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LANGUAGE SWITCHING IN STORY RETELLING TASKS AMONG FILIPINO BILINGUAL CHILDREN

Lenore A. de la Llana-Decenteceo
University of the Philippines

Forty-four children from the sixth grade of a laboratory school were assigned to two groups, high or low, depending on their proficiency in both English and Pilipino as measured by cloze tests which were developed for this study. They then read a story which was in either English or Pilipino which they had to retell in either English or Pilipino.

The main findings were: (1) response latency was longer and retelling was most difficult when the subjects had to retell the story in the language other than the one in which they read it; (2) the subjects took longer to start retelling when the story was in English and it had to be retold in Pilipino as compared to when it was read in Pilipino and retold in English; (3) the subjects took longer to complete retelling when the story was in Pilipino and it had to be retold in English as compared to when it was read in English and had to be retold in Pilipino.

Introduction

Language switching, or code-switching, as it is sometimes called, has become a common and effective communication strategy among members of bilingual communities (Garcia, 1983). In most cases, it appears to be the norm rather than the exception (Sridhar & Sridhar, 1980). Bilingual speakers access two language systems in dealing with their environment. It is clear, however, that the readiness to switch languages depends on the speaker's competence in each of his languages and the functions they serve for him (Mackey, 1968). Studies which focus on intrasentential code-switching have demonstrated this phenomenon to be a "highly structured bilingual communicative device with its own syntactic and sociolinguistic constraints" (Sridhar and Sridhar, op. cit., p. 407; Nishimura, 1986).

However, Hatch (1973) points out that the bilingual's skill in switching rapidly and fluently from one language to another within a conversation or in the middle of a sentence is not appreciated by everyone. Language switchers or mixers are viewed as "victims of language interference" (p. 203).

This pejorative sense sometimes attributed to bilingual talk in general most likely stems from

a lack of understanding of what the switching process entails. As De Avila and Duncan (1978) have noted in bilingual school settings,

the potential for misclassification is high because of the lack of knowledge as to the nature of the code-switching phenomenon and the extent to which the phenomenon represents a voluntary integration of two codes or a lack of control of each language independent of the other (p. 47).

Review of Literature

Definition of Terms

Although Uyekubo (1972) considers language mixing as a phenomenon distinct from interference, others regard the latter, together with borrowing and code-switching, as instances of language mixing (Pfaff, 1979). However, there is no consensus as to how these processes should be defined.

While Hatch (op. cit.) considers language mixing as a continuum, Haugen (1950) prefers to use the phrase linguistic borrowing over language mixing. He contends that borrowing avoids the ambiguities generated by the terms "pure," "mixed," or "hybrid," which the layman has

come to associate with language forms. In common language usage, he claims that the layman does not normally associate the term borrowing with language. Thus, its status as a technical term remains untainted. He also argues that although introducing the elements of one language into another alters the second language, it does not result in a mixture of the two. Mixture, for him, suggests a haphazard, unsystematically combined use of two languages.

Linguistic borrowing, therefore, represents an integration of two languages; that is, features of one language are used as if they were part of another (Mackey, *op. cit.*). In more specific terms, Garcia (*op. cit.*) defines borrowing as "language mixing at the lexical level with lexicon borrowed from one language" (p. 131). Very often, a borrowed word becomes assimilated into the host language and becomes an integral part of it.

On the other hand, code-switching has also been referred to as a type of borrowing (Gumperz & Hernandez, 1975) but Pfaff (*op. cit.*) claims that there is a vast difference between the two in terms of the linguistic competence of the speakers. According to her, borrowing may occur in the speech of those with only monolingual competence, while code-switching implies some degree of competence in two languages.

Sometimes code-switching is used synonymously with code-mixing. Sridhar and Sridhar (1980), however, prefer to make a distinction between the two. If a specific instance of language alternation is unaccompanied by a change in speech situation, and the alternations take place within a sentence, the process is referred to as code mixing. As it stands the phrase code-switching could very well apply without difficulty to both macro (change in language as a function of change in situation) and micro (intrasentential) levels. It is also better qualified in terms of whether the code-switch is due to external factors or internal factors. (This distinction, however, is not crucial for this particular study.)

Another important distinction is that between linguistic interference and code-switching. While interference occurs mainly at the phonemic or morphemic level, code-switching involves more than single lexical items (Clyne, 1980). The latter is often observed at constituent boundaries involving at least whole words, phrases, or larger linguistic units such as sentences or paragraphs (Hasselmo, 1969).

Beardsmore (1986) raises two other important distinctions between interference and code-switching. The first has to do with the nature of the triggering mechanism for either phenomenon. According to him, code-switching operates as a conscious device while interference does not. Interference operates mainly at the subconscious level. As such it has been regarded as an error of speech production resulting from an overlapping of the rules of two languages at various linguistic levels. This distinction also implies that a bilingual speaker is likely to be more in control of mixed language usage in switching than he is in interference. The second point is that interference is determined by "internal linguistic factors, whereas code-switching is determined by external linguistic factors" (p. 75).

Although the three processes involve a mixing of languages, borrowing and interference are not regarded as communication strategies in the sense associated with code-switching. Strictly speaking, borrowing and interference are treated as purely linguistic phenomena. They are the logical by-products of "languages in contact" (Vildomec, 1963). The same is true of code-switching, but unlike borrowing and interference, it loses much of its dynamic character if treated merely as a linguistic matter. To limit its analysis to grammatical and syntactic constraints leaves equally important parameters such as social and cognitive influences on behavior unexplained (Auer, 1984).

