



Modality in Sinhala and its Syntactic Representation

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ABSTRACT

Modality is considered as a semantic concept expressing such notions as possibility, necessity, probability, obligation, permission, ability, and volition. These different notions have given rise to two major distinct sub-types of modality as epistemic and root modality. Languages vary considerably in the way they realize each of these finer distinctions. This paper explores modality in Sinhala from a syntactic perspective. In particular, it attempts to answer such questions as (1) what are different types of modalities that can be observed in Sinhala and how are they represented? (2) Does the root-epistemic distinction in modality hold syntactically, and if so, what is their syntactic projection? (3) How does modality in Sinhala interact with the verbal system? Is there modal agreement in Sinhala? The theoretical alignment of the study is the generative syntactic theory expounded by Chomsky (1995 and thereafter), and within that, the cartographic framework proposed by Rizzi (1997), and Cinque, (1999). Data for the present study consisted of the grammatical judgments of native speakers of Sinhala. A sample of 10 native speakers representing different age groups was selected. This included 03 children aged between 8-13, and 6 adults in the age group of 30-60. The researcher too was considered as a member of the sample. About 40 sentences were presented to them with different ordering of modality particles in order to judge the scope properties and accuracy of such modal particles. The major conclusions of the paper are that the root/epistemic distinction holds in Sinhala not only semantically but also syntactically; epistemic modals occur higher in the structure while the root modals occur closer to the vP so that the former takes scope over the latter; Sinhala modals show hierarchy not only with respect to epistemic-root distinction, but also among each other; The -e suffix is as an overt reflex of an AGREE relation, i.e., a Spec-Head relation.

KEYWORDS: *Modality, epistemic, root, syntactic, cartography*

1. INTRODUCTION

Modality is considered as a semantic concept which can be expressed syntactically by modal verbs, imperatives, verbal inflection, modal adverbs and modal particles. Often, mood can be expressed through modality, thereby obscuring the distinction between the two. Cinque (1999) treats mood and modality together following tradition, but also because the same category may be expressed via mood in one language and with a modal in another, in a manner suggestive of a close link between the two.

Mood is often treated as a grammatical category, morphologically marked on the verb, and expressing the subjective attitude of the speaker towards the state of affairs described by the utterance. According to Thieroff, mood, or, more precisely, morphological mood, is a morphological category of the verb, just as are the verbal categories person, number, aspect, tense, and voice. Mood categories express modalities such as orders, wishes, (non-)factivity, (non-)reality and the like (Thieroff, R; 2010, 02). Modality, on the other hand, is considered as a semantic concept expressing such notions as possibility, necessity, probability, obligation, permission, ability, and volition. These different notions have given rise to two major distinct sub-types of modality as epistemic and root modality. Languages vary considerably in the way they realize each of these finer distinctions. Epistemic interpretations are speaker-oriented, or, in the case of embedded clauses, matrix-subject oriented qualification or modification of the truth of a proposition. The root interpretations involve the will, ability, permission or obligation to perform some action or bring about some state of affairs. Nevertheless, sentences are often ambiguous between the two readings (Barbiers; 2002, 02).

Nordstrom (2010) divides modality into three different domains. That is, in addition to Palmer's propositional and event modality distinction, Nordstrom adds a further domain--

speech act (speaker oriented) modality. She argues that Palmer's (2001) unification of all modality categories into one super-category, modality, with assertion as the relevant feature and realis-irrealis as its binary values is too wide and conceptually vague. She proposes the following scope relations for these three modality types: (Nordstrom 2010: 15).

(speech act modality (propositional modality (tense (aspect (event modality (voice (valence (verb))))))))))

Nordstrom's speech act modality includes imperative, hortative, jussive, prohibitive, optative, and interrogative, while propositional modality includes epistemic, evidential, indicative-subjunctive, realis/irrealis and conditional modality. The third category, event modality includes deontic modality and dynamic modality.

Palmer (2001) observes that there is considerable variation in the ways that languages deal with grammatical categories, and there is probably more variation with modality than with other categories. He observes that one language may mark commands as irrealis, another may mark them as realis, while yet another may not treat them as part of a system of modality at all.

Modality interacts with other modules of the grammar such as tense and aspect so that a distinct boundary between each is difficult to mark out. In notional terms, all three are concerned with the event or situation reported by the utterance. Tense is concerned with the time of the event: aspect with the nature of the event, particularly its internal structure, while modality is concerned with the status of the proposition that describes the event (Palmer: 2001).

