

Acquisition of articles by Sinhalese EFL/ESL learners

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Abstract— Acquisition order of English articles by L2 learners has drawn much attention in second language acquisition (SLA) research since it is believed that most L2 learners of English face difficulties in acquiring English articles especially when an article system does not exist in learners’ native language. Different acquisition orders have been identified in several empirical studies and this paper discusses the acquisition order of English articles by Sinhalese EFL/ESL learners based on the results of a study which investigated the acquisition order through accuracy, emergence and overuse/underuse of articles by analysing written language samples of 30 participants of 3 language proficiency levels. The results indicate an overall acquisition order of \emptyset >the>a across proficiency levels and also indicate that both accuracy and emergence of **the** and **a** increased steadily; however, accuracy of \emptyset demonstrated a U shape behaviour.

Keywords—Articles, Acquisition order, Accuracy/emergence/use

I. INTRODUCTION

Acquisition of English articles by L2 learners has drawn much attention in second language acquisition research. According to Humphrey (2007, p.301), it is a common belief that most L2 learners of English face difficulties in acquiring English articles especially when an article system does not exist in learners’ native language.

Even though many aspects related to acquisition of English by Sinhalese L2 learners of English have been studied, their acquisition order of English articles has not been studied yet. Therefore, this study was conducted aiming at investigating the article acquisition order of Sinhalese EFL/ESL learners whose L1 does not have an article system.

This paper includes a brief literature review on English article acquisition order by L2 learners of English, methodology adapted in this study, and the results. The main findings are discussed while paying attention to some pedagogical implications as well. A summary of the main conclusions arrived at is also included.

II. LITERATURE REVIEW

A. Models

Most studies on acquisition of articles by L2 learners

of English have used Bickerton’s model and Huebner’s Semantic Wheel model. In both models English articles are categorized into four categories. Bickerton (1981, p.249) explains four categories of semantic space for English articles based on where the articles occur in Noun Phrases (NP).

+P +S “Definite”	-P +S “Indefinite”
+P –S “Generic”	-P –S “Other”

Fig 1. Semantic space for English articles

Note. P-presupposed, S-specific. Adapted from “Semantic space for English articles” by D. Bickerton, 1981, *Roots of Language*, Anne Arbor: Karoma Publishers, p.249

In here Bickerton (1981) emphasizes that *definite* and *indefinite* have their traditional meanings while “*generic* refers to subject NP in *The dog/ A dog/ Dogs is/are (a) mammal(s)* and *other* includes NP in the scope of negation, *a book or books*, and similar cases” (p. 248).

Based on Bickerton’s model, Huebner (as stated in Lu, 2001 and Haiyan and Lianrui, 2010) developed the Semantic Wheel Model.

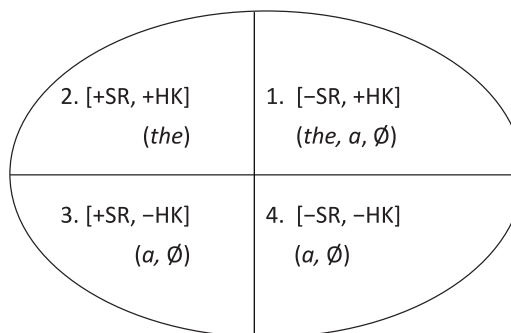


Fig 2. Huebner’s Semantic Wheel Model

Note. Adapted from “An Investigation of English Articles’ (sic) Acquisition by Chinese Learners of English,” by L.

Haiyan, and Y. Lianrui, 2010, *Chinese Journal of Applied Linguistics*, 33: 3, p.16

In this model, Huebner (as stated in Lu, 2001) explains four categories based on SR (Specific Referent) and HK (Assumed Known to the Hearer) categories. According to this model, the articles can be categorized as follows (Lu, 2001, p.45).

1. [-SR, +HK], (*the*, *a*, \emptyset): Generics
2. [+SR, +HK], (*the*): Unique, previously mentioned, or physically present referents
3. [+SR, -HK], (*a*, \emptyset): First-mention NPs, or NPs following existential 'has/have' or 'there is/are'
4. [-SR, -HK], (*a*, \emptyset): Equative NPs, or NPs in negation, question, or irrealis mode

These four categories are referred to as Type 1, Type 2, Type 3 and Type 4 respectively in this paper.

B. Data analysis methods used in empirical studies

Most researchers whose empirical studies are discussed in this paper have used the SOC, TLU and/or UOC measures to analyse the accuracy and usage of articles.

