

Successive-cyclic *Wh*-movement in Sinhalese and Japanese*

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1 Introduction

This paper will examine one aspect of *wh*-questions in Sinhalese and Japanese, i.e. successive-cyclic movement. Although *wh*-questions in the two languages have a lot of features in common,¹ there are a few differences. First, embedded *mokəda* ‘why’ is not allowed to take matrix scope in Sinhalese unlike in Japanese. Second, scrambling of a non-*wh*-expression and successive-cyclic movement of a *wh*-expression cannot be applied across the same clause in Sinhala. To account for the differences, the paper will show that Sinhalese *wh*-expressions are information focused, and focus causes scrambling and successive-cyclic movement of *wh*-expressions in Sinhalese, whereas *EF* features initiate successive-cyclic movement of *wh*-expressions in Japanese.

Before discussing successive-cyclic movement in the two languages, let us define *wh*-movement as follows:

$$(1) \quad [{}_{\text{CP}} \quad \text{C} \quad \dots \quad \text{wh}] \rightarrow [{}_{\text{CP}} \quad \text{wh}_i \quad \text{C} \quad \dots \quad t_i]$$
$$\quad \quad [u\text{WH}] \quad [\text{WH}] \quad \quad [\text{WH}] \quad \quad [\neq\text{WH}]$$

e.g. What did Mary buy *t*?

C triggers movement of *wh*-expressions. In this case, C is called a probe and has an uninterpretable feature. To delete the uninterpretable feature, *uWH* in (1), C tries to find a matching feature within its c-commanding domain, and spots a *wh*-expression, which is called a goal in this illustration. It has an interpretable feature [WH], which can delete [*uWH*] of C. At this moment, an operation called Agree happens between C and the *wh*-expression, by which [*uWH*] of C is deleted. Following Pesetsky and Torrego (2001), the present

paper assumes that it is uninterpretable features of C that cause phrasal movement (after Agree) whether the movement is overt or covert.

Nevertheless, it has been known that not every movement is targeting the final destination. For example, in the case of long-distance *wh*-questions, a *wh*-expression is known to go through every intermediate C before the targeted C, which is called successive-cyclic movement. Examine the following sentence:

(2) [_{CP1} What_i do you think [_{CP2} *t*'_i that Mary bought *t*_i]]

In (2), *what* is first raised to CP2, spec, and then to CP1, spec.

Here a problem arises of what triggers such intermediate movement. There are two possibilities. One is that an *EF* feature, which does not cause Agree, is in intermediate C causing successive-cyclic movement, as Chomsky (2007) argues.² The other possibility is to claim that Agree of a different feature from [_v WH] is employed for such movement. This paper will show that both strategies are actually necessary in natural language on the basis of Sinhalese and Japanese *wh*-questions. This paper is organized as follows. Section 2 will introduce the intervention effect in Japanese and Sinhalese. Section 3 will show that the intervention effect disappears in embedded context in both languages and will present one difference between the two languages: long-distance movement of ‘why’. In section 4, after another difference of *wh*-questions in the two languages is introduced, the paper will argue that the triggers for successive movement of *wh*-expressions are different in Sinhalese and Japanese: Sinhalese employs focus features whereas Japanese employs *EF* features. Section 5 will provide evidence for the claim that *wh*-expressions in Sinhalese are focused. Section 6 will conclude the paper.

2 Assumptions about *wh*-questions in Japanese and Sinhalese

This section presents a few assumptions. Both Sinhalese and Japanese are *wh-in-situ* languages. Following Morita (2013b), I assume that *wh*-expressions move to C, spec covertly via Agree in both languages. The second assumption is that the intervention effect is syntactic. The intervention effect in *wh*-questions is defined as follows:

(3) The intervention effect:

*	C	...	intervener	...	<i>wh</i>
	[<i>uWH</i>]		[<i>WH</i>]		[<i>WH</i>]

Hagstrom (1998) and Morita (2013a) argue that the intervention effect is one type of the economy principle. In other words, the goal for C can be an intervener or a *wh*-expression in (3), but the closest goal for C will enter into Agree with C. The notion of closeness is defined with c-command, and since the intervener c-commands the *wh*-expression, the former will go through Agree with C. However, C needs to do so with the *wh*-expression, so ungrammaticality follows.

