Information Structure Projects in Syntax: Evidence from Focus and Modality in Sinhala

Abstract. The major claim of this paper is that information structure related particles of Sinhala are distinct functional heads and they project in syntax. This is in line with the cartographic approach to syntax which claims that discourse related features are visible for computation (Rizzi 1997, 2004), a claim also supported by Miyagawa, (2010), and Aboh (2010), among others. The present paper seeks to validate the above claim with evidence from Sinhala, motivating the argument that discourse related features lexicalized in Sinhala drive the derivation, and these features are comparable to formal features in establishing an Agree relation.

Keywords: information structure, functional heads, Sinhala, syntax.

1. Introduction

Information structure is a term first introduced by Halliday (1967) to account for the distinctions of focus, presupposition, and propositional attitude toward entities in the discourse conveyed by phrasal intonation. It is mainly concerned with context-based information such as topic/old information versus focus/new information. According to Zimmermann and Fery (2010: 01), information structure is that cognitive domain that mediates between the modules of linguistic
competence in the narrow sense, such as syntax, phonology, and morphology, and other cognitive faculties which serve the central purpose of the fixation of belief by way of information update, pragmatic reasoning, and general inference processes.

Lambrecht (1995) defines information structure of a sentence as the formal expression of the pragmatic structuring of a proposition in a discourse. A proposition which has undergone pragmatic structuring is called a pragmatically structured proposition. According to him, the most important categories of information structure are (1) Presupposition and Assertion, which have to do with the structuring of propositions into portions which a speaker assumes an addressee already knows or does not yet know (2) Identifiability and Activation, which have to do with a speaker's assumptions about the statuses of the mental representations of discourse referents in the addressee's mind at the time of an utterance, and (3) Topic and Focus, which have to do with a speaker's assessment of the relative predictability vs. unpredictability of the relations between propositions and their elements in given discourse situations (Lambrecht 1995: 5-6). In his view, information structure is the result of the interaction between all meaning bearing levels of the grammatical system as manifested in prosody, semantics, and morpho-syntax which interact in various language specific ways. Accordingly, the sentences subjected to his analysis are of three types. (1) Constructions that express differences in the respective scope of presupposition and the assertion, differences in topic-focus structure, or differences in the cognitive status of the referents of argument expressions. All these constitute the constructions that express differences in Information Structure. As Lambrecht himself says, his study is located between both formal and functional approaches to syntax.

Irrespective of the standpoint or labelling, what is evident here is the assumption that certain formal properties of sentences cannot be fully understood extraneous to the linguistic and extra-linguistic contexts that apply to those sentences. Sinhala offers an interesting case in this regard with its morphological realization of information structure in the form of particles/affixes. The aim of this paper is to explore this interaction with empirical justification from Sinhala to substantiate the argument that information-structure is predetermined as such information structure related particles get computed in Syntax, rather than being added in some kind of post-syntactic component. The theoretical standpoint adopted in this paper is the cartographic approach as expounded by Rizzi (1997, 1999) and Cinque (1999). Rizzi’s seminal paper on the fine structure of the left periphery (1997) expounds a proposal for decomposition of the Complementizer layer of the clause into a series of functional projections in analogy to Pollock’s decomposition of the sentence eight years earlier. Motivating this decomposition by the peculiarities of complementizers of Italian and other Romance languages, Rizzi argues that interrogative and relative pronouns, topics, and foci project their own X-bar projections, and that this articulated array of projections constitutes the complementizer system (C-system). The C-system is interpreted as an interface

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1 Indo-Aryan, SOV, pro-drop, spoken by the majority Sinhalese in Sri Lanka.
between two layers of an information system, one interfacing with the domain of discourse – typing the clause as interrogative, relative, adverbal, 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.

Based on a wealth of crosslinguistic 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. Based on the distribution of Adverbial Phrases (AdvPs) in Italian, French, and other Romance languages, Cinque observes the presence of a head position of a functional projection to the immediate right and left of each such AdvP. Then the two independently established hierarchies, the AdvPs and the functional heads are matched systematically from left to right. The transparent semantic relation that exists between each adverb class and the contiguous head morpheme provide evidence that each AdvP is the specifier of the phrase projected by the corresponding functional head morpheme. The functional projection is considered to be structurally present in every language irrespective of the AdvP’s lack of overt morphological realization corresponding to the particular functional head in the case of certain languages.

