

Processing of Active Sentences with Different Accusative Markers /ʈa/ Accusatives vs. /va/ Accusatives in Spoken Sinhala language

A. B. Prabath Kanduboda

Abstract

This paper examines whether active sentences with different accusative markers illustrate identical circumstances when processing canonical ordered sentences and scramble ordered sentences. Specifically, this study focuses on Double Object Markers (DOM) phenomenon in Sinhala language with relation to sentence processing. Sinhala language is said to possess DOM for active sentences consisting of transitive verbs (*/ʈa/* and */va/*). Previous studies in experimental linguistics in Sinhala language have examined the canonical word order in active sentences consisting of transitive verbs with */ʈa/* accusatives, and have provided evidence that the canonical word order is decided based on the information provided by grammatical functions (Subject-Object-Verb). Since */va/* and */ʈa/* accusatives accompany different verbs, it is important to examine the sentences with */va/* accusatives in order to ascertain the fact that the canonical word order is constructed according to the grammatical information (i.e., Subject-Object-Verb) in all active sentences consisting of transitive verbs in the spoken form of the Sinhala language. Thus, this study conducted two experiments (EX#1 with */va/* accusatives, and EX#2 with */ʈa/* accusatives) using the nature of scrambling effects to seek whether SOV word order remains canonical and grammatical functions still provide necessary information to determine the canonical word order. A series of one-way ANOVAs was conducted on reaction times and error rates of the responses. The results show that the canonical order remains Subject-Object-Verb for active sentences consisting of transitive verbs with */va/* accusatives which in turn suggest that the information of grammatical function is still applicable regardless of different accusative types in active sentences of the Sinhala language.

Key words - */ʈa/* Accusatives, */va/* Accusatives, Scrambling effects, Canonical order, Scrambled order

Doctoral student, Graduate School of Languages and Cultures, Nagoya University, Japan. E-mail: kanda80@gmail.com

1.Introduction

Sinhala is the native language to 13 million people who live in Sri Lanka. Although it is an Indo-Aryan language, some features have set it apart from other languages in the family. For example, the free-word-order phenomenon in the Sinhala language demonstrates a unique syntactic system in comparison with that of others. Although the main word order (i.e., canonical word order), is said to be Subject-Object-Verb, there are other word orders (i.e., scrambled word orders), which are reported to have a general use among native speakers (Gair 1998; Gunasekara 1999; Dissanayaka 2007). Furthermore, Sinhala language is said to possess two different markers to denote direct objects (i.e., accusative NPs) in active sentences consisting of transitive verbs. According to previous studies (Kanduboda 2013; Noguchi 1984), /ʈa/ marker is used to denote accusative NPs in some active sentences consisting of transitive verbs, whereas, /va/ marker being used to denote some other accusative NPs in the same regard. Previous studies (Kanduboda & Tamaoka 2009, 2010) have examined the /ʈa/ accusatives in active sentences for determining the information cues in processing canonical and scrambled sentences. However, /va/ accusatives have not been taken into consideration by these studies. Therefore, this study examined whether active sentences consisting of transitive verbs with /va/ accusatives also follow the information provided by the grammatical functions to process canonically ordered sentences (i.e., Subject-Object-Verb order).

Due to the free-word-order phenomenon in the Sinhala language, as a previous study done by Giar (1998) has suggested the syntactic structure of the Sinhala language is non-configurational (i.e., a flat structure). However, recent studies in the field of experimental linguistics have provided controversial evidence to this claim stressing on the configurational structure in the Sinhala language. For example, Kanduboda and Tamaoka (2009, 2010), have experimented on different types of sentences in the Sinhala language with relation to priority information and free-word-order phenomenon. According to these studies, the Sinhala language possesses a configurational structure due to the difference of information available in differently ordered sentences. The experiments conducted by Kanduboda and Tamaoka (2009, 2010) have involved active sentences consisting of transitive verbs and ditransitive verbs, passive sentences with transitive verbs, and potential sentences. These studies have also provided evidence that grammatical functions play a major role in providing information for sentence processing among native Sinhala speakers.

