

Bilingual Narrative Development in English and Japanese—A Form/Function Approach

Masahiko Minami
San Francisco State University

1. Introduction

How does a particular language influence the way its speakers perceive the world? One of the long-standing critical debates in language studies involves the relationship between language and thought processes. The linguistic relativity hypothesis (Whorf, 1956) claims that speakers of different languages think differently, and that they do so because of the differences in the languages they speak. A substantial amount of research has been conducted on this topic. Some studies (e.g., Bloom, 1981; Brown & Lenneberg, 1954) have offered strong evidence in favor of the linguistic relativity hypothesis, whereas others (e.g., Berlin & Kay, 1969) have resulted in findings that did not support the hypothesis, and still others (e.g., Au, 1983) have even provided evidence challenging its validity of linguistic relativity.

The study reported in this paper represents an attempt to combine some aspects of (1) narrative studies and (2) bilingual studies against the background of the linguistic relativity hypothesis. Studies of language acquisition and language development have focused increasingly on the structural aspects of narrative discourse (e.g., Peterson, 1990; Reilly, 1992). The development of narrative discourse skills development is a relatively complex aspect of language acquisition, particularly for persons acquiring two different languages simultaneously. Learning the skills for narrative discourse is especially complicated for bilinguals to the extent that the schema (the organization of knowledge), which provides a cultural framework of events and actions and which affects memory encoding and retrieval, differs for each of the languages used. The human mind, which is influenced by a schema of prepackaged expectations or interpretations, seems also to be under the influence of the specific linguistic systems used. Since the linguistic relativity hypothesis suggests that those who speak more than one language (e.g., bilinguals) may actually have different thought patterns when speaking different languages, this study, which examines the same story told by individuals in two different languages, sheds further light on the validity of the hypothesis.

The present study deals with the notion of a language-specific story schema, an underlying organizational paradigm for stories considered necessary for successful participation in narrative interaction in a particular speech community. A story schema reveals children's competence in using the appropriate linguistic means in a narrative situation (Bamberg, 1987). As some researchers (e.g., Harris, Lee, Hensley, & Schoen, 1988; Kintsch & Greene, 1978) claim, a story schema is culturally and linguistically specific. To deal, in part, with this idea, this study, which compares the linguistic form/function relations in narrative discourse in two different languages, examines whether: "Bilinguals possess relatively separate linguistic rule systems for each of the two languages" or whether: "There is a common underlying rule system in a bilingual's mind." By analyzing the relationship between linguistic forms and their functions, the study attempts to bring to light specific characteristics in the narratives of bilingual children using the means that they have at their disposal in two different languages.

This study basically adopts Berman and Slobin's (1994) definition of "form/function." *Form* includes a broad range of linguistic/expressive devices. *Function* includes the purposes served by the forms used in narrative discourse. The current study particularly explores how, when telling narratives, bilingual children express verbal notions through the use of the tense, aspect, and voice forms available in each of their two languages. For instance, the present tense is often used in script narratives, specifying the typical series of events taking place in a particular activity such as going to a restaurant or going to a birthday party. In picture-book narrations, on the other hand, if the task is regarded as a narrative activity (i.e., recounting of events spatially as well as temporally distant from the speaker), the past tense may be predominantly used. The narrator uses tense systematically when he or she refers to events and temporally relates them with each other. In this way, the tenses that narrators use reveal their subjective attitude toward a particular event.

This study specifically analyzes narratives by English-Japanese bilingual children. Comparing English and Japanese, as a matter of fact, offers an interesting case study for cross-linguistic analysis, because they are such distinctly different languages. To begin with, Japanese, an Altaic language in marked typological contrast to English or other Indo-European languages, is an SOV language (i.e., the basic word order of a transitive sentence is that of subject-object-verb). Also, in contrast to English, which is a right-branching (RB), head-initial (HI) language, Japanese is a left-branching (LB), head-final (HF) language (e.g., in Japanese an adjectival clause comes before a noun, whereas in English a noun is a head of the phrase). These differences in syntactic features make comparison of English and Japanese of great potential interest for those who research cross-linguistic development (Mazuka, 1998).

We need, however, to be aware of both the advantages and potential disadvantages to involving bilinguals in research. If bilinguals are used in a study of the effects of language on behavior, cognition, or emotions, potential individual or membership differences are largely eliminated. In contrast, such differences are significant when two groups of monolingual participants (e.g., a group of Japanese-speaking individuals and another group of English-speaking individuals) are used. Even if cross-cultural or cross-linguistic differences are identified in the two groups, those differences might be attributable to the fact that the same individuals are not the members of both groups.

One of the critical requirements in this bilingual study, however, is that the degree of competence in each of the languages be equal. Many bilinguals tend to be more fluent in one language than the other. Differences in the degree of proficiency can confound the obtained results and consequently preclude meaningful comparisons.

This study, after controlling for the potential problem of differing linguistic levels, addresses the following two key questions:

- (I) What, if any, similarities and differences in linguistic forms are used in narratives in English and Japanese by bilingual children?
- (II) What do the similarities and differences suggest about narratives told in each of the two languages?