SOC (Supplied in Obligatory Context) is used to measure how often the articles are used when they are required to be used.

$$\text{SOC} = \frac{\text{Number of correct supplings in obligatory contexts}}{\text{Number of obligatory contexts}}$$

(Haiyan and Lianrui, 2010, p.19)

TLU (Target Like Use) measures overuse of articles.

$$\text{TLU} = \frac{\text{Number of correct supplings in obligatory contexts}}{(\text{number of obligatory contexts}) + (\text{number of supplings in non-obligatory contexts})}$$

(Haiyan and Lianrui, 2010, p.19)

UOC (Used in Obligatory Context) also measures the overuse of articles.

$$\text{UOC} = \frac{\text{Total no. of supplings in both o and non-o contexts}}{\text{Number of obligatory contexts}}$$

(Haiyan and Lianrui, 2010, p.20)

C. Empirical studies

Some empirical studies on article acquisition have focused their attention on high proficiency levels, some on lower proficiency levels and some on all levels. The findings of empirical studies reveal different acquisition orders of articles by L2 learners whose L1 does not have an article system.

According to the findings of Lu (2001), Haiyan and Lianrui (2010), Thomas (1989), Geng (2010), Kubota (1994),

Huebner (as stated in Humphrey, 2007) and Yamada and Mitsuura (as stated in Humphrey, 2007), Chinese and Japanese L2 learners of English whose L1s do not have an article system seem to master *the* first. Lu's (2001, p.43) study was based on three language proficiency levels (Advanced, Upper Intermediate and Lower Intermediate) of Chinese learners and he highlights that the order of article acquisition is *the*=*a*> \emptyset in SOC and *the*>*a*> \emptyset in TLU. Based on the results he concludes that the order is *the*>*a*> \emptyset because TLU measure is more accurate. Haiyan and Lianrui (2010) who used SCO, TLU and UOC as measurements have also found out a similar order.

A different acquisition order is discussed by Master (1987) and Parrish (as stated in Betaineh, 2005 and Thomas, 1989). Master (1987, p.161) who studied the article acquisition of Chinese, Japanese and Russian learners (whose L1s do not have an article system) states that at the beginner levels of proficiency, \emptyset dominates; however, according to him, it is difficult to judge whether the correct use of \emptyset article in these levels is due to acquisition or avoidance. He also states that lower proficiency level displayed 100% accuracy in \emptyset , then there was a drop of the percentage and again there was 100% accuracy in higher levels. This could be due to the U shape behaviour mentioned by Ortega (2009, p.118). Based on SOC, TLU and UOC measures, Master (1987, p.161) also points out that his subjects acquired *the* prior to *a* and argues that *a* starts to appear when the learners acquire a high level of proficiency of *the*. Based on the findings of Master's (1987) research, the acquisition order of English articles can be stated as \emptyset >*the*>*a*. According to Parrish (as stated in Betaineh, 2005 and Thomas, 1989) the order of acquisition of articles by Japanese L2 learners is also the same.

Another order has been proposed by Mahmood, Javed, and Tariq (2011, p.332) who have used TLU and UOC measures to analyze the use of articles by Urdu learners of English. They state that Urdu (It does not have an article system.) intermediate and graduate learners of English acquired *a/an* earlier than the definite article. The last in order was \emptyset . Ekiert's (2005, p.16) study of Polish ESL and EFL learners (whose L1 does not have an article system) also indicates an early acquisition of *a*. Lang (1998, p.iii) states another order and argues that the order of article acquisition among Chinese learners is *a*> \emptyset >*the*>*an*.

Most of these studies have also analyzed the acquisition order of different types of articles based on the Semantic Wheel Model. Thomas (1989, p.350) who analyzed the article use of Chinese and Japanese learners explains that even the early L2 learners in her study exhibited control of *the* in type 2 which is similar to the findings of Lu (2001), Geng (2010), Haiyan and Lianrui (2010) and Huebner (as stated in Humphrey, 2007). Both Geng (2010) and Kubota (1994, p.21) point out that the most difficult article for

their subjects to acquire was type 1 *the*. Geng (2010, p.182) indicates an acquisition order of Types 4>2>3>1 for Chinese learners. Haiyan and Lianrui (2010, p.23) have used a fifth category to indicate the article usage in idioms which is not included in the Semantic Wheel Model. They state an order of Types 2>1>3>4>5 for lower intermediate and Types 2>1>3>5>4 and Types 2>4>5>3>1 orders for intermediate and advanced levels respectively. The order highlights by Kobota (1994, p.24) is Types 2>3>4>1. Based on the accurate use of articles by her subjects, Ekiert (2005) concludes that both EFL and ESL learners in her study showed an early acquisition of *a* in non referential contexts followed by *a* in first mentioned environments. However, as discussed, there are more empirical evidence to show that L2 learners whose L1s do not have an article system master type 2 *the* first.