2. The DOM in Sinhala language

Sinhala is a language where DOM (Double-Object-Marker) phenomenon is prevalent in active sentences consisting of transitive verbs; some accusative NPs take /*ʔa*/¹ marker where some of other accusative NPs take /*va*/ marker (Aisen, 2007; Kanduboda, 2013). According to previous studies, it is said that the verbs accompanying these two accusatives are different (in which they represent different actions). For instance, examples 1 & 2 illustrate the difference of use between these two accusative types with Sinhala active sentences consisting of transitive verbs. Note that the nominative NP *anil* and the accusative NP *samara* are identical in both sentences though the accusative markers and the verbs are different.

1. අනිල් සමර-ට ඇද්ද.

anil samara-va ädda

Anil (ϕNOM, anim) Samara (ACC, anim) pull(V+PAST)
Anil pulled Samara.

Example 1 represents an active sentence of the Sinhala language *anil samarava ädda* meaning ‘Anil pulled Samara’. The accusative marker in this sentence is /*va*/ with the accompanying verb *ädda* ‘pulled’. On the other hand, Example 2 in the same regards is produced with the accusative marker /*ʔa*/ which immediately accompanies the verb *bänna* ‘scolded’.

1. අනිල් සමර-ට බැන්න.

anil samara-ʔa bänna

Anil (ϕNOM, anim) Samara (ACC, anim) scold(V+PAST)
Anil scolded Samara.

When different markers take place with different actions (i.e., verbs), the information is considered to be different since the verb properties are not identical. Thus, it is important to reveal whether grammatical functions which remain as main information clue for processing both types of sentences, and further, whether the proposed canonical order Subject-Object-Verb remains unchanged.

1. The dative marker in Sinhala language is /*ʔa*/, though in some sentences, it is also used to denote the accusative NPs (see: Noguchi 1984; Gunasekara 1999 for details.)

2.1 Assumptions for the present study

Upon this complex use of case markers /*va*/ and /*ta*/, it is possible to assume that the processing of these sentences may be poles apart since the information available in the VP for /*va*/ accusatives and /*ta*/ accusatives are incongruent. Therefore, this study conducted two experiments with three assumptions as explained below.

1) Difference of reaction times and lower error rates between /*ta*/ marker and /*va*/ marker

As stated many times, although the /*ta*/ marker is used to denote the accusative NPs in the Sinhala language, it originally denotes the dative NPs in most cases. This complex use is expected to make native speakers confused during the processing time. For example, when they encounter a sentence consisting of the /*ta*/ marker, the mind requires extra cognitive load to process the sentence since there are two types of use for the /*ta*/ marker. The /*va*/ marker, on the other hand, has always been recognized and used as an accusative case marker in the Sinhala language. Thus, this study assumes that sentences with /*va*/ marker will be processed with shorter reaction times and lower error rates than sentences with /*ta*/ marker.

2) Possible scrambling effects between the canonical order and scrambled order

As many previous studies have prompted empirical evidence on scrambling effects between canonical word order and scrambled word order, this study also assumes that sentences with /*va*/ accusative will also illustrate scrambling effects due to the discrepancy of information flow. For instance, Example 1 in section 2 anil samara-va ädda is formed based on the canonical order Subject-Object-Verb. The scrambled order is built altering the NP position of the accusative and the verb as in anil ädda samara-va. These two word orders provide information in a different way; the canonical order postulates that a subject NP is placed in the initial position and the object NP precedes the verb which constitutes the structure of SOV. However, the scrambled order postulates that a subject NP is placed in the initial position and the verb precedes the object NP which in turn constitutes the structure of SVO.

3) Consistency of grammatical information and canonical word order Subject-Object-Verb

Although the free-word-order phenomenon plays a major role in the Sinhala context, many previous studies suggest that canonical word order for the Sinhala language has been Subject-

Object-Verb over the years. In addition, the word order predicted by the grammatical functions (i.e., SOV) appears to remain unchanged in many Sinhala sentence types (Chandralal 2010; Dissanayaka 2007; Gunasekara 1999; Kanduboda & Tamaoka, 2009, 2010, 2011; Tamaoka et al. 2011). This study also expects that active sentences consisting of transitive verbs with /va/ accusative marker will continue to provide satisfactory information for processing sentences in the SOV order.

In order to avouch for the above assumptions, this study conducted two experiments; EX#1 with /va/ accusatives as the main investigation, and EX#2 with /ta/ accusatives as a reference investigation. The next section will provide in-depth information of these experiments.

