The Acquisition of English Motion Verbs with Locational/Directional PP by Korean EFL Learners

Meesook Kim
(Sangji University)


This paper examines whether Korean-speaking learners of English are able to discover the ambiguity of English prepositions like *under* and *behind*, occurring with manner of motion verbs, such as *John swam under the bridge*, where *under the bridge* can be either the goal of John’s swimming or the location of John’s swimming. It is well known that in the case of expressing the goal of motion, English allows both manner of motion verbs and directed motion verbs to occur with goal preposition phrases (PPs), whereas Korean disallows the conflation of manner with motion to occur with goal PPs. Instead, Korean must use directed motion verbs with goal PPs and express manner independently. It implies that the expression of the goal of motion events in Korean is more complicated than that of the location of motion events. Twenty advanced Korean EFL learners, twenty low-intermediate Korean EFL learners, and ten native speakers of English were tested using a picture-matching task. Results show that, unlike English speakers, Korean learners consistently failed to recognize the directional reading of English manner of motion verbs with locational/directional PPs. Therefore, I suggest that explicit negative feedback is required for L2 learners to overcome the L1 effect and succeed in learning their L2 grammar.

I. INTRODUCTION

Cross-linguistic research on conflation patterns of motion events has attracted much attention in the field of lexical semantics and first language (L1) acquisition (Soonja Choi & Bowerman, 1991; Jackendoff, 1983; Youngju Kim, 1995; Talmy, 1985; Wienold, 1992). Not much work, however, has investigated the effect on second language (L2) argument structure of such cross-linguistic differences (Inagaki, 2001, 2002; Juffs, 1996). Given that

* This paper was supported by a research grant from Sangji University in 2004. I am very grateful to the three anonymous reviewers for their helpful suggestions and comments. All errors, however, are mine.
different conflation patterns lead to differences in the surface expression of meaning from language to language, L2 researchers may raise the issue of whether L2 learners acquire conflation patterns appropriate for the L2. In this paper, I investigate the issue concerning the effect on L2 argument structure of cross-linguistic differences in conflation patterns of motion events by looking at Korean EFL learners’ acquisition of English manner of motion verbs with prepositional phrases (PP) which have either locational or directional readings.

The claim that adult L2 learners rarely achieve the same native competence that children do in learning their first language has provided strong evidence that second language acquisition is clearly different from first language acquisition. Furthermore, the fact that the L2 learners come to the task of acquisition already knowing a language is taken as evidence of distinguishing L2 acquisition from L1 acquisition. In fact, most current theories of L2 acquisition agree that the L1 plays a significant role at the earliest stages of development (Schwartz & Sprouse, 1996; White, 1989, 1991), even though there is still much debate on the extent of that role. For example, according to the Full Transfer/Full Access Hypothesis (FT/FA) by Schwartz and Sprouse (1996), L2 learners take advantage of the whole of their L1 grammar as the initial hypothesis for the L2 grammar. For instance, as far as FT/FA is concerned, the L2 learner’s initial interlanguage representation, including the representation of argument structure, originates from the L1. Given appropriate positive evidence, L2 argument structure can be restructured, along lines with UG. In support of this account, there is evidence of successful acquisition of L2 argument structure (Hirakawa, 1995; Juffs, 1996; Moore, 1993). However, there are some cases where the L1 argument structure is maintained, even in the grammars of advanced L2 learners (Inagaki, 2001). According to the study in Inagaki (2001), in the L2 grammars of advanced English-speaking learners of Japanese, the English conflation pattern for motion verbs with goal PPs is maintained. In spite of different approaches, a lot of L2 acquisition researchers still agree on strong L1 effects in the acquisition of argument structure at the initial state of L2 acquisition, even though it may not seem to be at the final state. Therefore, it would be relevant to investigate strong L1 effects of argument structure, by distinguishing advanced L2 learners from low-intermediate L2 learners.

The purpose of the present study is to investigate L1 influence on L2 argument structure and the role of positive evidence available to L2 learners by testing Korean EFL learners’ knowledge of English manner of motion verbs with PPs which have either locational or directional interpretations. There have been no systematic studies of manner of motion verbs with locational/directional PPs, except Inagaki (2002). Inagaki points out that there are differences between English and Japanese with respect to manner of motion verbs with PPs which have either locational or direction readings. That is, prepositions which are ambiguous between location and direction in English are unambiguously locational in Japanese. If L2 learners assume the L1 incorporation pattern, they may fail to realize that
such PPs are ambiguous in English. Using a picture-matching task, he found that most native speakers of English recognized sentences like *John swam under the bridge* as being ambiguous, whereas intermediate Japanese EFL learners predominantly chose the picture corresponding to the locational reading. Inagaki suggests that lack of frequent input and the strong L1 effect should lead Japanese-speaking learners of English to fail to recognize the directional interpretation of English prepositions.