Overuse or/and underuse is another feature discussed in these studies. The term *flooding* was used by Huebner (as stated in Humphrey, 2007, p.303) to refer to the phenomenon of overgeneralization and overuse in article acquisition. Lu (2001), Geng (2010), Haiyan and Lianrui (2010), Huebner (as stated in Humphrey, 2007) and Master (1987) have observed overuse of *the* among their subjects. Both Lu (2001, p.68) and Geng (2010, p.182) highlight that Chinese learners overuse *the* in type 2 than in type 1. Haiyan and Lianrui (2010, p.25) also point out that lower intermediate and intermediate Chinese learners of English overuse *the*. Huebner (as stated in Humphrey, 2007, p.303) has observed flooding of *the* in the initial stages and a gradual decrease of it thereafter. Lu (2001, p.69) states that his subjects overused \emptyset up to lower intermediate level and then there was a decrease of overuse. These findings provide evidence on early overuse of the articles that the learners acquire first. For example, Lu (2001), Geng (2010), Haiyan and Lianrui (2010), and Huebner (as stated in Humphrey, 2007) have observed an early overuse of *the* and their subjects have acquired *the* first. Thus, it is possible to conclude that overuse starts occurring in an early stage of article emergence and when the proficiency increases, overuse decreases. The studies also reveal that accuracy increases with proficiency.

Thomas' (1989, p.350) observation of overuse of \emptyset in all proficiency levels: low, mid and high indicates that her learners in all proficiency levels faced problems in using \emptyset . This idea can be supported by Master's (1997) findings. He states that errors in \emptyset were persistent even among advanced L2 learners. Haiyan and Lianrui (2010) have also observed overuse of \emptyset by advanced learners. These evidence indicate that some L2 learners of English whose L1s do not have an article system may face problems in acquiring the \emptyset article.

Apart from this problem Mahmood, Javed, and Tariq (2011) and Ekiert (2005) point out that L2 learners might face problems in using articles in idioms. Ionin, Ko and Wexler

(2004), Ionin, Zubizarreta and Maldonado (2008) and Sarco (2008) have observed fluctuation been definiteness and specificity among the learners whose L1 does not have an article system. They further point out that L1, semantic universals through UG (Universal Grammar) and input triggers can influence article acquisition. Thomas (1989) and Mater (1987) also believe that L1 influence plays a part in article acquisition. Butler (2002) points out that pedagogical factors, contexts, and existing knowledge can also affect article acquisition.

D. Articles in Sinhala

As Senaratne (2009) mentions, a separate article system does not exist in Sinhala. The function of articles is done by the inflectional suffixes /aa/, /a/, /ak/ and /ek/. Senaratne (2009, p.48) explains the use of articles in Sinhala as follows.

	Inanimate	Animate
Definite	<i>pota</i> /potə/	<i>gonaa</i> /gonaa/
	'the book'	'the bull'
Indefinite	<i>potak</i> /potak/	<i>gonek</i> /gonek/
	'a book'	'a bull'

According to Gunasekara (as stated in Senaratne, 2009), on certain occasions "demonstrative particles *ee* /ee/ 'that', *mee* /mee/ 'this', *oyaa* /oyaa/ 'that', *arə* /arə/ 'that', function as determiners in the absence of the definite article in Sinhala" (p.47).

E. Research questions

Based on the theoretical basis discussed above, three research questions were formed in this study in order to analyze the English article acquisition patterns of Sinhalese L2 learners of English.

1. What is the order of article acquisition by Sinhalese L2 learners of English based on accuracy?
2. What is the order of article acquisition by Sinhalese L2 learners of English based on emergence?
3. Is there a relationship between accurate use of article and proficiency?

III. METHODOLOGY

A. Data collection method

Most empirical studies that have been discussed in this paper have used cloze tests or gap fill tasks as the main data collection method. For example, Mahmood, Javed, and Tariq (2011), Humphrey (2007), Lu (2001), Geng (2010), Haiyan and Lianrui (2010), Master (1987), Butler (2002), and Ionin, Zubizarreta and Maldonado (2008) have used cloze tests and/or gap fill tasks.

One positive aspect of gap fill/cloze test type of tasks is that they can be suitable for the ‘type of measurement’ (Gass and Mackey, 2008, p.12) because the researcher can make the learners use the target structure. However, according to Gass and Mackey (2008), such tasks can deliberately make students deviate from real-life language use contexts. Gap fill/cloze tests provide an opportunity for learners to select/provide the target structure into blanks so that they can either guess or use the structure by chance. Thus, artificial accuracy, overuse or misuse can occur. For example, Jinting and Yi’an (as stated in Geng, 2010, p.182) have observed overuse of *the* in type 1 in the cloze test that they have used, but they have observed rare overuse of the same article in the composition task.

