

Qu-morpheme Positional Variation in Sinhala Yes/No Constructions*

Jason Ginsburg

University of Aizu

jginsbur@gmail.com

Abstract:

In Sinhala yes/no constructions, a question morpheme can either occur in a clause-peripheral position that appears to be C or in a non-peripheral position that appears to be below TP. In this paper, I argue that the distribution of Sinhala Qu-morphemes results from the existence of two types of Qu-morpheme; both types contain an interpretable Qu-feature, but one type also contains an uninterpretable Focus-feature. The interpretable Qu-feature is responsible for typing a clause as an interrogative by valuing an uninterpretable clausal typing feature in C, and the uninterpretable Focus-feature is responsible for giving an associated phrase scope by being valued by an interpretable Scope feature in C.

1. Introduction

Sinhala is a language with a Qu-morpheme (question morpheme) *də* that can appear in clause-final position. For example, the statement in (1a) becomes a yes/no construction when *də* ‘Qu’ is added to the end of a clause, as shown in (1b). The fact that the addition of *də* results in a yes/no construction is evidence that *də* is a Qu-morpheme – it is a morpheme that is responsible for typing a clause as an interrogative. Also, note that the verb ends in *-a*, glossed as ‘-A’.¹

(1) (a) Koləmbətə basekaka tienəwa.

Colombo bus be.A

‘There is a bus to Colombo.’

(b) Koləmbətə basekaka tienəwa də?

Colombo bus be.A Q

‘Is there a bus to Colombo.’ (Gair 1970:139)

Notably, the Sinhala Qu-morpheme is not confined to clause-final position; it can occur in a TP-internal position as a suffix on a focused phrase. In (2a), the Qu-morpheme appears in the typical clause-final position, but in (2b), it appears as an affix on the nominal *ee potə* ‘that book’, and a yes/no construction results. Similarly, in (2c), the Qu-morpheme appears with the TP-internal adjunct *hetə* ‘tomorrow’.

* I thank Andrew Carnie, Sandiway Fong, Heidi Harley, and Simin Karimi for discussion of various issues presented in this paper. All errors are my own.

¹ I follow Sumangala (1992) in glossing *-a* as ‘-A’.

(2) (a) Chitra ee potə kieuwa də?

Chitra that book read.A Qu

‘Did Chitra read that book?’

(b) Chitra [ee potə]-də kieuwe?

Chitra that book-Qu read.E

‘Was it that book that Chitra read?’ (Kishimoto 2005:11)

(c) Siri hetə-də waduwaedə kərənne?

Siri tomorrow-Qu woodworking do-PRES.E

‘Is it tomorrow that Siri does woodworking?’ (Gair & Sumangala 1991:96)

The semantics of (2a) and (2b) differ in that in (2b) the phrase *ee potə* ‘that book’, to which the Qu-morpheme is affixed, receives a focused interpretation, as evidenced by the clefted English gloss. This appears to be a form of identificational focus, in accord with Kiss’ (1998) view that an identificational focus refers to new information and to an exhaustive set (all elements of a set).² Also, when the Qu-morpheme appears in a TP-internal position (2b-c), the verb occurs with an *-e* ending, which I gloss as ‘-E’.³ This verbal ending differs from the ‘-A’ verbal suffix that occurs when a Qu-morpheme appears in clause-final position, as in (2a).

Three descriptive facts about these constructions are of importance for this analysis. First, the presence of the Qu-morpheme is responsible for a yes/no interrogative interpretation. Second, when the Qu-morpheme attaches onto a TP-internal phrase, as in (2b-c), this phrase becomes focused, as indicated by the clefted glosses. The third fact about these constructions is that the verb ending differs depending on where the Qu-morpheme is pronounced. When the Qu-morpheme occurs in clause-final position, the verb has an ‘-A’ suffix (2a). The verb also appears with this suffix in non-interrogative constructions such as (1a) above. When the Qu-morpheme appears in a TP-internal position, the verb of the clause that the Qu-morpheme is associated with occurs with the ‘-E’ ending (2b-c).

In this paper I provide a new account of these Sinhala yes/no construction facts that is compatible with Phase Theory (cf. Chomsky 1999, 2000, 2004, 2006). This account relies on the idea that the Sinhala Qu-morpheme comes in two forms – both forms contain an interpretable Qu-feature and one form also contains an uninterpretable Focus-feature. These features enter into a probe-goal checking relationship with a scopal C head.

