Acquisition of Prepositions by ESL Learners through Dictation Tasks

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Abstract

The study examines the acquisition of English prepositions by Sinhala speaking learners of English with respect to four fine-grained categories of prepositions found by Littlefield (2006) using first language acquisition of English speaking children. The acquisition order of these four categories found by Littlefield: adverbial prepositions [+Lexical, -Functional], particles [-Lexical, -Functional], semi-lexical prepositions [+Lexical, +Functional], and functional prepositions [-Lexical, +Functional], showed an advantage of [-Functional] features over the [+Functional] features. One of the aims of the study was to find out whether this ranking was good for learners of English as a Second Language (ESL) in tasks that tap comprehension knowledge (dictation task). The second aim was to see whether at initial stages of learning, there was an advantage of either [+Lexical] features or [-Functional] features, which disappeared at later stages of learning. 316 Sinhala speaking learners of English studying in Grades 4, 6, 8 and 10 answered a dictation task with 40 sentences, 10 each with adverbial prepositions, semi-lexical prepositions, particles and functional prepositions. Sentence length and structure was controlled and sentences differed only in the category of preposition used in them. The main findings of this task were as follows: (1) ESL learners imitated the four categories of prepositions differently in the dictation task. (2) [+Lexical] prepositions were better imitated than [-Lexical] prepositions initially, and this 'lexical' advantage disappeared in Grade 10 with all categories being used with comparable accuracy. These findings are recommended to be used in the ESL classroom to facilitate teaching prepositions.

Keywords: *Acquisition, [$\pm$ Lexical, $\pm$ Functional] prepositions, English as a Second Language (ESL), Dictation tasks*

Introduction

The study examines the acquisition of English prepositions by Sinhala-speaking learners of English as a second language, with special reference to the lexical-functional divide proposed by Littlefield (2006) for prepositions. This paper initially addresses on the theoretical and empirical literature review on the categorization of prepositions using [$\pm$ Lexical, $\pm$ Functional] categories and the complexities around this categorization. It presents a detailed description on Littlefield's (2006) study.

Secondly, it discusses on the difficulties in acquiring prepositions in English as a second language, and also on how to measure the order of acquisition of prepositions of ESL learners. Next, it addresses on the methodology of the research in order to meet the objectives mentioned in the abstract, followed by its findings. Finally it concludes with a discussion on the theoretical and pedagogical implications of the research findings.

Theoretical and Empirical Literature Review

The categorization of preposition has posed problems with respect to classifying it along the functional vs. lexical dimension (van Riemsdijk 1990, 1998; den Dikken 2003; Botwinik-Rotem 2004; Svenonius 2004). Littlefield (2006) utilized van Riemsdijk's (1990, 1998) notion 'semi-lexical', which she decomposed to [$\pm$ Lexical, $\pm$ Functional], arguing that the combination of these two properties determined the order of acquisition of a number of prepositional elements in English. She considered as [+Lexical] those that contribute semantic content, and as [+Functional] those that are able to check the Case of their complements. These fundamental distinctions resulted in the four categories of prepositional elements in (1), the acquisition of which proceeds from the most lexical to the least lexical, as she claimed.

- (1) a. Adverbial prepositions: *She sat down.*
[+Lexical, -Functional]

b. Particles: *He ate it up.*

[-Lexical, -Functional]

c. Semi-lexical prepositions: *The man runs to the store.*

[+Lexical, +Functional]

d. Functional prepositions: *I am proud of my son.*

[-Lexical, +Functional]