Language switching, therefore, is evidently more than a linguistic phenomenon, as sociolinguistic findings attest (Anisman, 1967; Hymes,

1967; Gumperz & Hernandez, 1972; Paulston, 1974; Scotton & Ury, 1977; Gumperz, 1982.) Bilingual speakers can deliberately use two languages alternately, depending on its meaning in a particular speech event. As a discourse strategy, code-switching is used:

1. To establish social identity or stress group solidarity,
2. To signal a change of topic,
3. To exclude others from conversation, and
4. For rhetorical purposes, among others.

In this study, language switching is described in broader terms. Like Hatch, it is regarded as a continuum which involves a process whereby a speaker who has a command of at least two languages uses these languages alternately in written or oral discourse at constituent boundaries of words, phrases, clauses, sentences, or even paragraphs under conditions demanded by the situation in which the speaker finds himself. Switches (or mixed utterances) are the products of this process. And a switch is defined as that point in an utterance where a bilingual speaker uses a constituent word, phrase, clause, or sentence in a language different from the constituent word, phrase, clause, or sentence immediately preceding it.

Conceptual Framework

One major controversy which has important implications for the phenomenon of language switching is on how a bilingual stores and processes two languages in memory.

The shared hypothesis or the single code model assumes that thoughts or ideas are organized in a common storage in a form Kolers (1963) describes as "supralinguistic" such as images, or sequences of movement. Each of a bilingual's languages can independently tap this common store. Direct retrieval and description from one language to the other is possible. It is constrained only by the rules of the language of recall.

Evidence for this position is derived from studies of children exposed to two languages from

birth (Leopold, 1954; Imedadze, 1967; Oksaar, 1973; Swain & Wesche, 1975; Volterra & Taeschner, op. cit.; Redlinger & Park, 1980). These studies report that at a very early age the child starts out with a unified language system, or a single lexical system which becomes differentiated as the child becomes increasingly proficient in both languages and until the child learns to discriminate and consistently address interlocutors in each language (Imedadze, 1967).

On the other hand, the separate hypothesis or the dual code model regards experiences as specifically and separately coded in the language in which they are experienced. It would then be impossible to directly retrieve and describe experiences coded in one language using the other language. An additional step of translation would be required (Macnamara, 1967; Taylor, 1971; Redlinger, 1979; Paivio & Desrochers, 1980; Durgunoglu & Roediger, 1987).

Evidence for the dual approach is suggested by the findings of Padilla and Liebman (1975), Bergman (1976), and Lindholm and Padilla (1978). They claim that at the initial stage of bilingual acquisition, children already use a dual system approach. Mixed utterances constituted only 2% to 3% of the language samples derived from the 1;5 to 2;2 year-old children. Separation of systems was most evident at the phonological level (Redlinger, 1979).

Lipski (1982), however, argues that the two models are interactive components of a single phenomenon. According to him, bilingual competence is characterized simultaneously by a shared component and a pair of separate components" (p. 199). To treat them as separate does not make sense since language switching behavior is clearly an integration of two language modalities and reflects the competence of the bilingual speaker. Language switching, therefore, is not two linguistic behaviors but one.

Following Bergman (op. cit.), how and when a bilingual child learns to separate two languages is perhaps more a question of the acquisition of sociolinguistic norms of language use rather than

linguistic competence. Both factors, however, have important implications for the analysis of language switching behavior among children. For example, the question could be raised as to what specific features of the socialization of bilingual children enhance the development of language switching behavior.

Developmental Considerations

Developmentally, language mixing is at the "early" temporal end of the continuum, while code-switching is more likely to be observed at a later stage. It is regarded "not as a sign of confusion" but as a natural stage and a natural tendency in the processes of becoming bilingual. Harris (Harris & Sherwood, 1977, cited in Redlinger, 1979, p. 18) postulates a theory of natural translation and claims that bilingual children, by the very nature of their being bilingual, possess an innate ability to translate from one language to the other. This ability, he further asserts, is "coextensive with bilingualism."

Amberg (1987) hypothesizes that with increasing age, mixing decreases while switching increases. According to her, language mixing is prevalent at the earlier stages of bilingual acquisition. This is due to the child's lack of awareness of the existence of two languages in his environment.

Exceptions, however, have been reported particularly by linguist parents who have studied the linguistic development of their children by adopting what is known as Grammont's strategy. Grammont claimed that there would be less confusion if a child learned two languages separately from two different individuals from infancy. For instance, Ronjat (1913) and his wife spoke to their son in two different languages: Ronjat spoke to him in his native French while his wife spoke in her native German. Ronjat reported no evidence of a mixed stage or of confusion in his child's acquisition of the two languages.

Amberg points out that the absence of a mixed stage could mean either of two things: (1) that the child who simultaneously learns two languages

is fully aware at that very early age that his two languages are separate; or (2) that the strict compliance with Grammont's strategy may have resulted in no awareness at all on the part of the child that he is using two different languages.

Awareness of linguistic differences seems to be a crucial issue in the onset of code-switching behavior among children. The problem, however, is determining how and when a bilingual child achieves this awareness. If the onset of code-switching marks a child's awareness, or maybe a lack of awareness (Greenfield, 1989), of the existence of two languages in his environment, at what age is code-switching likely to occur? What are its cognitive prerequisites? Can stages which lead to the development of code-switching behavior among children be identified?

Amberg (op. cit.) claims that with children raised bilingually using Grammont's strategy, language mixing is rarely observed beyond the age of four. Imedadze (1967) notes that the stage of mixed speech in her child's bilingual development lasted until age 1;8; and the stage of language discrimination or differentiation, from 1;8 onward. Volterra and Taeschner (1978), in their observations of children aged 1;0 to 4;0, describe three stages bilingual children pass through in the differentiation of their languages:

1. A stage in which the child has one lexical system including words from both languages;
2. The differentiation of two lexicons but the use of one syntactic rule system for both languages;
3. The differentiation of lexicon and syntax but the association of each language with the person using that language (cited in Amberg & Amberg (1985, p. 21).