Gass and Mackey (2008) who comment on naturalistic data collection methods argue that this method provides the researchers an opportunity to have a deeper understanding of the nature of language use. However, this type of data collection also has its own drawbacks. As Norris and Ortega (2006) mention, the data collection method should provide “adequate evidence for intended construct interpretations” (p.735); however, naturalistic data might not include adequate evidence to analyze the target structure. For example, Thomas (1989) who used oral narrations to analyze the use of articles by her subjects, states that it is difficult for her to interpret the data related to the use of articles in generic contexts because her subjects have not produced enough data to be analyzed. However, considering the advantage of providing data relevant to natural use of language, a naturalistic data collection method was used in this study of article acquisition by Sinhalese L2 learners of English.

B. Participants

The 30 participants of this study were Sinhalese adult L2 learners of English in Sri Lanka who learn English at a language school. They belonged to three different language proficiency levels: Elementary, Pre Intermediate and Intermediate. The participants were both males and females (20 females and 10 males) who belonged to the age category of 18 – 45. All of them had prior exposure to English in their schools. They came from different backgrounds; some were tertiary level students and some were employed. Therefore, their exposure to English outside the classroom was different.

C. Procedure

When a new batch of students is recruited into the school where these participants studied, the students are placed in classes according to their proficiency levels. This is done through a placement test. When this batch of students started studying at the school, in the first lesson itself, they were asked to write a composition. The topics given for each class were,

Elementary: What do you like and dislike about your hometown?

Pre Intermediate: Why do you need English?

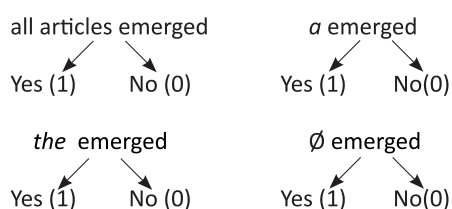
Intermediate: Who is your favourite sports personality? Why do you like him/her?

The activity was a free writing activity without any input from the teacher. The duration was not strictly marked but the students were told that the maximum word limit was 150 words. Since this was done in the first lesson and all the students were new to the language school, it was assumed that the students would use their existing knowledge to complete the task. Ten scripts each from each level were randomly selected for data analysis.

D. Data coding and analysis

Data coding for article emergence i.e. whether a particular article appears in the writing text, was done by a scale of 1 for emergence and 0 for non emergence.

Coding scheme for emergence of articles



This process was applied to all the scripts and the emergence for the proficiency group under each article was calculated as the next step. The same coding system was used to code data related to each article in the Semantic Wheel Model.

The writing pieces of the learners were analyzed for accuracy and usage by applying SOC and TLU measurements. First, the number of obligatory contexts for each article was counted. A coding system of A (correct supply of *a*), B (correct supply of *the*), C (correct supply of \emptyset), D (supply of *a* in non-obligatory contexts), E (supply of *the* in non-obligatory contexts) and F (supply of \emptyset in non-obligatory contexts) was used to code data in the scripts. As the third step, the number of correct suppliences in obligatory contexts and the number of suppliences in non-obligatory contexts for each article were calculated for each script and then for the whole proficiency group. The same method was used to code data for each article in the Semantic Wheel Model assigning a letter to each article in obligatory and non-obligatory contexts. Then the formulas for SOC and TLU were applied for each script and for the whole proficiency group to calculate SOC and TLU. The collected data were processed using the SPSS software.

In order to measure the intra-coder reliability, coding was done twice and the reliability for *the* was 93%. The reliability for \emptyset in type 1 and *a* in type 3 were 90% each.

Therefore, coding was done another time and the reliability between the second and third coding for all articles was 100%. When coding, *a* and *an* difference was ignored and both were coded as one. Later all the scripts were checked again to find out whether *a* is used for *an* and vice versa and none of such errors was found.

IV. RESULTS

The data in Table 1 highlight that all three proficiency groups have shown a high accuracy rate of \emptyset article. There is a slight drop in the accuracy rate of \emptyset in the lower intermediate level; however, accuracy has increased again in the intermediate level. Accuracy of *the* and *a* demonstrates a gradual improvement across proficiency levels. The accurate use of *a* has significantly increased across proficiency levels. Among both elementary and pre intermediate learners, an accuracy order of $\emptyset > the > a$ can be observed and in the intermediate level the accuracy order is $a > \emptyset > the$. The high standard deviations in *the* and *a* in both elementary and pre intermediate levels indicate a wider spread of the accuracy rate among the students in these proficiency levels. The lower standard deviation and the high accuracy of the same articles in the intermediate level is an indication of their better performance in this level.