Clause structure and information structure and their interaction in both root and embedded peripheries have been central in generative grammar and have been extensively dealt with over the years with a view to understanding the properties of both and finally of UG (Kidwai 1999; Rizzi 1997, 1998; Cinque 1999; Zagona 2007; Aboh 2010; Miyagawa 2010; Ananda 2011, 2012). The extension of the X-bar schema to the functional heads –CP and TP—and the explosion of the functional domain further highlights the significance of clausal architecture and information structure in syntactic theory. Though often conceived as distinct domains, both share certain common properties that may be differently represented in root and embedded peripheries. For example, the C-domain is both an information structure domain, housing topic and focus projections as well as heads that actualize key projections of the clause – finiteness and tense. Chomsky (2005) notes that “basic tense and also tense like properties (e.g., irrealis) are determined by C (in which they are inherent: “John left” is past tense whether or not it is embedded) or by the selecting V (also inherent) or perhaps even broader context. In the lexicon, T lacks these features. T manifests the basic tense features if and only if it is selected by C (default agreement aside); if not, it is a raising (or ECM infinitival), lacking Ф features and basic tense. So it makes sense to assume that Agree—and Tense—features are inherited from C, the phase head” (Chomsky 2005: 10).

Sinhala offers fertile ground for enquiry, given its liberal use of a number of particles and lexical words to encode topic, focus, mood and modality, the consequence of which being that the morphology makes transparent the relations between information structure and clausal architecture. In addition, the role of verbal morphology in determining the particular modal, topic, focus or Wh interpretation and scope relations highlights the overt interaction of morphology and syntax in clause structure and information structure. The data for the present study consist of the
grammatical judgments of native speakers of Sinhala. Although the researcher himself is a native speaker of Sinhala, grammatical judgments of at least 10 native speakers were sought. The data presented in the following sections were first subjected to the grammatical judgments of the native speakers of Sinhala for both accuracy and verification. The analysis attempted here aligns with both the existing theoretical claims and empirical arguments.

The paper is structured in the following manner. Section 2 presents the Sinhala facts. Section 3 provides data from the embedded contexts. Section 4 presents previous research on the same. Section 5 attempts an analysis of the Sinhala facts along the particular theoretical standpoint adopted. Section concludes the paper.

2. The Sinhala facts

The canonical word order in Sinhala is SOV, though other word order variations are also possible and freely used by the speakers. Thus, SVO, OVS, VSO, VOS, OSV are other possibilities. Sinhala is a thorough-going left branching language with all type of heads including the complementizer (kiyala) occurring as the rightmost element in phrasal and clausal architecture. Sinhala is pro-drop allowing the possibility of dropping elements in both subject and object argument positions. There is no subject-verb agreement in Sinhala except for some Focus/Modal agreement where a focused element or an element under the scope of an epistemic modal marker requires the –e form of the verb (as illustrated in later sections). Nominative subjects are unmarked. Sinhala also uses dative, instrumental, and accusative subjects which are overtly marked.

Sinhala has a number of particles/suffixes to convey mood, modality, interrogative, and the information focus. As illustrated in the following sections, they can attach to any lexical category in an agglutinative fashion and take scope over the domain to the left. They can also attach at the clausal level, thereby scoping the whole clause. They are present in both root and embedded peripheries; although their distribution is not uniform in this respect, interacting as they do, with the morpho-syntax of Sinhala at different levels. For example, the presence of such a mood/modal/interrogative or information focus particle in the clause is shown in the verbal morphology in the form of an –e suffix, in the present and past tenses.

Examples (1-4) illustrate this phenomenon with respect to focus, evidential modality, and epistemic modality, although the same phenomenon occurs with respect to other modalities, interrogative, and negation, as well.