At this point, Amberg and Amberg (op. cit.) question the appropriateness of these stages in describing children who were raised bilingually using strategies other than the ones stated above. While it may seem less confusing for children to

learn two languages using Grammont's formula, its advantages do not necessarily outweigh a mixed strategy.

Arnberg further argues that at a later stage in the child's bilingual development, a mixed strategy would allow for greater flexibility in contrast to the rigidity imposed by Grammont's strategy. If, at an early age, the child is exposed to the fact that a person can speak more than one language. After all, a mixed rather than a fixed strategy (e.g., Grammont's) is the more natural way of raising children bilingually. One has yet to establish a strong case for Grammont's strategy.

In the case of successive bilinguals—those who have achieved an adequate mastery of his or her first language between the ages 2:6 to 3:6 before being formally exposed to a second language—a question which immediately arises is: At what age should the child begin to learn a second language? The issue of awareness of differences between languages is not a crucial one, however, since differences are evident at the beginning of instruction.

In the case of simultaneous bilinguals, whether a mixed or a fixed strategy is applied, awareness of linguistic differences may or may not occur at varying stages of bilingual acquisition. Although awareness may seem important for a child to perceive language boundaries from a purely linguistic context, Khubdanchani (1976) argues that bilingual acquisition and development is more "a question of the child gradually becoming aware of situationally appropriate speech forms which have been previously internalized without overt consciousness" (cited in Redlinger, op. cit., p. 24). The emphasis, therefore, shifts to "selection mechanisms in bilingual communication," with social variables exerting a dominant influence on language choice.

Does Language Switching Take Time?

The amount of time it takes to switch from one language to another, often simply called response time, is used as a primary dependent measure in tests of the predictions of the shared

or separate hypotheses. These comparisons usually involve recall of word lists or word naming tasks. For word lists, response times for mixed lists are longer than those for unilingual lists.

In comparisons of switching times using unilingual number lists and linguistically mixed lists, Macnamara, Krauthammer, and Bolgar (1968) had reported that both types of switching take an observable amount of time. But when French-English bilinguals were asked to decode unilingual and bilingual passages, Macnamara and Kushnir (1971) found that subjects needed more time to decode mixed passages. Similar results were obtained by Kolers (1966) when mixed materials were read aloud by subjects. However, when two texts in different languages were read, the subjects took about the same average amount of time as when they read unilingual passages. These findings are supported by the studies of Chan, Chau, and Hoosain (1983) on Chinese-English bilinguals. On the other hand, Neufeld (1976), using basically the same procedures devised by Macnamara and Kushnir, demonstrated that his subjects did not require more time (cited in Timm, 1984, p. 405).

In an attempt to explain the variations in processing time between unilingual and bilingual outputs, Macnamara (1967c) proposed a two-switch model of bilingual functioning which he claims to operate sequentially and independently. One switch which he calls the "input switch" governs the selection of the language to be used in the interpretation of linguistic stimuli. The other switch governs the choice of language to be used in language production. He has no control over the former; the latter is within his control. In other words, a bilingual speaker can deliberately choose to speak in one language or the other. This choice may be influenced by internal factors (e.g., the speaker's linguistic competence) or extralinguistic factors (e.g., the social situation). To require a bilingual speaker to switch, therefore, would inhibit his performance but not when he can predict when a switch would occur.

Response Times and Bilingual Proficiency. In association tests requiring subjects to respond in one or the other language, Gekoski (cited in Albert and Obler, 1978, p.158) found that response time was:

1. Fastest when both stimulus and response items were in the native language;
2. Slower when the stimulus was in the second language and the response was in the native language; and
3. Slowest when the stimulus was in the native language and the response was in the second language.

In the same experiments, although the conditions which were intended to measure speed of translation correlated highly with each other, speed of translation was not affected by second language proficiency of the subjects or whether they were compound or coordinate bilinguals.

Again, with respect to switching time and proficiency, Macnamara (1966, 1967) claims that differences between individuals in switching time is independent of the degree of bilingualism. According to him, the anticipation of a switch is a more crucial variable. When subjects were made to expect switches that were programmed in either regular or random order, response time significantly decreased.

Timm (1984) argues that perhaps the importance of switching time (or response time) as a measure of bilingual processing has been over-emphasized. In studies where switching time was a major dependent measure, she notes that:

1. The subjects who participated in experiments were not used to switching; hence, it takes them longer to perform;
2. It is possible that the test materials used in some of these experiments do not conform to the way switching is actually done in a natural setting; and
3. With the tasks involved, practice decreased switching times.

Statement of the Problem

Although language switching behavior among children has not received much research attention in the Philippines, work in this area is considered extremely important. The limited resources available locally are dominated by works of some linguists whose major objective is to enumerate and describe a typology of code-switches more commonly of the English-Tagalog variety (Bautista, 1980; Pascasio, 1984). Some have described situations where and when Filipinos are likely to switch languages, but these accounts are mostly anecdotes and impressions (Pascasio, 1981; Gonzalez, 1985). Also, the language samples have been drawn primarily from adult subjects.

This study was an exploration into the nature and extent of language switching behavior in story retelling tasks among a select group of Filipino bilingual school children. More specifically, it attempted to:

1. Determine the effect of a child's level of proficiency in Pilipino and English on the quantity and quality of its language switches;
2. Describe the features of English-Pilipino switches among these children;
3. Determine the extent to which these features are associated with the child's level of proficiency in both languages; and
4. Determine the relationship among the latency, retelling time, and story retelling conditions.

Method

Subjects

A laboratory school with a student population which was heterogeneous with respect to such factors as intellectual ability and socioeconomic status was the site for this study.

