## COMPLEMENTATION IN COLLOQUIAL SINHALA: OBSERVATIONS ON THE BINDING HIERARCHY

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**1.** INTRODUCTION. This paper briefly examines the relationship between Sinhala's complementation system and Givón's (1980) Binding Hierarchy. In what ways does Sinhala's complementation system correspond to the Binding Hierarchy and in what ways does it diverge from it? What can examining their relationship reveal about the Binding Hierarchy itself? In my work, I will adopt Noonan's definition of complementation as 'the syntactic situation that arises when a notional sentence or predication is an argument of a predicate' (Noonan 1985:41). When a predicate can take a complement clause as an argument, it is termed a COMPLEMENT-TAKING PREDICATE (CTP). For the purposes of this paper, I will only be analyzing examples of complementation in which the complement clause acts as the object of the predicate. My data shows that Sinhala generally conforms to the Binding Hierarchy, but that certain CTPs exhibit behavior that deviates from it.

**1.1.** COMPLEMENTS IN SINHALA. Sinhala has five different complement types. The first complement type simply involves the juxtaposition of two clauses, which I will call the JUXTAPOSED-CLAUSE COMPLEMENT. Examples 1 and 2 give instances of the juxtaposed-clause complement.

- (1) laməya kukulawə mærənəwa mamə dækka child chicken-ACC kill-NONPST 1SG see-PST 'I saw the child kill/killing the chicken'
- (2) rošini redi hodanawa maţa æhuna rošini clothes wash-NONPST 1SG-DAT hear-PST 'I heard Rošini washing clothes'

Example 1 should be considered a complement because the clause *laməya kukulawə mærənəwa* 'the child kill/killing the chicken' acts as an object of the matrix clause *mamə dækka* 'I saw.' Similarly in 2, *rošini redi hodənəwa* 'Rošini washing clothes' acts as the object of the matrix clause *mațə æhuna* 'I heard.'

These complement clauses can be considered examples of a SENTENCE-LIKE COMPLEMENT TYPE (s-like). Noonan defines a sentence-like complement clause as one in which 'the predicate has the same syntactic relation to its subject and its other arguments that it has in syntactic main clauses' (Noonan 1985:49). Most languages include not only s-like complement types, but other complement types, called NON-SENTENCE-LIKE COMPLEMENTS (non-s-like), in which the subject does not have the same syntactic relations with its predicate as it would in a main clause. One feature that distinguishes s-like complements from non-s-like complements is the verb forms with which they occur. The juxtaposed-clause complement type takes FINITE VERB FORMS—meaning that the verb is fully inflected for TAM and is used in main clauses. In 1, for instance, the complement clause *lamaya kukulawa mæranawa* 'the child killing the chicken' is a grammatically acceptable clause on its own. Some of the other complement types in Sinhala, however, occur with NON-FINITE VERB FORMS. Non-finite verb forms are not fully inflected for

TAM and are used in subordinate clauses. Complement clauses using these verb forms could not stand alone as independent clauses, and therefore could be considered less s-like.

The second complement type is composed of two clauses joined by the complementizer *kiyala*, which I will call the *kiyala* COMPLEMENT.

(3) mamə dækka laməya kukulawə mærəla kiyəla

1sg see-pst child chicken-ACC kill-CON COMP

'I saw that the child had killed the chicken'

(4) rošini redi hodənəwa kiyəla matə æhuna rošini clothes wash-NONPST COMP 1sG-DAT hear-PST 'I heard that Rošini was washing clothes'

Again, these should be considered examples of complementation because the kiyəla clause acts as an argument of the predicate in the matrix clause. Complement clauses using *kiyəla* are s-like and occur with finite verb forms.<sup>1</sup>

Another complement type in Sinhala involves two clauses linked by the complementizer *bawa*, which I will refer to as the *bawa* COMPLEMENT.