Both Sinhalese and Japanese exhibit the intervention effect as follows:

(4) a.* {kaurude/kaurut} mokakdə kiwi-e? (Sinhalese)
 someone/everyone what said-Q

b. mokakdə_{*i*} {kaurude/kaurut} *t_i* kiwi-e?
 ‘What did {someone/everyone} say?’

(5) a.?? {dareka/daremo}-ga nani-o itta no? (Japanese)
 someone/everyone-Nom what-Acc said Q

b. nani-o_{*i*} {dareka/daremo}-ga *t_i* itta no?
 ‘What did {someone/everyone} say?’

Quantifiers such as ‘someone’ and ‘everyone’ are interveners in both Sinhalese and Japanese, which are indicated by underlines. The interveners cause the intervention effect when they are generated between C and a *wh*-expression as in (4)*a* and (5)*a*. However, when a *wh*-expression is scrambled and placed before an intervener, the intervention effect is lifted as in (4)*b* and (5)*b*. This type of contrast is naturally accounted for when one assumes the economy principle, because the scramblings make the *wh*-expressions closer to C.

Nevertheless, Tomioka (2007) claims that the intervention effect is a pragmatic phenomenon, and presents several reasons. Two of them are introduced here. One reason is that grammatical judgment on the intervention effect is not always clear-cut among speakers. The other reason is that the intervention effect is lifted in embedded context.

To answer Tomioka’s questions syntactically, Morita (2013a) argues that

there are two types of *wh*-questions: one derived via movement and the other via unselective-binding (see also S. Watanabe (1995) and Bruening and Tran (2006) for two types of *wh*-questions). *Wh*-questions derived through unselective-binding show no intervention effect because there is no Agree there, whereas ones derived through movement exhibit the intervention effect. Accordingly, the reason why grammatical judgment of the intervention effect is shaky among native speakers is because one cannot decide which type of *wh*-questions to derive without contextual information. The reason why the intervention effect is lifted in embedded context will be discussed in section 3.

Following Dayal (2002), Morita (2013a) presents one way to discern movement from unselective binding *wh*-questions in Japanese: only the former generates multiple-pair answers in the case of multiple-*wh* questions of *which NP*. Before examining this claim, let us consider the following dialogue:

- (6) Q: Mary-ga docchi-no gakusei-ni sono hon-o
 -Nom which-Gen student-Dat that book-Acc
 read Q
 yondeageta no?

‘To which student of the two did Mary read that book?’

A₁: Mary-ga John-ni sono hon-o yondeagemasita.

‘Mary read that book to John.’ (single-pair)

A₂:*Mary-ga John-ni, sosite Taro-ni sono hon-o yondeagemasita.

‘Mary gave that book to John and to Taro.’ (multiple-pair)

The *wh*-expression, *docchi* ‘which of the two,’ presupposes only one answer as in A₁, and cannot be answered as in A₂. However, where there is more than one *docchi* NP, multiple-pair answers are possible as follows:

- (7) Q: Mary-ga docchi-no gakusei-ni docchi-no hon-o
 -Nom which-Gen student-Dat which-Gen book-Acc
 yondeageta no?
 read Q

‘To which student of the two did Mary read which book of the two?’

A: Mary-ga John-ni kochira-no hon-o, sosite Taroo-ni achira-no hon-o yondeagemasita.

‘Mary gave this book to John, and that book to Taro.’

More significantly, if an intervener precedes one (or both) of the *wh*-expressions, multiple-pair answers become unavailable as in (8):

- (8) Q: ^(??) Daremo-ga [docchi]-no gakusei-ni [docchi]-no hon-o
 everyone which-Gen student-Dat which-Gen book-Acc
 yondeageta no?
 read Q

‘To which student of the two did everyone read which book of the two?’

A: #* John-ni kochira-no hon-o, sosite Taroo-ni achira-no hon-o yondeagemasita.

‘(Everyone) read this book to John, and read that book to Taro.’