Only one grade level, the sixth grade, was chosen. This meant that the subjects were of roughly the same age and had the same exposure to formal training since they had been together

since kindergarten. (The school does not allow the lateral entry of students.) Also, it seemed reasonable to assume that students at this level possessed somewhat stable literacy skills in English and Pilipino.

Selection Criteria. At the first screening stage, the initial pool of 225 students enrolled in Grade 6 was reduced to 190 students. Those who did not have grades in English and Pilipino subjects for either the first and the second quarter or who failed to take one or both cloze tests were not included.

At the second screening stage, the number was further reduced to 53: Only those who scored below 55 or above 69 on the cloze tests were retained. The 29 students who scored 55 and below in the English and Pilipino cloze tests were assigned to the low proficiency group. There were 24 students who scored 70 and above; these were assigned to the high proficiency group. Only the extreme groups were chosen because it was assumed that they could be the most sensitive to the experimental manipulation.

Only 44 students, however, were in the final sample. One was eliminated because he did not understand the task. Another could not remember the story he had just read. The rest were not given permission by their parents to participate in the study.

The distribution of subjects according to language of story and level of proficiency is shown in Table 1.

Table 1. Distribution of Sample by Language of Story and Level of Bilingual Proficiency

Bilingual Proficiency	Language of Story	
	English	Pilipino
High	11	11
Low	11	11

Design

This study used a 2 x 2 x 4 mixed factorial design with proficiency in English and Pilipino (high versus low) and language of story (English and Pilipino) as between subjects variables and language of retelling or recall (Free Choice, English/Pilipino, Pilipino/English, and "Taglish") as within subjects variables.

Response Measures

The response measures were: (1) reaction time or latency (the interval between termination of instructions and onset of retelling), (2) retelling time (the time from onset to completion of retelling), (3) number of pauses, (4) number of switches, and (5) categories of switches.

Measures of Proficiency

The Cloze Test. To assess the degree of proficiency of each subject in English and Pilipino, two reading tests based on the cloze procedure developed by Taylor (1953, 1956, 1957) were designed. The cloze procedure has been used to measure proficiency in second language learners and has been found to be highly reliable (Oller & Conrad, 1971; Oller & Inal, 1971; Stubbs & Tucker, 1974; Swain, Lapkin & Barik, 1976; Rye, 1982; Castillo, 1983; Henk & Helfeldt, 1985; Harris, 1988). This procedure involves deleting every nth word from a passage of prose. Subjects are then asked to supply the missing words.

To prepare the cloze tests, English and Pilipino teachers of Grade 6 at the laboratory school recommended that the materials be selected from books prepared for Grade 6 students by Filipino authors (del Rosario, Enriquez, & Trinidad, 1967; Calma, Agno, Resuma, & de Guzman, 1971). Since difficulty levels for any of the materials found in these books were not available, the English and Pilipino passages chosen were matched by cloze standards, that is, in terms of:

1. Total number of words,
2. Number of words deleted,
3. Class of words deleted, and

4. Bilateral context or word position, that is, whether the deletion was every 5th, 7th, or 9th word in the passage.

The two cloze passages are compared in Table 2.

Table 2. A Comparison of the English and Pilipino

Word Class	English Cloze	Pilipino cloze
Structure Words	38	35
Content Words	17	21
Bilateral Context		
Range	5 to 10	5 to 10
Total Words	361	355
Total Deletions	56	56

There were more structure words than content words because structure words were relatively easier to predict than content words (Rye, op. cit.). The points of deletion varied from the 5th to the 10th word. Deletions at the beginning of sentences were avoided because words deleted at that position are more difficult to predict.

The subjects were also asked to rate how interesting, how difficult, and how long the passages were. (See Appendices 1.0 and 1.1 for the cloze passages.)

Materials

The Stimulus Stories for Retelling. The stories were taken from the books cited earlier. (See Appendix 2.0 for the stories.) The English and the Pilipino versions of the story were pretested for appeal, difficulty, and length on a small group of students who were not part of the final sample. It was originally intended that the story should be one that the subjects were not familiar with. However, nine of them admitted that they were familiar with it. Five of them belonged to the low proficiency group and four of them to the high proficiency group.

Procedure

Administration of the Cloze. The cloze tests were administered in the classroom to the entire

class. Since the students were familiar with the cloze procedure, the planned practice sessions were omitted.

Responses were scored in terms of exact responses and acceptable responses. A response was scored as "exact" if it was the same word that was deleted from the original passage. An acceptable response was an appropriate substitute for the exact word. Appropriateness of responses was determined by three judges. A response was accepted if all of them agreed. The judges included three members of the Psychology faculty.

For the Pilipino cloze, only exact responses were considered. This criterion could not be applied to the English cloze, however, because the subjects' scores were generally low. This would have meant that too few subjects would qualify. Instead both exact and appropriate responses were scored.

As a validation procedure, a Pearson correlation between the cloze scores and the students' average grades in English and Pilipino for the first and second quarters were obtained. The results showed a significant correlation between the two measures ($r = 0.7853$ and 0.5800 English and Pilipino, respectively, with $n = 190$).

The Story Retelling Phase. Story retelling allows the child to restructure linguistic forms naturally through verbal imitation (De Avila & Duncan, 1978) which, according to McNeil (1970) is influenced by the child's linguistic competence at the time of testing. Story retelling has been used to measure language fluency, including language alternation (Cohen, 1975 as cited in Osterreich & John-Steiner, 1979; Broadbent, 1979; Gevz & Olson, 1983).

Individual test sessions were conducted in a faculty office at the psychology department. The subjects were escorted from their school which was a short walk from the testing room. All the sessions were recorded on audiotape. After preliminary introductions, the session proceeded as follows:

1. The subject was handed a sheet of paper on which a story in either English or Pilipino

was printed. (Half of the subjects read the story in Pilipino while the other half read it in English.)