2. Previous Proposals

Sumangala (1992) analyzes the Sinhala Qu-morpheme *də* as being the head of a FocP projection and a

² An identificational focus corresponds to a cleft in English, such as “it was a hat” in “It was a hat that Mary picked for herself (Kiss 1998:250)”.

³ I follow Sumangala (1992) in glossing *-e* as ‘-E.’

focused phrase as being its complement. The FocP is argued to have an operator in its specifier position that binds a focused phrase. This is shown in (3a). When the Qu-morpheme is in clause-final position, the operator focuses the entire phrase. When the Qu-morpheme is in a TP-internal position, the operator binds the relevant focused phrase and the operator raises to the matrix [Spec, CP], as shown in (3b).

- (3) (a) [Op [XP [d_{Foc}]_{Foc'}]_{FocP}]
 (b) [OP ... [Op [XP [d_{Foc}]_{Foc'}]_{FocP}] ... CP]

The Sinhala Qu-morpheme appears to be responsible for typing a clause as an interrogative (compare 1a-b) and if the Qu-morpheme is simply the head of a Focused phrase, as in Sumangala's analysis, it is not clear how clausal typing occurs.

Previous analysis also face certain difficulties with respect to Phase Theory. Kishimoto (2005) and Hagstrom (1998) develop analyses of *wh*-questions (not yes/no questions) in Sinhala (which allows a Qu-morpheme to appear in a TP-internal position adjacent to a *wh*-phrase) that rely on LF movement of a Qu element from a position adjacent to a *wh*-phrase. These analyses, as well as that of Sumangala, face the problem of how movement of a Qu element occurs through phase boundaries. A Qu-morpheme that originates within the complement of the head of a *v**P phase cannot be directly attracted by a higher C head unless it moves to the *v**P phase edge.

In this paper, I adopt the idea, based on these previous analyses, that there is something akin to movement in a Sinhala yes/no construction with a TP-internal Qu-morpheme, although I propose that the Qu-morpheme does not actually move. Rather, its associated features move. Furthermore, this movement (which consists of reinsertion into a subnumeration and re-Merge into the derivation) occurs before Spell-Out and it occurs in a manner that is consistent with Phase Theory.

3. Proposals

I assume that a Qu-morpheme is responsible for typing a clause as an interrogative, presumably via valuation of an uninterpretable feature in C. This follows work by Katz & Postal (1964), Aoun & Li (1993), Chomsky (1995), among others who take the position that a Qu element in a clausal typing projection is responsible for giving a clause an interrogative interpretation.⁴ This Qu-element appears overtly in languages such as Sinhala, as shown in (1-2) above.

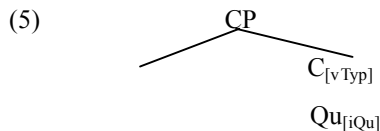
I further propose that there are two types of Qu-morpheme that occur in Sinhala, shown in (4a-b).

- (4) (a) Qu_[iQu]
 (b) Qu_[iQu,uFoc]

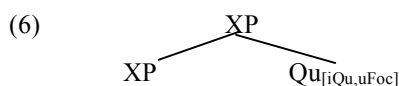
The Qu-morpheme in (4a) has an interpretable Qu-feature, *iQu*. This *iQu* feature can type a clause as an interrogative by valuing an uninterpretable feature in C that I refer to as *uTyp*, which is an uninterpretable

⁴ Aoun & Li (1993) take the position that a clausal typing projection in a yes/no construction contains [+Qu,-wh] features.

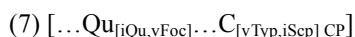
feature that when valued turns a clause into an interrogative, statement, etc. The type of Qu-morpheme in (4a) is Merged directly in C, where its iQu values the uTyp feature on C – resulting in an interrogative clause, as shown in (5), where vTyp in C refers to a uTyp that has been valued by the interpretable iQu.