Example (1) is a neutral sentence. In (2-4), the subject, Nimal, is exclusively in the (narrow) scope of the focus, evidential, and the evaluative modal particles respectively.

1. Nimal kaareka seeduwa (Neutral statement)
   Nimal (Nom) car-def wash (Pst)
   ‘Nimal washed the car’

2. Nimal tamai kaareka seeduwe (Focus)
Nimal (Nom)  Foc car-def wash-E (Pst)
‘It was Nimal who washed the car’

3. Nimal  lu kaareka  seeduw (Evidential modality)
Nimal (Nom) Evid car-def wash-E (Pst)
‘It is said that Nimal washed the car’

4. Nimal  ne kaareka  seeduw (Evaluative modality)
Nimal (Nom) Epis car-def wash-E (Pst)
‘Nimal washed the car’ (Speaker lacking confidence in the truth of the statement)

The same particle can attach at the clausal level, and then the whole clause comes under the (wide) scope of that particle. Example (5) illustrates this with the Evid particle.

1. Nimal  kaareka  seeduwa lu
Nimal (Nom) car-def wash (Pst) Evid
‘It is said that Nimal washed the car’

Note that a crucial difference between 2-4 and 5 is that the –e suffix of the verb is absent in the latter. This differential behavior of the –e suffix highlights two things: (i) it is not simply the focus/modal particle that determines the contrastive focus/modal interpretation, but the verbal inflection also takes part in this process. (ii) It shows the scope marking potential of the focus/modal particle and the corresponding verbal morphology. That is, when the focus/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 (5). Therefore, (5) indicates that the alternative set is not available in this instance.

In both cases, however, there must be adjacency between the relevant particle and the scope marked constituent/clause. No other category (adverb etc.) other than another modal particle or focus particle can intervene between the two.

Table 1 illustrates the information structure related particles of Sinhala with examples for each.