Littlefield's (2006) Categorization of Prepositions

The debate on how to categorize linguistic items in terms of their features has mostly focused on whether items are lexical or functional. That is, the debate has mostly concerned the features of lexical and functional as binary opposites, if an item is [+Lexical], then it must be [-Functional] as well and vice-versa. Grimshaw (1991) and van Reimsdijk (1990, 1998) proposed the feature [$\pm$ F] or [$\pm$ Functional], which divided the major lexical categories into functional [+F] and lexical [-F] elements. However, Littlefield (2006) parsed out the functional features from the lexical features, suggesting that these features are not in binary opposition. Therefore, if an item is [+Lexical] it can be either [-Functional] or [+Functional], and the same is true for [-Lexical] items. According to Littlefield (2006), a linguistic item is [+Functional] if it provides connectivity between items in a phrase or a sentence. For example, the role of inflection (INFL) in a sentence is to link the subject with the predicate. Without this [+Functional] item, a sentence like, **The girl walk slowly*, would be difficult to interpret since it lacks the [+Functional] item's' (INFL) which denotes the singular present tense of the root verb *walk*. A linguistic item is treated as [+Lexical] if it contributes descriptive, or notional content. Essentially, the functional feature concerns the syntactic contribution and the lexical feature concerns the semantic contribution.

Crucially for this study, we can determine whether a preposition is [$\pm$ Lexical] and [$\pm$ Functional]. A preposition is determined to be functional if the preposition links elements in a phrase together. Those elements that can assign Case or Agreement are designated [+Functional], those that cannot are designated [-Functional]. Prepositions are determined to be [+Lexical] if they contribute a descriptive, substantive meaning and can act as arguments or adjuncts. Prepositions are [-

Lexical] if they don’t contribute substantive meaning and cannot act as arguments or adjuncts. A diagrammatic representation of Littlefield’s categorization is presented below (as represented in Thomann 2013:2):

Table 1: Littlefield’s categorization of prepositions (Thoman 2013)

		+Functional	–Functional
		+Case assignment (IP) Specific complement type	–Case assignment No specific complement type
+Lexical	+Semantic content +Theta-role assignment (morphophonetically heavy) Open class category	Semi-lexical Preposition (<i>in, on, under, with</i>)	Adverbial Preposition (<i>throw up the ball</i>)
–Lexical	–Semantic content –Theta-role assignment (morphophonetically light) Closed class category	Functional Preposition (<i>of</i>)	Particle (<i>throw up ‘vomit’</i>)

[± Functional]

As mentioned above, a preposition is [+Functional] if it is able to link elements in a phrase together, usually through Case assignment and a [-Functional] item cannot link elements together. Interestingly, [+Functional] items and [-Functional] items differ in what types of movement they allow. Littlefield (2009:50) provides examples of how [+Functional] items pattern differently than [-Functional] items. In the sentences, *They trudged up the rocky slope* (*up* being a semi-lexical), and *They let out the brown dog* (*out* being an adverb), [+Functional] items (i.e. *up*) are allowed to engage in pied-piping (2a) and fronting (3a), while [-Functional] items (i.e. *out*) are not allowed as in (2b) and (3b) below.

- (2)   a [Up which slope] did they trudge? {semi-lexical [+L, +F]}
- b *[Out which dog] did they let? {adverb [+L, -F]}
- (3)   a [Up the slope], they trudged. {semi-lexical [+L, +F]}
- b *[Out the beagle], they let. {adverb [+L, -F]}

However, [-Functional] items allow object shift (4a) while [+Functional] items do not allow object shift (4b).

- (4) a They looked (up) the number (up). {particle [-L, -F]}
- b Mary is proud (of) her bird (*of). {functional [-L, +F]}

[-Functional] prepositional items follow the pronominal object (5 a) whereas [+Functional] prepositional items must precede their pronominal objects (5 b).

- (5) a He looked (*up) it (up). {particle [-L, -F]}
- b Mary is proud (of) her (*of). {functional [-L, +F]}

Table 2 excerpted from Littlefield (2009: 69), summarizes the different patterns of [+Functional] and [-Functional] elements.

Table 2: Structural features of [-Functional] and [+Functional] items

	[-Functional] Adverbs, Particles	[+Functional] Semi-lexical Preps, Functional Preps
Pied-piping	*	√
Fronting	*	√
Object Shift	√	*
Pronominal object precedes Prep Element	√	*
True adverb between verb and Prep element	*	√
Gapping (DP follows P)	*	√

Littlefield (2009:69)

[± Lexical]

As with [± Functional] items, [+Lexical] items pattern differently than [-Lexical] items in terms of what types of movement are allowed. For example, [+Lexical] items allow for easy substitution of elements (6a) and [-Lexical] items do not (6b). Note: the particle in (6b) is marked as ungrammatical because there is no shared element that contributes a consistent meaning as with the adverb which has the shared spatial meaning of *up*.

