

Locative PPs in L2 English Argument Structure Acquisition

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Kweon, Soo-Ok. 2002. **Locative PPs in L2 English Argument Structure Acquisition.** *Korean Journal of English Language and Linguistics* 2-1, 1-21. In this paper, a persistent L1 influence on L2 argument structure acquisition is observed in terms of complement and adjunct PPs. Since the distinction between these two PPs in L1 seems not as sharp as in L2, overgeneralization is anticipated in the L2 acquisition due to L1 transfer. Result of an experimental study shows that Korean learners of English do not successfully acquire L2 verb meanings as to which locative PP is obligatory and which is not. Generally, learners transfer the L1 properties when asked to judge grammaticality. Some possible source of constraints in L2 acquisition, such as input frequency and noticing ability is proposed as possible explanations of data. Finally, pedagogical implications in language classroom for vocabulary acquisition are discussed.

1. Introduction

I am interested in examining the acquisition of argument structure of English verbs in terms of the distinction between complement and adjunct locative phrases. In general, a complement is an obligatory element of a verb in the argument structure realization, while an adjunct is an optional element.

- (1) a. *John put the book.
 b. John put the book [PP on the table].
- (2) a. Mary bathed the baby.
 b. Mary bathed the baby [PP in the kitchen].

As shown in (1), argument structure of *put* requires a theme object and a prepositional phrase (PP) *on the table*. So, (1a) is ungrammatical without an obligatory locative phrase, whereas (1b) is grammatical with it. On the other hand, the verb *bathe* takes a locative phrase, *in the kitchen* optionally, which means that both (2a) without a locative phrase and (2b) with a locative phrase are grammatical in English. Therefore, it seems quite obvious that a locative phrase occurring with *put* and a locative phrase occurring with *bathe* will behave differently, though they share the same categorial function superficially. This difference for the two kinds of locative phrases is also reflected in naming the two sorts of PPs: an obligatory PP as in (1b) is generally called a **complement** and an optional locative phrase as in (2b) an **adjunct**, or a **modifier**.

In English, verbs which take locative phrases as complements (obligatory elements) for the argument structure, such as *put* and *lock* are categorized into one group, and those which take locative phrases as adjuncts (optional elements), such as *bathe* and *eat* are categorized into another group. The difference between complements and adjuncts has been described and explained as a significant classification of English verbs across various frameworks of syntactic theories, though each framework addresses the distinction with slightly different terminologies (e.g., Baker 1996; Haegeman 1996; Radford 1988). The basic learnability issue of argument structure in language acquisition is that if a speaker can be said to know the meaning of the verb *put* as is manifested in English, then, she will also know that *put* needs a locative phrase as its complement. As a result, she will automatically preempt any sentences that involve *put* without a locative phrase. Likewise, if the meaning of a verb *bathe* is readily acquired by a speaker, she will recognize that *bathe*, unlike *put*, does not have to take a locative PP as its argument. Either with a locative phrase or without it is far from

being problematic as far as the grammaticality of sentences in which *bathe* occurs is concerned. Thus, it is argued that the argument structure information is determined by the syntactic components and semantic information of verbs. Arguably, in first language development, positive evidence in the input has been assumed to be the only source for a child to learn language.

To put it differently, a child is exposed to grammatical sentences such as (1b) and (2a, b) only, because in English, sentences like (1a) are not allowed where verbs belonging to put-type class occur without a PP (e.g., *He put the book). How does a child know that (1a) is not the form allowed in English? The idea is that the innate language acquisition device or Universal Grammar (UG) is responsible for the successful acquisition of argument structure. Thus, if a child can link the behavior of 'putting' something on something with the lexicon PUT, then, she is expected to be able to build up a complete subcategorization requirement thanks to the inborn learning system. As is generally accepted, successful language acquisition procedures for the parts that are ambiguous in the input are attributable to the biologically endowed acquisition device (Bley-Vroman 1990; White 1989).

For L2 learners to acquire the complement-adjunct distinction, the input alone seems to be insufficient. This causes the logical problem of language acquisition just like in L1. If the same principles that govern the acquisition of L1 lexical rules have a role to play in L2 acquisition as well, then UG will act to constrain learner hypotheses (White 1989, 1990).