**Table 1. Information Structure related particles of Sinhala**

<table>
<thead>
<tr>
<th>Category</th>
<th>Particle</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOOD EVIDENTIAL</td>
<td>-lu</td>
<td>Nimal  lu    gaha kaepuw-e</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nimal(Nom) Evid tree cut(Pst)-e</td>
</tr>
<tr>
<td></td>
<td></td>
<td>‘It is said that it was Nimal who cut the tree’</td>
</tr>
<tr>
<td>MOOD</td>
<td>Suffix</td>
<td>Sentence</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>--------</td>
<td>------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>EVALUATIVE</td>
<td>ne</td>
<td>Nimal ne gaha kaepuw-e&lt;br&gt;Nimal(Nom) Eval tree cut(Pst)-e&lt;br&gt;‘Nimal cut the tree’</td>
</tr>
<tr>
<td>EPISTEMIC</td>
<td>-yae</td>
<td>Nimal yae gaha kaepuw-e&lt;br&gt;Nimal(Nom) Epis tree cut(Pst)-e&lt;br&gt;‘It is doubtful that it was Nimal who cut the tree’</td>
</tr>
<tr>
<td>Probability/possibility</td>
<td>puluwan</td>
<td>Nimal gaha kapann-a puluwan&lt;br&gt;Nimal(Nom) tree cut-Inf might&lt;br&gt;‘Nimal might cut the tree’ (Epistemic possibility)</td>
</tr>
<tr>
<td>Probability/possibility</td>
<td>vage</td>
<td>Nimal gaha kapa-la vage&lt;br&gt;Nimal(Nom) tree cut-PPlt seem&lt;br&gt;‘It seems Nimal has cut the tree’</td>
</tr>
<tr>
<td>INTERROGATIVE (Q)</td>
<td>-da</td>
<td>Nimal gaha kaepuwa-da&lt;br&gt;Nimal(Nom) tree cut(Pst)-Int/Q&lt;br&gt;Did Nimal cut the tree?</td>
</tr>
<tr>
<td>CONDITIONAL</td>
<td>-nang</td>
<td>Nimal gaha kaepu-a nang mama eya-ta baninava&lt;br&gt;Nimal(Nom) tree cut(Pst)-a if I(Nom) he-Dat scold&lt;br&gt;‘If Nimal cut the tree I would scold him’</td>
</tr>
<tr>
<td>EPISTEMIC</td>
<td>-kiyala</td>
<td>Nimal gaha kaepu-a kiyala amma kiuwa&lt;br&gt;Nimal(Nom) tree cut(Pst)-a Comp mother said&lt;br&gt;‘Mother said that Nimal cut the tree’</td>
</tr>
<tr>
<td>NEGATION</td>
<td>naeha</td>
<td>Nimal gaha kaepu-e naehae&lt;br&gt;Nimal(Nom) tree cut(Pst)-e Neg&lt;br&gt;‘Nimal did not cut the tree’</td>
</tr>
<tr>
<td>FOCUS</td>
<td>tamai</td>
<td>Nimal tamai gaha kaepuw-e&lt;br&gt;Nimal(Nom) Foc tree cut(Pst)-e&lt;br&gt;‘It was Nimal who cut the tree’</td>
</tr>
<tr>
<td>FOCUS (Neg)</td>
<td>nemei</td>
<td>Nimal nemei gaha kaepuw-e&lt;br&gt;Nimal(Nom) Foc(Neg) tree cut(Pst)-e&lt;br&gt;It wasn’t Nimal who cut the tree</td>
</tr>
<tr>
<td>TOPIC</td>
<td>-nang</td>
<td>Nimal nang gaha kaepuw-a&lt;br&gt;Nimal(Nom) Top tree cut(Pst)-a&lt;br&gt;‘As for Nimal, he cut the tree’</td>
</tr>
<tr>
<td>MODAL (ROOT)</td>
<td>puluwan</td>
<td>Nimal-ta gaha kapann-a puluwan&lt;br&gt;Nimal(Dat) tree cut-Inf can&lt;br&gt;‘Nimal can cut the tree’ (Root ability)</td>
</tr>
<tr>
<td>MODAL (ROOT)</td>
<td>baehae</td>
<td>Nimal-ta gaha kapann-a baehae&lt;br&gt;Nimal(Dat) tree cut-Inf cannot&lt;br&gt;‘Nimal cannot cut the tree’ (Root impossibility)</td>
</tr>
</tbody>
</table>
Table 1 illustrates a number of significant properties of Sinhala discourse particles. 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. With respect to focus and topic, they too show a similar distribution. 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.

3. Embedded clauses

Topic and Focus can occur in the embedded clause. However, there are distributional restrictions. Only one topic or focus particle can occur in the embedded clause. The occurrence of one in the matrix clause and one in the embedded clause at the same time is disallowed. In the same way, multiple occurrence in the same clause is not allowed. Both Topic and Focus are incompatible with a Wh-phrase. 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.

   Nimal [Ajith evid/EVAL stolen-did goods-certainty] Look for-E

   It is said that Nimal is looking for certain goods stolen by Ajith

The distribution of these information structure related particles in the embedded contexts is illustrated below.

<table>
<thead>
<tr>
<th>Property</th>
<th>Focus</th>
<th>Topic</th>
<th>Epis Modals</th>
<th>Root Modals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contrastive narrow scope possible</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>-e suffix on the verb in narrow scope</td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
</tr>
</tbody>
</table>
Some insights that can be gained from the above table are that, in Sinhala, Topic and Focus behave rather differently with respect to e-marking and in narrow scope marking. Topic marking at clause level is also not possible. All information structure related particles occur in both root and embedded peripheries except the epistemic modals which do not occur in the embedded clause. All of them show similar distributional restrictions with respect to multiple occurrence and compatibility with a Wh.

4. Previous literature

Hagstrom (1998) discusses the WH question formation with respect to syntax, morphology, and semantics of Sinhala questions. He explores the interrelation between the Wh-construction and the Focus construction based on the identical distribution and scope marking properties of the Question particle “da” in Sinhala. 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. He identifies Focus as an independent head.

Heenadearage (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 the literature. He lists the modal particles as focus markers so that they share the same
structural position and distribution. However, Heenadeerage does not attempt a cartographic analysis as his approach is Lexical Functional Grammar.