- (5) ohuge bahareawət hoyənə gaman horek tamange kææmə
  3M.SG -GEN wife look-REL.NONPST while robber himself food
  horəkan kərəpu bawə ohu dækka
  steal do-REL.PST COMP 3M.SG SEE-PST
  'While looking for his wife the man saw that the robber had stolen his food'
- (6) mamə toppi horəkan kərənə bawə tirənəya-keruwa 1sg hat-pl steal do-rel.nonpst comp decide do-pst 'I decided to steal the hats'

These two are examples of complementation because the *bawə* clause acts as an argument of the predicate in the matrix clause. As in the examples above, *bawə* normally occurs with non-finite verbs. Very rarely *bawə* occurs with finite verbs, such as in 7.

(7) mamə ohu wilətə giya bawə hoyaa-gatta
1SG 3M.SG lake-DAT go-PST COMP discover take-PST
'I discovered he went to the lake'<sup>2</sup>

Like kiyəla complements, the bawə complement in 7 occurs with a finite verb form, so that *ohu wiləṭə giya* 'he went to the lake' could be an independent clause. In their grammar of Sinhala, Gair and Paolillo report that *bawə* is 'restricted in use to factual or knowledge contexts' (Gair and Paolillo 1997:53). From my data, this appears to be true, as long as we consider *dakinəwa* 

 $<sup>^{1}</sup>$  Although converbs are not generally considered to be finite verb forms (see 3), in Sinhala they appear to be able to function in this way.

<sup>&</sup>lt;sup>2</sup> The same sentence could be made with ekə, but the verb form would have to be giya, the relative past form. I did not have enough time to test out all the verb forms that *bawa* complements can use.

'see,' *tirənəyə kərənəwa* 'decide,' and *balaaporoțțu wenəwa* 'hope/expect' to belong to 'factual or knowledge contexts.'

The complementizer *ekə* is also used to link two clauses, as in 8 and 9:

- (8) mamə redi hodənə ekə iwərə keruwa
   1sg clothes wash-REL.NONPST NOM FINISH do-PST
   'I finished washing the clothes'
- (9) mamə wæde kərənə ekə wælækuwa 1sg work do-rel.nonpst nom prevent-pst 'I avoided doing the work'

Again these are examples in which the complement clause acts as an argument of the predicate in the matrix clause. I will call this complement type the eka COMPLEMENT. The complementizer eka only occurs with relative past and relative non-past verb forms so the complement clauses could not function as independent clauses (i.e. this complement type is less s-like). There is evidence that eka is a nominalizer, as it can take the postposition gana.

 (10) waňdura toppi horakan karapu eka gæna dukaa unaa monkey hat steal do-REL.PST NOM about sad become-PST 'The monkey was sad about stealing the hats.'

In all three of the examples, the subject of the matrix clause and the subject of the complement clause are the same entity. Because the subjects are co-referential, it is only necessary to identify the subject one time (this is sometimes called EQUI-DELETION). However, the subject of the matrix clause and the subject of the complement clause do not need to be co-referential, as in 11.

(11) æyə wilətə yanə ekə mamə hoyaa-gatta
3F.SG lake-ACC gO-REL.NONPST COMP 1SG discover-take-PST
'I discovered that she was going to the lake.'

Lastly, Sinhala uses an infinitival verb form and no complementizer in what I will term the INFINITIVE COMPLEMENT.

- (12) oyaa redi hodannə awašay
  2sG clothes wash-INF necessary
  'It is necessary that you wash the clothes.'
- (13) oyaatə wilətə yanna puluwan
  2sg-dat lake-dat go-inf can
  'You can go to the lake.'
- (14) reenu ballawə mærennə æriya reenu dog-ACC die-INF let-PST 'Reenu let the dog die.'

The infinitive phrase in all three of these examples is acting as an argument of the matrix clause, and therefore should be considered a complement. 12 and 13 are examples of sentences in which the subject of the matrix clause and the subject of the complement clause are coreferential, but 14 has different subjects for the two clauses. The infinitive form is a non-finite form, and therefore this complement type should be considered less s-like. Example 14 gives further evidence for this complement type as less s-like. In this sentence, the subject of the complement clause *balla* has been raised to the object of the matrix clause and therefore carries the accusative *-wa*. Therefore, the predicate of the complement clause, *mærenna*, does not have normal syntactic relations with its subject because *balla* is not in the nominative case as it would be in a main clause.<sup>3</sup>

It is interesting to note the different orders in which the clauses in the various complement types appear, described in Figure 1.