Sinhala has a number of particles/suffixes to convey modality. They can attach to any lexical category in an agglutinative fashion and take scope over the domain to the left. When the clause bears one of these particles, the verb takes

a special e-ending (2), as opposed to neutral a-ending (1).

1) Nimal kaareka seeduwa
Nimal(Nom) car washed
'Nimal washed the car'

2) Nimal **lu** kaareka seeduwaE
Nimal (Nom) **EVID** car washed-E
'Nimal, it is said, was the one who washed
the car'

Example (1) is a neutral sentence. In (2), the subject, Nimal, is exclusively in the (narrow) scope of the evidential modal particle (Karunatilake (1992) labels "lu" as a reportive marker which is used when someone is reporting or relaying information as to what someone else said), i.e. the evidential report is about Nimal, and the verb takes the E-ending (as opposed to neutral/declarative –a ending).

The same particle can attach at the clausal level, and then the whole clause comes under the (wide) scope of that particle (3). However, in this instance, the e-morphology does not surface.

3) Nimal kaareka seeduwa **lu**
Nimal (Nom) car washed **EVID**
'It is said that Nimal washed the car'

This differential behavior of the –e suffix highlights among other things: (1) it is not simply the modal particle that determines the contrastive discourse interpretation, but the verbal inflection also takes part in this process. (2) It shows the scope marking potential of the discourse particle and the corresponding verbal morphology (Karunatilake (1992) calls this particular verb form with the –e suffix "emphatic verb". However, he does not attempt a separate analysis of –e). That is, when the modal particle attaches to any phrase level constituent, the verb inflects for –e. This creates a set of alternatives out of which one individual/entity is given saliency. But, when the same particle attaches to the whole clause, it

does not inflect for the –e suffix indicating that the alternative set is not available in this instance.

This paper explores modality in Sinhala from a syntactic perspective. In particular, it attempts to answer such questions as (1) what are different types of modalities that can be observed in Sinhala and how are they represented? (2) Does the root-epistemic distinction in modality hold syntactically, and if so, what is their syntactic projection? (3) How does modality in Sinhala interact with the verbal system? Is there modal agreement in Sinhala?

2. BACKGROUND

Gair (1998) discusses the e-suffix as a special marking on the tensed verb which occurs in the focus construction. He concludes that the e-suffix indicates that the focus is external to the verb- that is, that the focus does not include the verb. He generalizes that the clitics/ particles such as *da* (question), *yi* (emphasis or limitation), *tamai* (certainly, forsooth), *lu* (reportative) and *nan* (if) are Focus particles. Their occurrence on any constituent other than the verb requires the presence of the e-suffix.

Hagstrom (1998) discusses the WH question formation extensively by examining the syntax, morphology, and semantics of questions. Consequently he investigates the movement of the Q-particle (*da*) in Sinhala, the nature of the movement involved, constraints on movement, and the co-relation of Q-particle with e-morphology on the verb. Further, he discusses the Focus construction of Sinhala in relation to the question formation as the Q-particle "da" shows a similar distribution and shares similar scope marking properties.

Hagstrom maintains that the role of e-suffix is central to the understanding of the movement relation and establishing the identity of the moving particle/constituent. He proposes that e-Suffix serves a scope marking function that

depends on the distribution of the Q particle. Where Q (da) is clause internal, the embedded verb is marked with -e, but a clause peripheral Q (da) does not trigger -e on the verb. He identifies a strong syntactic parallel between WH and Focus on the basis of the above distributional evidence. He concludes that the e-morpheme is a morphological reflection of an unchecked feature and suffixation of the Q-head “da” or the focus head “tamai” can check this feature via movement.

Heenadeerage (2002) examines the role of the e-suffix in the context of the Sinhala focus construction. He identifies three distinct types of focus in Sinhala as Constituent Focus, Predicate Focus, and Clause-Final Focus. Constituent focus corresponds to morphological marking of focus with a focus particle where a pre-verbal constituent followed by the focus marker receives focus in the discourse. In this case the verb is e-marked. Predicate focus refers to the propositional focus where a focus particle occurs in the clause final position so that the whole proposition is focused. This does not trigger e- on the verb.

The post verbal position (with the verb e-marked) where a constituent receives focus is identified as Clause Final focus. This is also identified as syntactic focus in literature. He too lists the modal particles as focus markers so that they share the same structural position and distribution.