Besides the innately endowed linguistic competence which enables a child to learn language mainly based on the positive evidence in the input, the influence of L1 in SLA has been focused in previous studies to explain the L2 acquisition processes (Inagaki 2001; Montrul 2001; Schwartz and Spruce 1994, 1996). Clearly, it is necessary to consider the possibility

that the relevant properties can be considered as derivable from L1 knowledge or as direct transfer from surface properties in the L1. More importantly, it is conceivable that L1 influence surpasses UG availability, the evidence of which is usually exhibited by learners in initial stage.

Recently, significant number of researchers are looking into the L2 interlanguage grammar in terms of L1 influence concerning the matter of lexico-syntactic interface (Hirakawa 2001; Inagaki 2001; Montrul 2001).

The phenomenon examined in this is paper, L2 argument structure of verbs with locative PPs is presumed to have its source in a UG principle, X-bar syntax (Jackendoff 1977a). In the X-bar theory, the evidence of X-bar level is clearly laid out by the need of the distinction between complement and adjunct, which will be discussed below in more detail. In the current study, after showing that Korean EFL learners did not successfully acquire complement/adjunct locative PPs, I argue that L1 influence persists in L2 acquisition and input noticing ability (Bley-Vroman 1997) is also attributable to possible interpretation of data.

Essentially, the research on the acquisition of verb meaning in lexico-syntactic interface can provide some answers to the understanding of the nature of argument structure in the L2 acquisition. This phenomenon has not been explored in much detail in SLA.

2. Linguistic Theory

2.1. The Complement/Adjunct Distinction

In this section, a brief theoretical review on complement and adjunct distinction will be addressed. Intuitively, a complement is an element whose existence is somehow implied by the semantics of the head. Complements are to be distinguished

from adjuncts (or modifiers), which provide optional information about properties of the head (O'Grady 1998:5). Some tests for distinguishing complements and adjuncts. First, when the complement and adjunct both occur on the same side of the head, the preferred ordering places the complement closer to the head than the adjunct.

- (3) trust [pp₁ in your doctor] [pp₂ during period of illness]
 ??trust [pp₂ during period of illness] [pp₁ in your doctor]

This again confirms that PP₁ is a complement and PP₂ is an adjunct. The third test is that complements of the same type cannot be iterated; adjuncts of the same type often can.

- (4) *trust [pp₁ in your doctor] [pp₁ in your fortune teller] [pp₂ during periods of illness]
 trust [pp₁ in your doctor] [pp₂ during period of illness]
 [pp₂ in the summer]

Example (4) shows whereas the PP₁ type of phrase cannot be iterated, the PP₂ type of phrase can. Fourth test is about obligatoriness. If a phrase is obligatory, it is a complement.

- (5) trust without PP₂: You can trust [pp₁ in your doctor]
 trust without PP₁ (or PP₂): *You can trust.

Finally, "do-substitution" can replace a phrase no less than a minimal verb phrase. That is, a V-bar can be replaced by *do so*, but an element smaller than a V-bar cannot be replaced by *do so*.

- (6) a. Harry [v' [v' [v relied] [pp₁ on hard work]] [pp₂ in 1995]] and Mary did so in 1994. (did so=[v' relied on

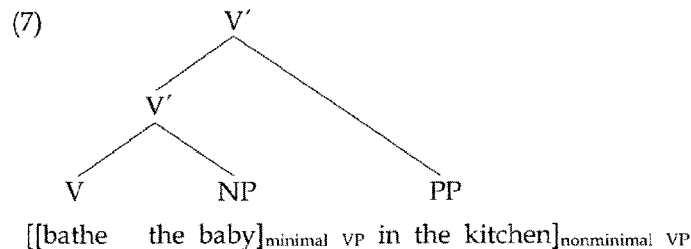
hard work]).

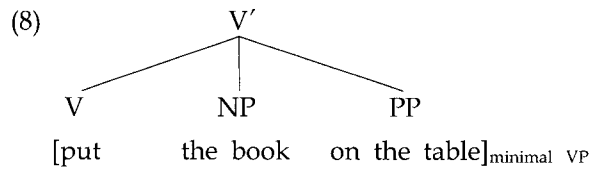
- b. Harry [v' [v' [v relied] [pp₁ on hard work]] [pp₂ in 1995]] and Mary did so too. (did so=[v' relied on hard work in 1995]).
- c. *Harry [v' [v' [v relied] [pp₁ on hard work]] [pp₂ in 1995]] and Mary did so on luck in 1994. (did so=[v relied]).