- (6) a The girls will sit/stand/drive/jump up. {adverbial [+L, -F]}
- b *The girls will crack/throw/blow up. {particle [-L, -F]}

Additionally, [+Lexical] items allow for imperative structure (7a, 7b) and [-Lexical] items do not (7c, 7d).

- (7) a Out! {adverb [+L, -F]}
b To the park! {semi-lexical [+L, -F]}
c *Up! (meaning: Throw up!) {particle [-L, -F]}
d *Of Daisy! (meaning: Be proud of Daisy!){functional [-L, +F]}

Table 3 below, excerpted from Littlefield (2009:69), outlines the different patterns that are allowed for [+Lexical] versus [-Lexical] items.

Table 3: Structural features of [-Lexical] and [+Lexical] elements

	[-Lexical] Particles, Functional Preps	[+Lexical] Adverbs, Semi-lexical Preps
Prep element occurs with unique, unpredictable head	√	*
Easy substitution	*	√
Imperative stress	*	√
Contrastive stress	*	√
Gapping (DP precedes P)	*	√
May be an argument	*	√
May be an adjunct	*	√
Modified by degree adverbs	*	√
Modified by <i>straight</i>	*	√

Fine-grained Categorization of Prepositions

The four categories of prepositions are different from each other in that they act syntactically different as seen above, but their semantic and phonological overlap indicate that they nevertheless belong to the same domain. Let us take a quick look at the four categories now.

Adverbs

Adverbs are a pure lexical category and are categorized as [+Lexical, -Functional] features. They contribute semantic content but cannot link elements in a sentence nor do they have Case assignment properties.

Semi-lexical prepositions

Littlefield assigns features for semi-lexical prepositions as [+Lexical] because they have descriptive content and are [+Functional] because they assign theta roles and establish spatial relationships, and they can link elements in a phrase through Case assignment (Littlefield 2009:42). It seems that the semi-lexicals are the largest category of the prepositional domain.

The theta roles assigned by semi-lexicals are the locative, goal, source, path, and instrument.

- (8) a. The eggs are in the basket. (Locative)
- b. We went to Colombo. (Goal)
- c. I flew from Sri Lanka. (Source)
- d. We walked along the river bank. (Path)
- e. I cut the cake with a knife. (Instrument)

Particles

Particles are an idiosyncratic category which are assigned [-Lexical, -Functional] categories. They do not contribute substantive, descriptive meaning, nor have the ability to assign Case. Generally, particles are thought to either trigger an aspectual or idiomatic meaning in conjunction with certain verbs (Fraser 1965, 1976; Bolinger, 1971). Bolinger also claims that where particle *up* occurs with the verb *be*, as in *His term is up* and *Time is up*; *up* can be paraphrased with the verb *finished* (completive aspect). In addition, Bolinger says that these aspectual features do not match with the particular particle all the time, for example,

- (9) a. turn out, grind out, spin out (iterative or repeated sense)
- b. write out, work out (perfective sense or completive sense)

In some verb-particle constructions (phrasal verbs), the aspectual meaning contributed to the phrase by the particle is not important, and the descriptive meaning remains the same, without it.

- (10) a. She ate up the sandwich.
- b. She ate the sandwich.

It can be noticed that either particle *up* is added or not, the descriptive meaning of (10a) and (10b) is the same.

On the other hand, there are some phrasal verbs (idiosyncratic) where neither the meaning of the verb nor the meaning of the particle contributes to the meaning of the verb- particle construction, for example, *put off*.

Functional Prepositions

Functional prepositions are assigned [-Lexical, +Functional] features since they lack substantive semantic content and have the ability to assign Case. Example (11a) illustrates nominal and (11b) adjectival structures where the functional preposition *of* is needed only for Case assignment, but it does not assign any theta role. Functional prepositions can also be inserted into verb phrases where functional preposition assigns Case to the NP argument but not a theta role (11c).