According to Dayal (2002), unavailability of multiple-pair answers indicates that movement of *wh*-expressions to C is blocked. If she is correct, the fact that (8) does not permit multiple-pair answers shows that it has to resort to unselective binding of the *wh*-expressions by C due to the intervener. As mentioned before, judgment of (8) is unstable among speakers because one cannot be sure whether s/he can analyze it as a movement or unselective-binding *wh*-question. Speakers will judge (8) grammatical if they manage to analyze it as an unselective binding. More importantly, they all agree that no multiple answer is available as in *A* of (8). The next section will show that the availability of multiple answers plays an important role in the case of long-distance *wh*-questions.

3 Data

This section will show why the intervention effect in embedded context is unobserved in Sinhalese and Japanese although *wh*-expressions are raised across interveners. To explain this phenomenon, I will claim that intermediate successive cyclic movement of *wh*-expressions can be initiated by *EF* (in Japanese) or other Agreeing features than [WH] (in Sinhalese).

3.1 Lifting of the intervention effect in embedded context

As mentioned above, Tomioka (2007) claims that the intervention effect is lifted in long-distance *wh*-questions in Japanese as follows:

- (9) Mary-wa [_{CP2} {dareka/daremo} -ga nani-o katta to]
 -Top someone/everyone-Nom what-Acc bought that
 itta no? (cf. (4)a)
 said Q

‘What did Mary say [_{CP} that {someone/everyone} bought]?’

Sinhalese exhibits the same result as in (10):

- (10) Ranjit [_{CP2} {kaurude/kaurut} mokakdə gatta kiyəla] kiwi-e?
 Ranjit someone/everyone what bought that said-Q
 (cf. (4)a)

‘What did Ranjit say [_{CP} that {someone/everyone} bought]?’

Before considering why there is no intervention effect observed above, it is necessary to find out which kind of *wh*-questions is employed above. Examine the following example, which is from Morita (2013a: 74):

- (11) Q: Ken-wa [_{CP2} daremo-ga docchi-no gakusei-ni
 -Top everyone-Nom which-Gen student-Dat
docchi-no hon-o yondeageta to] omotteiru no?
 which-Gen book-Acc read C think Q
 ‘To which student does Ken think that everyone read which
 book?’

- A: Ken-wa [_{CP2} daremo-ga John-ni kochira-no hon-o, sosite
 -Top everyone-Nom -to this-Gen book-Acc that
 Taroo-ni achira-no hon-o yondeageta to] omotteimasu.
 -to that-Gen book-Acc read C think
 ‘Ken thinks that everyone read this book to John, and that book to
 Taro.’

As (11) indicates, a multiple-pair answer is possible, so we can safely assume that *wh*-movement has taken place in (11).³ More specifically, the two *wh*-expressions crossed the intervener, *daremo-ga*, without triggering the intervention effect. In other words, according to (3), features other than [WH] are involved to launch successive-cyclic movement of *wh*-expressions

in both languages.

Next we need to answer why successive-cyclic movement of *wh*-expressions is not subject to the intervention effect. There are two possible explanations. One is that successive-cyclic movement is initiated by an *EF* feature, which does not require Agree. The other is that Agree causes successive-cyclic movement, but intermediate C has some uninterpretable feature other than [*uWH*]. Next it will be shown that both possibilities are employed in natural languages.

3.2 Long-distance questions of ‘why’

To find the answer to the question above, let us examine one interesting difference between Sinhalese and Japanese *wh*-questions as follows:

- (12) ?*Ranjit [_{CP2} Chitra mokədə aawa kiyəla] kiwi-e? (Sinhalese)
 Ranjit Chitra why came C said-Q
 ‘Why did Ranjit say [that Chitra came *t*]?’

(Kishimoto (2005: 43), adapted)

- (13) Mary-wa [_{CP2} Ken-ga naze kita to] itta no? (Japanese)
 -Top -Nom why came that said Q
 ‘Why did Mary say [that Ken came *t*]?’