2. The subject read the story out loud.
3. An interval of about 45 seconds was given for the subject to review the story silently.
4. The story was then retold according to a specified schedule.

There were four retelling conditions. For Condition 1, the language of retelling was not specified, that is, the choice of the language of retelling was up to the child. The language of retelling for Conditions 2 and 3 depended on the language in which the story was read. For example, if the story was in Pilipino, the language of retelling for Condition 2 was English and the language of retelling for Condition 3 was Pilipino. For Condition 4, the language of retelling was Taglish.

Condition 1, where the language of retelling was not specified, was intended to be the baseline condition. Conditions 2 and 3, where the language of retelling was specified, were in fact manipulations to increase the probability that switches would occur. It was hoped that the language of retelling in a previous condition would affect the language used in subsequent conditions as the language of retelling changed from one condition to the next. It was also hoped that the instructions, which were in a mixture of English and Pilipino, would help to prime the subjects to switch.

Only three conditions were originally planned. However, by the third condition of the first testing session, the subject still had made no switches. This researcher decided to introduce a fourth condition: She instructed the subject to retell the story in Taglish. Switches were produced with these instructions. ("Taglish" here was used as an instruction to switch or to use English and Pilipino alternately in retelling. Whether "Taglish" does in fact exist or whether it is a language in and of itself is debatable.) The instructions for retelling are in Appendix 4.

Because of the novelty of the procedure, there was only one experimenter for all the sessions.

Analyses of Data

The recorded stories were transcribed verbatim in detail by six transcribers. A total of 176 transcripts were prepared, four from each of the 44 subjects. Reaction time, retelling time, number of pauses, and number of switches were obtained from each transcript. These transcripts were also examined by this researcher in order to abstract categories of switches.

Two separate 2 x 2 x 4 ANOVAs were performed with reaction time and retelling time as dependent measures. Descriptive analyses of pauses and switches based on frequencies were done across the high and low bilingually proficient groups who read the story either in English or in Pilipino.

Results and Discussion

Reaction Time

The results of the 2 x 2 x 4 ANOVA with response latencies as the dependent measure showed a significant main effect of retelling conditions [$F(3, 120) = 10.616, p < .0001$]. Scheffe's post hoc comparisons further indicate that reaction time is longer when the language of retelling is specified than when it is not specified. The mean reaction times for Conditions 2, 3, and 4 are significantly greater than the mean reaction time for Condition 1.

There were significant differences in reaction times between subjects who read the story in English and subjects who read the story in Pilipino. For both groups, a significant main effect of retelling conditions on reaction time was evident. And based on Scheffe's post hoc comparisons, when the language of story was English, the mean reaction times for Condition 2 (3.423 sec.) and Condition 4 (3.018 sec.) were significantly longer than the mean reaction time for Condition 1 (1.141 sec.). When the language of story was Pilipino, the mean reaction times for

Condition 2 (2.500 sec.) and Condition 3 (2.491 sec.) were significantly greater than the mean reaction time for Condition 1 (0.932 sec.). The means are shown below.

Table 3. Mean Reaction Time as a Function of Language of Story and Retelling Condition

Language of Story	Retelling Condition	Mean Reaction Time
English	Free Choice	1.141 sec.
	Pilipino	3.423 sec.
	English	2.541 sec.
	"Taglish"	3.018 sec.
Pilipino	Free Choice	0.932 sec.
	English	2.500 sec.
	Pilipino	2.491 sec.
	"Taglish"	1.950 sec.

Retelling Time

The only significant main effect was due to conditions of retelling $F(3, 120) = 14.041, p < .0001$. This effect was qualified by a significant interaction of these conditions with the language in which the story was read $[F(3, 120) = 6.782, p < .0003]$.

The highest mean retelling time was obtained under condition 2 where the language in which the story was read was not the same as the language in which the story was retold. Scheffe's post hoc comparison further showed the effects of Condition 2 to be significantly different from the effects of Conditions 1, 3, and 4. The mean retelling time for each condition is presented below.

Table 4. Mean Retelling Time as a Function of Retelling Condition and Language of Story

Language of Story	Retelling Condition	Mean Retelling Time in Sec. (N=44)
English	1. Free Choice	144.318
	2. Pilipino	147.636
	3. English	138.545
	4. "Taglish"	138.636
Pilipino	1. Free Choice	157.409
	2. English	191.000
	3. Pilipino	140.227
	4. "Taglish"	156.091

For the group which read the story in Pilipino and retold it in English (Condition 2), a significant main effect of language of story on retelling time was observed $[F(3, 60) = 20.396, p < .0001]$. The mean retelling time was 191.00 seconds. Scheffe's post hoc comparisons showed this mean to be significantly greater than the means obtained for Conditions 1, 3, and 4.

For the group which read the story in English, no significant differences in mean retelling time across the four conditions were found. It must be noted, however, that 6 of the 11 subjects who read the story in English retold the story in "Taglish" in Condition 1. They all belonged to the Low Proficiency group. The mean retelling time for this subgroup was 146.72 seconds. They had to retell the story again in "Taglish" in Condition 4. The mean retelling time was 149.82 seconds. If practice effects had occurred, a shorter retelling time in Condition 4 should be expected. A similar trend is observed for the other subgroup of 11 subjects who read the story in English and retold it in the same language in Condition 1. A comparison of mean retelling time between the two subgroups is shown in Table 5.

Table 5. Mean Retelling Time of Two Subgroups in Condition 1 Who Read the English Story

Language of Retelling Per Condition	Mean Retelling Time in Seconds
Subgroup 1 (n=11)	
1. "Taglish"	146.72
2. Pilipino	165.54
3. English	127.27
4. "Taglish"	149.82
Subgroup 2 (n=11)	
1. English	149.27
2. Pilipino	154.63
3. English	126.63
4. "Taglish"	136.63

Note: All the subjects who read the Pilipino story retold the story in Pilipino.