- (11)   a. The destruction *(of) the city.
           b. Mary is proud *(of) her dog.
           c. The meal consisted * (of) vegetarian dishes.

These examples would be ungrammatical if the preposition *of* was omitted because it is required to assign Case to the following noun phrase.

Second Language Acquisition

The term ‘second language acquisition’ refers to the acquisition of a new language by children and adults who already have full knowledge of their first language. It is thus distinct from childhood bilingualism, or simultaneous language acquisition, which refers to the child language acquisition of two languages simultaneously, with exposure to both languages beginning in infancy or soon after (Genesee 2000; Meisel 2001, 2004). Child second language acquisition, also known as sequential bilingualism, refers to the acquisition of a second language after age three or four, when much of the first language is already in place (McLaughlin 1978; Lakshmanan 1994; Gass & Selinker 2001). In this context,

learners in the present study were all second language learners, since they were at least 8 years old, and already knew Sinhala as first language.

Second Language Acquisition of English Prepositions

The English preposition is often defined as a word that describes the location or direction of one object in relation to another. However, prepositions are often vague and confusing and it is extremely hard for second language learners to learn the nuances of all the English prepositions, how to understand them, and how to use them. In English, prepositions are words, while in Sinhala they are represented as spatial postpositions (12a) or are suffixes (locative, ablative case) (12b) (Tilakaratne 1992).

(12) (a) gala   udə   sitinə   monəra:
           gal-a   udə   sitinə   monar-a:
           rock-the   on   staying   peacock-the
           ‘the peacock on the rock’

(12) (b) dænwim   puwəruwəhi
           dænwim   puwəruw-ə- ēhi
           bulletin board-the-on
           ‘on the bulletin board’

However, these formal differences are not known to affect second language acquisition (Sudharshana 2013), and second language children are quick to figure out these differences and use language specific forms, with no transfer from L1 to L2.

Moreover, the use of prepositions in context varies greatly from one language to another. The same prepositions can carry vastly different meanings in various languages. For instance, a native speaker of Spanish would have difficulties translating the preposition *por* from Spanish into English, since it can be “expressed in English by the prepositions *for*, *through*, *by*, and *during*” (Lam 2009: 2).

Lam (2009) also points out that prepositions can be difficult to recognize in English speech because they typically contain very few syllables. As a result, language learners may not be able to recognize prepositions in rapid, naturally occurring speech, and often miss them unless they are necessary for the meaning of the sentence. This would mean that functional uses of preposition are less likely to be recognized.

Learning prepositions becomes more difficult because prepositions are generally polysemous, i.e. it is the characteristic of prepositions that they have multiple meanings. Learners often become frustrated when trying to determine prepositional meanings and when trying to use them appropriately (Koffi 2010:299). Tyler & Evans (2003) listed out the polysemous use of *over*, and showed how all meanings can be derived from a proto-scene.

- (13)   a. The horse jumped over the fence (on – the- other -side of).
           b. She will stay over the weekend in Kandy (temporal).
           c. Mary looked over the question paper carefully (examined).

As there is a polysemy in English prepositions, the second language learners get confused in producing and comprehending them.

Another difficulty comes from prepositions that conflate complex meanings into a single morpheme. Stringer (2005) has shown that traversal paths (e.g. *across*, *through*) present a particular lexicalization difficulty in the early stages of acquisition. In Stringer's study, children, who were first language learners of English, Japanese and French were found avoiding this difficulty by splitting such complex paths into sub events, as in (13), where *through* needed to be used.

- (14)   He goes in it...he comes out (split into two sub events).

Three studies (Dagut & Laufer 1985; Hulstijn & Marchena 1989; Laufer & Eliasson 1993) examined learners' avoidance of phrasal verbs in favour of their single-word synonyms. All three studies found that ESL students whose L1s do not contain phrasal verbs (for example, Hebrew language) tend to prefer single-word English verb equivalents to phrasal verbs, whereas students whose L1s have phrasal verbs, tend to use English phrasal verbs. A study by Sjöholm (1995)

indicates that results in learning English phrasal verbs are related in part to their presence or absence in the learner's native language.

