figure 2. Comparison of means between groups



As can be seen clearly in Table 7 and Figure 2, the code switching of words between the first and second length of stay is significantly different. More importantly, the Turkey test shows that the third length of stay is lower than that of the second length of stay, which suggests an decrease in word switching from second length of stay to third length of stay. In addition, the results suggest that Korean students' commands of the code switching have continued to make significant improvement with words during a three years' stay in America. With regard to code-switching of phrases between the groups, there are only minor differences. The results seem to suggest that the group of the third length of stay is reluctant to use words and phrases switching.

In comparison of clauses switching between groups, there is no significant difference between first length of stay and second length of stay. But, the group of the third length of stay uses clauses switching remarkably. The results suggest that Korean students' command of code-switching improved significantly in the clause level after three years' stay in America. In other words, code-switching of clauses seems to have ceased improving significantly between the first length of stay and the second length of stay, but increases remarkably in the third length of stay.

4.3. Comparison of gender

We also wanted to know if code-switching proved to be favorable to a group of examinees with regard to sex. Given that females may often process L2 through a right-hemispheric mode, which usually involves holistic language processing (as presented Seliger, 1982), we wanted to see if females would use more phrases switching and clauses switching as a whole or chunk than males.

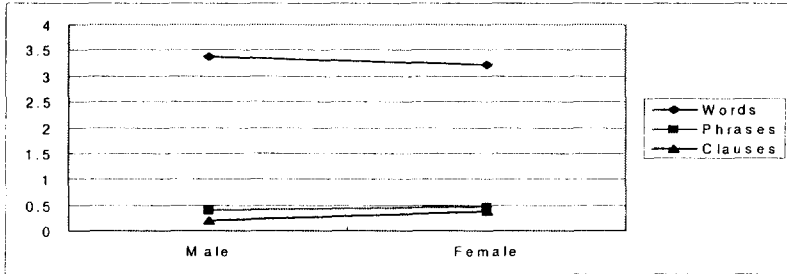
After we tabulated the results of the participants' performance, we calculated the mean of the 31 male and 32 female subjects in each of the three types of code-switching. We then conducted a T-Test using the groups as the independent variable in each of the three types of code-switching. The results are reported in Table 8. Figure 3 has also been provided to help illustrate the differences between the groups.

Table 8. Results of T-Test between males and females

Types	df	Male (n=31)		Female (n=32)		t
		M	SD	M	SD	
Words	61	3.38	1.17	3.21	1.09	0.58
Phrases	61	0.41	0.50	0.46	0.62	-0.34
Clauses	61	0.19	0.40	0.37	0.49	-1.60

* p < .05

Figure 3. Comparison of means between males and females



The findings of this study support hypotheses of the gender differences in a second language learning and use (Holland & Thayer, 1988; Oxford, 1993; Seliger, 1982). The results in Table 8 show that, although the significant differences were not found, the female speakers performed more code-switching in phrase and clause switches - that is, they used holistic language processing in code-switching use. Thus, we can support Crystal's (1987) study that code-switching is a kind of cognitive process.

5. Summary And Suggestions

The main goal of this study was to examine the use of code switching in conversations in Korean. This study has yielded three key findings. First, the total use of code switching increases as the participants' English proficiency level increases. In addition, Korean students command words switching in their conversations significantly after the low level. In phrases switching, Korean students command them in their conversations little by little from the low level, but do not improve them significantly. In clauses switching, Korean students command them in their conversations significantly after intermediate level, and improve them as the participants' English proficiency level improves. The results support Cook' (1991) study on the natural order of code-switching use - that is, words switching use first, phrases switching use second and clauses switching use last. Second, the length

of stay did not affect the code switching use. Unlike proficiency level, the group of the second length of stay used more code-switching than the group of the third length of stay. In addition, Korean students commands of the code switching have continued to make significant improvement with words during a three years' stay in America, and then decreases as their stays increases. Code-switching of phrases and clauses develops little by little with regard to their length of stay, and then increases significantly as the participants' stay reaches more than three years. Third, the female speakers perform more code-switching than males, but just significant differences were not found.

This study is limited because the number of subjects was not large enough to generalize on the use of code switching. Another limitation is that not enough data were provided to reveal a statistical significance. Therefore, further research calls for studies that have a larger sample size with a more balanced representation and that use a continuous measure of proficiency in grouping subjects.

There are some areas to study of code switching; for instance, the study on the order of eight parts of speech used, and the study on the reason that the students in the third length of stay are reluctant to use words switching although it is not significantly different. Therefore, future researches also call for studies mentioned above.

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APPENDIX A

Questionnaire

This appendix contains only the questionnaire items relevant to the results discussed in the report here.

1. What is your gender?.....
2. How long have you been in the United States?..... month(s) or year(s)
3. What is your most recent TOEFL score?..... score

APPENDIX B

Text A

Ming-fu and Lee met at a party. For Ming-fu, it was love at first sight. Hello, he said to Lee. I'm Ming-fu. Lee looked at him and smiled. Hi, she said. I'm Lee. Ming-fu and Lee laughed and talked all evening. When they left the party, it was 2 A.M.

For the next year, Ming-fu and Lee were together every weekend. They went everywhere together-to movies, to parks, to museums, and to restaurants.

One night, at a romantic restaurant, Ming-fu asked Lee, Will you marry me? No, Lee answered. I'm not ready to get married.

I can't believe it! Ming-fu thought. Lee doesn't want to marry me! But I love her! What can I do?

Ming-fu began writing love letters to Lee. Every day he wrote and mailed it to her. I love you, he said in his letters. Marry me.

Every day the same mailman delivered Ming-fu's letter to Lee. The mailman always smiled when he gave Lee a letter. Another letter from your boyfriend, he said.

Ming-fu sent Lee a love letter every day for two years-700 letters all together. Finally Lee said, I'm ready to get married now.

Did Lee marry Ming-fu? No, she didn't. She married the mailman who delivered Ming-fu's letters.

Text B

Young people have more freedom in North America than in many other countries. They often start dating around the age of 14, and do not need an older person to go with them. They go in groups or couples to school events (dances, plays, ball games), parties, restaurants, movies, and sports events.

For most teenagers, dating is just for fun. It does not mean that they want to get married. Young people may even date several friends at the same time. They usually choose their own dates. Sometimes, however,

someone arranges a date for two people who do not know each other. This is called a "blind date."

Either a man or a woman can invite someone on a date. If there are expenses, the man and woman often "go Dutch"; this means they share the cost. Sometimes, however, one person pays for both people.

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