Order Name	Order
C+M	COMPLEMENT CL. + MATRIX CL.
M+C	MATRIX CL. + COMPLEMENT CL.
Embedded	MATRIX CL. [Subj <sub>matrix</sub> + COMPLEMENT CL. + PRED <sub>matrix</sub> ]

FIGURE 1. Word Order of Complement Types

Unfortunately, at this point, meaning differences embodied in these different word orders and their pragmatic/discourse functions remain unclear. However, the data does suggest that certain complement types prefer certain word orders. The juxtaposed-clause complement appeared only in the C+M order, but there were very few examples of this complement type. The kiyəla complement appeared in all three word orders, but seemed to prefer the M+C order. The bawə complement appeared equally in the C+M and the embedded word order, but did not appear in the M+C order, while the ekə complement appeared only in the embedded order. Lastly, the infinitive complement appeared in all three orders but strongly favored the embedded word order.

**1.2.** GIVÓN'S BINDING HIERARCHY. In his article 'The Binding Hierarchy and the Typology of Complements,' Givón (1980) establishes the relationship between 'the semantic structure of complement-taking verbs and the syntactic structure of their complements' (Givón 1980:333). He argues that one can establish a hierarchy that systematically describes this relationship and that this hierarchy is cross-linguistically robust. In terms of the semantic structure, the complements are arranged over three different overlapping semantic scales—epistemic attitude, emotive attitude, and implicativity (Givón 1980:368). Each of these factors bifurcate into high and low categories—weak epistemic, strong epistemic, low emotive, high emotive, strong-attempt and implicative. The syntactic hierarchy codes for four factors—degree of structural integration, degree of freedom of action, degree of freedom of the agent, and use of complementizing subordinators (Givón 1980:371). Givón claims that the semantic categories are represented iconically in the structure of complement clauses. According to the hierarchy, CTPs with weak epistemic attitude will take complements with free clauses (i.e. the

<sup>&</sup>lt;sup>3</sup> Another analysis of this clause is possible where these constructions are actually auxiliaries and therefore are single clauses. In any case, these would be placed at the far end of the Binding Hierarchy. These predicates are so 'bound,' in other words, that they are a single clause.

complement-clause and the main clause are clearly distinguishable and independent from one another) whereas implicative CTPs will tend to occur in complements which are more integrated into the main clause, such as infinitive complements and nominalizations. Below is a reproduction of Givón's chart.

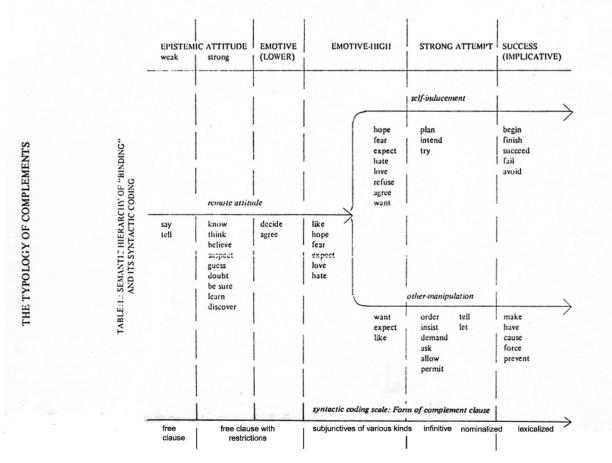


FIGURE 2. Givón's Binding Hierarchy, taken from Givón 1980 p. 369

In examining the Binding Hierarchy and Sinhala I had two main research questions:

1) What correlations and differences are there between Sinhala's complement system and the Binding Hierarchy's theoretical system?

2) What can these correlations and differences reveal about the Binding Hierarchy as a whole?