This study replicates Inagaki’s (2002) experiment to investigate whether Korean EFL learners are capable of finding out the ambiguity of English prepositions occurring with manner of motion verbs. In contrast with Inagaki’s experiment, the current study includes the two groups who are at the different proficiency levels and have been exposed to the different kinds of input (advanced vs. low-intermediate Korean EFL groups), in order to investigate the effect of the input in learning the target structures. In pursuing the goal, this study begins by introducing conflation patterns of motion verbs with goal PPs in English and Korean. Next, an experimental study is presented which was conducted on Korean EFL learners. Finally, the results and some pedagogical implications are discussed.

II. THEORETICAL BACKGROUND

Talmy (1985) has provided a typology of how different languages lexicalize motion events. He identified three basic conflation patterns of motion verbs in the world’s language, but two conflation patterns will be discussed here. In languages like English, verbs such as *dance, roll or float* can conflate motion with Manner to express movement in a particular direction. Accordingly, the meaning of the example (1a) is that the bottle moved into the cave in a floating manner. (Examples come from Talmy).

(1) a. The bottle floated into the cave.
   b. John walked to school.
   c. John ran into the house.

On the other hand, in languages like Spanish, motion does not conflate with manner in this way. Instead, it conflates with Path, while Manner of motion must be expressed independently, as shown in (2).

---

1 Talmy (1985) identifies three basic patterns of a motion event in the world’s languages. One is English-type languages (Indo-European languages and Chinese); another is Spanish-type languages (Romance languages); the third is Atsugewi-type languages. In languages like Atsugewi, the main verb expresses motion plus information about the Figure, with both Path and Manner of Cause expressed separately (see Talmy (1985) for more details).
(2) La botella entró a la cueva flotando.
The bottle moved into the cave floating.

Note that this pattern is also possible in English, even though it is not the most basic or frequent one, as shown in (3). That is, English allows directed motion verbs (*come, go*) with goal PPs, as shown in (3), as well as manner of motion verbs (*walk, run*) with goal PPs, as shown in (1). (Examples in (3b) and (3c) are drawn from Inagaki (2002)).

(3) a. The bottle went into or entered the cave (by) floating.
b. John went to school (by) walking.
c. John went into or entered the house (by) running.

It is important to note that both language types can express the equivalent of the bottle floated. That is, there is a locational reading of *float* in both languages, as well as a directional one (expressing the goal of the motion) in English.

On the other hand, it is a well-known fact that Korean differs from English with respect to motion verbs with a prepositional or postpositional phrase expressing a goal (Soonja Choi & Bowerman, 1991; Talmy, 1985; Wienold, 1992). Korean, as well as Japanese, patterns with Spanish in disallowing conflation of manner with motion. In the case of expressions involving directional PPs (expressing the goal of the motion), Korean must use a verb of directed motion like *go* and express manner by means of a complex verb form in which the verbal suffix */-e/* is attached to the verb, as shown in (4b). The use of a motion verb like *walk* with a directional PP is ungrammatical, as shown in (4a).

(4) a.*John-i  hakkyo-ey keol-ess-ta.
   John-Nom school-Loc walked
   ‘John walked to school.’
   John-Nom school-Loc walk-Conn-went
   ‘John went to school by walking.’

We have so far seen that in contrast with Korean, English allows both manner-of-motion verbs such as *walk* and *run* and directed motion verbs such as *come* and *go* to occur with goal PPs, as in (1) and (3). If L2 learners adopt L1 conflation patterns and associated argument structures, there may be directional differences in eventual success in acquiring L2 argument structures. Inagaki (2001) predicted that the Japanese-speaking learners of English would acquire the possibility of conflating manner with motion in the verb’s meaning, on the basis of positive L2 input. On the other hand, he predicted that it might be
impossible for the English-speaking learners of Japanese to lose the English-based conflation pattern. The results from Inagaki’s experiment support the claim for directional differences in acquiring L2 conflation patterns. That is, he found that English-speaking learners of Japanese overgeneralize the English conflation pattern, while Japanese-speaking learners of English have no difficulty acquiring a pattern which is not present in L1. Therefore, the results are consistent with theories, such as FT/FA.