As (12) shows, long-distance interpretation of ‘why’ is disallowed in Sinhalese, whereas it is possible in Japanese as in (13). However, as exhibited in (9) and (10), other types of *wh*-expressions allow long-distance movement in both languages. The difference between the two languages suggests that successive-cyclic movement of *wh*-expressions in Japanese is insensitive to syntactic categories; thus, an *EF* feature is employed because it does not care about the distinction between *naze* ‘why’ and other types of *wh*-expressions. In contrast, the same movement is sensitive to syntactic categories in Sinhalese, so it is natural to consider that Agree between intermediate C and a *wh*-expression is involved because Agree is feature-specific and different lexical items may have different features. In other words, (10) is accounted for if there is a feature which *wh*-expressions except *mokədə* ‘why’ carry, and this feature launches successive-cyclic movement of *wh*-expressions in Sinhalese. The next section discusses what feature induces Agree in

As (16)*b* shows, long-distance scrambling of non-*wh*-expressions is prohibited when a *wh*-expression is also going through successive-cyclic movement in Sinhalese. In contrast, Japanese has no such restriction as in (17). The Sinhalese data indicates that scrambling of non-*wh*-expressions and successive-cyclic movement of *wh*-expressions are in competition in Sinhalese. In other words, the same feature causes the two types of movement in Sinhalese, which I argue is [Focus].

Note that *wh*-movement to the final target and scrambling are not exclusive to each other as in (18):

(18) Ranjit-tə oyaa [_{CP} Chitra *t_i* monəwadə dunn-e kiyəla] dannəwa.
(Sinhalese)

Ranjit-Dat you Chitra what gave-Q that know
‘To Ranjit_{*t_i*}, you know what Chitra gave *t_i*.’

In (18), the *wh*-expression is covertly raised to the embedded CP, spec while the PP, *Ranjit-tə* ‘to Ranjit’, goes through long-distance scrambling. The grammaticality suggests that there is no competition between long-distance scrambling and *wh*-movement to the target C. Thus, features which cause scrambling and *wh*-movement to the target C are different in Sinhalese, whereas ones which cause scrambling and *wh*-movement to intermediate C are of the same feature, which is [Focus]. According to (1), [*uWH*] in C causes movement of *wh*-expressions, so if scrambling is launched by [*uFocus*] in C, (18) is naturally accounted for: no violation of the minimality principle is observed because embedded C has different features, i.e. [*uFocus*] and [*uWH*], to trigger scrambling and *wh*-movement respectively.

4.2 Long-distance scrambling of *why* and other types of *wh*-expressions

As for long-distance scrambling of *wh*-expressions, both Sinhalese and Japanese exhibit the same phenomena. First, long-distance scrambling of *wh*-expressions except ‘why’ is available as in (19):

(19) a. monəwadə_{*i*} Ranjit [_{CP2} oyaa gatta *t_i* kiyəla] dann-e?
(Sinhalese)

what Ranjit you bought that know-Q
‘What did Ranjit know that you bought?’

- b. nani-o_i Mary-wa [_{CP2} Ken-ga *t_i* katta to] shuchoositeiru
 what-Acc -Top -Nom bought that claim
 no? (Japanese)
 Q
 ‘What does Mary claim that Ken bought *t*?’

However, both languages disallow long-distance scrambling of ‘why’ as in (20):

- (20) a. *mokədə_i Ranjit [_{CP2} Chitra *t_i* aawa kiyəla] dann-e? (Sinhalese)
 why Ranjit Chitra came that know-Q
 ‘Why did Ranjit know [that Chitra came *t*]?’
 b. *naze_i Mary-wa [_{CP2} Ken-ga *t_i* kita to] shuchoositeiru no?
 why -Top -Nom came that claim Q
 ‘Why does Mary claim [that Ken came *t*]?’

The contrast between (19) and (20) along with (14) and (15) suggests that the same mechanism, i.e. Agree of [Focus], is employed to induce long-distance scrambling in both Sinhalese and Japanese. Moreover, the inability of scrambling ‘why’ in both languages indicates that ‘why’ cannot possess [Focus].