These questions may relate to Cummins's (1984) competing notions of Common Underlying Proficiency (CUP) and Separate Underlying Proficiency (SUP), i.e., whether or not transfer of knowledge from the first language to a second language is likely. While this study bears some relationship to the developmental interdependence hypothesis, it mainly focuses on the similarities and differences in certain specific aspects of the children's narratives.

2. Method

2.1 Participants

The subjects for this study were 40 English-Japanese bilingual, school-age children (17 boys and 23 girls, ages 6 to 12) residing in the multilingual, multicultural San Francisco Bay Area. Specific information regarding the 40 subject children is as follows: (1) All of the subjects were either enrolled in bilingual programs in public elementary schools or were attending Japanese language classes on weekends as well as public elementary schools on weekdays. (2) Twenty-five children were from families in which both parents were native Japanese speakers; the remaining 15 children were from families in which the mother was a native Japanese speaker. (3) Nineteen children were born in Japan; the remaining 21 children were born in the United States. Although all the children were considered to be balanced bilinguals, the Bilingual Verbal Ability Tests (Muñoz-Sandoval, Cummins, Alvarado, & Ruef, 1998), which will be described below, was used as a screening measure. [Note: All the children's names in this study are pseudonyms.]

2.2 Task, procedure, and materials

Two separate processes were used in the study: (1) the administration of the Bilingual Verbal Ability Tests (BVAT) and (2) storytelling activities. First of all, the BVAT was administered to confirm that each individual child possessed balanced bilingual verbal ability. Then, the subjects were asked to engage in storytelling activities in both English and their native language, Japanese. [Note: Because all the mothers are native speakers of Japanese and used that language exclusively with them initially, the children's first language is considered to be Japanese (Fishman, 1991).] In this narrative

construction task, children were asked to look at and describe a sequence of pictures in both Japanese and English.

2.2.1 *Bilingual Verbal Ability Tests (BVAT)*

The BVAT contains three sections to measure different aspects of verbal cognitive ability: (1) picture vocabulary, (2) oral vocabulary, and (3) verbal analogies. The picture vocabulary task, which is at a single-word level that requires the subject to name a pictured object, is arranged by presenting familiar objects (e.g., star, shoe, spoon) and then gradually moving to less familiar objects (e.g., stethoscope, pendulum, turnstile). The oral vocabulary task, which examines knowledge of word meanings, is further divided into two subsections: In synonyms, the subject is expected to answer with a word similar in meaning to the word presented, whereas in antonyms, the subject is expected to answer with a word opposite in meaning to the word presented. Examples of synonyms include "angry-mad," "small-little," and "look-see," whereas examples of antonyms are "no-yes," "out-in," and "happy-sad." The verbal analogies task measures verbal reasoning. The subject is expected to comprehend and complete a logical word relationship, such as "A bird flies; a fish . . ." and "Hungry is to eat, as tired is to" The purpose of using the BVAT in this study was for recruiting and screening participants as well as for establishing equivalency in language proficiency. The subject children were asked to answer all the items both in English and in Japanese, because it was believed that the relationship in the vocabulary usage between English and Japanese would reveal whether or not the children were balanced bilinguals.

2.2.2 *Picture-book reading*

Bamberg (1987) pioneered the use of frog (or picture) stories in the belief that the process of language acquisition should be analyzed in the context of narrative discourse. Carrying over this type of methodology into a cross-linguistic research paradigm, Berman and Slobin (1994) created a method by which, whatever language they spoke, all the subjects narrated the same events. The pioneering work of these researchers helped later researchers (e.g., Stavans, 1996) to identify dynamics in the language acquisition process that come from the linguistic system of the language to be acquired. However, aside from its use in areas not germane to this study, such as the learning of American Sign Language, and in research connected with language (developmental) impairment (McIntire & Reilly, 1996), the main focus of the use of the frog story has been in studies on first language acquisition. More generally, much of our understanding of narrative development has been based on research with monolingual children. Far less work using this technique has been conducted with bilinguals, and, as a result, we know much less about the elements of narratives as told by bilinguals. Designed to address some of these gaps in the literature, therefore, the present study analyzes narratives produced in a picture-book reading task by English-Japanese bilingual children.

Comparability in terms of both content and language was the key factor in the decision to use picture stories in this study. Because the primary goal of the study was to identify how bilingual children tell stories in the two different languages, we asked the subject children to tell the same event sequence in English and Japanese. Topically similar personal narratives, such as those collected by researchers adopting content-based analyses (e.g., Labov, 1972; Peterson & McCabe, 1983), could address in part the advantage of having different people talk about similar things, but personal narratives are never identical. Differences in people's experience can influence or even jeopardize equivalency among their narratives. On the other hand, because picture-based narrative elicitation provides a single framework, the content is held strictly constant not only across subjects who are using a particular language but across different languages. Although this study is based on content analysis, the subjects were asked to tell narratives in which the sequence of events was controlled.