Kariyakarawana (1998) investigates the focus phenomena of Sinhala in the theoretical framework of Government and Binding (Chomsky 1981, 1986a, 1986b) 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 and constituent focus dichotomy. He generalizes that the different particles that encode some degree of focus and have a similar distribution are focus particles. A critical investigation of the focus/modal particles and their syntactic representation has not been attempted.

Aboh (2010) argues that information structure begins with the Numeration itself and hence is part of narrow syntax. He shows that the functional head C which carries the Wh-feature, forcing I to C movement for clause typing is in the lexicon and therefore, is part of the Numeration in a Wh-question. This shows that the lexicon contains discourse-related functional items that project in syntax. He further shows with respect to question-answer pairs, that even though speakers have the freedom of choice with regard to which linguistic expression to use in a particular context or discourse, the form of this expression is a product of syntax that directly relates to the Numeration. For example, “that the matching answer to a Wh-question contains a focused expression seems to be a requirement of the question operator in the question. Accordingly, focus assignment (which in some languages, e.g., Gunbe, require constituent displacement) satisfies a syntactic requirement generated in the question through clause-typing and Wh-licensing” (Aboh 2010: 18).

Aboh provides evidence from Maale, an SOV North Omotic language spoken in Southern Ethiopia, Lele, a Chadic language, and Gunbe to support the claim that information-structure related information is encoded in the lexicon. In Maale, all sentence types must be morphologically marked on the verb. These discourse related inflectional suffixes mark discourse modality and therefore, he argues, should be part of core syntax. In Lele, both yes-no questions and wh-questions require the presence of a sentence-final question particle. Lele displays both in-situ and ex-situ wh-questions, and the ex-situ construction occurs in the context of the focus marker –*ba*. The wh-phrase moves to the left periphery because it is focused, suggesting that Focus and Wh-movement should be separately treated as involving two probes. The important point he raises is that this particular information sensitive information should be part of the lexicon, which the speakers acquire. Gunbe offers further evidence for the same claim. In Gunbe, both topic and focus are morphologically marked (*wЄ*, *(ya) and both occur to the right of the complementizer *راءَا*. Aboh suggests that these topic and focus markers are heads that project their own X-bar schema and attract the relevant constituents to Spec-Top and Spec-Foc: An argument which strongly supports Rizzi’s (1997, 1998) split-C hypothesis.
Miyagawa (2010) argues with respect to Japanese that the topic/focus feature is a grammatical feature in discourse configurational languages which is equivalent to the Phi-agreement feature in agreement languages. He proposes a separate projection – aP, above TP and below CP. The a head may also host a grammatical feature, and when there are two grammatical features – topic and topic/focus, for example – one occurs on a and the other on T, and both involving A-movements. This too supports the cartographic approach to syntax, which claims that discourse related features are visible for computation.

5. Analysis

Information structure encoding in Sinhala presents a challenge to both the minimalist assumptions (Chomsky 1995) and Discourse Pragmatics/Information Structure as expounded by Lambrrecht (1995). According to the minimalist standpoint, the topic/focus related information is considered a pragmatic property and hence is not well motivated in the narrow syntax. Lambrecht (1995) adopts a similar view with his pragmatic-grammatical orientation to the phenomena under study. For example, in the framework he has adopted, the definition of topic is related to the notion of subject in traditional grammar in line with the argument that the topic of a sentence is the thing which the proposition expressed by the sentence is ABOUT. Accordingly, a “topicalized” phrase may stand either in a topic relation or in a focus relation to the proposition expressed by the sentence because the first has a “predicate focus” structure and the second “argument-focus” structure. And this clear difference in pragmatic function correlates with an equally clear prosodic difference. At the level of syntax, however, the difference is not marked (Lambrecht 1995: 123).

As shown above, 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 focus/modals in Sinhala offers further empirical justification for a cartographic approach. Thus, in line with the cartographic approach adopted by Rizzi (1997) and Cinque (1999), I propose that information structure related particles in Sinhala are distinct functional heads. Their head order is determined by their order of occurrence in the clause. They are part of the Numeration and that they project in syntax. Also, as it will be shown below, a Wh-operator cannot be focused (07), and Focus and a Wh do not co-occur in Sinhala (08), prompting the argument that there is only one head position for both which attracts the relevant constituent to its Specifier.