**2.** THE BINDING HIERARCHY IN SINHALA. To study the Binding Hierarchy in Sinhala, I elicited data for thirty CTPs. For each CTP I looked at which types of complements each predicate could take. The results are listed in Figure 3. The CTPs are sorted first according to Givón's semantic scales and next according to the complement types with which they can occur. Structurally I have organized the complement clauses left to right from most independent to least independent (from free clauses to bound clauses).

At the far left I put the juxtaposed-clause complement because the matrix clause and the complement clause undergo no structural integration, and the verb in the complement clause

can have its own independent TAM marking. Furthermore, the juxtaposed-clause complement tends to favor word orders where the complement clause and the matrix clause are distinct. Unlike some of the complement types farther down on the scale, this complement type occurs with finite verb forms. Putting this complement type above the kiyəla complement may seem at first to be a contradiction to Givón's claim of iconicity because there is no complementizer to separate the clauses. However, it could be argued that the complementizer acts as a kind of subordinator, marking one clause as predicating another, and therefore this complement type should be considered to be more independent than the kiyəla complement. The same would not be true for complement types farther down on the scale because of their restrictions and degree of integration into the matrix clause.

Next I have placed the kiyəla complement. As in the juxtaposed-clause complement, the matrix clause and the complement clause in the kiyəla complement type are independent. There is no evidence of structural integration and the verb in the complement takes independent TAM markings and finite verb markings. In addition, this verb occurs only in word orders where the matrix clause and the complement clause are clearly distinguishable.

After the kiyəla complement, I have placed the bawə complement type. The verbs in this complement clause can occur in both finite and relative verb forms, but they strongly prefer relative verb forms. The use of relative verb forms affects the independence of the matrix clause—it could not stand alone as an independent clause. Last, the bawə complement occurs both in word orders where the matrix and the complement clauses are distinct and where the complement clause is embedded in the matrix clause. Therefore, the bawə complement is subject to more structural integration than the kiyəla complement or the juxtaposed-clause complement.

To the right of the bawə complement I put the ekə complement. The ekə complement is even less independent than the bawə complement because it can only occur with relative verb forms. In addition, it only occurs in the embedded word order, which shows that it is less structurally independent than the complement types above it on the scale. On the very end I put the infinitive complement because it occurred with only one verb form, which does not take independent TAM markings. The TAM of the complement clause is therefore determined by the TAM marking in the matrix clause. Like the ekə complement, the infinitive complement strongly prefers the embedded word order.

The data suggests that Sinhala generally conforms to Givón's hierarchy. For instance, the weak epistemic verb *kiyənəwa* 'to say or to tell' can only occur with the kiyəla complement, as shown in Ex. 15.

(15) nuwan redi heduwa kiyəla sarat kiyənəwa nuwan clothes wash-pst comp sarat say-nonpst 'Sarat says that Nuwan washed the clothes.'

On the opposite side of the scale, the implicative, other-manipulation CTP *kriyə kiyənəwa* 'to cause' can only take the infinitive complement.

(16) ohu gaha mærennə kriya keruwa
3M.SG tree die-INF cause do-PST
'He caused the tree to die.'

Verb	Gloss	Semantic Scale	0	kiyəla	bawə	ekə	inf
kiyənəwa	say, tell	Epistemic-Weak	-	g	-	-	-
kæhægæhuwa	shout	Epistemic-Weak	-	g	-	-	-
dakinəwa	see	Epistemic-Strong	g	g	g	-	-
æhenəwa	hear	Epistemic-Strong	g	g	-	-	-
hitənəwa næhæ	doubt	Epistemic-Strong	-	g	-	-	-
hoyaagatta	discover	Epistemic-Strong	-	g	g	g	-
dannəwa	know	Epistemic-Strong	-	g	g	gwg	-
hitənəwa	think	Epistemic-Strong	-	g	-	gwg	gcs
matəkə tiyənəwa	remember	Epistemic-Strong	g	g	g	g	gcs
tirənəyə kərənəwa	decide	Emotive-Low	-	g	g	gwg	gcs
dukai	sad	Emotive-High	-	g	-	gwg	gcs
santosai	happy	Emotive-High	-	g	-	gwg	gcs
bəyai	afraid	Emotive-High	-	g	-	gwg	gcs
dukaa unaa	regret	Emotive-High	-	g	-	gwg	-
kalpəna kərənəwa	imagine/dream	Emotive-High	-	g	-	gwg	-
balaaporoțțu wenəwa	hope/expect	Emotive-High	-	g	g	-	gcs
kæməti	like	Emotive-High	-	g	-	-	gcs
aasay	love	Emotive-High	-	-	-	-	gcs