The participants were asked to narrate the story in the 24-page textless children's picture book, *Frog Where Are You?* (Mayer, 1969). With regard to the testing procedure, the participants were first allowed to look through the pictures to become familiar with the plot. They were then asked to narrate the story with the support of the pictures, first in English and then in Japanese or vice versa. The plotline of the story consists of the actions taken by two main characters—a boy and his pet dog—as well as the boy's pet frog and a variety of forest dwellers, such as bees, an owl, a deer, and a mole. The story first depicts the boy, his pet dog, and the frog happy together. At night, while the boy and the

dog are asleep, the frog runs away. The next morning, when the boy and the dog discover that the frog has disappeared, they begin to look for it. During their search, the boy and the dog encounter several obstacles and are involved in several adventures, mainly with the forest animals. Eventually, the boy and the dog find their frog, now with a mate and baby frogs, and return home happily with one of the baby frogs in the boy's hand. Within this goal-directed sequence, there are brief digressions, as for example when the dog gets his head stuck in a jar, then falls out of a window, and shatters the jar.

2.2.3 Major strengths of using the frog story

As noted earlier, one major strength of using the frog story is that uniformity of the content is assured across all the narrators who participated in this study. Another advantage is that the frog story is a cognitively challenging but suitable task for child narrators (i.e., a little boy searches for a frog through various locations—looking into a hole on the ground, climbing up cliffs, falling down, and calling to the frog in a loud voice). The complicated actions undertaken by the boy, the dog, and the various other characters in the forest are ideal for eliciting narrative talk. Because the plotline moves not only from place to place but also through time, the narrator is expected to provide both causal and temporal descriptions, carefully tracking the characters across scenes. Furthermore, regardless of the language they are speaking, the bilingual children are expected to express movement through space (locative trajectories) and movement through time (temporality and tense aspects). The frog story is very suitable for the purpose of observing how children forge connections spatially and temporally in each of the two languages.

As a final note, because the same children narrated the same story in both English and Japanese, counter-balancing was achieved by having one half of the participating children narrate the entire story in English first and then in Japanese, and the other half narrate the entire story in Japanese first and then in English. This counter-balancing was used to help cancel any effect of order of presentation. The children's narratives were audio-taped, and the CHAT (Codes for the Human Analysis of Transcripts) format from the CHILDES system was used for transcription (MacWhinney & Snow, 1985, 1990). [Note: CHILDES is an acronym of "Child Language Data Exchange System."]

2.2.4 Coding

For the purpose of analyzing the organization of tense forms in the picture-book narrations, all transcripts were coded using two-level coding systems. The first-level coding includes the past tense, the present tense, and nominalization (i.e., the grammatical process of forming nouns from other parts of speech, usually verbs, such as "Her answering of the e-mail" from "She answered the e-mail"). The second-level coding addresses more detailed forms: non-past (i.e., present and future) and simple past tenses, progressive and perfective aspects, as well as the passive voice. [Note: Although "unmarked" was also included in the study, it was used for identifying the unmarked present tense, which will be explained in the results section.]

2.2.5 Reliability

Coding was carried out by three individuals who are bilingual in Japanese and English and familiar with the coding system. A Cohen's Kappa measurement of reliability (Landis & Koch, 1977) was .98 for the coding of the both English and Japanese data.

3. Results

3.1 BVAT

Using the BVAT, the competency equivalence between the two languages in terms of the three language proficiency sections (Picture Vocabulary, Oral Vocabulary, and Verbal Analogies) was determined. Overall, the children's English vocabulary usage was highly correlated with their vocabulary usage in Japanese, particularly in the corresponding measurements of Japanese and English usage (see Table 1: figures shown in bold). Scores in each task were comparable in the two languages. The BVAT scores, therefore, revealed that the subject children were balanced bilinguals.

Table 1

Correlations between English and Japanese in Three Verbal Ability Related Tasks

	<i>English</i>		
	Picture Vocabulary	Oral Vocabulary	Verbal Analogies
<i>Japanese</i>			
Picture Vocabulary	.35*	.27	-.10
Oral Vocabulary	-.23	.33*	.33*
Verbal Analogies	-.04	.56***	.80****
* $p < .05$	** $p < .01$	*** $p < .001$	**** $p < .0001$

3.2. *Frog stories: initial analyses*3.2.1 *Cross-linguistic differences and similarities*

Table 2 below displays both raw and proportional frequencies of linguistic constructions used by the 40 bilingual children when narrating the frog story in the two languages. Looking at this distribution pattern, despite the fact that the numbers of the coded clauses are essentially identical (1,586 clauses in English vs. 1,600 clauses in Japanese), we can observe a distinct difference in the choice of present- and past-tense forms. When narrating the frog story in Japanese, the children tended to use the present-tense forms more frequently than they did when narrating the same story in English. In the English narrations, 1,247 clauses (78.6%) were narrated in the past tense, 314 (19.8%) were in the present tense, and the remaining 25 (1.6%) were in the form of nominalization. In the Japanese narrations, on the other hand, 811 clauses (50.7%) were narrated in the past tense, 770 (48.1%) were in the present tense, and 19 (1.2%) were in the form of nominalization. Comparisons of mean scores by *t* tests showed that the children used past-tense forms in their English narrations more frequently than they did in their Japanese narrations, $t(39) = 7.41$, $p < .0001$. In contrast, the children used present-tense forms in their Japanese narrations more frequently than they did in their English narrations, $t(39) = 9.54$, $p < .0001$.

