

The Interpretation of Multiple *Wh*-Questions in Japanese*

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The discussion to be developed here is based on the following two observations which have not been noticed in previous studies: (i) *wh*-phrases in Japanese undergo optional syntactic movement, and (ii) the landing site for moved *wh*-phrases is responsible for a 'D-linked' interpretation. I consider how this is the case, and claim that the position for D-linking is a syntactic position. I also point out that the same phenomena are observed in many other languages, which suggests that the syntactic position for D-linking is part of the universal grammar.

1. Multiple *Wh*-Questions and Their Possible Interpretations

It is well-known that in Japanese, *wh*-phrases do not undergo syntactic movement but remain in situ. Or, they can reside in some moved position. Observe the following examples:

(1) a. John-wa *nani-o* katta no?

John-top what-acc bought Q

'What did John buy?'

b. *Nani-o*₁ John -wa *t*₁ katta no?

what-acc₁ John-top *t*₁ bought Q

(1a) and (1b) have virtually the same meaning. Hence the optional movement in (1b) is regarded as a case of 'scrambling', which is a semantically-vacuous operation outside syntax.

Then let us turn to multiple *wh*-questions involving two *wh*-phrases. In those sentences, optional movement of *wh*-phrases obviously affects the interpretational possibility of the sentences. I take up (2a-c) for instance:

(2) a. [_{VP} Matigatte *dare-ga nani-o* katta] no?

[mistakenly who-nom what-acc bought] Q

‘Who bought what by mistake?’

b. *Dare-ga*₁ [_{VP} *matigatte t₁ nani-o katta*] no?

who-nom₁ [mistakenly *t₁ what -acc bought*] Q

c. *Dare-ga*₁ *nani-o*₂ [_{VP} *matigatte t₁ t₂ katta*] no?

who-nom₁ what -acc₂ [mistakenly *t₁ t₂ bought*] Q

Following the VP-Internal Subject Hypothesis, both of the subject and the object are generated within VP. Assuming that a subject need not undergo subject movement in Japanese, it can remain within VP. In (2a), the subject *dare-ga* ‘who-nom’ remains within VP since the preceding VP-adverb *matigatte* ‘mistakenly’ edges the VP boundary. In (2b), the subject *dare-ga* has moved out of VP, either by subject movement or by scrambling. In (2c), both of the two *wh*-phrases have moved out of VP.

It should be noted here that multiple *wh*-questions potentially have two readings, a single-pair (SP) reading and a pair-list (PL) reading.¹ The former is obtained when the speaker knows that there is at least one particular person and one particular item he bought, but does not know who he is and what it is. The latter is obtained when the speaker knows that there are several buyers and purchases, but does not know the ‘buyer-purchase’ connection. Therefore, if each of (2a-c) has an SP reading, it will be answered by (3), and if it has a PL reading, it will be answered by (4):

(3) An SP answer: *John-ga ringo-o (matigatte) katta.*

John-nom apple-acc (mistakenly) bought

‘John bought an apple (by mistake).’

(4) A PL answer: *John-ga ringo-o, Mary-ga mikan-o (matigatte) katta.*

John-nom apple-acc Mary-nom orange-o (mistakenly) bought

‘John bought an apple, and Mary an orange (by mistake).’

Although a multiple *wh*-question may have the two possible readings, the possibility is actually limited by the surface position of *wh*-phrases. Consider (2a-c) again. The SP answer (3) is a natural answer to any of the questions (2a-c). However, the PL answer (4) is natural only for the question (2c), where both of the two *wh*-phrases have moved out of VP:

on the other hand, it would sound odd if (2a) or (2b) were answered by the PL answer (4). To generalize the point, the following limitation is assigned to the interpretation of multiple *wh*-questions:

(5) a. An SP reading is always available.

b. A PL reading is available only when both *wh*-phrases have moved out of VP.

(5b) entails that movement of *wh*-phrases out of VP in (2c) can have an effect on semantic interpretation. That is, *wh*-movement observed in (2c) is not scrambling that is semantically-vacuous. Rather, it is syntactic movement to yield a PL interpretation.

2. The Position for 'D-Linking': SPEC-Pr (esupposition)

In the previous section, I have shown that *wh*-phrases in Japanese undergo syntactic movement out of VP when the question has a PL reading. Let us then consider where their landing site is, and how the movement is motivated.

2.1 Focus Movement in Japanese

In Japanese, there is another type of element which undergoes the same kind of movement out of VP. It is a contrastive focus phrase marked by particle *-wa*. Observe the following example:

(6) a. John-wa *ringo-wa* katta.

John-top apple-foc bought

'John bought AN APPLE.'

b. Cf. John-wa *ringo-o* katta.