Kariyakarawana (1998) investigates the focus phenomena of Sinhala in the theoretical framework of Government and Binding (Chomsky: 1981, 1982, and 1986 a, b) and attempts at a comprehensive analysis of the focus construction. His critical examination of focus includes the cleft construction, WH movement, focus particles, focus and pre-supposition, and the verb marking. He lists the particles *lu* (reportative), *da* (interrogative), *ne* (tag), *tamai* (Foc) as focus markers that make any constituent immediately preceding one of them morphologically focused and observes that

they attribute a contrastive meaning to the whole proposition, or a constituent that comes under the scope of such a particle thereby contributing to the propositional focus/constituent focus dichotomy. He generalize that the different particles that encode some degree of focus and have a similar distribution are focus particles. Consequently, a critical investigation of the modal particles and their syntactic representation has not been attempted.

Chao Ting Tim Chou, and Sujeeva Hettiarachchi (2016), based on the volitive-involitive distinction of the Sinhala verb argue that the subject of a volitive verb moves to Spec TP to receive Nominative structural case from Finite T, and A-movement in Sinhala is driven by case valuation, rather than by a universal EPP structural requirement on T. They point out that much of the existing analyses along default Nominative and inherent/lexical/quirky cases (Gair, 1990 a,b; Inman, 1990, Beavers and Zubair, 2010, 2013) do not capture the Sinhala facts properly in this regard. Crucial to their analysis is the epistemic-deontic modal distinction, both realized in Sinhala by the modal *puluwan* (can) with differential case marking properties. They argue, with sufficient empirical and theoretical justification that the epistemic modal interpretation is yielded when the epistemic modal is treated as a one-place raising predicate, whereas the deontic root modal interpretation is yielded when the root modal is treated as a control predicate. Thus, deontic modal assigns Dative case to its surface subject which is the thematic subject of the Deontic modal, whereas the surface subject in sentences with epistemic modals originate in the infinitival clause which require their raising to matrix Spec TP for Nominative case.

The present study differs from all the above in a number of crucial ways. In what follows I attempt to motivate the argument for the syntactic distinction between epistemic-root modals in terms of their hierarchy between themselves and within different realizations of each type (along Cinque, 1999; Zagona, 2007)

to account for the *e-* morpheme that surfaces when there is a discourse related particle in the clause, their different scope properties, their occurrence within both root and embedded peripheries, and also to present an argument (along Miyagawa, 2010 for Japanese) for Modal agreement in the absence of Phi-agreement in Sinhala. As shown above, none of the above studies attempt a sufficient syntactic analysis of epistemic and root modals as their focus is on some other aspects of Sinhala syntax. Also, they do not follow a cartographic approach, as quite understandable, some of their work are pre-cartographic. Also, their work do not sufficiently capture the strongly visible interaction between discourse phenomena and morphology of the Sinhala clause.

3. METHODOLOGY

3.1. Data

Data for the present study consisted of the grammatical judgments of native speakers of Sinhala. Since the aim of generative syntax is to model the native speaker competence by examining his performance, this study too relied on such native speaker grammatical judgments. Although the researcher himself is a native speaker of Sinhala, it was still necessary to rely on a rather larger corpus. Hence, a sample of 10 native speakers representing different age groups was selected. This included 03 children aged between 8-13, and 6 adults in the age group of 30-60. The researcher too was considered as a member of the sample. About 40 sentences were presented to them with different ordering of modality particles. This was necessary in order to judge the scope properties of such modal particles, in addition to testing accuracy of the utterances. The utterances included both matrix and embedded sentences.

3.2. Theoretical Framework

In recent times, cartographic approaches have attempted to present a unified picture

incorporating all these domains of language structure and language use. The cartographic project assumes the existence of a large number of functional categories, and attempts to map out the universal hierarchy by which they are ordered. Since the cartographic project is grounded in the generative enterprise, naturally, the ultimate aim is to understand and model the nature of the language faculty.

The underlying assumption is that all languages involve the same functional sequence and the same principles of phrase and clause composition, although they may differ in the movements they admit and in the projections that are overtly realized (Cinque 2006: 4-5). Consequently, their typological and universal orientation has contributed to our understanding of the structure of UG. Notably the cartographies of Cinque (1999), and Rizzi (1997, 1999, 2004) have focused on the different domains of the clause with a view to finding a universal framework, so that their representation in UG can be better understood.