	SOC all articles		SOC_the		SOC_∅		SOC_a	
	M	SD	M	SD	M	SD	M	SD
Elementary	84.4	23.02752	20.0	42.16370	93.3	16.12486	15.0	33.74743
Pre Intermediate	68.6	13.05714	56.6	42.29841	91.3	12.14770	45.2	41.54997
Intermediate	80.5	11.63567	58.5	26.98250	93.6	10.47961	98.3	5.37587

Table 1. Accurate use of article in the three proficiency levels
Note. M= Mean, SD=Standard Deviation

Table 2 demonstrates a very high level of emergence of all articles in the intermediate level and a low level of emergence of *the* and *a* in the elementary level. According to the data, the order of article emergence can be identified as $\emptyset > a > the$ for elementary, $\emptyset > the > a$ for pre intermediate and $\emptyset = a > the$ for intermediate levels. Due to the very high percentage of \emptyset article accuracy and emergence in the elementary level, SOC (Table 1) of all articles in this proficiency level has become high.

	Emergence_all articles	Emergence_the	Emergence_∅	Emergence_a
Elementary	0.2	0.3	1.0	0.4
Pre Intermediate	0.5	0.9	1.0	0.8
Intermediate	0.9	0.9	1.0	1.0

Table 2. Emergence of articles in the three proficiency levels

Table 3 highlights the TLU data for all articles and Table 4 highlights the comparison of SOC, TLU and emergence in all proficiency levels. Table 4 indicates that overuse of \emptyset is low in the elementary level and it has increased across proficiency levels. However, the increase from pre intermediate to intermediate level is very slight. Another observation is that when emergence increased, both overuse and accuracy of *a* have increased. When the emergence of *the* increased both accuracy and overuse have also increased but in the intermediate level overuse of *the* has decreased.

	TLU all articles		TLU_the		TLU_zero		TLU_a	
	M	SD	M	SD	M	SD	M	SD
Elementary	77.6	28.89906	20.0	42.16370	85.1	23.02873	13.4	32.24972
Pre Intermediate	55.8	15.48332	42.6	34.35501	67.9	21.49134	39.3	37.25602
Intermediate	68.3	15.93075	55.8	27.18169	68.9	15.64893	88.0	16.88819

Table 3. Target Like Use of articles in the three proficiency levels

	Elementary				Pre Intermediate				Intermediate			
	a	the	∅	a	a	the	∅	a	a	the	∅	a
				/				/				/
SOC	15.0	20.0	93.3	84.4	45.2	56.6	91.3	68.6	98.3	58.5	93.6	80.5
TLU	13.4	20.0	85.1	77.6	39.3	42.6	67.9	55.8	88.0	55.8	68.9	68.3
SOC-TLU	1.6	0.0	8.2	6.8	5.9	14.0	23.4	12.8	10.3	7.7	24.7	12.2
Emergence	0.4	0.3	1.0	0.2	0.8	0.9	1.0	0.5	1.0	0.9	1.0	0.9

Table 4. Comparison of SOC, TLU and emergence of articles in the three proficiency levels

Tables 5 and 6 demonstrate the accuracy (SOC) and emergence of articles based on the four categories of the Semantic Wheel Model. According to Tables 5 and 6, the accuracy and emergence orders of articles in the three proficiency levels are;

Elementary:

SOC $3(\emptyset) > 2 > 3(a) > 1(\emptyset)$

Emergence $3(\emptyset) > 3(a) = 2 > 1(\emptyset)$

Pre Intermediate:

SOC $3(\emptyset) > 1(\emptyset) > 2 > 4(a) > 3(a) > 4(\emptyset) = 1(the)$

Emergence $3(\emptyset) > 2 > 1(\emptyset) > 4(a) > 3(a) > 4(\emptyset) = 1(the)$

Intermediate:

SOC $4(a) > 3(\emptyset) > 3(a) > 2 > 1(\text{the}) = 1(\emptyset) > 4(\emptyset)$
 Emergence $2 = 4(a) > 3(\emptyset) > 3(a) > 1(\text{the}) = 1(\emptyset) = 4(\emptyset)$