Accuracy Order of Prepositions in Dictation tasks

Accuracy order of the usage of prepositions in dictation tasks measures the order of acquisition of prepositions. According to Bley-Vroman & Chaudron (1994), the produced sentence at the dictation reflects on the formulation of the sentence on the basis of the held representation. This representation reflects on what the learner heard and the way the input is processed.

Figure 1: Dictation as imitation (Bley Vroman 1994)

It is clear to understand that to form a representation of the input in the dictation task that the listener hears and processes, the learner should use his/her acquired knowledge on prepositions. Therefore, it confirms the fact that by analyzing the production of the dictation task on prepositions, we can gauge the acquisition of prepositions of learners at a given stage.

With the above in mind, we set off to study the acquisition of English prepositions by second language learners. We focus on the accuracy of comprehension of the four categories of prepositions in second language learners of varying English proficiency through a dictation task.

When a certain category of prepositions show the highest accuracy, that category should have been the easiest for these learners to acquire. If these learners imitate the four categories with different accuracy according to a certain order in the

dictation task, that means they have acquired these four categories of prepositions according to that particular order.

Methodology

In this study, we tested the acquisition pattern of four categories of prepositions: adverbial prepositions, semi-lexical prepositions, particles and functional prepositions of the Sinhala speaking ESL learners in a dictation task. The main aim was to test and validate Littlefield's (2006) fine-grained categorization through a dictation task. In order to validate this categorization, we examined these ESL learners' performance in this selected task, to find out whether there are any significant differences among the accuracy of the usage of the four different categories of prepositions shown by these learners in the selected task. Therefore, it was hypothesized that:

- (i) The learners would imitate the sentences with different prepositional categories differently (referred to *Hypothesis 1*).

Given the fact that lexical categories are known to be easier than functional categories, we hypothesized that:

- (ii) Sentences with [+Lexical] prepositions would be imitated better than the sentences with [-Lexical] prepositions (*Hypothesis 2*).
- (iii) By Grade 10, all prepositional categories will be imitated equally well.

(Hypothesis 3)

As there are clear cut difficulties for the second language learners in the acquisition of English prepositions, we hypothesized that:

- (iv) There would be differences in second language acquisition data compared with first language data reported in Littlefield (2009). (*Hypothesis 4*)

Subjects

A pool of 316 Sinhala speaking students (Male = 156 and Female =160) from Sirimavo Bandaranaike Vidyalaya, a girls' school and from Ananda College, a boys' school in Colombo, Sri Lanka, participated in the study. A total number of 260 scripts were collected from four grades: 65 each from Grade 4 (age: Mean-8.07, SD-0.26), Grade 6 (age: Mean-10.10, SD-0.31), Grade 8

(age: Mean- 12.09, SD-0.29), and Grade 10 (age: Mean- 14.10, SD -0.31) were randomly selected for the test. The participating grades in two schools were Sinhala medium, where all subjects except English and Tamil were taught in Sinhala. In Sri Lanka, both Sinhala and Tamil are official languages, but all the main activities such as administration, education (up to secondary level), trade, aviation, shipping, and business are mostly conducted in Sinhala language. English language is also used in these activities considerably, being the second Language.

Data Collection Tools

Dictation task: The dictation task had 40 sentences with 10 sentences each for adverbial prepositions, semi-lexical prepositions, particles and functional prepositions. Sample sentences are given below:

The girl climbed *up*. (adverbial preposition)

The boy swam *across* the river. (semi-lexical preposition)

The boy *got over* his sickness. (particle)

The boy was good *at* cricket. (functional preposition)

In constructing the sentences, the length of the sentence (6 words per sentence, except in sentences with adverbial prepositions had four words), the syntactic construction, and the tense of the verb were controlled. All the sentences were in active voice and in simple past. Each construction denoted only one event and had only one main verb. Words used in the task were frequently occurring ones, as per our intuitions. The sentences were recorded on CDs in the Sound Studio, Department of Mass Communication, The English and Foreign Languages University. A 35-second pause was provided after each sentence to enable learners to write the sentences down.