oone	want		Emotive-High	-	-	-	-	gcs
hædənəwa	try	si	Strong Attempt	-	-	-	-	gcs
æhuwa	ask		Strong Attempt	-	-	-	gwg	g
arinəwa	let		Strong Attempt	-	-	-	-	g
dunna	allow	om	Strong Attempt	-	-	-	-	g
puluwan	able to		Strong Attempt	-	-	-	-	g
awašay	to be necessary		Strong Attempt	-	-	-	-	g
wælækuwa	prevent	om	Implicative	-	g	-	g	-
næwætuwa	stop	om/si	Implicative	-	g	-	g	-
iwərə kərənəwa	finish	si	Implicative	-	-	-	g	gcs
balə kərənəwa	force	om	Implicative	-	-	-	-	g
kriya kərənəwa	cause	om	implicative	-	-	-	-	g

g=grammatical, -=ungrammatical, gwg=grammatical only with gænə, gcs=grammatical only if the subject of complement clause and main clause correspond, si=self-induced, om=other-manipulation

FIGURE 3. Sinhala Complementation Data

Furthermore, note that the CTPs at the top of the table cannot take the infinitive complement. Similarly, most of the CTPs at the bottom of the scale cannot take the kiyəla complement.

The mid-range of the hierarchy involves quite a bit of overlap and requires some explanation. Overlap across complement types is not surprising—Givón notes in his paper that the various scales overlap each other. Some CTPs can use both kiyala and eka complement types, but in order for the clause to be acceptable, eka must be followed by the postposition gana 'about.' The CTP dannawa 'to know' is one example of this phenomenon.

- (17) mamə dannəwa waňdura toppi issuwa kiyəla 1sg know-NONPST monkey hat-PL steal-PST COMP 'I know that the monkey stole the hats.'
- (18) waňdura kehel gedi wələtə kæməti bawə mamə dannəwa monkey bananas cl for like COMP 1sg know-NONPST 'I know that the monkey likes bananas.'<sup>4</sup>
- (19) eyaa gedərə yanə ekə gænə dannəwa 3M.SG home-DAT go-REL.NONPST COMP about know-NONPST 'He knows about going home.'<sup>5</sup>
- (20) \*eyaa gedərə yanə ekə dannəwa 3SG:M home-DAT go-REL.NONPST COMP know-NONPST

The CTPs that can only occur with  $ek \partial g a n \partial$  are distributed mainly in the emotive portion of the semantic scale. The restricted use of  $ek \partial$  with the postposition is not unique to Sinhala. For instance, we see the same pattern in the English verb *know*.

- (21) I know about going home.
- (22) \*I know going home.

Certain CTPs can only occur with the infinitive if the subject for the main clause and the subject for the complement clause are co-referential. An example of such a CTP is *hitanawa* 'to think,' which can also occur with *kiyala* and *eka gæna*.

- (23) mamə ohu wilətə giya kiyəla hituwa 1SG 3SG:M lake-ACC go-PST COMP think-PST 'I thought that he went to the lake.'
- (24) mamə wilətə yanə ekə gænə hituwa 1sg lake-dat go comp about think-pst 'I thought about going to the lake.'

 $<sup>^4</sup>$  Note that *kæməti* is a quasi-verb which does not take any TAM markings. There are a large number of these quasi-verbs that are CTPs. As they do not behave differently than the regular verbal CTPs, I did not treat them differently in the data.