The recent studies in the left periphery of the clause by Rizzi (1997, 1999), and Cinque (1999), have far reaching theoretical and empirical implications for further research on the clause structure of individual languages. Rizzi argues for a multiple layer approach to CP with two distinct head positions, FORCE and FINITENESS, interacting with two interfaces and activating a Topic Focus field. The C-system is interpreted as an interface between two layers of an information system, one interfacing with the domain of discourse - typing the clause as interrogative, relative, adverbial, etc., -- and the other interfacing with the domain of the sentence - expressing the content within IP, and determining its finiteness properties.

Accordingly, the information contained in the higher structure is called the specification of Force (or Force) and the lower, more inward-looking structure headed by IP, as Finiteness. Unlike the Force-Finite system, which is an essential part of the C-system present whenever

there is a CP, the topic-focus field is present in the structure only when it is activated, that is, when a constituent bearing topic or focus needs to be licensed by a Spec-Head criterion. Since Force and Finiteness closes off the C-system upward and downward, the topic-focus field is located between the two C-Heads on either side as shown below.

.....Force..... (Topic)..... (Focus).....Fin IP

The positions occupied by Force and Finiteness are justified on empirical grounds using the behavior of complementizers “di” and “che” in Italian (which Rizzi says is applicable to Romance in general).

Cinque (1999) proposes a universal hierarchy of functional heads represented by moods/modalities/tenses/and aspects which construct the natural language clause. Based on a wealth of cross-linguistic evidence, Cinque (1999) builds up the argument, that natural language clause is a construct of Moods, Modals, Tenses, and Aspects. He argues that these major clause-building categories are rigidly hierarchically ordered with respect to each other, as in (4) (Cinque (1999: 56):

- (4) MOOD speech act > MOOD evaluative
- > MOOD evidential > MOOD epistemic >
- T(Past) > T(Future)> MOOD (Ir)realis>
- ASP habitual > T(Anterior) > ASP perfect
- > ASP retrospective > ASP durative > ASP
- progressive > ASP prospective / MOD root
- > VOICE > ASP celerative> ASP
- completive > ASP(semel) repetitive > ASP
- iterative

Cinque further proposes that adverb phrases are unique specifiers of this fixed universal ordering of the set of Moods, Modals, Tenses, and Aspects.

Consequently, the above two proposals provide strong motivation to explore the modal particles of Sinhala in a similar theoretical framework.

4. ANALYSIS

4.1. Epistemic and Root Modals in Sinhala

Palmer (2001) divides modality into two domains: propositional modality and event modality, where the former stands for the speaker’s attitude to the truth value or factual status of the proposition, and the latter concerns the conditions on the agent with respect to the main event. Epistemic and evidential systems are the two main types of propositional modality, while deontic and dynamic are the two main types of event modality. Viewed from this broader perspective, epistemic modality is then a quite broad class that includes a number of other modal types that relate to the status of the proposition. Similarly, event modality corresponds to the root modality which relates to obligation, permission, ability, and willingness. According to Cinque (1999), epistemic modality expresses the speaker’s degree of confidence about the truth of the proposition (based on the kind of information he/she has). Further, in Cinque’s functional sequence, epistemic modals and root modals correspond to a structural difference as well: epistemic modals are generated higher in the structure and have scope over the root modals.

In my analysis of modality, I will follow the directions set by Palmer (2001). Sinhala expresses a number of modalities which are realized in the form of particles and lexical words. Interpretively, they correspond to the epistemic root distinction. We will examine whether this distinction holds structurally too in our detailed examination of each in later sections. Epistemic modals include the evidential, evaluative, interrogative and irrealis. Root modals include the modals denoting ability, possibility/probability and permission. In my discussion, I will keep basically to the epistemic-root distinction and consider epistemic as a broader category that subsumes the modalities evidential, evaluative, and epistemic. But, I will refer to these individual modal categories by their respective labels as

evidential, evaluative etc. Similarly, in the case of root modals, I will refer to them by their individual labels as root-ability, root-possibility

etc. Table (1) lists such modals/lexical words denoting both types of modality in Sinhala.

Table 1. Epistemic and Root Modals in Sinhala

Broad type	Category	Modal	Example (kapanava: cut)
Epistemic modals	Evidential	-lu	Nimal gaha kapanava-lu Nimal(Nom) tree cut(PRS)- EVID It is said, Nimal is cutting the tree
	Evaluative	-ne	Nimal gaha kapanava-ne Nimal(Nom) tree cut(PRS)EVAL Nimal is cutting the tree (evaluation/shared information)
	Interrogative	-da	Nimal gaha kapanava-da? Nimal(Nom) tree cut(PRS)- Q Is Nimal cutting the tree
	Irrealis	-ta	Nim gaha kapana bava-ta saakki thiyenava Nimal(Nom)tree cut (PTCP) Fin –ta evidence has There is evidence that Nimal is cutting/going to cut the tree
	Conditional	oth/thoth	Nimal gaha kaepu-woth mama salli denava Nimal(Nom)tree cut-COND I money give(PRS) If Nimal cuts the tree, I will give money (to him)
	Epistemic possibility	puluwan	Nimal natanna puluwan Nimal(Nom) dance(INF) possible Nimal might dance
	Root modals	Ability	puluwan
Permission		puluwan	Oya-ta daen yanna puluwan You-DAT now go(INF) can You may go now (you are permitted to go now)