1.EX#1 - Active sentences consisting of transitive verbs with /va/ accusatives

The main purpose of this experiment was to seek evidence on the canonical order and information cues. This study applied the nature of scrambling effects for this purpose. For example, an SOV ordered sentence *anil samara-va ädda* meaning ‘Anil pulled Smara’ [NP ϕ NOM, anim [VPACC, anim V+PAST]] is altered to produce its scrambled word order SVO *anil ädda samara-va* which semantically represents the identical meaning though syntactically possesses a different structure. When the syntactic structure becomes different between the sentences (in this case between SOV and SVO), it is assumed that the information available for recognizing sentences are incongruent. For instance, the sentence with SOV order *anil samara-vädda* comprises with grammatical information. A subject NP always precedes the direct object NP and the verb is placed at the very end of the sentence. However, with the order of SVO, the information provided by the grammatical functions suggests that a subject NP precedes a verb and the object NP is placed at the very end of the sentence. When native speakers process these two types of sentences, it is assumed that the reaction times are different due to this syntactic variance. Since previous studies have suggested the SOV order as the canonical order for most Sinhala sentences, this study also hypothesized that that SOV order predicted by the information of grammatical function may process with shorter reaction times in comparison with SVO ordered sentences. However, if SVO ordered sentences are processed with shorter reaction times, the canonical order can be considered different depending on the sentences.

3.1 Participants

The present study was conducted in Sri Lanka with 28 Sinhala native speakers. All the participants were born and brought up in Sri Lanka and have received 13 years of general education in Sinhala language. They all belonged to a university during the time of experiment. The ages ranged from 19 years and 3 months to 24 years and 6 months with the average age being 21 years and 2 months at the time of experiment.

3.2 Procedure

The stimulus was presented using a computer program called DMDX (version 5.1.0.0). Both 'yes' responses, and 'no' responses were presented randomly on the center of the computer screen 600ms after the appearance of a line of asterisks '*****' as the eye fixation point on the screen.

3.3 Stimuli

A total of 136 stimuli were prepared for the present experiment (a sample of stimuli is listed in Appendix A). First, SOV ordered 24 active sentences consisting of transitive verbs with /va/ accusative were produced. Then, in order to make their corresponding scrambled sentences, the original positions of the accusative NP and the verb were swapped. For example, an SOV ordered sentence *amara kalana-va tallu kaḷā* meaning 'Amara pushed Kalana' [NP ϕ NOM, anim [VPACC, anim [V+PAST]]] has its corresponding scrambled sentences as *amara tallu kaḷā kalana-va*. In this way, a set of SOV ordered sentences and SVO ordered sentences were produced for the 'yes' Grammatically and semantically accepted as 'correct' sentences. responses. The same method was applied to produce another 24 canonical and 24 scrambled sentences for correct 'no' Either grammatically or (and) semantically accepted as 'incorrect' sentence. responses. For example, a sentence such as *lalitā mālā-va giya* 'Lalitha Maala went' is altered to produce their corresponding scrambled sentence as *lalitā giyā maalā-va* which is considered incorrect both in syntactic formation and semantic representation. Another 40 sentences were built as dummy sentences using the same method. Overall, a total of 136 sentences were prepared for the actual experiment. All the participants were given 10 other trial stimuli prior to the actual experiment in order for them to get used to the computer based experiment and to understand the flow of the experiment. In addition, all the participants were advised to respond as quickly and accurately as they can to the stimuli which

appeared on the computer screen. It was assumed that seeing the same stimuli item may shorten the reaction times. Thus, in order to prevent recursion among stimuli, a counter balanced design was applied making the participants belong to two different groups with two different lists of stimuli items. The left shift key represented correct ‘no’ answers while the right shift key represented correct ‘yes’ answers. All the responses were recorded accordingly and converted to excel data for the analysis process.

3.4 Analysis

A series of ANOVA were conducted for all the responses to outline which word order had shorter reaction times with lower error rates. Extremes among sentence correctness decision times (less than 500 ms and longer than 5,000 ms) were recorded as missing values. Table 1 illustrates the means and standard deviations of correct ‘Yes’ and ‘No’ reaction times and error rates for sentence correctness decisions. In the statistical tests, (F1) represents the subject variability and (F2) represents the item variability. Although the study applied correct ‘no’ responses in the main experiment, they were not considered for the main argument and excluded with the other dummy stimuli items. However, it is reported in Table 1.