The Qu-morpheme in (4b) has both an interpretable Qu-feature, iQu, and an uninterpretable Focus-feature, uFoc. The iQu, like the iQu of the Qu-morpheme in (4a), is responsible for typing a clause as an interrogative. The uninterpretable Focus-Feature uFoc is valued by an interpretable feature, which I refer to as iScp (an interpretable feature responsible for scope) on C. CP is notably a projection where *wh*-phrases obtain scope (cf. May 1985). Thus, it seems reasonable to assume that it has an interpretable scope feature, iScp, that can give a phrase scope.⁵ Valuation of the uFoc by iScp gives the phrase that the Qu-morpheme is associated with an identificational focus interpretation (see section 1 above). I propose that this type of Qu-morpheme in (4b) is Merged in a position adjoined to a focused phrase, as shown in (6).



In order for a derivation containing this type of Qu-morpheme to converge successfully, the Qu/Focus-feature bundle of the Qu-morpheme must undergo a feature-valuation relation with C of the form shown in (7), whereby the iQu of the Qu-morpheme values the uTyp in C (the valued feature is represented by vTyp) and the uFoc feature of the Qu-morpheme is valued by the iScp feature of C (the valued feature is represented by vFoc).



I propose that feature valuation between C and a Qu-morpheme is a reciprocal relation that is similar to the case checking relation proposed by Chomsky (1999, 2006, etc). Chomsky, essentially, proposes that v* and (non-defective) T have uninterpretable phi-features and interpretable structural case, and that v* or T behaves as a probe that searches for a matching goal - a DP that has an interpretable phi-feature. A DP has an interpretable phi-feature and uninterpretable structural case. When T or v* forms an Agree relation with a DP, the interpretable phi-feature on the DP values the uninterpretable phi-feature of v* or T, and the interpretable case feature of v* or T values the uninterpretable case feature of the DP. In a similar manner, I propose that C can have its uTyp feature valued by an iQu associated with a Qu-morpheme, and a uFoc of a Qu-morpheme can be valued by an iScp feature on C.

⁵ In a *wh*-question such as ‘‘what did you buy?’’ a *wh*-phrase gets scope and ‘what’ is presumably in [Spec, CP]. If a non-*wh*-phrase gets scope, as in the relevant Sinhala constructions discussed in this paper, then this phrase receives a focus interpretation, but the resulting construction cannot be a *wh*-question.

Feature checking is constrained by Phase Theory. I follow the Phase Theory view that v^* and C are strong phases and when the head of a (strong) phase is Merged into a derivation, the complement of the next lower phase, if present, is sent to Spell-Out (Chomsky 2004). For example, in (8), when C is Merged, YP, the complement of v^* , is sent to Spell-Out and C can only access up to the v^* P edge.

(8) [C [TP T [v^* P v^* YP]]]

I also propose that there is an operation of Last Resort (Chomsky 1995) that is constrained by Phase Theory. Last Resort is defined in (9a) - an element with an uninterpretable feature that is contained within a phase that is about to be sent to Spell-Out is reinserted into a higher subnumeration as an operation of Last Resort.⁶ For example, in (9b), assume that X and Y are strong phase heads and α is an element with an uninterpretable feature. When X is Merged, the complement of the next lower phase head Y will be sent to Spell-Out. Thus, when X is Merged, I propose that α , with an uninterpretable feature, is subject to a Last Resort operation - it is reinserted into the current subnumeration, and then it can be re-Merged into a derivation.

(9) Last Resort:

(a) When an element with an uninterpretable feature is contained within a structure that is about to be sent to Spell-Out, it will (when possible) be reinserted into the current subnumeration.

(b) Last Resort [_{XP} X [_{YP} Y α]]

In this paper, I take the position that the Qu- and Focus-features of the TP-internal Sinhala Qu-morpheme (4b above) form a Qu/Focus feature bundle of the form '[iQu,uFoc]' that under the appropriate circumstances (when contained within a phase that is about to be sent to Spell-Out), separates from its associated Qu-morpheme and undergoes Last Resort reinsertion into the current sub-numeration. Then it can be selected and re-Merged into the derivation, thus enabling it to undergo a feature valuation probe-goal relation with C.