In (6a, b), *did so* replaces the V' constituent, which is allowed. However, *did so* in (6c) replaces a V constituent *relied*, a phrase less than a V' *relied on hard work*, which makes the sentence unacceptable. This shows that one cannot predict a phrase's function from its category. For the *do so* substitution is most relevant for the consideration of L1 influence, for the reason which will be clear below, this paper from now on will solely focus on *do so* substitution among several contrasts between complement and adjunct.

2.2. Distinction between Complement and Adjunct: *do so* Test

Among many researchers, Radford (1988) carefully argued that a structural distinction between verbal complements and adjuncts can be formulated in relation to pronominalization facts. Jackendoff (1977a:58, cited by Radford 1988) notes that the phrase *do so* appears to function as a pro-V bar. As shown in (7) and (8), *do so* can replace a V-bar constituent.





According to the X-bar theory, the difference in V' constituent between *bathe*-type and *put*-type verbs is that the former can replace either [bathe the baby in the kitchen] or [bathe the baby] with the pro- V' *do so* as shown in (7), while the latter can only replace the whole string [put the book on the table], not the substrings [put the book]. This suggests that [put the book on the table] is a V' constituent, but [put the book] is not, as is indicated in (8). That a V' constituent can be replaced by a pro- V' *do so* means that a V' can be the smallest unit for the *do so* replacement. Consider sentences (9) and (10) below, where (9) is unacceptable with *did so* replacing a verb (*put*) and its direct object (*some money*), but (10) is acceptable in the same situation (i.e., *did so* substitutes *bathed Fido*). (Examples from Baker 1996:60-65),

- (9) Martha put some money in the bank, and then Shirley
 {put some money/*did so} in her wall safe.
- (10) George bathed Fido in the kitchen, and then Fritz {bathed
 Fido/ did so} in the garage.

Baker (1996) explains why *did so* cannot replace *put some money* in (9), but can replace *bathed Fido* in (10) by making three simple assumptions between complements and adjuncts.

- a. The complements of a head are included in the head's minimal phrase.
- b. The locative phrase that occurs with *put* is a complement of *put* and thus is included in its minimal verb phrase.

- c. *Did so* cannot replace a sequence that is less than a minimal verb phrase.

Thus, *do so* substitution test that replaces less than a minimal phrase, [put some money], yields ungrammatical result. In contrast, [bathe Fido], which is the minimal verb phrase and [bathe Fido in the kitchen], which is larger than the minimal verb phrase with an added optional PP can be replaced by *did so*, because these two phrases constitute *V'* as in (8).

In sum, it should be pointed out that *did so* cannot replace a sequence that is less than a minimal VP. As a result, a complement locative PP cannot be replaced by *did so*, since it occurs within a minimal VP of *put*-type verbs. However, an adjunct locative PP occurs within a nonminimal VP. Thus, both a minimal VP (a verb and its theme) and a nonminimal VP (the whole VP) of *bathe*-type verbs can be replaced by *did so*.

2.3. “do so” Substitution Test in Korean

The primary interest in this paper is to examine the L1 influence on L2 acquisition. The persistence of L1 influence can be observed if the properties under investigation are present in both L1 and L2. Previous work in L2 argument structure suggests that L1 influence persists when L2 property constitutes the subset of the corresponding property in L2, because no positive evidence tells the learners that the corresponding form of L1 is not allowed in L2 (Juffs 1996a, 1996b; Sorace 1995).

Unlike English, Korean seems not to show a sharp contrast between *put*-type verbs and *bathe*-type verbs in *do so* substitution possibility with respect to locative PPs. That is, the equivalent Korean versions of English counterparts show that both types of sentences are grammatical with *do so* substitution, whether a locative PP is complement or adjunct.