3.5 Results

Response Type	Sentence Type	Reaction Time (ms)		Error Rate(%)	
		M	SD	M	SD
'YES' Responses	SOV	1144	116	7.7%	7.3%
	SVO	1249	209	10.1%	12.3%
'NO' Responses	SOV	1194	156	12.5%	6.8%
	SVO	1277	228	13.7%	10.7%

Note : M - mean SD - standard deviation

In Experiment #1, the results for correct ‘yes’ responses in participants’ analysis indicated that canonical sentences had shorter reaction times [F1 (1, 27) =4.234, p<.05; F2 (1, 23) =2.117, n.s] although the error rates showed no significance between SOV order and SVO order [F1 (1,27) =2.448, n.s; F2 (1, 23) =3.874, n.s]. The results for correct ‘no’ responses both in participants’ analysis [F1 (1, 27) =2.877, n.s; F2 (1, 23) =. 025, n.s] and item analysis [F1 (1,27) =.368, n.s; F2 (1, 23) =.571, n.s] indicated that there were no significance between SOV order and SVO order.

3.6 Discussion

Upon these results, it is evident that active sentences consisting of transitive verbs with /va/ accusatives also possess a configurational structure (scrambling effects between SOV order and SVO is 105 milliseconds as illustrated in Table 1) and the canonical order remains Subject-Object-Verb as predicted. (Further discussion will be done in the general discussion section at the end.) However, it is also important to examine the sentences with /ʈa/ accusatives in the same regard. Thus, the next section will provide in-depth information regarding the experiment conducted for active sentences consisting of transitive verbs with /ʈa/ accusatives.

1.EX#2 - Active sentences consisting of transitive verbs with /ʈa/ accusatives

The main purpose of this experiment was to reassure the canonical order and seek evidence as reference to Experiment 1 with /va/ accusatives. Again, this study also utilized the nature of scrambling effects to conduct the experiment. For example, an SOV ordered sentence *anil samara-ʈa gāhuva* meaning ‘Anil hit Smara’ [NP_φNOM, anim [VPACC, anim V+PAST]] is altered to produce its scrambled word order SVO *anil gāhuva samara-ʈa* which semantically represents the identical meaning though syntactically possesses a different structure. Again as in Experiment#1, when the syntactic structure becomes different between the sentences, it is assumed that the information available for recognizing sentences is incongruent. For instance, the sentence with SOV order *anil samara-ʈa gāhuva* is comprised as subject NP precedes the direct object NP and the verb is placed at the very end of the sentences. However, with the order of SVO, the information for processing suggests that a subject NP preceding a verb and the object NP is placed at the very end of the sentence. When native speakers process these two types of sentences, it is assumed that the reaction times are different due to this syntactic variance. As with other previous studies, this study also hypothesizes that SOV order predicted by the information of grammatical function may process with shorter reaction times in comparison with SVO ordered sentences. However, if SVO ordered sentences are processed with shorter reaction times, the canonical order can be considered different depending on the sentences.

4.1 Participants

Refer Ex#1.

4.2 Procedure

Refer Ex#1.

4.3 Stimuli

Another 136 stimuli were prepared for the present experiment (a sample of stimuli is listed in Appendix B). First, SOV ordered 24 active sentences consisting of transitive verbs with /ṭa/ accusative were produced. Then, in order to make their corresponding scrambled sentences, the original positions of the accusative NP and the verb were swapped. For example, an SOV ordered sentence *amara kalana-ṭa bänna* meaning ‘Amara scolded Kalana’ [NP ϕ NOM, anim [VP ACC, anim [V+PAST]]] has its corresponding scrambled sentences as *amara bänna kalana-ṭa*. In this way, a set of SOV ordered sentences and SVO ordered sentences were produced for the ‘yes’ responses. The same method was applied to produce another 24 canonical and 24 scrambled sentences for correct ‘no’ responses. For example, a sentence such as *lalitha maala-ṭa giya* ‘Lalitha Maala went’ is altered to produce their corresponding scrambled sentence as *lalitha giyā māla-ṭa* which is considered incorrect both in syntactic formation and semantic representation. Another 40 sentences were built as dummy sentences using the same method. Overall, a total of 136 sentences were prepared for the actual experiment. All the participants were given 10 other trial stimuli prior to the actual experiment in order to get used to the computer based experiment and to understand the flow of the experiment. In addition, all the participants were advised to respond as quickly and accurately as they could to the stimuli which appeared on the computer screen. It is assumed that seeing the same stimuli item may shorten the reaction times. Thus, in order to prevent recursion among stimuli, a counter balanced design was applied making the participants belong to two different groups with two different lists of stimuli items. The left shift key represented correct ‘no’ answers while right shift key represented correct ‘yes’ answers. All the responses were recorded accordingly and converted to excel data for the analysis process.