Table 2

Distribution of Tense Forms across all 80 Narratives (40 English Narratives and 40 Japanese Narratives)

	Past	Present	Nominalization
English	1,247 (78.6%)	314 (19.8%)	25 (1.6%)
Japanese	811 (50.7%)	770 (48.1%)	19 (1.2%)

The results presented above, however, require cautious interpretation. In both English and Japanese tenses are marked on the verb. But Japanese and English vary significantly in tense agreement. In Japanese, for example, verbs in subordinate clauses take a tenseless continuative form, and the sentence takes its overall tense from the verb in the main clause (Kuno, 1973). To illustrate such peculiarities, Examples (1a) and (1b) show how two children, Kazuo and Sayuri, described Picture 2 using the "unmarked" present tense as well as the conjoining *te* form of the verb. In short, English and Japanese have different rules for agreement of tenses, and, therefore, the striking differences shown in Table 2 are somewhat deceptive.

Example (1a) Kazuo [boy; 12 years, 1 month] (Picture 3)
 Japanese: *sono asa, Maaku ga **oki-te**, totsuzen, totsuzen bikkurishimashita.*
 'That morning, when he **wake [woke] up**, Mark was suddenly surprised.'

Example (1b) Sayuri [girl; 11 years, 10 months] (Picture 3)
 Japanese: *inu to otokonoko ga **oki-te**, kaeru ga **inai** to kizuita.*
 'When they **wake [woke] up**, the dog and the boy noticed that the frog **be [was] gone.**'

Given the above-mentioned problem, a decision was made to remove the unmarked (present-tense) patterns from the analysis. However, as is shown in Table 3, which gives the amended figures and percentages, even after the unmarked patterns have been removed and proportional differences are compared, we still find cross-linguistic differences in terms of tense distribution. Comparisons of mean scores by *t* tests showed that past-tense forms were more frequently used in the English narrations, $t(39) = 2.58, p < .02$, whereas present-forms were more frequently used in the Japanese narrations, $t(39) = 2.67, p < .02$.

Table 3

Revised Distribution of Tense Forms across all 80 Narratives (40 English Narratives and 40 Japanese Narratives)

	Past	Present	Nominalization
English	1,247 (78.6%)	314 (19.8%)	25 (1.6%)
Japanese	811 (74.8%)	254 (23.4%)	19 (1.8%)

The cross-linguistic differences with regard to the distribution of present- and past-tense forms seem to be attributable, at least in part, to the relative ease of constructing "reported speech," including both direct and indirect quotation, in Japanese. Reported speech in Japanese is completed by simply adding a "quotation final" particle at the end a quotation. Thus, compared to English, the grammar of an indirect quotation is much simpler in Japanese. In the Japanese narrations 104 reported speech and related patterns [e.g., psychological complements such as *omou* (think, wonder)] appeared, whereas in English narrations 75 reported speech and related patterns were used, $t(39) = 2.49, p < .02$ [see Examples (2a), (2b), and (2c)]. [Note: Although all three examples below come from girls' narrations, who seemed to use reported speech more frequently ($M = 3.17, SD = 4.20$) than boys ($M = 1.82, SD = 1.70$), gender difference in usage of reported speech did not approach statistical significance.]

Example (2a) Melissa [girl; 6 years, 1 month] (Picture 3)
 Japanese: *soshite "ah inai" tte itte, wanwan mo "woof woof."*
 "Then, she said, "(the frog) is gone," and the dog barked, "woof, woof."

Example (2b) Misa [girl; 9 years, 2 months] (Picture 5)
 Japanese: *otokonoko wa mado ni "kaeru chan doko ni iru no."*
 "The boy (said) from the window, "Frog, where are you?"

Example (2c) Asami [girl; 7 years, 9 months] (Picture 24)
 Japanese: *soshitara kaeru ga koko ni "jaane" tte ii ni itte.*
 "Then, the frogs come here and say, "See you."

Correlational analyses were used for further investigation. As reported above, for instance, the cross-linguistic difference in reported speech was distinct. However, individuals who tended to use reported speech in one language also tended to use reported speech in the other language, $r(38) = .84, p < .0001$. In like manner, the proportional frequencies in Table 4 show that individuals who tended to narrate in the present tense in one language tended to narrate in the present tense in the other language as well. It is also the case that individuals who tended to narrate in the past tense did so in both languages. As seen below, for instance, Asami's exclusive use of the present tense in both English and Japanese when narrating the frog story [Example (3a)] shows a stark contrast to Jon's frequent use of the past tense in both languages [Example (3b)]. Note, however, that these are general tendencies, and we should not ignore the fact that there were some individuals who did not match these tendencies (see sub-section 3.2.3, "Individual Differences"). Finally, those who frequently used nominalization in Japanese (which basically corresponds to verbal omission here) did not necessarily use nominalization in English, and vice versa. Example (3c) shows that Mike used nominalization when describing Picture 4 in Japanese, while he did not do so in English. This cross-linguistic difference seems attributable to the relative ease of constructing nominalization in Japanese. Unlike English, in which derivation of a noun phrase is required from an underlying clause, as can be seen in Example (3c), just deleting the verb "*shimashita* (or *shita*), which means "did," from the end of the sentence completes

nominalization in Japanese (i.e., *zenbu no mono o chekku* instead of *zenbu no mono o chekku shimashita/shita*). [Recall that Japanese is an SOV language (the verb comes at the end of the sentence).]