- (11) Martha-ka unhayng-ey yakkan-uy ton-ul nehe-twu-ess-ko,
Martha-Nom bank-Loc little-Poss money-Acc put-pst-comp
 kuliko Shirley-nun pyukcang kumko-ey kuluk-key hay-ss-ta
and Shirley-Nom wall-safe-Loc did so-Pst-Decl.
 *'Martha deposited some money in the bank and Mary
 did so in the wall-safe.'
- (12) Mary-ka kay-lul pwuek-eyse mokyok sikyess-ko,
Mary-Nom dog-Acc kitchen-Loc bathe-Pst-comp
 kuliko Tom-un pang-eyse kulekey hayss-ta.
and Tom-Nom room-Loc so did-Pst-Decl.
 'Mary bathed the dog in the kitchen and Tom did the
 same thing in the room.'
- (13) *Martha put some money in the bank and Shirley did so
 in the wall-safe.
- (14) Mary bathed the dog in the kitchen and Tom did the
 same thing in the room.

In Korean, sentence (11), a translated version of ungrammatical English sentence (13), is grammatical. Sentence (12), which has a grammatical English counterpart (14) is also grammatical. That is, Korean does not show the contrast of grammaticality between *put*-type and *bathe*-type verbs in terms of *do so* substitution, while English does. This may suggest that the argument structure in Korean is not realized in the same way as it is in English. In English, *put*-type verbs obligatorily take a locative PP, whereas the same category in Korean does not necessarily take a locative PP for the subcategorization, thus it is suggested that Korean does not show as clear a distinction as in English between *put*-type verbs and *bathe*-type verbs in terms of the requirement of locative PP complement. Apparently, Korean allows a broader range of acceptability than English, regarding *do so* substitution. In this respect, it is reasonable to expect L1 influence (i.e., overgeneralization) on the interpretation of *did so*.

I hypothesize that L2 learners will be affected by their L1 knowledge. If learners transfer their L1 properties to L2, they will show the same behavior patterns for L2 as in their L1. Therefore, a structure possible in the L1 will be regarded as possible in L2. This may be particularly true as to the intermediate level learners whose IL grammar has yet to reach the ultimate stage. With this in mind, the following hypothesis can be formulated.

3. Research Hypotheses

Hypotheses are based on the requirement of locative PPs with respect to two types of verbs: *put*-type and *bathe*-type. The two kinds of verbs classes behave differently in English and Korean with locative PP obligatoriness. The hypotheses are:

1. If L2 learners are sensitive to aspects of meaning that define argument structure and are constrained by their L1, it is expected that they will accept *bathe*-type sentences where *do so* replaces not only a minimal VP (i.e., *bathe the baby*) but also a nonminimal VP (i.e., *bathe the baby in the kitchen*).
2. Difficulties are anticipated with *put*-type verb classes, due to transfer from the L1. While it is expected that L2 learners will accept *put*-type sentences where *do so* replaces a minimal VP (i.e., *put the book on the table*), it is also predictable that they will incorrectly accept sentences where *do so* replaces less than a minimal VP (i.e., *put the book*), not realizing the requirement of a locative PP in this case.

4. The Experiment

4.1. Participants

There were two groups of participants: English native speaker

s¹) (n=10) and Korean learners of English (n=24). The Korean learners of English were all college students who were enrolled in an English composition class at a university in Korea. Most of the students were sophomores with various backgrounds of major and their proficiency level was assumed to be intermediate.

4.2. Materials

There was a written grammaticality judgment test. Participants were asked to judge to which degree each sentence sounded natural. Judgment was given on a seven-point Likert scale ranging from -3 (completely unnatural) through 0 (not sure) to +3 (completely natural). The total test items were 44 sentences with 24 target sentences and 20 distracters. Among the 24 target sentences, 12 of them consisted of *put*-type verb class and the remaining 12 involved *bathe*-type verb class. Each verb in both types of verb classes has two sentence patterns, hence, there were six verbs in each type, as shown in (15).

(15) **Put-type verbs:** [___ NP, PP_{loc}]

ex) place, lock, deposit, plant, put, load

Bathe-type verbs: [___ NP]

ex) bathe, eat, sell, watch, bake, buy

One verb in each type takes [___ NP PP] and [___ NP PP PP] patterns as shown in (16).

¹Two native speakers were excluded from the analysis because they consistently gave an unfavorable rating (-3), commenting that in written form a conjunction cannot start a sentence. However, Baker himself (1996:62) illustrates sentences starting with a conjunction. The second sentence in the test items started with the conjunction *And*, as shown in the examples of test material.