These data indicate that emergence increased with proficiency. Except type 1 *a* all the other articles emerged in pre intermediate and intermediate levels and the emergence is comparatively high in the intermediate level. A high emergence and a high accuracy are shown in type 3 \emptyset , even though there is a slight decrease of both (emergence and accuracy) in the intermediate level. The high standard deviation in the intermediate level indicates that accuracy rate of type 3 \emptyset is widely spread in this level. A high emergence is also shown by type 2 *the* across proficiency levels. Both type 1 and 2 *the* and type 3 and 4 *a* demonstrate a gradual increase of accuracy. Except type 3 \emptyset , all other \emptyset articles also indicate an increase of accuracy across proficiency levels. Further, it is clear that type 1 *a* did not emerge at all in the three proficiency levels. The standard deviation in type 2 *the* is decreased when the proficiency increases which is another indication of more accurate use of that article when proficiency increases.

		Elementary		Pre Intermediate		Intermediate	
		M	SD	M	SD	M	SD
Type 1	SOC_the	00.0	0.00000	10.0	31.62278	40.0	51.63978
	SOC_zero	10.0	31.62278	60.0	51.63978	40.0	51.63978
	SOC_a	00.0	0.00000	00.0	0.00000	00.0	0.00000
Type 2	SOC_the	20.0	42.16370	51.8	41.90147	55.9	26.46780
	SOC_a	15.0	33.74743	40.0	51.63978	70.0	48.30459
Type 3	SOC_a	15.0	33.74743	40.0	51.63978	70.0	48.30459
	SOC_zero	93.0	16.36392	97.5	7.90569	77.1	41.62918

Table 5. Accurate use of four types of articles in the three proficiency levels

		Elementary	Pre Intermediate	Intermediate
Type 1	E_the	0.0	0.1	0.4
	E_zero	0.1	0.6	0.4
	E_a	0.0	0.0	0.0
Type 2	E_the	0.2	0.7	0.9
Type 3	E_a	0.2	0.4	0.7
	E_zero	1.0	1.0	0.8
Type 4	E_a	0.0	0.5	0.9
	E_zero	0.0	0.1	0.4

Table 6. Emergence of four types of articles in the three proficiency levels

Tables 7 and 8 reveal that in type 1 *the*, \emptyset and type 4 \emptyset , both emergence and accuracy have increased with proficiency and overuse has not occurred. It is also noteworthy that the emergence of these articles is comparatively low. Type 4 *a* emerged late and emergence, accuracy and overuse have increased with proficiency. Type 3 *a* and type 2 *the* highlight a gradual increase of emergence, accuracy and overuse; however, overuse of *the* has decreased in the intermediate level and overuse of *a* remains the same in both pre intermediate and intermediate levels. In type 3 \emptyset , both accuracy and overuse have increased in the pre intermediate level but decreased in the intermediate level. There is a slight drop of emergence of the same article in the intermediate level. The high standard deviation of TLU in type 3 \emptyset in the intermediate level shows a wide spread accuracy range in this level for this article.

Type		Elementary		Pre Intermediate		Intermediate	
		M	SD	M	SD	M	SD
1	TLU	00.0	0.00000	10.0	31.62278	40.0	51.63978
	_the						
	T L U _zero	00.0	0.00000	60.0	51.63978	40.0	51.63978
2	T L U _the	20.0	42.16370	40.1	51.63978	53.2	26.37676
	T L U _a	13.4	32.24972	30.0	42.16370	60.0	45.94683
3	T L U _a	13.4	32.24972	30.0	42.16370	60.0	45.94683
	T L U _zero	86.1	22.59031	65.7	23.80499	55.5	33.14363
4	T L U _a	00.0	0.00000	50.0	52.70463	82.7	32.82293
	T L U _zero	00.0	0.00000	10.0	31.62278	35.0	47.43416

Table 7. Target Like Use of four types of articles in the three proficiency levels

Type		Elementary				Pre Intermediate				Intermediate			
		SOC	TLU	SOC-TLU	EMR	SOC	TLU	SOC-TLU	EMR	SOC	TLU	SOC-TLU	EMR
1	the	00.0	00.0	0.0	0.0	10.0	10.0	00.0	0.1	40.0	40.0	00.0	0.4
	zero	10.0	10.0	0.0	0.1	60.0	60.0	00.0	0.6	40.0	40.0	00.0	0.4
	a	00.0	00.0	0.0	0.0	00.0	00.0	00.0	0.0	00.0	00.0	00.0	0.0
2	the	20.0	20.0	0.0	0.2	51.8	40.1	11.7	0.7	55.9	53.2	2.7	0.9
3	a	15.0	13.4	1.6	0.2	40.0	30.0	10.0	0.4	70.0	60.0	10.0	0.7
	zero	93.0	86.1	6.9	1.0	97.5	65.7	31.8	1.0	77.1	55.5	21.6	0.8
4	a	00.0	00.0	0.0	0.0	50.0	50.0	00.0	0.5	90.0	82.7	7.3	0.9
	zero	00.0	00.0	0.0	0.0	10.0	10.0	00.0	0.1	35.0	35.0	00.0	0.4