4. Analysis

When the Sinhala Qu-morpheme occurs in a clause-peripheral position, as in (2a) above, it is most likely directly Merged in C. First of all, direct Merge in C is the most economical operation (cf. Chomsky 1995). Merge of an element from a numeration into a derivation must occur. If a Qu-morpheme were to move, then it would have to be Merged, undergo movement, and then be Merged again. Secondly, the C head in Sinhala occurs clause-finally. Sinhala is an SOV language with head-final projections (Sumangala 1992). For example, the noun *minissu* 'people' and the verb *bivva* 'drink- PAST' follow their complements in (10a-b) respectively.⁷

⁶ I thank Sandiway Fong, with whom I developed the idea of this type of Last Resort operation.

⁷ Sinhala allows scrambling. When there is scrambling, a complement need not precede its head. However, if one considers the underlying word order of scrambled constructions to be SOV, then the head must follow its complement in the underlying structure.

(10) (a) NP: gamee minissu
 village-GEN people
 ‘people of the village’

(b) *V*P*: tee **bivva**
 tea drink-PAST
 ‘drank tea’ (Sumangala 1992: 41)

Since the Qu-morpheme occurs at the end of the clause in constructions such as (2a) above, a natural assumption is that it occurs in C.

Thus, example (2a) with a clause-final Qu-morpheme can be accounted for as shown in (11). The Qu-morpheme *də*, of type (4a), is Merged directly in C, where its interpretable Qu-feature *iQu* values the uninterpretable Type feature, *uTyp*, of C, and thereby types the clause as an interrogative, as represented by the resulting *vTyp* feature in C.

(11) [[Chitra ee potə kieuwa TP] [**də**_[iQu+vTyp] C] CP]
 Chitra that book read Qu

When a Qu-morpheme does not appear at the clause-periphery, as in (2b) repeated below, I have claimed that it is in a TP-internal position.

(2) (b) Chitra [ee potə]-**də** kieuwe?
 Chitra that book-Qu read.E

‘Was it that book that Chitra read?’ (Kishimoto 2005:11)

As noted above, projections in Sinhala are head-final. Therefore, if the Qu-morpheme *də* in (2b) were in C, then everything preceding it would have to be in a higher position, such as the specifier of CP. But if this were the case, then it is not clear where the verb *kieuwe* ‘read-E’ would occur, since C linearly follows the *v*P* projection housing the verb. The verb would have to undergo rightward movement, or be a remnant of a complex series of leftward movements. On the other hand, if the Qu-morpheme occurs below the TP in a position adjoined to the object, then the word order facts are accounted for straightforwardly.

In constructions such as (2b), I propose that the presence of an uninterpretable Focus-feature, *uFoc*, within a Qu-morpheme, as in (4b) above, forces the Qu-morpheme to be Merged TP-internally adjacent to a phrase that is the focus of the interrogative. For example, in (12), the Qu-morpheme *də* is adjoined to an XP that is contained in a TP-internal position.

(12) [[...[XP]-**də**_[uFoc,iQu] XP]... TP]... CP]

A Qu-morpheme with a Focus-feature cannot be Merged directly in C because then its Focus-feature would not be associated with a phrase that needs to be focused.

As noted above in section 1, there is a phenomenon of verbal agreement in Sinhala whereby a verb appears with an ‘-A’ or ‘-E’ suffix. When the Qu-morpheme occurs clause-finally, the verb occurs with

the ‘-A’ ending. The ‘-A’ ending is something akin to a default verbal ending, as suggested by Gair and Sumangala’s (1991:94) statement that the ‘-A’ affix “is the most common [verbal affix] in finite independent sentences”. Below is an example of a declarative sentence with the default ‘-A’ ending on the verb.

(13) Chitra potə gatta.

Chitra book bought.A

‘Chitra bought the book.’ (Kishimoto 2005:4)

When the Qu-morpheme appears in a TP-internal position, the ‘-E’ ending appears on the verb, as in (2b). I propose that this ‘-E’ ending is the Spell-Out of a moved Qu/Focus-feature bundle. Only tensed verbs appear with these suffixes (Gair & Sumangala 1991). Therefore, a reasonable assumption is that a tensed verb raises as high as T, as is claimed by Gair & Sumangala (1991).