(16) Put-type: ungrammatical

- a. *Tom placed the book on the table. And Sue did so on the chair. [___ NP PP]
- b. *Tom placed the book on the table on Wednesday. And Sue did so on the bed on Friday. [___ NP PP PP]

Bathe-type: grammatical

- c. Bill bathed the dog in the kitchen. And Martha did so in the bathroom. [___ NP PP]
- d. Bill bathed the baby in the kitchen on Tuesday. And Martha did so in the bathroom on Thursday. [___ NP PP PP]

As illustrated in (16), sentences (16a-b) which involve *placed* are ungrammatical when *did so* replaces less than a minimal verb phrase for the reason mentioned before. On the other hand, sentences (16c-d) which involve *bathe* are grammatical, because neither of the PPs is within the minimal verb phrase, which means the PPs are not obligatory in this case. As a result, PPs in (16c) and (16d) can be replaced by other words. The second PPs in both (16b) and (16d) are not relevant to the grammaticality of the sentences, because these PPs are outside of the minimal verb phrase in both types of verb classes. By *did so* substitution, it is possible to distinguish complement PPs from adjunct PPs according to the grammaticality. In other words, if a PP is a complement, the test item in which it occurs is ungrammatical, however, if a PP is an adjunct, the test item is grammatical.

Consequently, construction with *put*-type verbs should show unfavorable (negative) ratings, but construction with *bathe*-type verbs should show favorable (positive) ratings. As was the case with the target items, distracters also consist of grammatical and ungrammatical sentences, ten being grammatical and the remaining ten being ungrammatical in order to balance the

numbers between grammatical and ungrammatical sentences.

4.3. Analysis

A two-way repeated measures ANOVA was conducted on the data. The design included one between subject factor (language), which had two levels (Korean and English), and one within-subject factor (sentence type), which had two levels (sentence with complement PP (*put*-type verb) and adjunct PP (*bathe*-type verb)).

5. Result

The results are reported in terms of mean acceptance scores. If a construction is accepted, it will show a positive number, whereas if rejected, a negative number. Table 1 summarizes the mean acceptability scores of native speakers and L2 learners in *put*-type construction (impossible situation) and *bathe*-type construction (possible situation).

Table 1. Descriptive statistics of native speakers and learners

	Mean acceptability score	
	<i>put</i> -type	<i>bathe</i> -type
Native speakers (N=10)	-0.43 (1.51)	0.22 (1.47)
L2 learners (N=24)	0.61 (1.01)	1.38 (1.07)

*Numbers in the parenthesis indicates the standard deviation

As shown in table 1, while native speakers show negative ratings for *put*-type construction (average score is -0.43), they show positive ratings for *bathe*-type construction (average score is 0.22). By this result, native speakers seem to be able to “act on principle,” serving well as a comparison group. By contrast, learners show positive ratings for the two verb types, suggesting that they accepted both of these as possible forms in English.

The results are displayed graphically in figure 1.

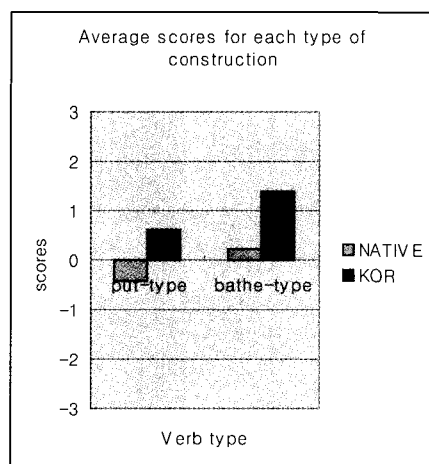


Figure 1. Average scores for each type of construction

In figure 1, we can see more clearly that *put*-type construction shows negative ratings by native speakers, but positive ratings by L2 learners, which means that L1 transfer effect is observed by the positive ratings. The permission for *bathe*-type construction is expected not only in English but also in Korean, and thus it is reflected by the positive ratings for both language groups.