4.4 Analysis

Refer Ex#1.

4.5 Results

Response Type	Sentence Type	Reaction Time (ms)		Error Rate(%)	
		M	SD	M	SD
'YES' Responses	SOV	1360	301	6.8%	11.2%
	SVO	1529	348	8.9%	9.6%
'NO' Responses	SOV	1133	135	11.6%	9.9%
	SVO	1149	118	11.8%	10.6%

Note : M - mean SD - standard deviation

In Experiment #2, the results for correct ‘yes’ responses in the participants’ analysis indicated that canonical sentences had shorter reaction times [F1 (1, 27) =4.303, p<.05; F2 (1, 23) =4.692, p<.05], with lower error rates. However, the item analysis showed that there is no significance between two word order patterns [F1 (1.27) =1.380, n.s; F2 (1, 23) =1.680, n.s]. The results for correct ‘no’ responses both in the participants’ analysis [F1 (1, 27) =.757, n.s; F2 (1, 23) =.212, n.s] and item analysis [F1 (1.27) =.011, n.s; F2 (1, 23) =.571, n.s] yet again indicated that there was no significance between SOV order and SVO order.

4.6 Discussion

Upon these results, it is repetitively evident that active sentences consisting of transitive verbs with /ʈa/ accusatives also possess a configurational structure (scrambling effects between SOV order and SVO is 105 milliseconds as illustrated in Table 1) and the canonical order remains Subject-Object-Verb as predicted.

5.General discussion

This study conducted two experiments in order to attest three assumptions regarding the spoken form of the present Sinhala language. This section will look into the results and verify how these assumptions can be addressed accordingly.

1) Difference of reaction times and lower error rates between /ʈa/ marker and /va/ marker

The author hypothesized that /va/ accusatives will be processed with shorter reaction times and lower error rates when compared with sentences with /ʈa/ accusatives due to the complexity in the use of the /ʈa/ marker as dative case marker and accusative case marker. The assumption on reaction times was correct; the reaction times showed significant difference between SOV ordered sentences.

Table3. Reaction Times and Error Rates for /ʈa/ & /va/ Accusatives					
Response Type	Sentence Type	Reaction Time (ms)		Error Rate(%)	
		M	SD	M	SD
/va/ Accusatives	SOV	1144	116	7.7%	7.3%
/ʈa/ Accusatives	SOV	1360	301	6.8%	11.2%
<i>Note</i> : M - mean SD - standard deviation					

Table 3 represents the reaction times and error rates between /ʈa/ accusatives and /va/ accusatives. Both accusative types were compared with the error rates and reaction times with SOV sentences. The results for correct ‘yes’ responses in the participants’ analysis indicated that /va/ accusatives had shorter reaction times [F1 (1, 27) =10.443, p<.01;] although error rates showed no significance between the types [F1 (1,27) =.175, n.s]. It should be noted that these two types of accusatives cannot be compared directly as the accompanying verbs are different.

2) Possible scrambling effects between the canonical order and scrambled order

First, the main purpose of this study was to examine the active sentences with /va/ accusatives to seek information on scrambling effects. The results illustrated in Table 1 substantiate the assumption since scrambling effects are evident. This also restates that the syntactic structure of the Sinhala language is configurational (non-flat).

3) Consistency of grammatical information and canonical word order Subject-Object-Verb

The Subject-Object-Verb word order had shorter reaction times in both accusative types proving that the word order predicted by the grammatical functions is still used by the native speakers during sentence processing.

Overall, including the present results, it is highly possible to posit that all the active sentences consisting of transitive verbs either with /va/ accusatives or /ʈa/ accusatives for the spoken form of the Sinhala language has a configurational structure and the canonical word order is predicted by the information provided by the grammatical functions Subject-Object-Verb.