The table illustrates a number of significant properties of Sinhala modals. Of the epistemic modals, evidential, evaluative, epistemic (except epistemic possibility), and interrogative attach to the fully inflected verb, i.e. they attach to the present, past, future, and past participle verbal forms which may be inflected for indicative/imperative/hortative/volitive/and future/irrealis moods of the verb.

However, in embedded clauses, the evidential/evaluative cannot have narrow or wide scope, thus indicating that evidentiality/evaluative modality in Sinhala is a root phenomenon. This is further supported by empirical facts as two evidential/evaluative particles (lu/ne) cannot occur in the clause simultaneously, one in the matrix and another in the embedded.

But in root/event modalities, the modalities of ability and permission, only the infinitive/imperative verb forms are allowed. Narrow scope marking by the modal is not possible here.

5)*Nimal [Ajith lu/ne horakam-karapu badu-wagayak] soyanne
Nimal [Ajith EVID/EVAL stolen-did goods-certain] look for-E
It is said that Nimal is looking for certain goods stolen by Ajith

The three modals (epistemic possibility, root ability and root permission) can occur in embedded clauses. Table 2 illustrates their properties.

Table 2. Properties of the Modals

Property	Epis modals	Root Modals
Contrastive narrow scope possible	✓	x
-e suffix on the verb in narrow scope	✓	x
Clausal level scope possible	✓	✓
Occur in root clause	✓	✓
Occur in embedded clause	x	✓

Information structure encoding in Sinhala presents a challenge to the minimalist assumptions where topic/focus related information are considered pragmatic property and hence are not well motivated in the narrow syntax. In Sinhala, the picture is different as focus/modality encoding takes place morphologically through particles. Essentially, then these lexical items/particles should be in the lexicon before they become a Numeration, must have semantic features, and get computed in syntax. Hence, in a way, information structure of the clause is pre-determined.

This indicates that, what drives the derivation cannot be the formal features alone, but the feature composition of the discourse particles too. Therefore, the morphological encoding of modals in Sinhala offers further empirical justification for a cartographic approach. This is not surprising because there are other languages too which realize information packaging overtly through particles/suffixes. Aboh (2010) presents evidence from Kwa and Bantu languages, notably from Gungbe and Zulu for focus encoding through focus markers (wC), (ya).

Thus, in line with the cartographic approach adopted by Rizzi (1997) and Cinque (1998), I propose that modal particles in Sinhala (also focus) are distinct functional heads. Their head order is determined by their order of occurrence as shown in the following sections.

Now, where are the epistemic modals in Sinhala located? Cinque (1999) taking examples from a wealth of languages proposes that epistemic modals are located higher than root modals (higher than Tense as well) so that the former has scope over the latter. His hierarchy of functional heads shows that epistemic modals are outside the scope of Tense but within the scope of evaluation time specified in CP (ForceP).

This line of argument is also in line with Stowell (2004). Stowell shows that epistemic modals are construed in relation to the evaluation time of their clause. Stowell concludes that epistemics can have both past and present forms but are associated with the evaluation time of the clause. In line with Cinque (1999), and Stowell (2004) I propose that the epistemic Modals in Sinhala are located in the CP domain, below Force. The evidence for the above claim can be presented as follows.

6)*Nimal thamai lu/ne gaha kaepuwe
 Nimal Foc Evid/Eval tree cut (past)
 ‘It is Nimal /as people say it is Nimal who cut the tree’

7) *Nimal gaha kaepuwa lu/ne thamai
 Nimal tree cut (past) Evid/Eval Foc
 ‘Nimal cut the tree as people say / indeed’

The examples show that both Focus and Epistemic modal particles cannot co-occur, either in narrow scope marking or in broad scope marking. This further indicates that both Focus and Epistemic Modal compete for the same Head position.