The results showed that regardless of the subject's choice of retelling language in Condition 1, retelling time in Condition 2 increased.

This may be due to the fact that when the language of retelling is specified, planning how to retell the story in a specific language was a deliberate process as compared to Condition 1 where retelling was spontaneous. This demand on the subjects seemed to overshadow the effects of practice or familiarity. And although the stories tended to be shorter in Condition 2, the subjects generally took a longer time to finish retelling the story.

It must be noted that none of the subjects who read the story in Pilipino retold it in English in Condition 1.

While the first retelling for Subgroup 1 may be considered a translation from English to Pilipino, the translation was not a pure one. The texts clearly involved English insertions predominantly at the word level. To be able to say anything about the translation skills of the subjects would require an analysis of the direction of translation (i. e., English to Pilipino, or Pilipino to English) and how closely related the translations are across the first three conditions. It may also be the case that the experimental manipulations are also tapping the translation proficiency of the subjects. All the four conditions are recall tasks but Condition 2 required an additional task of translating the story from English to Pilipino or from Pilipino to English.

Pauses

A pause is described either as a: (1) silent pause, a period of no speech between words, or (2) filled pause, a gap filled by ah, umm, eh, etc. (Clark & Clark, 1977, p. 252). The frequencies distributed across the high and low proficiency groups and the language in which the subjects read the story are shown in Table 6.

In general, the results showed that the Low Proficiency group had more pauses than the High Proficiency group. (Proficiency refers to bilingual proficiency, that is, the High Proficiency group were highly proficient in both English and Pilipino.) Of the total number of 1,068 pauses recorded, 54.4% (n = 869) were found in the Low

Proficiency group and 45.6% (n = 739) in the High Proficiency group.

Table 6. Number of Pauses by Language of Story and Level of Proficiency

Groups based on Language of Story/Proficiency	Number of Silent Pauses and Filled Pauses for Each Retelling Condition				
	1	2	3	4	Total
1 English/High Proficiency	51 (33) n=84	50 (35) n=85	39 (41) n=80	50 (42) n=92	341
2 English/Low Proficiency	49 (48) n=97	31 (31) n=62	44 (77) n=121	48 (48) n=96	376
3 Pilipino/High Proficiency	47 (60) n=107	66 (102) n=168	29 (31) n=60	23 (40) n=63	398
4 Pilipino/Low Proficiency	81 (32) n=113	148 (47) n=195	50 (8) n=58	82 (45) n=127	493
Total					1608

Note: The figures in parentheses refer to the number of filled pauses.

The smallest total number of pauses (n=341) was found among the High Proficiency subjects who read the story in English. This suggests that for these subjects retelling in either Pilipino or English were tasks of equal difficulty or ease.

The largest total number of pauses (for all the four retelling conditions) was found among Low Proficiency subjects who read the story in Pilipino (n = 493). The highest number of pauses for this group was in Condition 2 when they were asked to retell the story in English (n=195). This meant that for these subjects difficulty shifting from Pilipino to English was the more difficult task. This result is consistent with an earlier observation that this group had the longest mean retelling time (MRT = 216.727 seconds) during the same condition.

The greatest number of pauses in Condition 4, the Taglish condition, was found among the Low Proficiency subjects who read the story in Pilipino. In the light of the other results above, this is probably due to their difficulties in English.

Regardless of level of bilingual proficiency, the subjects had more pauses when they had to

retell the Pilipino story in English. In fact, low proficient subjects had fewer pauses, as compared to the baseline condition, in the other direction, when they retold the English story in Pilipino. (By the third condition, however, when they had to retell the story in the same language that they read it, the Low Proficient subjects who read the story in English had the greatest number of pauses.)

This could imply that the bilingually proficient subjects are better in English than in Pilipino. However, there is a strong possibility that this is an artifact of the proficiency measure used, the cloze test. The subjects of the study reported that they were more familiar with the cloze test in English than in Pilipino.

Number of Switches

Switches, which were defined as shifts in language from English to Pilipino or from Pilipino to English at the word, phrase, clause, and sentence levels within the four retelling texts of each of the 44 subjects, were counted. The distribution of switches across the four retelling conditions and the two proficiency groups is shown in Table 7.

Table 7. Distribution of Word, Phrase, Clause, and Sentence Switches in Four Retelling Conditions Across Bilingual Proficiency Levels

	Retelling Conditions				Total
	1	2	3	4	
High Proficiency					
Word	63	37	15	257	372
Phrase	7	4	0	43	54
Clause	1	0	0	42	43
Sentence	0	1	0	13	14
Low Proficiency					
Word	92	59	13	205	369
Phrase	8	1	0	49	58
Clause	5	0	0	68	73
Sentence	0	0	0	27	27
Total					1010

What is most obvious from the table is that except for the word switches, very few switches

of the other types occurred during Conditions 1, 2, and 3. And even the number of word switches was considerably lower than those in Condition 4. From the standpoint of generating switches for examination, the last minute decision to introduce a fourth condition requiring the subjects to retell in Taglish was justified.

Of the 1,010 switches identified across all conditions, 73.3% ($n = 741$) occurred at the word level, 11.4% ($n = 112$) at the phrase level, 11.8% ($n = 116$) at the clause level, and 3.5% ($n = 41$) at the sentence level. This means that switches occur more often within sentences than between sentences. Also, the low proficiency group had more clause switches than the high proficiency group.