I am now in a position to account for constructions such as (2b) in which the Qu-morpheme occurs as an affix on the TP-internal phrase *ee potə* ‘that book’. The derivation proceeds as follows. (14a) shows the structure of the subnumeration that forms the v^*P . (14b) is the resulting v^*P that is formed after selection and Merge of the LIs (Lexical Items) from the subnumeration in (14a). The Qu-morpheme *də* is Merged in a position adjoined to the DP *ee potə* ‘that book’ and the Qu-morpheme contains a Qu/Focus feature bundle ‘[iQu,uFoc]’.

(14) (a) Subnumeration: [Chitra, *ee potə*, $də_{[iQu,uFoc]}$, *kiew*]

(b) Derivation: [Chitra [*ee potə*]- $də_{[iQu,uFoc]}$ *kiew* v^*P]

(15a) below shows the subnumeration of the CP, and (15b) shows the resulting CP that is formed after Merge of T and C. I assume that the verb moves to T - the crossed out *kiew* signifies a copy of the verb. Note that the matrix C contains an interpretable Scope feature *iScp* and an uninterpretable Type feature *uTyp*.

(15) (a) Subnumeration: [$C_{[uTyp,iScp]}$, T]

(b) Derivation: [[[Chitra [*ee potə*]- $də_{[iQu,uFoc]}$ ~~*kiew*~~ v^*P] *kiew* TP] $C_{[iScp,uTyp]}$ CP]

At the point at which C is Merged, in accord with Phase Theory, the complement of v^* will be sent to Spell-Out. However, the Qu-morpheme contains the uninterpretable feature *uFoc* that needs to be valued. Thus, at the point at which C is Merged, I propose that the Qu/Focus-feature bundle ‘[iQu,uFoc]’ is reinserted into the sub-numeration, as shown in (16a). Crucially, the feature bundle is able to separate from its associated morpheme. Then, as shown in (16b), the Qu-feature bundle ‘[iQu,uFoc]’ is re-Merged into the derivation in C, where it is pronounced as an *-e* ‘-E’ suffix of the verb.

(16) (a) Subnumeration: [[$iQu,uFoc$]]

(b) Derivation: [[[Chitra [*ee potə*]- $də_{[iQu,uFoc]}$ ~~*kiew*~~ v^*P] *kiew* TP] $-e_{[iQu,uFoc+iScp,vTyp]}$ CP]

Crucially, the *iQu* values *uTyp* on C, resulting in $vTyp$, and *iScp* on C values the *uFoc* of the Qu/Focus-feature bundle, resulting in $vFoc$ and thereby giving the DP *ee potə* ‘that book’ a focus interpretation.

This analysis also accounts for the fact that a Qu-morpheme in Sinhala can take scope outside of the

clause that it appears in. In (17) the Qu-morpheme *də* is attached to *nimal-Tə* ‘Nimal-DAT’ in the embedded clause and a matrix yes/no construction results; the embedded clause is not a yes/no construction.

(17) Guneə [Siri eekə Nimal-Tə-**də** dunna kiyəla] kivve?

Gune Siri that/it Nimal-DAT-Qu give-PAST.A that] say-PAST.E

‘Is it to Nimal that Gune said that Siri gave it?’ (Adapted from Sumangala 1992:135)

In this case, the verb of the embedded clause has the default ‘-A’ ending and the matrix verb, which is the verb of the clause in which the Qu-morpheme has scope, has the ‘-E’ ending; the verb of the clause that is typed as an interrogative by the Qu-morpheme appears with the ‘-E’ ending. Example (17) is accounted for as follows. The subnumeration of the embedded v*P is given in (18a) and the resulting v*P is shown in (18b). The Qu-morpheme is Merged in a position adjoined to the DP *Nimal-Tə* ‘Nimal-DAT’.

(18) (a) Subnumeration: [Siri, eekə, Nimal-Tə, də_[iQu,uFoc], dunn]

(b) Derivation: [Siri eekə [Nimal-Tə]-də_[iQu,uFoc] dunn_{v*P}]

(19a) shows the subnumeration of the remaining elements of the embedded CP, where *kiyəla* ‘that’ is a C head and *-a* is a T head, and (19b) shows the CP that results from selection and Merge of these LIs.