6. Conclusion

This study was conducted to reveal the canonical order of active sentences consisting of transitive verbs with /va/ accusatives in the Sinhala language. The Sinhala language is said to possess two different markers to denote the accusative NP in active sentences consisting of transitive verbs. Some sentences require the /ta/ marker to denote accusative NPs with some transitive verbs, while some other sentences require the /va/ marker to denote accusative NPs with some different transitive verbs. Using the nature of scrambling effects for the free-word-order phenomenon in the Sinhala language, previous studies have provided evidence on sentences with /ta/ accusatives that the canonical order is Subject-Object-Verb since the scrambled order sentences were resulted with longer reaction times and high error rates (Kanduboda & Tamaoka, 2010, 2011). However, active sentences with /va/ accusatives have not been taken into consideration in this regard. Since many previous studies suggest that the /va/ marker is the accusative marker for the Sinhala language it is important to reveal the information about the canonical word order in relation to /va/ accusatives too. Thus, this study conducted an experiment to reveal these hidden facts in the Sinhala language using the nature of scrambling effects.

The survey was conducted with Sinhala native speakers who were living in Sri Lanka at the time of the experiment. The results confirmed scrambling effects between SOV ordered sentences and SVO ordered sentences. As suggested in previous studies, the Subject-Object-Verb ordered sentences have been processed faster compared with the Subject-Verb-Object ordered sentences. This result restates that the canonical order for Sinhala sentences consisting of transitive verbs is SOV, meaning although the accusative markers are different, the canonical word order remains unchanged. In previous studies done by Kanduboda & Tamaoka, (2009 and 2010) for spoken form and written forms of the Sinhala language, the reaction times for /ta/ accusatives have been resulted with 1308 milliseconds and 1291 milliseconds respectively. However, this study showed that SOV ordered sentences with /va/ accusatives have processed faster in contrast (1144 milliseconds). Nevertheless, Experiment#2 in this study (which was conducted as the reference study) also had longer reaction times when compared with the sentences with /va/ accusatives. It is assumed that this difference of reaction times have occurred due to the complexity of case marker use in the Sinhala language.

Although this study could provide evidence to support the configurational structure of the Sinhala language using the nature of scrambling effects, there are many other topics that should be addressed in order to reveal hidden factors of Sinhala language in relation to sentence processing and free-word-order phenomenon.

References

- Aissen, J. (2003), 'Differential object marking: Iconicity vs. economy', *Natural Language & Linguistic Theory* 21: 435–483.
- Chandralal, D. (2010), *Sinhala*, Amsterdam: John Benjamins Publishing Company.
- Dissanayaka, J.B. (2007), *Say it in Sinhala*, Pannipitiya: Stamford Lake Publication.
- Gair, W. J. (1998), 'Syntax: Configuration, order, and grammatical function'. in L. C. Barbara (ed.), *Studies in South Asian linguistics; Sinhala and other South Asian languages*, New York: Oxford University Press: 47–110.
- Gunasekara, A. M. (1999). *A comprehensive grammar of the Sinhalese language*, Madras, New Delhi: Asian educational services.
- Kanduboda, A. B. P., & K. Tamaoka (2009), 'Priority information in determining canonical word order of colloquial Sinhalese sentences', *Proceedings of the 139th conference of the linguistic society of Japan*: 32-37.
- Kanduboda, A. B. Prabath. (2011). Issues in Sinhalese Syntax- Sentence Processing and Word Order, *The Sri Lanka Journal of the Humanities*, University of Peradeniya, Sri Lanka, 37:157-167.
- _____ (2013), On the Usage of Sinhalese Differential Object Markers; Object marker /va/ vs. object marker /ʔa/. *Theory and Practice in Language Studies*, 3-7, 1081-1092.
- Kanduboda, A. B. Prabath, & K. Tamaoka (2010), 'Priority information for canonical word order of written Sinhalese sentences'. *Proceedings of 140th conference by the linguistic society of Japan*: 35-40.
- Noguchi, T. (1984), *Shinharago nyuumon* [Introductory to the Sinhalese language]. Tokyo: Daigaku Shorin.
- Tamaoka, K., A. B. P. Kanduboda & H. Sakai (2011), 'Effects of word order alternation on the sentence processing of Sinhalese written and spoken forms', *Open Journal of Modern Linguistics* 1(2): 24-32.