Administration

The dictation task was administered in groups of 10-15 in the multimedia room of the school. Precautions were taken to ensure that learners were not able to copy from each other. The laptop containing the CD with recorded sentences was connected to an amplifier (Model No- Microlab M 280 Sub woofer-65) for more

volume and clarity. Clear oral instructions were given to the students on how to answer the test, and they were also asked to listen to the same instructions on tape. The instructions were repeated on the tape to make the students familiar with the recorded voice. Each learner was provided a sheet with 40 numbered spaces to write the sentence in. As in the pilot study, after 20 sentences, a five-minute break was provided, and then the rest of the sentences were played. After the 40th sentence, the answer scripts were collected.

Findings

Key findings of this research are:

- (i) Sinhala speaking ESL learners respect the Littlefield (2006) fine-grained categorization of prepositions.
- (ii) In the dictation task, initially adverbial prepositions and semi-lexical prepositions [+Lexical featured prepositions] were better imitated than the particles and functional prepositions [- Lexical featured prepositions].
- (iii) This ‘lexical’ advantage gradually disappeared in Grade 10, and all the four categories of prepositions were equally acquired.

Under this section, scoring and analysis of this study, the findings of the category –wise performance in each grade and the main findings of the significant differences between the accuracy of the usage of each category of prepositions of these ESL students across the four grades will be presented.

Scoring and analysis

21 out of 316 learners were dropped from the dictation task, since they had left the task incomplete, or had illegible handwriting or had serious problems with spelling making comprehension impossible. For each correct written sentence, a score of ‘2’ was awarded if the preposition used was correct and so were other parts of the sentence. If there were errors of grammar and spelling in the rest of the sentence, but the preposition was correct, a score of ‘1’ was awarded. For a sentence with nil or incorrect preposition, or misspelt preposition, a score of ‘0’ was awarded.

The scores for the four categories of prepositions were analyzed for mean, and standard deviation was calculated. Statistical analysis was done on SPSS 12 to find out if there were any significant variances between the four categories of prepositions in each grade interaction.

To determine the ordering, one would need to look at the two features [$\pm$ Lexical] and [$\pm$ Functional] and see whether [+Lexical] or [-Functional] is ranked higher and dictates the order of acquisition. We leave the order of acquisition of these two categories to emerge from our data. However, two developmental orders are possible.

- (i) If [+Lexical] features are ranked higher, then semi-lexical prepositions [+Lexical] will be acquired before particles [-Lexical].
- (ii) If [-Functional] features are ranked higher, then particles [-Functional] will be acquired before semi-lexical prepositions with [+Functional].

Category-wise performance

The category-wise performance of the groups is presented in Table 4 with the mean and standard deviation, F and p value, for each category of preposition. The maximum score for each category was 20.

Table 4: Performance on prepositional categories in dictation task

	Grade 4	Grade 6	Grade 8	Grade 10	F	P
Adverbs	5.42 (3.88)	9.86 (4.32)	12.95 (6.65)	16.38 (3.74)	81.57**	0.000
Semi-lexicals	3.35 (3.31)	7.98 (4.16)	10.66 (4.31)	15.29 (4.01)	103.07**	0.000
Particles	2.95 (3.02)	7.15 (3.94)	10.77 (4.65)	14.45 (3.60)	106.28**	0.000
Functionals	2.89 (3.24)	6.25 (4.02)	9.85 (4.73)	14.49 (3.80)	101.31**	0.000

Standard deviation given in parenthesis and italicized

Table 4 shows that the accuracy in imitating sentences with each of the four categories of prepositions increased from Grade 4 to Grade 10: in adverbial prepositions from a mean of 5.42 to 16.38 [$F(3, 256) = 81.57, p < .0001$]; in semi-lexical prepositions from 3.35 to 15.29 [$F(3, 256) = 103.07, p < .0001$]; in particles from 2.95 to 14.45 [$F(3, 256) = 106.28, p < .0001$]; and in functional prepositions from 2.89 to 14.49 [$F(3, 256) = 101.31, p < .0001$]. This meant that on each prepositional category, older learners were better than the younger learners.