Table 8. Comparison of SOC, TLU and emergence of the four types of articles in the three proficiency levels
Note. EMR - Emergence

V. DISCUSSION

According to the results of the study, it can be stated that these learners were able to master the \emptyset article before the other two. Table 2 reveals that the emergence of \emptyset is very high in all levels. Accuracy of \emptyset has decreased with proficiency but has slightly increased again in the intermediate level. Overuse of \emptyset shows an increase across proficiency levels. However, the increase of overuse from pre intermediate level to intermediate level is very low and if the decrease of standard deviation in TLU (Table 3) of \emptyset from pre intermediate level to intermediate level is taken into account, this slight increase of overuse can be ignored. Thus, it is possible to state that \emptyset article demonstrates a U shape behaviour (Ortega, 2009, p.118) and this is similar to what Master (1987) observed in his study. Since the article use of higher level learners has not been investigated in this study, it is difficult to predict the behaviour of \emptyset article use among high proficiency Sinhalese learners of English. However, the slight increase of accuracy in the intermediate level in this study can be taken as an indication of the increase of accuracy of \emptyset article in the higher levels. Further, the high accuracy level of \emptyset shown by the elementary group could be a result of avoidance as mentioned by Master (1987). Although there is a fluctuation of accuracy in \emptyset article, the overall accuracy rate of it is very high in all levels.

Even though *a* indicates an increase in emergence and accuracy in Table 4, Table 8 indicates that emergence of *a* except in type 3 is delayed and type 1 *a* does not emerge at all. However, there is a consistent increase of emergence and accuracy of both types of *the*. In type 2, overuse of *the* has increased with proficiency and decreased in the intermediate level. This can be an indication of mastering *the* when the proficiency increases.

If the emergence is taken into consideration separately, the acquisition order of articles among these learners appears to be $\emptyset > the = a$; however, SOC and TLU measures clearly

demonstrate that *the* is mastered before *a*. Considering these findings, it can be concluded that these learners have mastered \emptyset first, *the* next and *a* last. This is similar to what Master (1987) and Parrish (as stated in Thomas, 1989) found out in their studies.

Since the emergence of type 1 and 4 \emptyset is very low even in the intermediate level, it can be stated that these learners have mastered type 3 \emptyset before the other \emptyset articles. However, a decrease of accuracy and emergence of this article across proficiency levels can be observed. Further, a decrease of overuse in the intermediate level is also evident which can be an indication of increase of accuracy in the higher proficiency levels. This can also be an indication of a difficulty that these learners encounter in acquiring \emptyset article as also observed by Thomas (1989) and Master (1997) in their studies. Among *the*, it is clear that these learners have mastered type 2 first. Even though type 4 *a* indicates a very high increase of emergence and accuracy in the intermediate level, it is too early to claim that these learners have mastered it because emergence of it has only started in the pre intermediate level. Therefore, it is possible to conclude that these learners have mastered type 3 *a* first among *a* articles.

The results in this study clearly demonstrate that both accuracy and emergence have increased with proficiency (Tables 4 and 8). The only deviation of this pattern is in type 3 \emptyset which could be due to the U shape behaviour (Ortega, 2009, p.118). Another finding of the study is that there is an early overuse of articles that the students master first. This is evident in the behaviour of type 3 \emptyset , type 3 *a* and type 2 *the* articles. This is similar to the overuse pattern discussed in other empirical studies mentioned in the literature review.

In type 1 \emptyset , emergence drops in the intermediate level; however, accuracy level does not decrease. The data available in this study are not sufficient enough to explain the reasons for this behaviour because overall emergence of type 1 \emptyset is low. A possible problem for low emergence

of articles in some categories (especially *a*) could be due to the data collection method used in the study in which the students might not have found a necessity to use such articles.

This study also provides some pedagogical insights into how articles should be taught to Sinhalese EFL/ESL learners. Since accuracy of *the* and *a* demonstrated a steady increase, it can be predicted that learners might not face particular problems in acquiring them when their proficiency increases; however, teachers may have to pay more attention to \emptyset article since it demonstrated a U shape behaviour. It would be useful for teachers to understand that there can be a decrease of the accuracy level in mid proficiency level and thus it would be necessary to provide constant input to learners to remind them of \emptyset article usage. Moreover, it would be necessary for teachers to understand that the decrease of accuracy level is a temporary behaviour; therefore, encourage learners to achieve the expected proficiency level gradually.