<sup>&</sup>lt;sup>5</sup> Restrictions on the subject in this construction need to be investigated. It is not clear whether the subjects of the two clauses must be co-referential.

- (25) mamə wilətə yannə hituwa 1sg lake-ACC go-INF think-PST 'I thought about going to the lake.'
- (26) \*mamə ohu wilətə yannə hituwa

This restriction with infinitives does not apply lower on the hierarchy. For instance, the verb *bala-karanawa* 'to force' does not have the same restriction.

(27) mamə nuwantə wæde kerannə balə-kərənəwa 1sg nuwan-dat work do-inf force do-nonpst 'I will force Nuwan to do the work.'

This is an example of what Givón would call an OTHER-MANIPULATION IMPLICATIVE CTP. The semantics of the complement itself therefore may restrict it so that it requires an explicit subject in the complement clause. Thus, 'I forced myself to do the work' may require (as in English) a reflexive pronoun. This needs to be investigated further because I did not check this in my elicitation sessions. Still, we can see the progression of the hierarchy is generally preserved with infinitive complements—the top of the hierarchy cannot take infinitive complements, the middle can take the infinitive complement when the subjects of the main clause and the complement clause are co-referential, and the bottom can take infinitive complements when the subject is different. Similarly, kiyəla complements can occur with the epistemic and emotive complements, but cannot occur with the strong attempt and implicative complements. The bawə complements only occur with a very limited number of CTPs. Last, the ekə complements do not occur at all at the top of the chart, occur with *gænə* in the middle of the chart, and appear alone towards the bottom of the chart. Thus we see different parts of the hierarchy patterning similarly in terms of the complement types they can take.

**2.1.** COMPLICATIONS IN THE DATA. There are, however, some CTPs which disrupt the tidy progression of the hierarchy. *Kiyanawa* is used both in the sense of 'say' and in the sense of 'tell' so that it can be used to describe an indirect order. Givón puts *tell* both in the weak epistemic category at the top of the chart and in the strong-attempt, other-manipulation category at the bottom of the chart. We might then expect to find a point lower on the structural scale to code for indirect orders. Instead, we find that it can only be used with *kiyala*, even for indirect orders, as in 28.

(28) mamə kiwwa nuwantə wæde kərannə kiyəla nuwan say-pst nuwan-dat work do-INF COMP 'I told Nuwan to do the work.'

From this example we might think that the verb forms within the complement clause are restricted to the infinitive, but it turns out that other forms may be used with this CTP as well:

(29) mamə nuwantə kiwwa oyaa wæde kərənəwamay kiyəla nuwan nuwan-dat say-pst 3sg:m work do-nonpst-emph comp 'I told Nuwan that he will do the work'

The quasi-verb *kæmeti* 'to like' and the verb *balaaporoțțu-wenawa* 'to hope/expect' show another deviation from the binding hierarchy. These verbs may take both kiyala and infinitive complement types. One would expect that they would also be able to take eka complement types, as is true for the other emotive CTPs on the chart that take both of these complement types. Instead, we find that these CTPs skip over sections of the hierarchy rather than overlapping them.

- (30) mamə kæməti waňdura toppi issuwa kiyəla 1sg like monkey hat-pl steal-pst comp 'I like it that the monkey stole the hats'
- (31) mamə toppi ussənnə kæməti1SG hat-PL steal-INF like'I like to steal hats.'
- (32) \*mamə kæməti waňdura toppi ussənə ekə 1sg like monkey hat-pL steal-REL.NONPST COMP
- (33) mamə ohu wilətə yanəwa kiyəla balaaporottu-wenəwa 1sg 3sg:m lake-dat go-nonpst comp hope become-nonpst 'I expect that he will go to the lake.'
- (34) mamə wilətə yannə balaaporottu-wenəwa 1sg lake-dat go-inf hope become-nonpst 'I hope/expect to go to the lake.'
- (35) \*mamə wilətə ohu yanə ekə balaaporottu-wenəwa 1sg lake-dat 3M.sg go-rel.NONPST COMP hope become-NONPST

Two of the implicative verbs are also not where we would expect them to be on the hierarchy—*wælækuwa* 'to prevent/avoid' and *næwætuwa* 'to stop.'<sup>6</sup> Given that these are othermanipulation implicative verbs, we would expect them to occur in structurally bound complement clauses. The other verbs on this end of the semantic scale occur with ekə and/or infinitive complements. As it turns out, these verbs can only occur with *kiyala* and with *eka*.