This claim, if correct, naturally explains the two differences between Sinhalese and Japanese *wh*-questions: (i) no matrix scope for ‘why’ in embedded clauses in Sinhalese, and (ii) the long-distance scrambling and *wh*-movement cannot be applied over the same embedded clause in Sinhalese. As mentioned above, scrambling and successive-cyclic movement of *wh*-expressions are caused by [Focus] in Sinhalese. Accordingly, long-distance *wh*-movement of ‘why’ is disallowed in Sinhalese; hence, ‘why’ never takes matrix scope when embedded as in (12). Moreover, as (16)*b* exhibits, scrambling of a non-*wh*-expression and successive-cyclic movement of a *wh*-expression cannot be administered across the same embedded clause because they are caused by the same feature, [*u*Focus]. In contrast, Japanese employs [EF], so long-distance *wh*-question of ‘why’ is possible in Japanese as in (13), and no competition between long-distance scrambling and *wh*-movement to intermediate C arises in Japanese as in (17)*b*.

5 Evidence for focus in Sinhalese *wh*-questions

According to the previous section, Sinhalese *wh*-questions employ [Focus] to induce successive-cyclic movement, whereas Japanese *wh*-questions introduce [EF]. This fact about Sinhalese implies that its *wh*-expressions are inherently focused.⁴ This section will provide a few pieces of evidence for this claim.

5.1 Interpretation

The first piece of evidence is found in the interpretation of a *wh*-question. Consider the following *wh*-question, which is from Sumangala (1992: 212):

- (21) *oyaa mokakdə dəkk-e* (Sinhalese)
 you what saw-E
 ‘What did you see?’
 ‘What is it that you saw?’

As Sumangala (1992) explains, Sinhalese *wh*-questions tend to have cleft-like interpretations as in (21). In contrast, overt movement of a *wh*-expression is additionally necessary to have the same interpretation in Japanese as follows:

- (22) [_{CP} *anata-ga t_i mita no*]-wa *nan_i desu ka?* (Japanese)
 you-Nom saw C-Top what is Q
 ‘What is it that you saw?’

These facts show that *wh*-questions in Sinhalese and Japanese are different and the former is easily focused.

5.2 Focus construction

The next piece of evidence is seen in focus constructions. Consider (23), which is from Kishimoto (2005:11):

- (23) *Chitra ee potə tamay kieuw-e*
 Chitra that book FOC read-E
 ‘It was that book that Chitra read.’

As (23) exhibits, the verb-final particle, *e*, is used and is the same particle as the one used for *wh*-questions in Sinhalese, which supports that strong connection between *wh*-questions and focus constructions in Sinhalese. In

contrast, the same focus construction and the *wh*-construction in Japanese do not have an identical structure as follows:

- (24) a. [_{CP} Mary-ga *t_i* yonda no]-wa ano hon_i desu. (Japanese)
 -Nom read Q-Top that book is
 ‘It is that book that Mary read.’
 b. Mary-ga nani-o yonda no?
 -Nom what-Acc read Q
 ‘What did Mary read?’

5.3 Answers to *how many NP* questions

Finally, let us compare *how many NP* questions in the two languages as follows:

- (25) Q: kiidenekdə potə kieuw-e? (Sinhalese)
 how.many book read-Q
 ‘How many people are there who read the book?’
 A: #kauruwat kieuwe næə
 anyone read not
 ‘No one read it. Kishimoto (2005: 9), slightly adapted’
 (26) Q: nannin -ga sono hon-o yonda no? (Japanese)
 how.many.people-Nom that book-Acc read Q
 ‘How many people read the book?’
 A: daremo sore-o yomanakatta yo.
 anyone that-Acc read.not
 ‘No one read it.’

A difference between the two languages in the case of *how many NP* questions arises in their answers. As the Sinhalese example, (25), indicates, the existence of the answer is strongly presupposed, so one cannot answer ‘no one read it’. However, Japanese does not have such a restriction as in (26). This contrast follows if Sinhalese *wh*-questions are normally focused, so that cleft-like interpretations are added. Thus, (25) asks how many people there are who read the book, where the embedded clause, i.e. ‘someone read the book’, is presupposed. This is why the existence of an answer is presupposed in Sinhalese.