(19) (a) Subnumeration: [kiyəla, -a]

(b) Derivation: [[[Siri eekə [Nimal-Tə]-də_[iQu,uFoc] ~~dunn~~_{v*P}] dunn-a_{TP}] kiyəla_{CP}]

At the point at which the C head *kiyəla* is Merged, the Qu-morpheme is contained within the v* complement that is about to be sent to Spell-Out. Thus, at this point, the Qu/Focus-feature bundle ‘[iQu,uFoc]’ is reinserted into the sub-numeration, as shown in (20a), and then Merged at the edge of the CP (20b). I propose that out of the need for the subnumeration to be emptied, the Qu/Focus feature bundle adjoins to the CP edge. There is no feature checking that results from this adjunction operation since the embedded C has no uninterpretable features that need to be checked - its uTyp feature has been valued by *kiyəla* ‘that’.

(20) (a) (a) Subnumeration: [[iQu,uFoc]]

(b) Derivation: [[[Siri eekə [Nimal-Tə]-də_[iQu,uFoc] ~~dunn~~_{v*P}] dunn-a_{TP}] kiyəla+[iQu,uFoc]_{CP}]

The matrix v*P subnumeration is shown in (21a) followed by the resulting v*P that is formed after Merge of the LIs in (21b).

(21) (a) Subnumeration: [Guneə, kivv]

(b) [Guneə [[[Siri eekə [Nimal-Tə]-də_[iQu,uFoc] ~~dunn~~_{v*P}] dunn-a_{TP}] kiyəla+[iQu,uFoc]_{CP}] kivv_{v*P}]

The subnumeration of the matrix CP is shown in (22a), followed by the derivation that results from Merge of the LIs in (22b).

(22) (a) [C_[iSep,uTyp], T]

(b) [[[Guneə [[[Siri eekə [Nimal-Tə]-də_[iQu,uFoc] ~~dunn~~_{v*P}] dunn-a_{TP}] kiyəla+[iQu,uFoc]_{CP}] kivv_{v*P}] kivv_{TP}] C_[iSep,uTyp] CP]

At the point at which the matrix C is Merged, the Qu-feature bundle ‘[iQu,uFoc]’ again undergoes Last

Resort reinsertion into the subnumeration, as shown in (23a). The Last Resort operation occurs because the feature bundle still contains an uninterpretable feature, uFoc, and it is contained within an element that is about to be sent to Spell-Out, the complement of the matrix v^* . Then the feature bundle is selected and Merged as shown in (23b).

(23) (a) Subnumeration: $[[iQu, uFoc]]$

(b) $[[[Gunee [[Siri eekə [Nimal-Tə]-də_{[iQu, uFoc]} dunn_{v^*P}] dunn-a_{TP}] kiyəla+_{[iQu, uFoc]}_{CP}] kivv_{v^*P}]$
 $kivv_{TP} -e_{[iQu, vFoc +iSep, vTyp]}_{CP}]$

The derivation converges because the Qu/Focus feature bundle and C undergo a successful feature checking relation (the uTyp feature and uFoc features are valued). The Qu/Focus feature bundle is pronounced as $-e$ ‘-E’.

In this manner, a Last Resort process enables the Qu/Focus-feature bundle to move from a TP-internal position to a clause peripheral position without violating the constraints imposed by Phase Theory. There is no need to postulate an EPP feature or other element at a Phase Edge to attract the Qu/Focus-feature bundle. The feature bundle undergoes Last Resort reinsertion into the subnumeration and then is re-Merged at a CP edge, without an EPP feature needed to attract it. There is also no violation of the Head Movement constraint (Travis 1984) or Minimal Link Condition (Chomsky 1995)⁸ since the Qu/Focus-feature bundle never moves through an intervening filled position.

5. Related Phenomena

This analysis also extends to other constructions in Sinhala as well as to similar phenomena in other languages.

Other clausal typing morphemes in Sinhala can appear TP-internally and focus an adjacent phrase. The following examples show that *tamay* ‘certainty’ can either appear in the clause periphery (24a) or TP-internally (24b). When it occurs TP-internally in (24b), it focuses *hetə* ‘tomorrow’ in the same manner that a TP-internal Qu-morpheme does, as in (2c) above.

(24) (a) Gunəpaalə heTə gallu yanəva-**tamay**?

Gunapaala tomorrow Galle go-A-CERTAINTY

‘It is for sure that Gunapala is going to Galle tomorrow.’