It will also be noted that (1) the number of word switches decreased from Condition 1 to Condition 3 in both proficiency groups and that (2) there were more word switches in the low proficiency group. Regarding the first, it will be noted that word switches are lowest in Condition 3 where the language of the story is the same as the language of retelling. These suggest that the occurrence of word switches might be due to limitations in vocabulary.

On the other hand, the pattern may have been triggered by the retelling conditions. It is possible to consider the switches under Condition 1 as the baseline. (In fact, this was what was intended.) In which case, the subsequent decrease in word switches in Conditions 2 and 3 may be because the language of retelling is specified. In effect, the subjects were told to minimize switching.

It should be pointed out, however, that on the average only a few word switches per subject are being referred to (in Condition 1): three per subject in the high proficiency group and four in the low proficiency group.

Categories of Switches

In this study, the transcripts were examined to locate the switches. Words, phrases, clauses, sentences, and pauses before and after the switch

points were also examined. Early in this process, it could be seen that very few switches occurred at sentence boundaries (41 out of a total of 1,010 switches or 4.05%). The analyses thereafter focused on switches within sentences.

Switches that appeared to have common features were grouped together. Several preliminary groupings were attempted until a set was arrived at that seemed to exhaust possibilities. These are listed and described below.

The labels are not final. Ideally, these labels should suggest the processes that generate the switches in that category; however, this study was not designed to investigate these processes.

The boundaries of these categories overlap. These categories would be more useful if they were mutually exclusive. But that, too, will have to await process studies.

Switches were not analyzed in terms of language functions or syntax but in terms of categories that may afford a glimpse of the processes that generated them. Patterns of switching among Filipino bilinguals in both oral and written language have often been described in terms of their linguistic structures and social functions, e.g., Bautista, 1980; Marasigan, 1983; and Pascasio, 1984.

The following are the categories of switches abstracted from the transcripts. Unless sequence is important, the condition number will not be indicated. Numbers in brackets are pause lengths in seconds.

Category 1. Replacements: A word, phrase, clause, or sentence is expressed in one language but not completed in that language. The same word, phrase, clause, or sentence is restated and completed in the other language.

Examples:

- 1.1 Kaya't, ah, sinabi niya sa, [1] sa mga lalaki na, [1.6] ang, [1] ang isang, [1] ang isang, [11] the one who, [1] the one who makes the

bridge from their city to Los Baños, ah, will be her, [1] will be the one that she will marry.

- 1.2 In the morning, ah, the girl, ah, the girl, ang dalaga ay naki ... nakita niya ang isang bridge na patungo sa Los Baños.

Category 2. Repetitions: These are direct translations of words, phrases, clauses, or sentences from one language to the other, and which occur one after the other.

Examples:

- 2.1 Isabel also saw the demons. Nagdasal siya ng nagdasal. She prayed very hard along with her suitors and laian.
- 2.2 Sinabi niya sa mga suitors niya na, magpapa-marry, magpapakasal siya.

Category 3. Transitions: A switch is made between sentences or within a sentence between two clauses, to pursue the same idea, introduce a new idea, or correct the previous one.

The switch is introduced by "connector" words such as and, then, and then, that, at, at saka, kaya, pagkatapos, tapos, na, etc.

Examples: The Use of Conjunctions

- 3.1 Mga tao ay gumawa ng tulay. And then, Isabel go to the church and get the big cross, [2] And, tapos, natakot ang demonyo sa dinala ni Isabel.
- 3.2 Her boyfriends think that she is out of her mind at lumayo ang mga binata sa kanya.
- 3.3 Then Isabel got scared so she went to the church at nagdasal siya ng mataimtim.

The Use of Relative Pronouns

- 3.4 Na-remember ng mga, [1] ng mga binata na they cannot build the bridge in just one night so they just forget about it.
- 3.5 She told them na gusto niya ay dapat na sila ay makagawa ng isang bridge mula sa kanilang nayon hanggang sa Los Baños.

Category 4. Quotes/Reported Speech: A switch occurs at points where direct quotations or reports of speech within a discourse are made.

Examples:

- 4.1 And one day Isabel said kung sino man ang makakagawa ng tulay ng isang night lang, [1] pakakasalan niya.
- 4.2 Isang araw, there was a man came to Isabel's house and said: Ikakasal tayo ngayong gabi.

Category 5. Elaborations: The subject may not know the equivalent of a word or concept (or there may not be one) in the other language. These elaborations can include words, phrases, clauses, or sometimes sentences, often characterized by the alternate use of two languages after at least one word.

Example 5.1:

The subject who produced the sample below is not proficiency in either English or Pilipino. He read the story in Pilipino.

In Condition 1, where he chose to retell the story in Pilipino he uses a Pilipino equivalent for "suitor."

"Pagkatapos, pinatawag niya ang kanyang mga manliligaw."

In the next condition, where he has to tell the story in English, he is unable to find the English

equivalent of manliligaw, even after three pauses, one of them eight seconds long. He resorts to an elaboration.

"He has, [1] she has many [5], she has many, [8.5] there was many boys that in love with him."

That the English equivalent of manliligaw is not available to him is seen in the last condition, the Taglish condition, where he uses manliligaw as a word switch.

"One day he calls up all her manliligaw and then he said: ..."

"At, and all her manliligaw said "impossible" at sila ..."

Category 6. Temporal Markers: These are words or phrases referring to time. In most cases, subjects use stock phrases like "once upon a time" or "noong unang panahon." This may be due to the story format.

Examples:

- 6.1 Nung gabing 'yon, they heard some kind of construction going on.
- 6.2 One day, may isang dalagang nagngangalang Isabel.
- 6.3 Once upon a time, meron isang binibining nagngangalang Isabel.
- 6.4 Bukas, at the end of the day, magagawa na ang bridge to Los Baños hanggang Laguna.
- 6.5 Kaya, later on, meron silang narinig na pukpukan sa malayo.