To summarize, on the basis of three pieces of evidence, it is reasonable to consider that Sinhalese *wh*-expressions are focused, due to which the differences between Sinhalese and Japanese *wh*-questions arise as discussed in section 4.⁵

6 Conclusion

To conclude, this paper has indicated that natural languages allow intermediate stages of successive-cyclic movement with at least two methods: [*EF*] and Agree. More specifically, Sinhalese employs Agree of [*Focus*] to trigger successive-cyclic covert movement of *wh*-movement and scrambling. Since ‘why’ cannot be scrambled, and hence, cannot possess [*Focus*] in Sinhalese (or Japanese), long-distance question of ‘why’ is forbidden in Sinhalese. Due to the same feature for two different operations, ungrammaticality might follow in Sinhalese when long-distance scrambling of non-*wh* expressions and long-distance covert *wh*-movement arise across the same clause. In contrast, Japanese makes use of [*EF*] to trigger successive-cyclic covert movement of *wh*-expressions and [*Focus*] to cause successive-cyclic movement of scrambling. Thus, long-distance questions of ‘why’ are possible in Japanese.

A remaining question is what distinguishes overt from covert movement. According to the findings in this paper, successive-cyclic movement of scrambling and *wh*-movement are caused by the same feature, [*Focus*], in Sinhalese. However, the former is overt movement whereas the latter is covert. Accordingly, the present paper supports that the distinction between overt and covert movement is attributed not to a probe but to a goal as Groat and O’Neil (1996) argue. Actually, the present paper can present a more specific claim: phonological features can be tied with a specific feature, which may result in overt movement. For example, in the case of Sinhalese and Japanese scrambling, a phonological feature of a scrambled phrase, [*P*], is required to be bundled with [*Focus*], which causes overt movement. In contrast, in the case of *wh*-questions in Japanese, a phonological feature is not tied with [*WH*], so covert movement follows. Therefore, the two schematic

patterns can be represented in the following way:

(27) Long-distance *wh*-questions in Japanese (covert movement):

$$\begin{array}{ccccccc} [\text{CP}_1 & \text{C}_1 & \dots & [\text{CP}_2 & \text{C}_2 & \dots & \textit{wh} &]] \\ & [u\text{WH}] & & & [\text{EF}] & & & [\text{WH}, \text{P}] \end{array}$$

(28) Long-distance scrambling in Sinhalese and Japanese (overt movement):

$$\begin{array}{ccccccc} [\text{CP}_1 & \text{C}_1 & \dots & [\text{CP}_2 & \text{C}_2 & \dots & \text{XP} &]] \\ & [u\text{Focus}] & & & [u\text{Focus}] & & & [\text{Focus}+\text{P}] \end{array}$$

(27) describes long-distance *wh*-questions in Japanese, but phonological features, [P], are separate from other syntactic features, so covert movement subsequently happens. In contrast, (28) represents long-distance scrambling in the two languages. Both the final and intermediate C have [uFocus] and trigger phrasal movement of a scrambled phrase (XP), which will be overt because [Focus] is inseparable from [P] there.

Finally, as for long distance *wh*-questions in Sinhalese, I claim the following schematic representation:

(29) Long-distance *wh*-questions in Sinhalese (covert movement):

$$\begin{array}{ccccccc} [\text{CP}_1 & \text{C}_1 & \dots & [\text{CP}_2 & \text{C}_2 & \dots & \textit{wh} &]] \\ & [u\text{WH}, u\text{Focus}] & & & [u\text{Focus}] & & & [\text{WH}, \text{P}] \end{array}$$

On the basis of the arguments in section 5, *wh*-expressions are focused in Sinhalese. Suppose [WH] in Sinhalese is inherently focused. Then it is plausible to consider that [WH] can check both [uWH] and [uFocus] in C in Sinhalese. Moreover, [P] is not bundled with [WH]; hence, movement of a *wh*-expression in (29) is covert.

Notes

* This paper is a modified and extended version of a presentation (Morita (2013c)) I made at 146th *Nihon Gengo Gakkai (The Linguistic Society of Japan)* held at Ibaraki University on 15th and 16th of June in 2013. I would like to thank the audience for suggestions and comments. I am also thankful to Tilak and Punya Senanayake for judgment of Sinhalese examples. This study has been supported in part by a Grant-in-Aid for Young Scientists (B) from Japan Society for the Promotion of Science (#24720181).

1 See Morita (2013b) for common features of *wh*-questions in Sinhalese and

Japanese.