(b) Gunəpaalə heTə-**tamay** gallu yanne?

Gunapaala tomorrow- CERTAINTY Galle go.E

‘It is certainly tomorrow that Gunapala is going to Galle.’ (Sumangala 1992:131)

Also, *lu* ‘reportative,’ *nee* ‘tag question’ and *yə* ‘dubitative’ can occur either clause peripherally or clause internally (cf. Sumangala 1992:131-132). These facts can be accounted for under the current analysis. The

⁸ The Head Movement Constraint and Minimal Link Condition account for certain intervention effects. These rules are requirements that an element not move, nor be attracted over, an intervening element of the same type.

relevant clausal-typing morpheme is base-generated in a position adjacent to a salient phrase. A Last Resort process of reinsertion into the sub-numeration and re-Merge into the derivation results in clausal typing and in the relevant phrase receiving a focus interpretation. In these cases, however, the clausal typing morpheme contains a feature other than *i*Qu that values the *u*Typ on C, thereby resulting in a non-interrogative clause.

There are also other languages that have similar phenomena – a Qu-morpheme can occur either in the clause periphery or in a TP-internal position. In Okinawan, *mi* can appear at the end of a clause to form a yes/no construction (25a), or the Qu-morpheme *ga* can occur in a TP-internal position adjacent to a focused phrase (25b).

(25) (a) John-ga ich-u-**mi**?

John-NOM go-PRES-Qu

‘Is John going?’

(b) John-ga-**ga** ich-u-ra?

John-NOM-Qu go-pres-RA

‘I wonder if JOHN is going?’ (Miyara 2001:27)

In Premodern Japanese, the Qu-morpheme *ya* appears in clause-final position in (26a), and in (26b), it appears in a TP-internal position.

(26) (a) Ware wo ba sira-zu **ya**?

Me ACC TOP know-not.CONC Qu

‘Don’t you know me?’ (*Ise Monogaari*, per Whitman 1997:165)

(b) Ofotomo no Dainagon ϕ a [tatu no kubi no tama **ya**] torite o ϕ asitaru?

Otomo GEN councilor TOP dragon GEN head GEN gem Qu take come

‘Did Otomo-no-Dianagon get the gems on the dragon’s head?’ (*Taketori Monogatari*: 859, per Whitman 1997:161)

The following examples are from Sateré-Mawé in which the Qu-morpheme *apo* can occur in a clause-final (27a) or TP-internal position (27b).

(27) (a) Ere-ket kahato **apo**?

2s-sleep very Qu

‘Do you sleep well?’

(b) Etu-nug kahu teran **apo** ui-yat?

2s-make beautiful want Qu 1s-house

‘Do you want to fix my house?’ (Summer Institute of Linguistics 1978, per Brandon & Seki 1984:83-84)

Similarly, in Assurini, the Qu-morpheme *pa* can occur clause finally (28a) or TP-internally (28b).

(28) (a) Karoa o-ata a-ha **pa**?

Karōa 3-hunt 3-go Qu

‘Is Karōa hunting?’

(b) Itasoa **pa** ere-reke?

Triangle Qu 2s-have

Do you have a triangle?’ (Nicholson 1978, per Brandon & Seki 1984:84)

Although I leave detailed analyses of these constructions for further investigation, the proposals presented in this paper can account for these data. A clause-final Qu-morpheme lacks a uFoc feature and is Merged directly in C. A Qu-morpheme with a uFoc feature is Merged in a position adjacent to a salient phrase, and then a Qu/Focus-feature bundle separates from the Qu-morpheme and undergoes a Last Resort process that enables it to be re-Merged in C.