Further evidence for the Head order comes with respect to Tense. Tense is interpreted as a relation between times: Event Time (ET) and Utterance Time (UT). In Mary left, the event time (ET) of Mary’s leaving is ordered in relation to the time of speaking, or utterance time (UT). (Zagona, 2007, 23). Epistemic modals are associated with utterance time as an expression of speaker opinion or attitude toward

the proposition of the clause. It is at UT that the speaker judges the likelihood or proposition of X doing something. Thus, with respect to Tense, the epistemic modal occupies a higher position in Sinhala (8).

8) Lamaya adanna puluwan
Child cry (inf) can
'The child might cry' (epistemic possibility)
(Modal Evaluation Time = Utterance Time)

The example shows that the epistemic modal has scope over T(ense), (as shown with more evidence in the following section) so that the Head order is (9),

9) Epis>T(ense)

This shows that Epis Head can be somewhere in the CP space, in complementary distribution with Focus.

Now we have to pay attention to the Root modals in line with our argument. The questions that we have to answer are: Do the Root Modals occur lower than epistemic modals and higher/lower than T(ense) in Sinhala? Or do they occur higher than epistemic modals and higher than T(ense)?

Based on the following evidence, I propose that the Root modals occur lower than epistemic modals in Sinhala (10, 11).

10) Nimal-ta natanna puluwan lu ne da?
Nimal-DAT dance (INF) can (Root) EVID EVAL Q
'It is said that Nimal can dance, isn't it so?'

11) *Nimal-ta natanna lu ne da puluwan
Nimal-DAT dance (INF) EVID EVAL Q
can (Root)
'It is said that Nimal can dance, Cannot he?'

The examples indicate that the epistemic modals should occur higher than the Root Modals in

Sinhala having the latter in their scope. Hence, the Head order for the two types of modals should be (12),

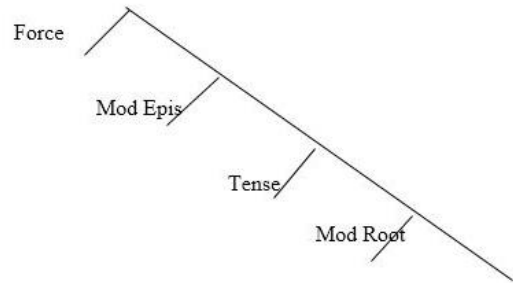
12) Epis (evid) > root

In the same way, now we should examine the position of Root modals with respect to T(ense). The following evidence suggest that the Root modals occur lower than Tense (and lower than Epistemic modals) in Sinhala.

13) Lamaya-ta natanna puluwan una
Child-Dat dance can(root) Pst
'The child could dance' (Root ability)

In (13) the root modal comes under the scope of T(ense) and the sentence is fine. Here, Modal Evaluation Time (Event Time) precedes UT. Tense scopes over the modal. Thus the Head order for the respective modals should be as in (14).

14)



Now we should examine in what ways modality in Sinhala interacts with the verbal system. We noted in the preceding sections that in narrow scope marking of the Epistemic modal, the verb ends in -e form as opposed to neutral/declarative -a form (15, 16)

15) Nimal lu gaha kaepuw-e (*kaepuw-a)
Nimal (Nom) Evid tree cut (Pst-E) (*Past)
'It is Nimal, as they say, the one who cut the tree'

16) Nimal ne gaha kaepuw-e (*kaepuw-a)

Nimal(Nom) Eval tree cut (Pst-E) (*Past)
 ‘Nimal cut the tree’ 19)
 (disappointment/shared info)

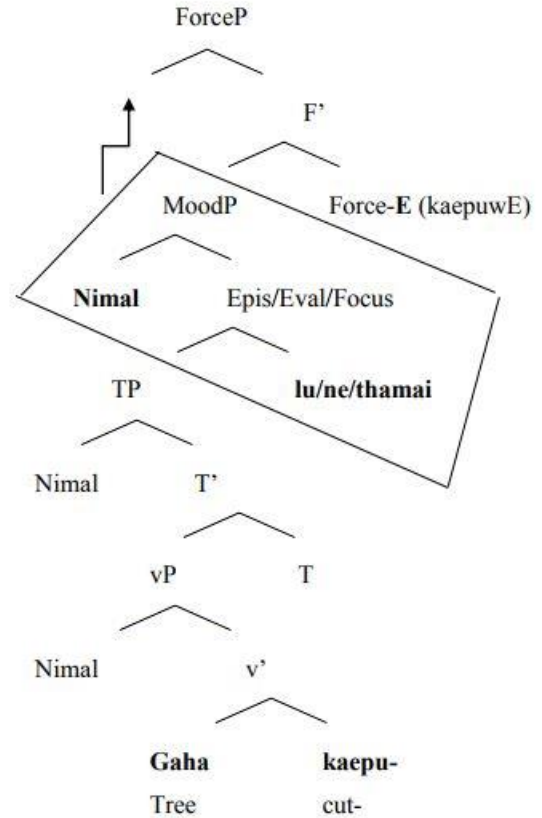
One notable feature of Sinhala is its lack of Agreement, as also noted by Gair, (1998), Hagstrom, (1998), Henadeerage, (2002), Kariyakarawana, (1998), Ananda (2015), Chou & Hettiarachchi (2016), and Weerasooriya (2018) The verb inflects for Tense in Sinhala (example 17). However, the verb does not inflect for person/number/gender agreement (Phi-agreement) (example 18).