Category 7. Lexical Insertions: These refer to switches at the single word level.

Examples:

- 7.1 Nung ano, ayaw niya na magkaroon ng suitors nag-promise

siya na kay God lang siya mag-sisilbi.

7.2 Nung [1] nung umaga ay may nakita silang, [2] parang, [2] passage na papunta doon sa Los Baños.

In Example 7.2, the subject does not seem to know the Pilipino equivalent of "mound." The phrase "parang passage" (in a figurative form) is used to refer to "mound." Hence, the hesitation before the word "passage."

The categories abstracted from the transcripts can be grouped into two, depending on the size of the constituents involved. Replacements and elaborations often involved phrases. Replacements in particular seem to require quite a large constituent or chunk: a subject pauses in the middle of a clause and restarts and finishes that clause in the other language. Elaborations, on the other hand, seem to occur when the subject does not know the equivalent of a word in the other language as shown by hesitations on his part. The subject then proceeds to define that word by using a phrase or a clause in the other language.

Repetitions and quotes or reported speech may also involve large chunks. Repetitions are direct translations of words, phrases, clauses, or sentences from one language to the other, which occur one after the other. Direct quotations or reported speech involve all that somebody else said but in another language.

Temporal markers and transitions may also involve phrases but are rarely clauses. Temporal markers are usually stock phrases which are readily translatable while transitions are conjunctives or relative pronouns that link two clauses.

The only category that most of the time clearly involves only one word are lexical insertions although idioms may also be considered as equivalent to single words.

The distribution of the number of switches for each of the categories, except for lexical inser-

tions, classified by level of proficiency and language of story is shown in Table 8.

Table 8. Distribution of Switches Per Category (Except Lexical Switches)

	High Proficiency		Low Proficiency		Total
	Eng	Pil	Eng	Pil	
Replacements	4	6	9	7	26
Repetitions	1	0	3	0	4
Transitions	10	11	8	10	38
Temporal Markers	13	6	12	15	31
Reported Speech	5	4	4	7	20
Elaborations	1	0	0	1	2
Total	34	26	34	40	121

It will be recalled that the total number of switches was 1,010. Since these categories overlap, computations based on percentages are not based on the same total. But it can be seen that the total number of switches in the above categories constitute only roughly 10% of the grand total.

While it is tempting to say that these categories require higher level processing, the fact that there are very few of them is not encouraging to the hypothesis nor to any attempt to confirm it. That there is only a small difference between the High Proficiency and Low Proficiency groups (60 vs. 74) in terms of the total number of switches in all these categories is also inconsistent with an expectation that Highly Proficient subjects would generate more switches of the above categories than Low Proficient subjects.

In fact, it could be said that the data support an expectation in the other direction, that is, the Low Proficient subjects generate more of these high level switches than the Highly Proficient subjects. An alternative is to say that these switches do not require high level processes: that switches involving larger constituents and chunks are processed at the same level as single word switches. Perhaps low bilingual proficiency leads to more switches of larger chunks because they have difficulty anticipating where a chunk will take

them. Whatever the case may be, to settle the question as to what kind of processing these categories might involve, it will be necessary to design experimental tasks that will generate more of them. The present story retelling tasks generate not only a small number of switches of these types but also just a small percentage of them. Perhaps less structured situations will generate more of these switches.

It may also be the case that switches of these types are not a function of the degree of bilingualism. Or, it may be that the bilingual proficiency measure used in this study, the cloze test, is not sensitive enough to differences between High and Low Proficient subjects.

The results of the present study may be summarized as follows. Story retelling was most difficult when subjects had to retell a story in the language other than the one in which they read it. It took them longer to start and complete retelling when the story was in Pilipino and it had to be retold in English. The most number of pauses was also generated by both proficiency groups under this condition. These findings are consistent with Gekoski's observation in his association experiments that response time was slowest when the stimulus was in the native language and the response was in the second language.

Intrasentential switches were more frequent than intersentential ones with single word switches as the most frequent of all the categories. It would seem that the subjects cannot totally deactivate the other language even when they choose to retell the story in only one language. And more often intrusions from the other language occur at the lexical level. The baseline data of subjects who read the story in English but retold it in "Taglish" bear this out.

Implications for Educational Policy

In countries like the Philippines where bilingualism in education is a legislative concern, studies on the use of two languages in the school

curriculum become imperative. The present Philippine language policy in education maintains the use of two languages (English and Filipino) as medium of instruction, with specific recommendations on which subjects should be taught in each language. What is referred to by Pascasio (1981) as "English for Specific Purposes in the Philippine language classroom" is actually a "strategy of dichotomy" (Schmidt-Mackey, 1979) which discourages the use of more than one language within the boundaries set by factors of person, place, time, topic and activity. Consistent with Grammont's position that such a strategy would facilitate learning with a minimum of confusion, the teaching of subjects would lead to faster learning of both language and subject matter since a strategy of dichotomy, by inhibiting language switching, assures more efficient processing of information. In contrast, if two languages are used, an additional process of translation is introduced. This increases the amount of time needed to cover a topic while, at the same time, increasing the amount of time for a child to absorb an idea.

The other alternative involves what is referred to as a "strategy of alternation" which allows spontaneous switching from one language to the other. Although it could be argued that switching comes naturally to bilingual speakers, in order to maximize learning, the type of switching that must occur should be a function of intensive exposure to both languages.

In adopting this strategy in the classroom, measures must be taken to guarantee that the child's competencies in two languages are acquired at almost the same rate in the skills of reading, writing, listening, and comprehension.

The effects of a dual language curriculum would have to be assessed in the light of how proficient the child has become in his two languages and how his level of bilingual proficiency is correlated with his academic achievement at a particular grade level.

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