VI. CONCLUSION

This study revealed an overall $\emptyset > the > a$ pattern of article acquisition by this set of Sinhalese L2 learners across proficiency levels from elementary to intermediate. The behaviour of \emptyset article can be explained further if the article use of higher proficiency levels can also be studied. It can also be highlighted that these Sinhalese L2 learners of English acquired type 3 \emptyset , type 2 *the* and type 3 *a* articles earlier than the other types. The less emergency of certain articles could be a result of the type of activity used for data collection; therefore, more controlled tasks such as cloze or gap fill tests would be more suitable to study the use of those articles.

Since the contextual factors, differences in learners and their behaviours, L1 influence, and article usage in higher proficiency levels were not taken into account in this study and also since a controlled data collection method such as a cloze test was not used to collect data, the results in the study might not have displayed all the behavioural patterns of English article acquisition among Sinhalese L2 learners of English. Therefore, the use of a mixture of both naturalistic and controlled data collection methods and a study of article acquisition among all levels of learners may provide a better insight into the patterns of article acquisition among Sinhalese L2 learners of English.

REFERENCES

- Bataineh RF (2005). Jordanian undergraduate EFL students' errors in the use of the indefinite article. *Asian EFL Journal*, 7 (1), 1-20.
- Bickerton D (1981). *Roots of Language*. Ann Arbor: Karoma Publishers.
- Butler YG (2002). Second language learners' theories on the use of English articles. *SSLA*, 24, 451-480
- Ekiert M (2005). Acquisition of the English article system by speakers of Polish in ESL and EFL settings. *Columbia University Working Papers in TESOL & Applied Linguistics*, 4 (1), 1-23.
- Gass S and Mackey A (2007). *Data elicitation for second and foreign language research*. New Jersey: Routledge.
- Geng J (2010). The semantic analysis of the definite article' misuse by Chinese learners of English. *Asian Social Science*, 6 (7), 180-184.
- Haiyan L and Lianrui Y (2010). An investigation of English articles' acquisition by Chinese learners of English. *Chinese Journal of Applied Linguistics (Bimonthly)*, 33 (3), 15-31.
- Humphrey SJ (2007). Acquisition of the English article system: some preliminary findings. *Journal of School of Foreign Languages*, (2007-02), 301-325.
- Ionin TR (2003). *Article semantics in second language acquisition*. (Unpublished doctoral dissertation). Massachusetts Institute of Technology, Massachusetts.
- Ionin T, Ko H and Wexler K (2004). The role of semantic features in the acquisition of English articles by Russian and Korean speakers. Draft to appear in *The Role of Formal Features in Second Language Acquisition*, Second language research acquisition series (Theoretical and Methodological Issues).
- Ionin T, Zubizarreta ML and Maldonado SB (2008). Sources of linguistic knowledge in the second language acquisition of English articles. *Lingua*, 118 (2008), 554-576.
- Kobota M (1994). Acquisition of English articles by Japanese EFL learners. *Educational Resources Educational Centre Reports - Research/Technical*, 149, 1-27.
- Lu CF (2001). The acquisition of English articles by Chinese learners. *Second Language Studies*, 20 (1), 43-78.
- Mahmood A, Javed S and Tariq M (2011). Acquisition of articles by Pakistani English learners. *International Journal of Academic Research*, 3 (5), 332-336.
- Master P (1987). *A cross-linguistic interlanguage analysis of the acquisition of the English article system* (Unpublished doctoral dissertation). University of California, Los Angeles.
- Master P (1989). The English article system: acquisition, function and pedagogy. *System*, 25 (2), 215-232
- Norris J and Ortega L (2006). Defining and measuring SLA. In C. Doughty & M.H. Long (Eds.), *The handbook of second language acquisition* (3rd ed.) (717-761). Malden: Blackwell Publishing.
- Ortega L (2009). *Understanding second language acquisition*. London: Hodder Education.
- Sarco G (2008). Morphophonological or Syntactic Transfer in the Acquisition of English Articles by L1 Speakers of Syrian Arabic? *Proceedings of the 9th Generative Approaches to Second Language Acquisition Conference (GASLA 2007)*, 206-217

Senarathne CD (2009). *Sinhala-English code-mixing in Sri Lanka: a sociolinguistic study*. Utrecht: LOT.

Thomas M (1989). The acquisition of English articles by first- and second-language learners. *Applied Psycholinguistics*, 10, 335-355.

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