17) Nimal kaareka soodanava/seeduwa
 Nimal (Nom car-def wash (Prs)/ wash (Pst)
 ‘Nimal is washing the car/Nimal washed the car’

18) Nimal/mama/api kaareka
 soodanava/seeduwa
 Nimal/I/We car-def wash (Prs)/ wash (Pst)
 ‘Nimal/I/We are washing the car’
 ‘Nimal/I/We washed the car’

However, the fact that the verb inflects for the –e form (soodannE/seeduwE) when there is a modal/focus/Q/Wh particle in the clause having narrow scope indicates some form of agreement. I propose that this constitutes modal/focus agreement in Sinhala with a MoodP which has features of both Focus and Modal where both are in complementary distribution with respect to each other. This claim is also in line with Miyagawa (2010) who motivates the argument that topic/focus features are computationally equivalent to Phi-features and trigger agree relations.

I propose that a DP moves to the Spec of the MoodP triggering Spec-Head agreement. And then this whole MoodP moves to Spec ForceP to agree with E suffix of the verb (kaepuwE as opposed to neutral kaepuwa). This e-morpheme marks the illocutionary Force of the utterance (19).



5. CONCLUSION

This paper explored modality in Sinhala from a syntactic perspective. A number of modal particles together with their distribution and properties were identified. Further, it was noted that the root/epistemic distinction holds in Sinhala not only semantically but also syntactically. In line with Cinque (1999), I proposed that epistemic modals occur higher in the structure while the root modals occur closer to the vP so that the former takes scope over the latter. It was shown that Sinhala modals show hierarchy not only with respect to epistemic-root distinction, but also among each other. Further, I considered the –e suffix as an overt reflex of an AGREE relation, i.e., a Spec-Head relation.

Some important implications of the present proposal are that not only does it validate the epistemic-root distinction syntactically as proposed by Cinque (1999) and Zagona (2007), and thus support their argument for the functional head hierarchy, but also makes a claim for the morphology-discourse interface in Sinhala. It also supports the argument along Miyagawa (2010) that discourse features get computed in narrow syntax and thus drive the derivation, just as the formal features do. Hence, the paper offers sufficient scope for future research in Sinhala not only along cartographic approach, but also in the areas of morphology-discourse interface, syntactic representation of epistemic-root distinction and also case marking properties of the Sinhala verb.