7) *Kauda tamai gaha kaepuw-e?
   Who  foc  tree  cut-E

   ‘It is who cut the tree?’
Also, a Wh and a focused constituent are not compatible in the same clause showing that there is only one landing site for both in the root clause, as in (8).

8) *Kauda gaha tamai kaepuwe?
   Who  tree  FOC  CUT-E
   ‘Who cut the tree’ (tree focused)

This holds in the embedded contexts too, as a Wh and a focused constituent are not compatible simultaneously in the embedded clause either, as in (9).

9) *Sunil [Kauda gaha tamai kaepuwe kiyala] aehuwa?
   Sunil [Who  tree  FOC  CUT-E  COMP] ASKED?
   ‘Sunil asked who cut the tree’ (tree focused)

Now, we must find out the structural position of the epistemic modals with respect to other information structure related particles of Sinhala. Taking examples from a wealth of languages, Cinque (1999) 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 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 C- domain, below Force. The evidence for the above claim can be presented as follows.

10) *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’

11) *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 Modals compete for the same Head position.
Now let us further examine in what ways focus/modality/Wh/Q in Sinhala interacts with the verbal system. We noted in the preceding sections that in narrow scope marking of the focus/epistemic modal/Wh, the verb ends in –e form as opposed to neutral/declarative –a form (12-17).

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

13) Nimal tamai gaha kaepuw-e (*kaepuw-a)
   Nimal Foc tree cut(Pst-E) (*Past)
   ‘It is Nimal who cut the tree’

14) Kauda gaha kaepuw-e (*kaepuw-a)
   Who tree cut(Pst-E) (*Past)
   ‘Who cut the tree?’

15) Kauda gaha kaepuw-a
   Somebody tree cut(Pst-a)
   ‘Somebody cut the tree?’

16) Nimal da gaha kaepuw-e
   Nimal (Nom) Q tree cut(Pst-e)
   ‘Was it Nimal who cut the tree?’

17) *Nimal da gaha kaepuw-a
   Nimal (Nom) Q tree cut(Pst-a)
   ‘Was it Nimal who cut the tree?’

Note that in (14-15), the –e suffix is crucial for Wh force/interpretation, without which the Wh word simply becomes an existential pronoun (somebody).

One notable feature of Sinhala is its lack of Agreement. The verb inflects for Tense in Sinhala (example 18). However, the verb does not inflect for person/number/gender agreement (Phi-agreement) (example 19).

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

19) Nimal/mama/api kaareka soodanava/seeduwa
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 ModalP which has features of Wh, Focus and Modal where all are in complementary distribution with 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 ModP triggering Spec-Head agreement. And then this whole ModP moves to Spec ForceP to agree with E suffix of the verb (kaepuw-e as opposed to neutral kaepuw-a) which also marks the illocutionary Force of the utterance (20).

20)
6. Conclusion
This paper presented the argument that discourse related features lexicalized in Sinhala drive the derivation, and these features are comparable to formal features in establishing an Agree relation. This is in line with the cartographic approach to syntax which claims that discourse related features are visible for computation (Rizzi 1997, 2004), a claim also supported by Miyagawa (2010), and Aboh (2010) among others. It was shown that in Sinhala, Wh-, Focus, Evidential Modality, and Epistemic Modality are morphologically realized in the form of particles suffixed to a constituent. In such cases, a verbal argument or adjunct can come under the scope of the Focus or Modal particle. When such a particle marks narrow scope, the verb should take the –e ending, as opposed to the neutral –a ending. I proposed that these information structure related particles are Functional Heads carrying the relevant feature, they are in the lexicon, and that they become part of the Numeration and they project in syntax. Since Focus, Modal and Wh- do not co-occur in Sinhala, there is only one projection (ModP) for all which attracts the relevant constituent to its Spec. I considered the –e suffix as a reflex of a discourse Agree relation though in Sinhala there is no Phi-agreement.

References