Table 4
Between Language Correlations (based on proportional frequencies)

	present	English past	nominalization
<i>Japanese</i>			
present	.70****	-.68****	-.11
past	-.70****	.68****	.09
nominalization	-.10	.07	.24

* $p < .05$, ** $p < .01$, *** $p < .001$, **** $p < .0001$

Example (3a) Asami [girl; 7 years, 9 months] (Picture 4)
 English He looks inside his shoes, and says "Frog, where are you?"
 Japanese: *soshitara kutsu ni mite, "iru kana" tte omottete.*
 'He looks into his shoes, wondering "Is he there?"'

Example (3b) Jon [boy; age 8 years, 11 months] (Picture 4)
 English: He looked everywhere.
 Japanese: *otoko no ko wa zenbu no mono o mita.*
 'The boy looked into everything.'

Example (3c) Mike [boy; 7 years, 7 months] (Picture 4)
 English: He searched in his room.
 Japanese: *then room no naka de zenbu no mono o chekku.*
 'Then, his checking of everything in his room.'

3.2.2 Developmental changes

Another interesting tendency with regard to nominalization was identified in developmental patterns. The proportion of "nominalization in Japanese" was negatively associated with "age," $r(38) = -.33, p < .05$. The proportion of "nominalization in English" was also negatively associated with "age," $r(38) = -.37, p < .05$. These results seem to suggest that, irrespective of the language they use, as they grow older, children become less likely to use nominalization. These developmental patterns may be the effect of schooling as well. The proportion of "nominalization in Japanese" was negatively associated with "grade," $r(38) = -.34, p < .05$. The proportion of "nominalization in English" was also negatively associated with "grade," $r(38) = -.37, p < .05$. Although age generally corresponds to grade, in the present study, some second graders, were seven years old, some others were eight, and others were even nine years old. Not only "age" but also "grade," therefore, were strong predictors of the nominalization patterns used by the bilingual children. The fact is that the number of nominalization patterns, regardless of the language used, decreases with age (and grade) is therefore one of the many indicators of the growing linguistic and narrative abilities of the bilingual children. As reported earlier, a cross-linguistic difference in nominalization was attributable to the relative ease of nominalization in Japanese; overall, however, this may represent the children's gradual transition into an adult-like strategy of using full sentences with verbal predicates, irrespective of the language they speak.

3.2.3 Individual differences

Although the majority of narrators anchored their stories in the past tense, some others anchored their narratives primarily in the present tense. This difference was perhaps intensified because a natural tendency toward temporal coherency induced the speaker to continue to narrate in the same tense throughout. However, some narrators switched strategies in their tellings. For instance, three

fourth graders (Taizo, Naoto, Keigo), one fifth grader (Hanayo), and one sixth grader (Mai) showed a clear preference for telling their English narrations in the past tense. These narrators did not use the present tense in their English narrations at all. Two second graders, Kaori and Asami [whose description of Picture 4 was presented earlier in Example (3a)], in contrast, told their English stories almost exclusively in the present tense. Although we tend to believe that, as they grow, children are more likely to use the past tense when narrating (because of the nature of narrative), no differences between children's ages and tense forms in this study approached statistical significance. As a matter of fact, Natsuko, one of the older subjects, a fifth grader, constructed 19 clauses in the present tense and narrated only 2 clauses in the past tense. The examples described here represent two extremes in the continuum of past- and present-tense preference. As can be seen in this sub-section, however, breaking up the data into individual performances and analyzing them as such provides us with some deeper insights than those gained from the overall cross-linguistic analysis of tense forms.

3.3 Detailed analyses

3.3.1 Cross-linguistic differences and similarities

In both past-tense and present-tense anchored narratives, various verbal forms were used. Cross-linguistic similarities and differences of these forms were further analyzed (see Table 5 below).

Table 5
Inter-Language Correlations (based on raw frequencies)

	non-past	progressive	<i>English</i> perfect	passive	simple past
<i>Japanese</i>					
non-past	.76****	.20	.04	-.01	.16
progressive	.49**	.50**	-.04	.19	.33*
perfect	.26	.17	-.13	-.04	.11
passive	-.17	.05	.01	.31†	.19
simple past	-.06	.20	.37*	.11	.72****

† $p < .06$, * $p < .05$, ** $p < .01$, *** $p < .001$, **** $p < .0001$

(I) "Non-past" (i.e., present and future) in Japanese was associated with "non-past" in English (those who tended to narrate in a non-past tense in one language tended to narrate in a non-past tense in the other language), $r(38) = .76$, $p < .0001$.

Example (4) Asami [girl; 7 years, 9 months] (Picture 14)
 English: He **steps** on the rock, and **says**, "Frog, where are you?"
 Japanese: *soshitara koko kara "kaeru doko ni iru no" tte yutte sa.*
 'He then **says**, "Frog, where are you?"'

(II) "Progressive" in Japanese was associated with "progressive" in English (those who tended to tell narratives using progressive forms in one language tended to tell narratives using progressive forms in the other language), $r(38) = .50$, $p < .01$.

Example (5): Maria [girl; 6 years, 6 months] (Picture 4)
 English: And the boy **was looking** for the frog.
 Japanese: *unto sagashiteta no.*
 'They **were searching** a lot.'

(III) "Passive" in Japanese was marginally associated with "passive" in English (those who tended to narrate using passive forms in one language tended to narrate using passive forms in the other language), $r(38) = .31$, $p < .06$.