Learners of Grades 4, 6 and 8 had imitated sentences with the four categories differently $F > 4.2$ at $p < .0001$. However, by Grade 10, there was no difference in the imitation of sentences with the four categories [$F(3, 256) = 1.75, p < 0.157$]. This supports our hypothesis that learners treat the four categories differently, and this difference disappears with increase in grade.

To look at the differences within category and between grades, a post hoc Tukey HSD was computed. In Grade 4 performance on adverbs was significantly better than particles [$t(15) = 2.462, p < .04$] and functional prepositions [$t(15) = 2.52, p < .027$] but not significantly better than semi-lexical prepositions. Performance on particles and functional preposition was similar and showed no significant difference.

In Grade 6, a similar trend was found, with adverbs being better imitated than particles [$t(15) = 2.708, p < .010$] and functional prepositions [$t(15) = 3.615, p < .00$], but not better than semi-lexical prepositions. No significant difference was seen between semi-lexical preposition and particles and functional prepositions, and also performance on particles and functional preposition did not show a significant difference. In Grade 8, performance on adverbs was significantly better than functional prepositions but not better than particles, the rest of the differences were similar to Grade 4 and Grade 6. In Grade 10, the performance on each preposition was similar since no significant differences were found between any of the categories.

65 learners each from the four grades (Grades 4, 6, 8, and 10) had to write sentences (with one of the four preposition types) that they had heard orally. It was hypothesized that learners would imitate sentences with different prepositional categories differently (*Hypothesis 1*).

Given the numerous findings in first language acquisition research that lexical elements are learnt before functional elements, it was hypothesized that [+Lexical] prepositions (i.e. adverbs and semi-lexical prepositions) would show an initial advantage (in Grade 4 and Grade 6) over [-Lexical] prepositions (i.e. particles and functional prepositions). This would translate in the task as follows: Sentences with [+Lexical] prepositions would be imitated better than sentences with [-Lexical] prepositions (*Hypothesis 2*). The initial advantage would disappear with increasing age and proficiency, i.e. all categories would be imitated equally well by Grade 10 (*Hypothesis 3*).

As expected, the ability to hear and imitate sentences with different categories of prepositions showed a steady and consistent increase from Grade 4 to Grade 10. Second language learners showed differences in their imitation of sentences with different prepositions. Recall that the sentence length, number of syllables, familiarity of words, syntactic structure, complexity of ideas presented were strictly controlled, the sentences differed only in the nature of prepositions used in them. Grade 4 and Grade 6 showed that there was significant difference in the way sentences with different prepositions were imitated [in Grade 4: between adverbs and particles [$t(15) = 2.462, p < .04$], between adverbs and functional prepositions [$t(15) = 2.52, p < .027$] in Grade 6 between adverbs and particles [$t(15) = 2.708, p < .01$] and between adverbs and functional prepositions [$t(15) = 3.62, p < .00$]]. However, the difference was not significant in Grade 10. Therefore, this fact fully confirmed *Hypothesis 1*.

Looking at the differences in sentence imitation, we found that adverbs and semi-lexical prepositions were imitated more accurately than particles and functional prepositions, thus supporting an initial advantage for [+Lexical] features over [-Lexical] i.e. in Grade 4, and in Grade 6. However, adverbs showed a higher imitation accuracy than particles and functional prepositions but not semi-lexical

prepositions. Semi-lexical prepositions were better imitated than particles and functional prepositions in initial grades but the difference was not significant. This **supports Hypothesis 2**, where we posited that in the dictation task prepositions with [+Lexical] features would be imitated better than prepositions with [-Lexical] features. By Grade 10, the difference in imitation that we showed between [+Lexicals] and [-Lexical] categories also disappeared, thereby **confirming Hypothesis 3**.

In drawing connections with the researcher's literature review on Littlefield (2006) study, Littlefield has administered a longitudinal study using spontaneous speech utterances of five first language learners of English (aged 1;2 to 2;3) and provided evidence for the four categories of prepositions in English Language. Therefore, both Littlefield study (2006) and this current study being a cross sectional study using 65 Sinhala speaking ESL students each from: Grade 4, 6, 8 & 10 **confirm Hypothesis 1 as mentioned above**.