- (36) mamə waňdura toppi usənəwa kiyəla wælækuwa 1sg monkey hat-pl steal-NONPST COMP prevent-PST 'I prevented the monkey from stealing the hats.'
- (37) mamə waňdura toppi ussənə ekə wælækuwa 1sg monkey hat steal-REL.NONPST COMP prevent-PST 'I prevented the monkey from stealing the hats.'

<sup>&</sup>lt;sup>6</sup> The present tense forms of these verbs are unknown.

- (38) mamə laməya wilətə yanəwa kiyəla næwætuwa 1sg child lake-DAT go COMP stop-PST 'I stopped the child from going to the lake.'
- (39) mamə laməya wilətə yanə ekə næwætuwa 1sg child lake-DAT go-REL.NONPST COMP stop-PST 'I stopped the child from going to the lake.'

The language consultant described the sentences using *kiyala* as having a different meaning than the sentences using *eka*, but the exact meaning difference remains unclear. In any case, the meaning difference between the two suggests that when CTPs can take different complement types, the use of one complement type over another is not simply subject to free variation. Rather, speakers may choose different complement types depending on the semantic, pragmatic and discourse variables.

3. CONCLUSION. This paper has described, in brief, the complement system of Sinhala and the ways in which it conforms to and deviates from Givón's Binding Hierarchy. From the data, CTPs in Sinhala tend to distribute along the Binding Hierarchy as Givón predicts—CTPs that are epistemic or emotive tend to take complement types that are more biclausal in nature while CTPs that are implicative tend to have complement clauses more tightly bound into the main clause. In Sinhala, this is reflected syntactically in the type and range of verb forms a complement type allows (finite vs. non-finite) and the preferred word order of a given complement type (biclausal versus embedded). However, my data also reveals CTPs that deviate from the Binding Hierarchy by taking complement types that would not be predicted from their semantic classification. This data does not necessarily undermine the validity of the Binding Hierarchy, but it does have implications for the use of the Binding Hierarchy. Based on language data, the Binding Hierarchy should be understood as a general pattern and not as a predictive formula or universally applicable rule. Although a typological hierarchy, like Givón's binding hierarchy, can show trends across languages, actual language data is complex, and will never conform completely to theory.

More work needs to be done on Sinhala's complementation system. The differences in meaning as well as pragmatic and discourse functions of the various permissible word orders warrants further study. As yet we do not have a full understanding of the exact syntactic relations in these constructions, and the meaning differences between the various complement types are still unclear. Furthermore, most of the data in this study was gathered through elicitation sessions rather than through data of language-in-use. As is widely recognized, language-in-use data often varies considerably from elicited data. Making grammaticality judgments in context-free environments is difficult. Unfortunately, our limited corpus of language-in-use provided few examples of complementation and was restricted to the storytelling genre. For a truly comprehensive study of Sinhala's complementation system and the Binding hierarchy one would want to include data from spontaneous discourse from a variety of genres as well.<sup>7</sup>

<sup>&</sup>lt;sup>7</sup> Many thanks to Nissanka Wickremasinghe for his patience and dedication during long data elicitation sessions.

## REFERENCES

GAIR, JAMES W. and JOHN C. PAOLILLO. 1997. Sinhala. München: Lincom Europa.

GIVÓN, TALMY. 1980. The Binding Hierarchy and the Typology of Complements. *Studies in Language*. 4.3.333-377.

NOONAN, MICHAEL. 1985. Complementation. *Language Typology and Syntactic Description: Complex Constructions* Vol. 2, ed. by Timothy Shopen, 42-140. Cambridge, UK: Cambridge University Press.

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