6. Conclusion

This analysis accounts for the perplexing fact that the Sinhala Qu-morpheme *də* is not confined to a single position in a yes/no question in a way that is compatible with Phase Theory. The position of the Qu-morpheme depends on whether or not it contains an uninterpretable Focus-feature uFoc. A Qu-morpheme of type (4a) contains a iQu but no uFoc. Thus, it is Merged directly in C, where its iQu values a uTyp feature, resulting in a yes/no construction. A Qu-morpheme of type (4b) contains both a iQu and a uFoc. This Qu/Focus-feature bundle undergoes a Last Resort process of reinsertion into a subnumeration and re-Merge into a derivation at a higher point, thereby enabling the iQu feature to value the uTyp on C and the uFoc to be valued by the iScp on C. This analysis thus shows that in some languages, such as Sinhala (and probably also in Okinawan, Premodern Japanese, Sateré-Mawé, Assuriní, etc.) there is, in certain cases, a close connection between a clausal typing element and focus, whereby a Qu-morpheme contains an uninterpretable Focus-feature. Further investigation could shed light on the nature of this connection between focus and clausal typing. Lastly, I have examined languages (primarily Sinhala) that I propose contain two types of Qu-morpheme (4a-b) that may occur in a yes/no construction. However, there may be languages that only contain one of these types of Qu-morpheme. For example, in Japanese and Korean a Qu-morpheme is confined to the clause periphery, suggesting that only the Qu-morpheme of type (4a) may be present in a yes/no question. I leave this issue for further analysis.

References:

Aoun, Joseph, & Yen-hui Audrey Li. 1993. *Wh*-elements in situ: Syntax or LF. *Linguistic Inquiry* 24.199-238.

- Brandon, Frank Roberts, & Lucy Ferreira Seki. 1984. Moving interrogatives without an initial +WH node in Tupi. In *Syntax and semantics, volume 16: The syntax of Native American Languages*, ed. by Eung-do Cook & Donna B. Gerdt, 77-103. Orlando, Florida: Academic Press, Inc.
- Chomsky, Noam. 1995. *The Minimalist Program*. Cambridge, MA: MIT Press.
- Chomsky, Noam. 1999. *Derivation by phase*. MIT Working Papers in Linguistics: MIT occasional papers in linguistics number 18.
- Chomsky, Noam. 2000. Minimalist inquiries: The framework. In *Step by step*, ed. By Roger Martin, David Michaels, & Juan Uriagereka, 89-155. Cambridge, MA: MIT Press.
- Chomsky, Noam. 2004. Beyond explanatory adequacy. In *Structures and beyond: The cartography of syntactic structures, volume 3*, ed. By Adriana Belletti, 104-131. Oxford, UK: Oxford University Press.
- Chomsky, Noam. 2006. On phases. In *Foundational issues in linguistic theory: essays in honor of Jean- Roger Vergnaud*, ed. By Robert Freidin, Carlos Otero, & Maria-Luisa Zubizarreta, 133-166. Cambridge, MA: MIT Press.
- Gair, James W. 1970. *Colloquial Sinhalese clause structures*. The Hague: Mouton.
- Gair, James W., & Lewlala Sumangala. 1991. What to focus in Sinhala. In *The proceedings of the Eastern States Conference on Linguistics (ESCOL) '91, 93-'08*. Columbus, OH: The Ohio State University.
- Hagstrom, Paul. 1998. *Decomposing questions*. Massachusetts Institute of Technology dissertation.
- Katz, Jerrold, & Paul Postal. 1964. *An integrated theory of linguistic descriptions*. Cambridge, MA: MIT Press.
- Kishimoto, Hideki. 2005. Wh-in-situ and movement in Sinhala questions. *Natural Language and Linguistic Theory* 23.1-51.
- Kiss, Katalan E. 1998. Identificational Focus versus Information Focus. *Language* 74.245-273.
- May, Robert. 1985. *Logical Form*. Cambridge, MA: MIT Press.
- Miyara, Shinsho. 2001. Wh-questions in Okinawan. *Linguistic Analysis* 30.25-66.
- Nicholson, V. C. 1978. *Aspectos da lingual Assurini*. Brasília: Summer Institute of Linguistics.
- Sumangala, Lelwala. 1992. *Long distance dependencies in Sinhala: The syntax of focus and WH questions*. Cornell University dissertation.
- Summer Institute of Linguistics. 1978. *Livro de frases Sateré-Mawé Português*. Brasília: Summer Institute of Linguistics.
- Travis, Lisa. 1984. *Parameters and effects of word order variation*. Massachusetts Institute of Technology dissertation.
- Whitman, John. 1997. Kakarimusubi from a comparative perspective. In *Japanese/Korean linguistics 6*, ed. By Ho min Sohn & John Haig, 161-178. Stanford, CA: Center for the Study of Language and Information.