There is another interesting aspect of conflation patterns of motion verbs. In English, some directional prepositions have a clear morphological reflex of the incorporation (to, into, onto). For example, onto consists of on+to and the meaning can only be directional, not locational, as can be seen in (5). However, some English prepositions such as under and behind do not show such explicit morphology, and are ambiguous as to whether they are directional (Path) or locational (Place), as in (6) (Carter, 1988; Jackendoff, 1983, 1990; Levin & Rapoport, 1988). (Examples in (6) are drawn from Inagaki (2002)).

(5) a. John walked to the beach. (directional only).
   b. John walked onto the stage. (directional only)
   c. John ran into the store. (directional only)

(6) a. John swam under the bridge. (directional/locational)
   b. John jumped behind the wall. (directional/locational)
   c. John jumped in the water. (directional/locational)

For instance, in (6b), behind the wall can be either the goal of John’s jumping (directional) or the location of John’s jumping (locational). That is, the meaning of (6b) can be that John jumped from somewhere to behind the wall (directional) or it can mean that John was behind the wall, where he was jumping (locational). Similarly, for many native speakers, a preposition like in has both interpretations, although a locational reading may be preferred in the absence of context. In (6c), the meaning can be that John was already in the water where he was engaged in jumping activity (Place) or it can mean that he was on the edge of the pool and jumped into it (Path). In contrast, onto the stage in (5b) can be only the goal of John’s walking (directional), not the location of John’s walking (locational).

Inagaki (2002) points out that in contrast with English locational PPs with manner of motion verbs, their Japanese counterparts allow only a locational reading, as shown in (7). (Examples in (7) come from Inagaki).

(7) a. John-wa hasi-no sita-de oyoida. (locational only)
   John-Top bridge-Gen under-at swam
‘John swam under the bridge.’

b. John-wa kabe-no usiro-de hasita. (locational only)
   John-Top wall-Gen back-at ran
   ‘John ran behind the wall.’

c. John-wa puuru-no nak-de tonda. (locational only)
   John-Top pool-Gen inside-at jumped
   ‘John jumped in the pool.’

Inagaki’s (2002) study found that English speakers recognized sentences like (6) as being ambiguous (75% of the time), whereas intermediate Japanese EFL learners predominantly selected the picture corresponding to the locational reading (75% of the time). That is, intermediate Japanese learners of English had difficulty recognizing the directional interpretation of English manner of motion verbs with locational/direction PPs (e.g., John swam under the bridge). Therefore, he suggests that intermediate Japanese EFL learners’ misanalysis of directional sentences as locational ones should be due to the strong L1 effect and the low frequency of the target structure.

In contrast, Korean differs from English and Japanese in expressing the equivalent of the goal of motion events, although these languages can express the equivalent of the location of motion events, as discussed above. More specifically, Korean postpositions corresponding to English prepositions like under and behind can have either locational or directional readings by using different postpositions and different verb patterns, as shown in (8) and (9).

(8) a. John-i tari arae-eyseo heomchi-essta. (locational only)
     John-Nom bridge under-at swam
     ‘John swam under the bridge.’

b. John-i tari arae-lo heomchi-e- kassta. (directional only)
     John-Nom bridge under-to swim-Conn went
     ‘John went to the bridge by swimming.’

(9) a. John-i pyeok twi-eyseo ttwi-essta. (locational only)
     John-Nom wall behind-at ran
     ‘John ran behind the wall.’

b. John-i pyeok twi-lo ttwi-e- kassta. (directional only)
     John-Nom wall behind-to run-Conn went
     ‘John went to the wall by running.’

For example, under and behind in Korean allow only locational readings when another
locational postposition eyseo (‘at’) is attached to the postpositions like under and behind, as shown in (8a) and (9a). In contrast, under and behind allow only direction readings when another directional postposition lo (‘to’) is attached to the postpositions and the complex verb forms containing a directed motion verb are used, as shown in (8b) and (9b).