Repeated measures ANOVA shows that the differences between groups are significant, $F(1, 112)=15.736$, $p=0.000$. The difference in sentence type is also significant, $F(1, 112)=6.676$, $p=0.011$, but, there is no interaction between sentence type and group, $F(1, 112)=0.43$, $p=0.836$. This means that native speakers do better than the L2 learners and sentence types are differentiated by the two groups. The ANOVA results suggest that native speakers correctly differentiate between possible and impossible sentences, while L2 learners do not. The ANOVA summary is reported below.

Table 2. ANOVA Summary

Source	df	SS	MS	F
Language	1	19.940	19.940	10.306*
Structure	1	8.459	8.459	15.736*
Language × Structure	1	5.486	5.486	6.676
Total	3	33.885		

*P < .011

I would like to focus on two things that needs to be explored about the results in more detail. First, even though learners show positive ratings for both verb types, it does not mean that they accepted sentences with similar preference. There is a difference in average scores, *bathe*-type construction showing relatively higher acceptability score than *put*-type construction (0.61 vs. 1.38, respectively). Besides, native speakers do not show contrast as predicted. These issues will be returned in the next section.

6. Discussion

The focus of this study is on whether L2 learners have readily learned the target-like argument structure for the verbs that take a complement locative PP or an adjunct locative PP, manifested specifically by *did so* replacement test. I am interested in observing how sensitive L2 learners are in distinguishing a complement PP from an adjunct PP, when these phrases share the same category (PP) and occur in superficially the same position.

L2 learners' interlanguage is tested by a substitution test. *Did so* replacement is divided into two groups depending on whether the replaced elements are less than a minimal VP or not. As was noted, a PP complement is included in a minimal VP,

whereas an adjunct PP is not. Thus, *did so*, which replaces no less than a minimal VP could serve as an indicator of complement and adjunct distinction.

It should be noted that it is not given explicitly in the input whether a verb takes a complement or an adjunct as L2 learners learn a target language. That is, the complement locative PPs looks identical with the adjunct locative PPs on the surface, but the differences between the two kinds of PP are found at a level which learners do not observe directly. Furthermore, learners may not be taught the properties manifested in the abstract level either in classrooms or in natural settings. Therefore, the only available source of the acquisition can be UG (see Hirakawa 2001:228). However, learners' positive response to the replacement possibility of the two different kinds of PP lead to an obvious conclusion that it may not be UG that constrains L2 acquisition of the relevant structure of the current study. For if UG is involved in L2 acquisition, the expected behavior from learners will be like that sentences including a complement PP will show negative responses, while sentences including an adjunct PP will show positive responses, as can be expected from what UG hypothesis might predict. But, as is shown in the results, the learner responses were all positive ratings throughout PPs. This is not what is expected from UG hypothesis. Thus, it is proposed that L2 learners are not guided by UG for the distinction between complement PPs and adjunct PPs. When we assume that UG is not involved in L2 acquisition, we can seek other sources to the L2 argument structure learning process.

As we have seen in the previous section, Korean displays quite a different property, allowing *did so* replacement for *put*-type verbs as well as for *bathe*-type verbs. The translated versions of *did so* test in Korean does not show contrast between complement PPs and adjunct PPs. That is, it is conceivable that a locative PP of *put*-type verbs in Korean may not have the

same property as in English. If I hypothesize correctly that L2 learners will be influenced by their L1 knowledge in the process of L2 acquisition, especially before they get to the final state of the L2 (see Martohardjono and Gair 1993; Schwartz and Sprouse 1996), L2 learners should not demonstrate a clear distinction between complement PPs and adjunct PPs, more so when they are intermediate level of learners.

Arguably, the result which shows that native speakers appear to act on principle, while learners do not support the hypothesis that L1 is of key importance in foreign language learning. This result is also compatible with the other views in which the L1 transfer is substantial in acquisition (e.g., Schwartz and Sprouse's (1996) Full Transfer/Full Access Hypothesis).

There are things that draw our attention about the behavior pattern of the two kinds of PP by both native speakers and L2 learners. Native speakers, on the one hand, do not show a great contrast between *put*-type and *bathe*-type (-0.43 vs. 0.22, respectively, being around "not sure" scale, though one is rejected and the other is accepted), contrary to what is predicted from linguistic theory. This kind of imperfect response of native speakers has been pointed out by other research. As Juffs (2001) mentions in his discussion on a few empirical studies in which native speaker group "undermine to some degree the theoretical claims" that are being tested:

... some scholars may argue that we may in fact be trying to assess knowledge representation among L2 learners prematurely because the theoretical literature has not yet reached consensus on the status of that knowledge in native speakers. ... it is clear that SLA researchers can contribute to the theoretical literature by conducting this empirical research. Although theoreticians have long argued that linguists' own intuitions need to be validated ..., syntacticians have in fact failed to do this necessary empirical research. Without SLA studies ..., many of these theoretical claims are

simply not going to be tested. (Juffs 2001:311).