Example (6) Sayuri [girl; 11 years, 10 months] (Picture 12)
 English: And the boy fell down from the tree because the dog **was being chased** by bees.
 [Note: Ignore the logical inconsistency of the clauses connected by "because" in this example.]
 Japanese: *etto, inu wa hachi kara owarete.*
 'Um, the dog **was chased** by bees.'

(IV) The "simple past" in Japanese was associated with the "simple past" in English (those who tended to tell narratives using the simple past in one language tended to tell narratives using simple past in the other language), $r(38) = .72, p < .0001$.

Example (7) Genki [boy; 9 years, 5 months] (Picture 1)
 English: They caught a baby frog.
 Japanese: *futari wa kaeru o tsukamaemashita.*
 'The two caught a frog.'

The above-described four forms were highly or marginally correlated between English and Japanese probably because they exist in both languages. In contrast, English has various forms (the present, past, future, and conditional perfect tenses) for expressing the perfective aspect that are not available in Japanese. For instance, Maria's narration in Japanese in Example (8) below resembles her narration in English in terms of the direction of action; there are, however, striking differences with regard to tense forms. In her Japanese narration, Maria used the verbal form *te-shimatta* or, colloquially, *chatta*, which is a formulaic expression signaling a perfective aspect of the action. Generally speaking, however, this is not an obligatory usage in Japanese. Because *ta* is attached at the end of a verb to represent a perfect past action, the distinction is not always clear. In other words, Japanese does not have markers that mirror the perfect tenses in English.

Example (8) Maria [girl; 6 years, 6 months] (Picture 4)
 English: And the dog puts his face inside the frog's house.
 Japanese: *inu ga naka ni haitchatta!*
 'The dog has gone inside!'

3.3.2 Developmental changes and cross-linguistic differences

A positive association was identified between age and passive forms in Japanese, $r(38) = .49, p < .01$. Likewise, a positive association was found between grade and passive forms in Japanese, $r(38) = .51, p < .001$. These results indicate that bilingual children use more passive constructions as they age. One of the most appropriate pictures for using a passive form is Picture 17, in which the boy is thrown by a deer into a pond, and Examples (9a) and (9b) present how two 11- and 12-year-old children (fifth and sixth graders) described the picture using a passive construction in Japanese and, in contrast, how they described the same scene using an active construction in English.

In her English narrative, for instance, Asuka held the voice constant (the active voice throughout) by changing the subject. In her Japanese narrative, on the other hand, Asuka held the subject constant by switching from the active voice to the passive voice. Certainly, these differences are related to perspective-taking, i.e., the speaker has more than one way to express a certain event by emphasizing one of the event characters, without altering the logical contents of the event (Bamberg, 1997a, 1997b). The meanings of the two constructions of the event, "The deer threw the boy into the river" versus "The boy was thrown into the river," are different not only in terms of what are placed into subject (i.e., the actor) and direct object positions, but also in terms of what is emphasized in the event or action. As a matter of fact, the positive association between the children's age or grade and their use of passive forms, however, was not observed in English, and, therefore, this interesting phenomenon seems language specific. This cross-linguistic difference, which will be explained in the discussion section, may be attributable to various functions of passive structures in Japanese that are not available in English (Makino & Tsutsui, 1986; Maynard, 1990).

- Example (9a) Asuka [girl; 11 years, 1 month] (Pictures 14, 15, 16 and 17)
 English: And then they met a deer, and then the deer carry them, and dump them into the creek.
 Japanese: *de, tochuu de shika ni atte, shika no tsuno ni hasamarete, ike ni hoorikomarete.*
 'And, they met a deer on their way, and they **were grabbed** by the deer's horns, and **were thrown** into a pond.'
- Example (9b) Kenji [boy; 12 years, 6 months] (Picture 17)
 English: So deer raised him up, and throw him into a river, I mean, a creek.
 Japanese: *aa, sono ue ni nokkerarete, ike ni otosaremashita.*
 'Uh, he **was carried** on its back, and **was dropped** into the pond.'

4. Discussion

This investigation of the 40 English-Japanese bilingual children's narratives of the multi-character *Frog, Where Are You?* picture book has provided us with various insights. To summarize, with regard to the distribution of tense and other linguistic forms in the two languages, the present study revealed: (1) There is a cross-linguistically common—possibly universal or quasi-universal—route of development for the creation of well-constructed organized narratives, such as age-related decreasing use of nominalization in both English and Japanese. (2) At the same time, different paths are taken by bilingual children when narrating in different languages, such as (a) the more frequent use of past-tense forms in English, (b) the age-related increasing use of passive forms in Japanese, and (c) cross-linguistically different patterns of distribution in the use of the perfective aspect. The study thus illustrates that children's narratives reflect not only their age, but also the specific language they are speaking.