In sum, Korean and Japanese differ in the expressing English manner of motion verbs with ambiguous Ps. In addition, Korean counterparts to English manner of motion verbs involving ambiguous Ps (under, behind) are also ambiguous, even though both languages differ in expressing either locational or directional readings. In the case of expressions involving directional PPs, Korean must utilize the complex verb forms, which contain a directed motion verb, with goal PPs. In contrast, in the case of expressions involving locational PPs, both Korean and English express the location of motion events equivalently. It implies that the expression of the goal of motion events in Korean is more complicated than that of the location of motion events. Accordingly, if Korean EFL learners show strong L1 effect on the acquisition of English manner of motion verbs with PPs which have either locational or directional readings, they will have difficulty recognizing the direction reading. In addition, if the robustness of input available to L2 learners plays an important role in the acquisition of L2 argument structure, advanced Korean EFL learners will be better than low-intermediate Korean EFL learners in recognizing the directional reading of English ambiguous prepositions occurring with manner of motion verbs.

III. RESEARCH QUESTION

The purpose of this experiment is to investigate Korean EFL learners’ interpretation on the English manner of motion verbs with PPs which have either locational or direction readings (Jim swam under the bridge). The following hypotheses were formulated for the present study:

1) In the acquisition of English manner of motion verbs with goal PPs, Korean EFL learners will have difficulty learning ambiguous Ps (under, behind) because of the L1 influence.

2) Advanced Korean EFL learners will be better than low-intermediate Korean EFL learners in learning the ambiguity of English PPs occurring with manner of motion verbs, if the frequency of the input affects the acquisition of L2 argument structure.
IV. METHOD

1. Participants

Forty Korean learners of English and ten native speakers of English participated in this experiment. Based on TOEFL scores, the Korean EFL learners were divided into two groups: the low-intermediate group who has the TOEFL scores below 500 (the TOEFL below 500 group) and the advanced group who has the TOEFL scores over 600 (the TOEFL above 600 group). The first experimental group (the TOEFL above 600 group) consisted of twenty Korean EFL learners who were raised in Korea and came to America as adults to study in graduate programs at the University of Illinois at Urbana-Champaign. These participants were between twenty-eight and thirty-six years of age at the time of testing. The reported age of first exposure to English for these participants ranged from ten years old to sixteen years old. Each participant had studied English in school in Korea for a minimum of seven years up to a maximum of ten years. The length of time these participants had been continuously living in America ranged from two years to six years.

The second experimental group (the TOEFL below 500 group) consisted of twenty Korean EFL learners who were undergraduate students at Sangji University and had never lived in an English-speaking country. Even though they were taking an intermediate English conversation class, their level of speaking English was demonstrated as beginner or low-intermediate level.

The final group in this study consisted of ten native speakers of English who served as controls. They were undergraduate or graduate students at the University of Illinois at Urbana-Champaign. None of the participants had the background in linguistics.

2. Materials

As in the experiment for Japanese EFL learners by Inagaki (2002), Korean EFL learners were tested using a written picture-matching task (see Appendix A for an example test item). In each test item an English sentence included a manner of motion verb with a PP which was ambiguous between locational and directional interpretations. The task involved pairs of pictures, one showing a directional reading and one a locational one, as shown in Figure 1. A pair of pictures was given to the participants with the test sentence. In each picture there were two objects: an object that moves (Figure) and the object with respect to which the Figure moves (Ground).
FIGURE 1
A Sample Test Item

For example, the test sentence for a pair of pictures given in Figure 1 was *Jim ran behind the house*. Jim was the Figure and house was the Ground. In order to focus on a directional context, one of the pictures had an arrow with a dot. Participants were told that the direction of the movement was demonstrated by the arrow and the endpoint of the movement was demonstrated by the dot. Thus, the left picture in Figure 1 describes the situation where Jim ran towards the house and ended up being behind the house. The other picture shows a situation where an action took place at some location. Three options were given to each sentence: 1 only, 2 only, and either 1 or 2. Participants were asked to identify which picture the sentence corresponded to. More specifically, they were asked to circle ‘1 only’ if the sentence corresponded to the first picture only, ‘2 only’ if it corresponded to the second picture only, and ‘either 1 or 2’ if it corresponded to either the first and the second picture.

There were twelve target items including six manner-of-motion verbs and six prepositions, as in (10). (Target sentences given in Appendix B come from Inagaki (2002)).

(10) Manner-of-motion verbs: swim, jump, walk, run, fly, crawl
    Prepositions: in, on, under, behind, above, inside

There were also eight distractors including both ambiguous and unambiguous sentences (see Appendix B for all the sentences included in the picture-matching task). The test items and distractors were randomly ordered, so were the two pictures within each items.