However, Littlefield (2006) empirically proves that adverbial prepositions and particles, {[- Functional] featured prepositions} are acquired before the semi - lexical prepositions and functional prepositions {[+Functional] featured prepositions}, **and do not support Hypothesis 2**. The current study, **confirms the Hypothesis 2**, that there is an initial advantage of adverbial prepositions and semilexical prepositions { [+ Lexical] featured prepositions} over the particles and functional prepositions { [- Lexical] featured prepositions}.

Hypothesis 3 in this study, the disappearance of the difference in imitation by Grade 10 is confirmed by the current study. As Littlefield (2006) has done a longitudinal study for a period of time using very small children (aged 1;2 to 2;3), **Hypothesis 3 is not applicable**.

Discussion

Questionnaire on the general information of the students

The questionnaire analysis showed that 79% of the subjects used only Sinhala outside school and 24.7% both Sinhala and English at home. Most learners

indicated (on the questionnaire) that they had good exposure to reading materials in English and Sinhala.

Theoretical and Pedagogical Implications on Teaching English as a Second Language

The advantage of the [-Lexical] featured prepositions (adverbial prepositions and semi-lexical prepositions) over the [-Lexical] featured prepositions (particles and functional prepositions) in the process of the acquisition of prepositions by Sinhala speaking ESL learners, can be used to facilitate teaching English prepositions from Grade 4 to Grade 10. Here the teachers of English should focus more on [+Lexical] featured prepositions (adverbial prepositions and semi-lexical prepositions) than the [-Lexical] featured prepositions (particles and functional prepositions) for initial grades (Grade 4 to Grade 6) in dictation tasks. For example, in *The cat is on the mat* (here 'on' is a semi-lexical preposition) should be introduced before *I am proud of my son* (here 'of' is a functional preposition).

We can apply this particular advantage of [+lexical] featured prepositions to revise the English language syllabuses and the lessons related to English prepositions in school text books. By conducting workshops for Teachers of English as a second language in local schools in Sri Lanka, they should be made aware about the existence of these four categories of the prepositions and also this order of acquisition of prepositions in order to facilitate teaching English prepositions. Moreover, as it is clear that from Grade 10 onwards, the Sinhala speaking learners have the ability to acquire all these four categories of prepositions equally well, unfamiliar prepositions of all four categories of prepositions can be introduced in their lessons simultaneously.

Conclusion

Under the findings of this study, category-wise performance shows that the ESL learners of Grade 4, 6 and 8 had imitated sentences with four categories differently ($F > 4.2$ at $p < 0.001$) and by Grade 10, there is no significant difference in the imitation of sentences with four categories ($F(3, 256) = 1.75$, $p < 0.157$). Therefore this particular finding supports the existence of fine-grained categories

of prepositions as proposed by Littlefield (2006). Younger learners had an initial advantage in [+Lexical] categories and therefore, the sentences with [+Lexical] prepositions were imitated better than the sentences with [-Lexical] prepositions. The results also showed that all the categories of prepositions were equally used in Grade 10.

It is a known fact that pure lexical categories are acquired earlier than pure functional categories. Therefore, adverbial prepositions should be always at a higher rank in the order of acquisition whereas functional prepositions should lie at the extreme bottom of the acquisition order. The fact that the particles (phrasal verbs, e.g. Rani ate up the cake.) are acquired after the semi-lexical prepositions in this study can be justified by the fact that Sinhala language has no phrasal verbs (particles) whereas English has much use in phrasal verbs. According to Sjöholm (1995), as discussed in the literature review, it shows that results in learning English phrasal verbs are related in part to the presence or absence in the learner's native language. Therefore Sinhala speaking ESL learners acquire particles [-L, -F] after the semi-lexical prepositions [+L, +F]. Native speakers of English, as Littlefield (2006) shows, acquire particles before semi-lexical prepositions as English language is rich with many phrasal verbs.

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