Having analyzed, in a fairly detailed way, the employment of tense (and some other linguistic) forms in bilingual children's narrations, we are now in a better position to deal with questions that touch on questions regarding both similar and distinct use of verb forms in different languages. On the one hand, a similar choice of tense forms signals that, irrespective of the language used, consecutive clauses are connected in similar ways. On the other hand, a different choice of tense signals that narrators, when narrating in different languages, are also under other constraints of the language they use (e.g., in Japanese, the relative ease of constructing reported speech and nominalization as well as the availability of relatively diverse functions in passive constructions). The form-function mapping appears to differ in different languages. In other words, we may be able to claim the following: (1) When comparable forms are available in the two languages (e.g., the present and past tense), bilinguals deploy a similar organizational strategy in the use of tense forms. (2) When comparable forms are not available or less frequently used, bilinguals access different linguistic systems in their minds and organize their narrations accordingly.

Acquisitional routes in different languages probably start in similar ways, but tense and other linguistic forms (e.g., voice, nominalization, reported speech) are governed by language-specific constraints. Certainly, language learning requires learning certain skills. Passives, nominalization, and reported speech, however, are complex rhetorical options that children are expected to master in the course of language or literacy skills development; they are more than mere strategies. To provide an example of such an option, whereas in English only transitive verbs are allowed in passive constructions, in Japanese both transitive and intransitive verbs can be used to construct the passive, such as "I was fallen by rain (= I got rained on)" and "I was died by my pet dog (= My pet dog died on me)." In these indirect passives, which are also called adversity passives (Kuno, 1973), the individual who is the subject of the passive sentence is the individual who is influenced by the event, and negative feelings are conveyed in a subtle but effective way (Matsumoto, 2000; Maynard, 1990; Niyekawa-Howard, 1968). This use of the passive form, which is not available in English, is not uncommon in Japanese. Speakers of different languages come to employ the forms particular to each language. The present study, which examined English-Japanese bilingual children, illustrates that not only shared (and possibly universal) but also language-specific patterns of development are deployed by the individual child.

The findings obtained in this study are reminiscent of previous studies that provided evidence in favor of the linguistic relativity hypothesis, in which Whorf (1956) suggested that from early childhood on, children acquire a specific worldview as they acquire language. For example, according to Bloom (1981), Chinese speakers are less likely than English speakers to give hypothetical interpretations to a hypothetical story, because, unlike English, Chinese does not employ a subjunctive mood in the sense of a mandatory marking in each verb or a recognizable verbal sequence (i.e., in English, the subjunctive constructions "were . . . would" and "had . . . would have," signal a contrary-to-fact assertion). Another example of a specific language-related worldview can be seen in a series of studies on cross-national comparisons of children's mathematics achievement (counting systems in particular) conducted by Miura and her colleagues (e.g., Miura, Okamoto, Kim, Chang, Steere, & Fayol, 1994). The high level of performance of Asian children in mathematics is well known, and Miura and Okamoto (1989) propose that differences in mathematics performance between English- and Japanese-speaking children, for instance, seem to be attributable to fundamental variations in the cognitive representation of numbers that result from differences in specific language characteristics. For example, whereas in English the numbers 11 ('eleven') and 12 ('twelve') are denoted by words that are not predictable in terms of order, many Asian languages use the numbers 1 through 10 exclusively in a fixed order. In Japanese, number 11 is denoted by the word for 10 followed by the word for 1; likewise, number 12 is denoted by the word for 10 followed by the word for 2. Although this regularity alone does not explain the superior performance of Asian children in mathematics, we need to be aware that language shapes attitudes and encourages particular types of behavior.

The finding that different ways of expressing perfective aspects in the two languages in the present study seems to support the findings in the previous studies described above (i.e., an interdependence of language and thought, or the profound effect of the particular language one speaks on how one perceives and thinks about the world). Slobin (1991), as a matter of fact, claims that some of the strongest evidence for his support of the linguistic relativity hypothesis comes from studies of typological discourse analysis of frog stories. The schema approach, which analyzes the psychological reality of narrative structure, is inevitably related to the linguistic relativity hypothesis. While this study may furnish only limited evidence in support of the linguistic relativity hypothesis, it seems to offer some convincing evidence that cognitive and linguistic factors affect one another in a complex fashion in language/narrative development.

To conclude, an increasingly well-explored area of children's language acquisition is the development of storytelling skills, or the development of narrative discourse skills in a broad sense. However, as mentioned at the very beginning of this paper, few studies have been conducted using the innovative approach of analyzing bilinguals' narratives. Yet, the study is, at the same time, limited in many ways. Many detailed questions remain unresolved. More numerous and extensive narrative analyses from bilingual children would be necessary before we could draw final conclusions about universals and language-specific aspects of language development. Nevertheless, it is my hope that this bilingual study of some aspects of narrative structure will help lead to increased understanding of bilingual children's linguistic and cognitive development.

References

- Au, T. K. (1983). Chinese and English counterfactuals: The Sapir-Whorf hypothesis revisited. *Cognition*, *15*, 155-187.
- Bamberg, M. G. (1987). *The acquisition of narratives: Learning to use language*. New York: Mouton de Gruyter.
- Bamberg, M. G. W. (1997a). Positioning between structure and performance. *Journal of Narrative and Life History*, *7*, 335-342.
- Bamberg, M. (1997b). Language, concepts and emotions: The role of language in the construction of emotions. *Language Sciences*, *19*, 309-340.
- Berlin, B., & Kay, P. (1969). *Basic color terms: Their universality and evolution*. Berkeley: University of California Press.
- Berman, R. A., & Slobin, D. I. (1994). *Relating events in narrative: A crosslinguistic developmental study*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Bloom, A. H. (1981). *The linguistic shaping of thought: A study in the impact of language on thinking in China and the West*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Brown, R., & Lenneberg, E. (1954). A study in language and cognition. *Journal of Abnormal and Social Psychology*, *49*, 454-462.