V. RESULTS

Mean scores and standard derivations for the three groups’ performance on the 20 picture matching test sentences are presented in Table 1. Table 2 also presents the
percentages of mean responses of ‘locational only’, ‘directional only’ and ‘either locational or directional’. The differences of mean scores between the three groups are graphically displayed in Figure 2.

### TABLE 1

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Locational only Mean</th>
<th>Locational only SD</th>
<th>Directional only Mean</th>
<th>Directional only SD</th>
<th>Locational/Directional Mean</th>
<th>Locational/Directional SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced</td>
<td>20</td>
<td>9.45</td>
<td>2.30</td>
<td>.95</td>
<td>.944</td>
<td>1.60</td>
<td>1.69</td>
</tr>
<tr>
<td>Low-intermediate</td>
<td>20</td>
<td>10.05</td>
<td>1.09</td>
<td>.85</td>
<td>.933</td>
<td>1.10</td>
<td>1.29</td>
</tr>
<tr>
<td>Controls</td>
<td>10</td>
<td>1.50</td>
<td>.527</td>
<td>.80</td>
<td>.918</td>
<td>9.70</td>
<td>1.05</td>
</tr>
</tbody>
</table>

### TABLE 2

<table>
<thead>
<tr>
<th>Group</th>
<th>Locational only</th>
<th>Directional only</th>
<th>Locational/Directional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced</td>
<td>78.75% (189/240)</td>
<td>7.91% (19/240)</td>
<td>13.34% (32/240)</td>
</tr>
<tr>
<td>Low-intermediate</td>
<td>83.75% (201/240)</td>
<td>7.08% (17/240)</td>
<td>9.17% (22/240)</td>
</tr>
<tr>
<td>Controls</td>
<td>13.33% (16/120)</td>
<td>5.83% (7/120)</td>
<td>80.83% (97/120)</td>
</tr>
</tbody>
</table>

### FIGURE 2

The results indicate that in the case of Korean EFL learners, both the advanced group and the low-intermediate group chose ‘locational only’ in most cases (78.75% vs. 83.75%). No significant difference between two groups was found (t (38) = 5.28 p = 0.337). In contrast, the control group (native speakers of English) chose ‘either locational or directional’ in most cases (80.83%). A one-way analysis of variance indicates that there was a significant difference between the three groups, as shown in Table 3 and Table 4.
The Acquisition of English Motion Verbs with Locational/Directional PP by Korean EFL Learners

TABLE 3
ANOVA Summary for "Locational Only" Response

<table>
<thead>
<tr>
<th></th>
<th>Sum of squares</th>
<th>Df</th>
<th>Mean square</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>548.100</td>
<td>2</td>
<td>274.050</td>
<td>101.902</td>
<td>.000</td>
</tr>
<tr>
<td>Within groups</td>
<td>126.400</td>
<td>47</td>
<td>2.689</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>674.500</td>
<td>49</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TABLE 4
ANOVA Summary for “Locational/Directional” Response

<table>
<thead>
<tr>
<th></th>
<th>Sum of squares</th>
<th>Df</th>
<th>Mean square</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>560.280</td>
<td>2</td>
<td>280.140</td>
<td>136.159</td>
<td>.000</td>
</tr>
<tr>
<td>Within groups</td>
<td>96.700</td>
<td>47</td>
<td>2.057</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>656.980</td>
<td>49</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

That is, the results in Tables 3 and 4 indicate that Korean EFL learners (both advanced and low-intermediated groups) chose ‘locational only’ significantly more often than native speakers of English, and that English speakers chose ‘either locational or directional’ significantly more often than Korean EFL learners. Thus, the results suggest that, unlike native speakers of English, Korean EFL speakers failed to recognize the directional reading of English manner of motion verbs with locational/ directional PPs.