REFERENCES

- ANANDA L. *The Focus Construction in Sinhala*. Germany: Lap Lambert Publishing; 2011.
- ANANDA L. *Clausal complementation in Sinhala*. Unpublished PhD thesis. Jawaharlal Nehru University. 2012.
- ANANDA L & PRABATH K. Configurationality and mental grammars; sentences in Sinhala with reduplicated expressions. *International Journal of Multidisciplinary Studies*. 2016; 3(2): 25-34.
- AIKHENVALD AY. *Evidentiality*. Oxford: Oxford University Press. 2004.
- BARBIERS S. An introduction to modality and its interaction with the verbal system. In: Sjef Barbiers (ed.), *Modality and its interaction with the verbal system*. Amsterdam: John Benjamins. 2002; 1-18.
- CHAO TING TIM CHOU & SUJEEVA HETTIARACHCHI. On Sinhala subject case marking and A- movement. *Lingua*, 177. 2016;17-40.
- CHOMSKY N. *The Minimalist Program*. Cambridge, MA: MIT Press. 1995.
- CHOMSKY N. *Lectures on government and binding*. Dordrecht: Foris. 1981a.
- CHOMSKY N. *Barriers*. Cambridge, Mass: MIT Press. 1986b.
- CINQUE G. *Adverbs and Functional Heads, A Cross-Linguistic Perspective*. Oxford University Press: Oxford. 1999.
- CINQUE G. Mapping functional structure: A project. In Guglielmo CINQUE (ed.), *Functional structure in DP and IP: The cartography of syntactic structures*. Vol. 1, Oxford: Oxford University Press. 2002; 3-11.
- CINQUE G. Issues in adverbial syntax. *Lingua*, 114. 2004; 683-710.
- CINQUE G. *Restructuring and functional heads: The cartography of syntactic structures*. Vol. 4. Oxford: Oxford University Press. 2006.
- CINQUE, G. & RIZZI, L. *The cartography of syntactic structures*. CISCL Working Papers; 2008.
- GAIR JW. *Studies in South Asian linguistics: Sinhala and other South Asian languages*. Selected and edited by Barbara C. Lust. New York & Oxford: Oxford University Press. 1998.
- HAGSTROM PA. *Decomposing questions*. Doctoral dissertation, MIT. 1993.
- HENADEERAGE DK. *Topics in Sinhala syntax*. Doctoral dissertation, Australian National University. 2002.
- HETTIARACHCHI S. *Sinhala Object Scrambling Revisited*. In: *Proceedings from the Pennsylvania Linguistics Conference 39*, University of Pennsylvania Working Papers in Linguistics. 2015; 21(1).

- KARIYAKARAWANA SM. The Syntax of Focus and WH Questions in Sinhala, Karunaratne and Sons LTD, Colombo. 1998.
- KARUNATILLAKE WS. An introduction to spoken Sinhala, Gunasena & Company Limited, Colombo. 1992.
- KIDWAI A & MATHEW R. The finest structure of the left periphery: Complementizers in Hindi, Malayalam, Sinhala and Meiteilon. Talk given at the V Asian GLOW conference, Jawaharlal Nehru University, New Delhi. 2005.
- KIDWAI A. Word order and focus positions in Universal Grammar. In: G. Rebuschi & L. Tuller (eds), *The grammar of focus*. Amsterdam/Philadelphia: John Benjamins Publishing Company. 1999; 213-244.
- KIDWAI A. XP- adjunction in Universal Grammar. Scrambling and binding in Hindi-Urdu. Oxford & New York: Oxford University Press. 2000.
- KIDWAI A. The Cartography of phases: Facts and inference in Meiteilon. Unpublished manuscript, Jawaharlal Nehru University, New Delhi. 2007.
- KISHIMOTO H. Wh-in-situ and movement in Sinhala questions. *Natural Language and Linguistic Theory*, 23, No. 1, 2005; 1-51.
- MIYAGAWA S. *Why Agree? Why Move?* Cambridge. The MIT Press. 2010.
- NORDSTROM J. *Modality and subordinators*. Amsterdam: John Benjamins. 2010.
- OUHALLA J. *Functional categories and parametric variation*. London: Routledge. 1991.
- PALMER FR. *Semantics*. Cambridge: Cambridge University Press. 1981.
- PALMER FR. *Mood and modality*, 2nd edn, Cambridge University Press, Cambridge. 2001.
- PORTNER P. *Modality*. Oxford: Oxford University Press. 2009.
- RIZZI L. The fine structure of the left periphery. In: L. Haegeman (ed.), *Elements of grammar*. Dordrecht: Kluwer Academic Publishers; 1997. 281-338.
- RIZZI L. On the position of Int (errogative) in the left periphery of the clause. Manuscript, University of Siena. 1999.
- RIZZI L. *Comparative syntax and language acquisition*. London: Routledge. 2000.
- RIZZI L. Locality and left periphery. In: Adriana Belletti (ed.), *Structures and beyond: The cartography of syntactic structures*, Vol. 3, Oxford: Oxford University Press. 2004; 223-251.
- THIEROFF R. Moods, moods, moods. In Thieroff, R, and Rothstein, B, (ed.), *Mood in the languages of Europe*. Amsterdam : John Benjamins. 2010; 1-32.
- WEERASOORIYA T. Exhaustify! Locally or Globally? Implications for Ignorance Inferences. In: *Proceedings of the 35th West Coast Conference on Formal Linguistics*, ed. Wm. G. Bennett et al., Somerville, Cascadilla Proceedings Project, MA. 2018; 419-418.
- ZAGONA K. On the syntactic features of epistemic and root modals. In: Luis Eguren and Olga Fernandez (edt) *Co-reference, Modality and Focus*, Amsterdam: John Benjamins. 2007; 221-236.