- Cummins, J. (1984). Wanted: A theoretical framework for relating language proficiency to academic achievement among bilingual students. In C. R. Rivera (Ed.), *Communicative competence approaches to language proficiency assessment* (pp. 2–19). Clevedon, England: Multilingual Matters.
- Fishman, J. A. (1991). *Reversing language shift*. Clevedon, England: Multilingual Matters.
- Harris, R. J., Lee, D. J., Hensley, D. L., & Schoen, L. M. (1988). The effect of cultural script knowledge on memory for stories over time. *Discourse Processes, 11*, 413–431.
- Kintsch, W., & Greene, E. (1978). Recalling and summarizing stories. *Language, 40*, 98–116.
- Kuno, S. (1973). *The structure of the Japanese language*. Cambridge, MA: MIT Press.
- Labov, W. (1972). *Language in the inner city*. Philadelphia, PA: University of Pennsylvania Press.
- Landis, J. R., & Koch, G. G. (1977). The measurement of observer agreement for categorical data. *Biometrics, 33*, 159–174.
- MacWhinney, B., & Snow, C. E. (1985). The Child Language Data Exchange System. *Child Language, 12*, 271–296.
- MacWhinney, B., & Snow, C. E. (1990). The Child Language Data Exchange System: An update. *Child Language, 17*, 457–472.
- Makino, S., & Tsutsui, M. (1986). *A dictionary of basic Japanese grammar*. Tokyo: The Japan Times.
- Matsumoto, D. (2000). *Culture and psychology: People around the world* (2nd ed.). Belmont, CA: Wadsworth.
- Maynard, S. K. (1990). *An introduction to Japanese grammar and communication strategies*. Tokyo: The Japan Times.
- Mayer, M. (1969). *Frog, where are you?* New York: Dial Press.
- Mazuka, R. (1999). *The development of language processing strategies: A cross-linguistic study between Japanese and English*. Mahwah, NJ: Lawrence Erlbaum Associates.
- McIntire, M. L., & Reilly, J. S. (1996). Looking for frogs in the narrative stream: Global and local relations in maternal narratives. *Journal of Narrative and Life History, 6*, 65–86.
- Miura, I. T., & Okamoto, Y. (1989). Comparisons of U.S. and Japanese first graders' cognitive representation of number and understanding of place value. *Journal of Educational Psychology, 81*, 109–113.
- Miura, I. T., Okamoto, Y., Kim, C. C., Chang, C.-M., Steere, M., & Fayol, M. (1994). Comparisons of children's cognitive representation of number: China, France, Japan, Korea, Sweden, and the United States. *International Journal of Behavioral Development, 17*, 401–411.
- Muñoz-Sandoval, A. F., Cummins, J., Alvarado, C. G., & Ruef, M. L. (1998). *Bilingual verbal ability tests: Comprehensive manual*. Itasca, IL: Riverside Publishing.
- Niyekawa-Howard, A. M. (1968). *A study of second language learning: The influence of first language on perception, cognition, and second language learning: A test of the Whorfian hypothesis*. Washington, DC: US Dept. of Health, Education, and Welfare, Office of Education, Bureau of Research.
- Peterson, C. (1990). The who, when and where of early narratives. *Journal of Child Language, 17*, 433–455.
- Peterson, C., & McCabe, A. (1983). *Developmental psycholinguistics: Three ways of looking at a child's narrative*. New York: Plenum.
- Reilly, J. S. (1992). How to tell a good story: The intersection of language and affect in children's narratives. *Journal of Narrative and Life History, 2*, 355–377.
- Slobin, D. I. (1991). Learning to think for speaking: Narrative language, cognition, and rhetorical style. *Pragmatics, 1*, 7–26.
- Stavans, A. (1996). Development of parental narrative input. *Journal of Narrative and Life History, 6*, 253–280.
- Whorf, B. L. (1956). *Language, thought, and reality: Selected writings* (Ed. J. B. Carroll). Cambridge, MA: MIT Press.

ISB4: Proceedings of the 4th International Symposium on Bilingualism

edited by James Cohen, Kara T. McAlister,
Kellie Rolstad, and Jeff MacSwan

Cascadilla Press Somerville, MA 2005

Copyright information

ISB4: Proceedings of the 4th International Symposium on Bilingualism
© 2005 Cascadilla Press, Somerville, MA. All rights reserved

ISBN 978-1-57473-210-8 CD-ROM
ISBN 978-1-57473-107-1 library binding (5-volume set)

A copyright notice for each paper is located at the bottom of the first page of the paper.
Reprints for course packs can be authorized by Cascadilla Press.

Ordering information

To order a copy of the proceedings, contact:

Cascadilla Press
P.O. Box 440355
Somerville, MA 02144, USA

phone: 1-617-776-2370
fax: 1-617-776-2271
sales@cascadilla.com
www.cascadilla.com

Web access and citation information

This paper is available from www.cascadilla.com/isb4.html and is identical
to the version published by Cascadilla Press on CD-ROM and in library binding.