VI. DISCUSSION AND PEDAGOGICAL IMPLICATIONS

The results of this experiment show that both low-intermediate and advanced Korean EFL learners had difficulty recognizing the directional reading of English manner of motion verbs with locational/ directional PPs (John swam under the bridge), whereas native speakers of English had no difficulty understanding the ambiguity of English prepositions occurring manner of motion verbs. The result supported the first hypothesis: Korean EFL learners would have difficulty learning ambiguous Ps (under, behind) because of the L1 influence. As mentioned above, Korean counterparts to English manner of motion verbs involving ambiguous Ps are also ambiguous, although the expression of the locational PPs involving manner of motion verbs in Korean is different from that of the directional PPs. For example, in the case of expressions with locational PPs, both Korean and English utilize the equivalent expression of the location of motion events. In contrast, in the case of expressions involving directional PPs, Korean, unlike English, must utilize the complex
verb forms, which contain a directed motion verb, with goal PPs. This indicates that the expression of the direction of motion events in Korean is more complicated than that of the location of motion events. Thus, it was expected that Korean EFL learners would have difficulty in recognizing the directional reading of English ambiguous Ps with manner of motion verbs due to their L1 effect.

In addition to the L1 effect, it has been generally assumed that for L2 learners to succeed in learning L2 argument structure, relevant positive input must be not only available but also robust enough. For example, Inagaki (2002) himself suggests that the intermediate Japanese-speaking learners of English had not received enough exposure to the target structures to incorporate them into their interlanguage grammar. Thus, the intermediate Japanese EFL learners were not able to discover the ambiguity of English prepositions like *under* and *behind* occurring with manner of motion verbs, such as *John swam under the bridge*. In order to investigate the role of positive evidence, therefore, the present experiment, unlike Inagaki’s experiment, included advanced and low-intermediate Korean EFL learners. The result shows that no significant difference between advanced and intermediate Korean EFL learners was found in the acquisition of English ambiguous Ps involving manner of motion verbs. Thus, this result does not support the assumption that more advanced learners have had more of the relevant input for the acquisition of target structures.

In conclusion, the results of the present study show that availability of positive evidence may not be enough for L2 learners to overcome the L1 influence and succeed in the acquisition of the L2 grammar. Given that Korean EFL learners were found to lack appropriate knowledge of English manner of motion verbs with the ambiguity of locational/directional PPs, the present study is expected to give some pedagogical implications to the EFL classroom. Previous studies have shown the important role of negative feedback or explicit instruction in the EFL classroom for L2 learners (Jong-Bai Hwang, 1999; Dami Lee, 2004; White, 1991). White’s (1991) study on the L2 acquisition of English adverb placement indicated that when given with repeated instructions over a longer period of time, L2 learners could retain some linguistic knowledge longer. In addition, Jong-Bai Hwang (1999) found that explicit instruction was more effective than implicit instruction for learning English unaccusative verbs. Another study by Dami Lee (2004) examined whether negative feedback might be effective for L2 morphosyntactic and vocabulary acquisition. She found that explicit negative feedback could play a facilitative role in L2 development. Accordingly, Korean EFL learners can have a better chance to learn the target structures of English prepositions through being provided with explicit instruction or negative feedback. Thus, I suggest that proper attention, for example, in the form of explicit instruction or negative feedback, should be paid to learn the ambiguity of English PPs with manner of motion verbs in terms of repetitive and timely exposure for successful language teaching and learning. In doing so, Korean EFL learners are able to further their
grammatical ability, and build confidence in using both ambiguous prepositions (under, behind) and unambiguous prepositions (onto, to, into) involving manner of motion verbs for communicative purposes.

REFERENCES


Second Language Research, 12, 177-221.


APPENDIX A

Sample Test Item

(A sample test item comes from Inagaki (2002))

Mike swam under the bridge.

1 only 2 only either 1 or 2
APPENDIX B

Sentences Included in the Picture-Matching Task
(Test sentences are drawn from Inagaki (2002))

A. Test sentences
1. Tom walked behind the house.
2. Mary walked in the store.
3. Mike swam under the bridge.
4. John ran in the store.
5. The bird flew above the tree.
6. The mouse crawled on the table.
7. Jim ran behind the wall.
8. Bill swam inside the cave.
9. Peter jumped in the pool.
10. The baby crawled under the table.
11. Susie jumped on the bed.
12. Ben ran inside the gym.

B. Distractors
Directional only
1. Paul walked on the beach.
2. Ted walked onto the stage.
3. The butterfly flew into the house.

Locational only
1. Jane was in the park.
2. Robert ran at the racetrack.

Ambiguous
1. The baby ate the chocolate on the table.
2. The girl waved to the man with a flag.
3. Jason saw the girl with binoculars.

Applicable levels: secondary education, adult education
Key words: manner of motion, path, manner, prepositional phrase (PP)