Appendix A
A Sample of correct ‘yes’ Responses in EX#1
Canonical Word Order SOV

1. අමර කමලව බැන්ද
amara kamala-va bānda
Amara (φNOM,anim) Kamala (ACC,anim) marry (V+PAST)
Amara Married Kamala
2. අතිල කලනව ඇද්ද
atila kalana-va ādda
Atila (φNOM,anim) Kalana (ACC,anim) pull (V+PAST)
Atila pulled Kalana
3. චම්ල රනිල්ව ඇගයුව
camila ranil-va āgayuva
Camila (φNOM,anim) Ranil (ACC,anim) praise (V+PAST)
Camila praised Ranil
4. තිලින නීලව ඇහැරෙව්ව
tilina nīla-va āhārevva
Tilina (φNOM,anim) Nīla (ACC,anim) raise (V+PAST)
Tilina raised Nīla
5. කපිල අමල්ව චලෙව්ව
kapila amal-va elevva
Kapila (φNOM,anim) Amal (ACC,anim) chase (V+PAST)
Kapila chased Amal

Scrambled Word Order SVO

1. අමර බැන්ද කමලව
amara bānda kamala-va
Amara (φNOM, anim) marry (V+PAST) Kamala (ACC, anim)
Amara Married Kamala
2. අතිල ඇද්ද කලනව
atila ādda kalana-va
Atila (φNOM, anim) pull (V+PAST) Kamala (ACC, anim)
Amara Married Kamala
3. චම්ල ඇගයුව රනිල්ව
camila āgayuva ranil-va
Chamila (φNOM, anim) praise (V+PAST) Ranil (ACC, anim)
Chamila Ranil praised
4. තිලින ඇහැරෙව්ව නීලව
tilina āhārevva nīla-va
Tilina (φNOM, anim) raise (V+PAST) Nīla (ACC, anim)
Thilina Nīla raised
5. කපිල චලෙව්ව අමල්ව
kapila elevva amal-va
Kapila (φNOM, anim) chase (V+PAST) Amal (ACC, anim)
Kapila Amal chased

Appendix B
A Sample of correct ‘yes’ Responses in EX#2
Canonical Word Order SOV

1. අමර කමලට ආදරය කළා
amara kamala-ta ādaraya kaḷā
Amara (NOM,anim) Kamala (ACC,anim) love (V+PAST)
Amara loved Kamala
2. අහිල කලණට අපහාස කළා
atila kalana-ta apahāsa kaḷā
Atila (NOM,anim) Kamala (ACC,anim) humiliate(V+PAST)
Atila humiliated Kalana
3. චම්බල රනිල්ට අවවාද කළා
camila ranil-ta avavāda kaḷā
Camila (NOM,anim) Ranil (ACC,anim) advice (V+PAST)
Camila advised Ranil
4. තිලින නීලට හිංසා කළා
tilina nila-ta himsā kaḷā
Tilina (NOM,anim) Nila (ACC,anim) trouble(V+PAST)
Tilina troubled Nila
5. කපිල අමල්ට කරදර කළා
Kapila amal-ta karadara kaḷā
Kapila (NOM,anim) Amal (ACC,anim) disturb (V+PAST)
Kapila disturbed Amal

Scrambled Word Order SVO

1. අමර ආදරය කළා කමලට
amara ādaraya kaḷā kamala-ta
Amara (NOM,anim) love (V+PAST) Kamala (ACC,anim)
Amara loved Kamala
2. අහිල අපහාස කළා කලණට
atila apahāsa kaḷā kalana-ta
Atila (NOM,anim) humiliate (V+PAST) kalana (ACC,anim)
Atila humiliated Kalana
3. චම්බල අවවාද කළා රනිල්ට
camila avavāda kaḷā ranil-ta
Camila (NOM,anim) advice (V+PAST) ranil(ACC,anim)
Camila advised Ranil
4. තිලින හිංසා කළා නීලට
tilina himsā kaḷā nila-ta
Tilina (NOM,anim) trouble (V+PAST) nila(ACC,anim)
Tilina troubled Nila
5. කපිල කරදර කළා අමල්ට
kapila karadara kaḷā amal-ta
Kapila (NOM,anim) disturb (V+PAST) Amal (ACC,anim)
Kapila disturbed Amal