On the other hand, interestingly, although learners accept both grammatical and ungrammatical sentences, they show higher acceptability for sentences containing an adjunct PP than for sentences containing a complement PP. Two sample t-test result shows that the acceptability of sentences in which an adjunct PP are replaced by *do so* was significantly higher than in the case of a complement of PP ($t=-3.631$, 2-tail, $p=0.000$). This means that learners do better for grammatical sentences with adjunct PPs than for ungrammatical sentences with complement PPs. This would suggest consistent results with previous research on the pattern of grammaticality judgment, where L2 learners do better for grammatical sentences than for ungrammatical sentences (e.g., Felix 1987; Bley-Vroman et al. 1988). Why should the acceptability of these two kinds of PP be differentiated? It is originally hypothesized that L2 learners will show similar response patterns for the two kinds of PP if they are strongly influenced by their L1, since the *do so* test does not distinguish these two kinds of PP in the L1. Then, we need another explanation except for the L1 negative transfer for this matter.

One possible reason for this asymmetry to acceptability preferences may be that learners' knowledge on possible and impossible structures of an L2 is not stored with the same degree in the IL grammar, thereby it is reasonable to imagine that forms that are allowed in the target language are easier to discern than those that are not. The information that a locative PP of *put*-type verbs is obligatory element of argument structure is given in the input, because learners have never seen or heard of the versions where *put*-type verbs occur without a complement PP. In contrast, learners may have abundantly experienced that *bathe*-type verbs occur sometimes with a locative PP and sometimes without one. Therefore, it is reasonable to

assume that learners might have accepted input-familiar/frequent forms higher than the input-unfamiliar (i.e., non-existent) forms, based on the extent to their exposure to input, but the distinguishing ability is not equivalent to that of native speakers. The ability to discern may require something like noticing the nonoccurrence and it may have yet to reach the ultimate stage. This suggestion would follow the proposal of Bley-Vroman (1997), in which it was claimed that “the elements in foreign language grammar are built out of (1) the native language or (2) the easily perceived input.” In conclusion, I argue that L1 transfer effect is persistent and that the noticing ability of L2 input play an important role in L2 acquisition.

7. Pedagogical Implications and Further Research

It can be said that vocabulary has been taught in Korea in a one-to-one, form-meaning relationship. That is, an English word followed by Korean translation for it. This will not hurt the learning procedure of, for example, categories, like noun or adjective. However, the information of verbs may be provided insufficiently by this one-to-one teaching method.

The point of teachability regarding verb meanings in L2 acquisition is that syntactic information should be given at the same time with the semantic information when a new verb is introduced. This can be done most effectively by presenting a new verb with a whole sentential context in which it occurs, rather than with an isolated word-meaning relation.

It can be suggested that preemption of the impossible form, such as, **The man put the book* can be achieved through as much exposure to positive evidence as possible. By doing so, we can expect that pseudo native-like competence can be achieved, although the ultimate status of learners' grammar would not be identical with that of native speakers (cf. Bley-Vroman 1990).

A suggestion for further research should be made. In this study, data of Korean learners of English were presented. As was shown above, Korean allows a broader range of acceptance as to *do so* substitution than English. Therefore, it was shown that Korean learners of L2 English showed positive ratings for both types of constructions, under the influence of their L1. In reverse, to have a balanced argument, it is, then, necessary to test with English learners of Korean. It is conceivable, following the same hypothesis that L1 influence persists in the L2 acquisition, that English learners of L2 Korean will show positive ratings for construction with adjunct PPs and negative ratings for construction with complement PPs with *do so* substitution, just as they will behave for their L1, English.

However, it is also imaginable that they will follow the acceptability pattern allowed in Korean language. How English learners of L2 Korean will behave for the *do so* substitution is left open for further research.

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