- 2 Actually, Chomsky (2007) assumes that every A' movement is achieved by *EF*; thus, no Agree is involved in A' movement. However, as will be shown, the intervention effect in Japanese and Sinhalese strongly indicates that movement to the final target requires Agree.
- 3 According to Sumangala (1992: 237–), Sinhalese multiple-*wh* questions generally do not generate multiple-pair readings, so corresponding Sinhalese data cannot be presented here.
- 4 Here focus is information focus, not contrastive-focus. See Kiss (1998) for the difference of the two types of focus.
- 5 A question remains whether Sinhalese *wh*-questions always carry information focus, i.e. cleft-like interpretations. If so, then it is necessary to explain why non-cleft-like interpretations are sometimes allowed as in (21). It is possible that Sinhalese also has two types of *wh*-questions like Japanese as discussed in section 2: one derived via *wh*-movement and the other via unselective binding by C. More specifically, *wh*-questions derived by *wh*-movement always contain information focus, whereas ones by unselective binding do not carry information focus. There is one piece of evidence for the claim. According to Morita (2013d), a *wh*-question derived via unselective binding by C can escape the *wh*-island effect in Japanese as follows:

(i) Ken-wa [_{CP} Mary-ga nani-o katta ka] sitteimasu ka?
 -Top -Nom what-Acc bought Q know Q

‘Does Ken know what Mary even bought?’ or
 *~? ‘What does Ken know whether Mary bought?’

(ii) Ken-wa [_{CP} Mary-ga nani-sae-o katta ka] sitteimasu ka?
 -Top -Nom what-even-Acc bought Q know Q

‘Does Ken know what Mary even bought?’ or
 ‘What does Ken know whether Mary bought?’

It is not clear whether (i) is derived through *wh*-movement or unselective binding, in which case the interpretation of Yes/No question is possible for every speaker of Japanese. However, the judgment of the interpretation of matrix WH question is not clear for speakers, which Morita (2013d) attributes to the availability of two types of *wh*-questions. In contrast, questions derived via unselective binding are induced when contrastive-focus particles such as *sae* c-command *wh*-expressions as in (ii). In this case, the *wh*-expression can easily take the matrix scope ignoring the *wh*-island effect in comparison to (i).

The same observation can be made in Sinhalese. Consider the following example, which is from Sumangala (1992: 239, adapted):

- (iii) Amma [_{CP} Siri mokakdə keruv-e kiyəla] kalpənaa.keruv-e.
mother Siri what did-E that thought-e
'Did Mother wonder what Siri did?' or
'What did Mother wonder whether Siri di?'

If the *wh*-expression, *mokakdə*, is raised covertly to the embedded CP, spec, then it should not be able to move on to the matrix CP, spec, which indicates that the matrix interpretation of the *wh*-expression should be unavailable in (iii). However, if Sinhalese allows *wh*-questions via unselective binding as in Japanese, the matrix interpretation should also be possible, and is indeed possible. Accordingly, Sinhalese also has two types of *wh*-questions, and this is the reason why there are non-focused *wh*-questions in Sinhalese as in (21).

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2 種類の連続的循環移動： シンハラ語および日本語WH疑問文より

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シンハラ語と日本語のWH疑問文については、共通する点も多いが、いくつか異なる点も観察される。そのひとつに、日本語の「なぜ」は埋め込み節に使われても、「健はメリーがなぜ会社をやめたと思っているの?」のように、直接疑問文で尋ねることができる。しかし、シンハラ語では、それに相当する疑問文を作ることができない。すなわち、*mokada*は連続的循環移動を起こすことができない。もうひとつの違いは、埋め込み節にかき混ぜ移動と連続的循環移動は日本語では共起できるのに、シンハラ語ではそれは許されない。これらの違いを突き詰めていくと、実は、疑問詞の連続的循環移動を引き起こす、C内の素性がシンハラ語と日本語で、異なったものを利用していることがわかる。言い換えると、日本語では[EF]と呼ばれる素性で疑問詞の連続的循環移動を引き起こしているのに対し、シンハラ語では、かき混ぜ移動も起こす、[Focus]を用いていることがわかる。このことは、連続的循環移動を示す自然言語内でも、その原因となる素性は一様でないことを示唆する。