John-top ringo-acc bought

'John bought an apple.'

In (6a), there are two elements marked with particle *-wa*. For some unclear reasons, a contrastive focus interpretation is assigned to the second element in the sequence, while a topic interpretation is assigned to the first.^{2,3} Consequently, the object *ringo-wa* is interpreted as a contrastive focus. 'Contrastive' means that a picked element stands out as

one and only one member with which the relevant statement holds true. Specifically, the speaker of (6a) states that John bought an apple, and at the same time implies that John did not buy anything else he should/could have bought. This kind of contrastive nuance is absent in (6b) where there is no focused element. John might have bought something else.

Miyagawa (1997) and Yanagida (1996) observe that contrastive foci must move out of VP. Consider (7) for illustration:

(7) a. ?? John-wa [_{VP} isoide *hon-wa* katta].

John-top [quickly book-foc bought]

'John quickly bought A BOOK.'

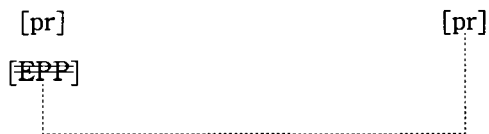
b. John-wa *hon-wa*₁ [_{VP} isoide *t*₁ katta].

John-top book-foc₁ [quickly *t*₁ katta] (adapted from Miyagawa (1997: 10))

The manner adverb *isoide* 'quickly' edges the VP boundary. Hence in (7a), the focus phrase *hon-wa* 'book-foc' following the adverb should remain in VP. On the other hand, in (7b), the focus has scrambled out of VP since it precedes the adverb. The contrast in grammaticality between (7a) and (7b) is then attributed to the position of the focus: a focus must be outside VP.

Let us now consider the following question: Why should a focus move out of VP? Miyagawa and Yanagida assume that there is a position for a focus interpretation outside VP, and that contrastive foci must move to the position overtly. I follow their assumption and provide the following phrase structure for a Japanese focus construction:

(8) [_{CP} [_{TP} (Subject) [_{PrP} FOCUS [_{v*P} Subject [_{VP} Object V] v*] Pr] T] C]



I suggest a new functional category Pr (esupposition) between v*P and TP. The projection of Pr is responsible for the interpretation of a contrastive focus. Specifically, Pr bears a feature [pr] and seeks its goal(s) with the same feature. Since a contrastive focus bears the feature, Pr and the focus enter into an agreement relation, deleting the uninterpretable features. Assuming that a contrastive focus obligatorily bears an EPP-feature, it must

undergo overt movement to SPEC-Pr to have its EPP-feature deleted. The reason why an EPP-feature should reside on the goal, not on the probe, is to distinguish between obligatory focus movement and optional *wh*-movement to SPEC-Pr: focus movement is motivated by an obligatory EPP-feature on the focus, and optional *wh*-movement is motivated by an optional EPP-feature on the *wh*-phrase. I discuss this issue in the next section. See Bošković (1998) whose analysis is based on the assumption similar to mine: a strong feature can reside on the goal.

2.2 SPEC-Pr as a D-linking Position

The above discussion has revealed that there are two types of elements in Japanese that undergo movement out of VP. One is a *wh*-phrase that contributes to a PL reading, and the other is a *wa*-marked focus that contributes to a contrastive meaning. The two movements might be of quite distinct types. However, there is a reason to consider them as a unique kind of movement. I point out the reason and consider how the two movements are derived.

The reason to pursue a unique account is that there is one property that is shared by a PL reading and a contrastive reading: both readings require a presupposed set in the context/discourse. When the multiple *wh*-question (9a) below takes a PL reading, the sets of possible buyers and possible purchases are presupposed, and the questioner requires the answerer to show the connection between members of the sets, which is shown schematically in (9b):

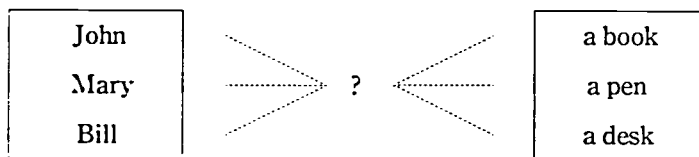
(9) a. *Dare-ga nani-o (matigatte) katta no?*

who-nom what-acc (mistakenly) bought Q

‘Who bought what (by mistake)?’

b. Presupposed Set (I): possible buyers

Presupposed Set (II): possible purchases



In (10a) below, on the other hand, when the *wa*-marked element *ringo-wa* is interpreted as a focus, the focused element is contrasted with the other possible purchases in the presupposed set, as shown in (10b):

(10) a. John-wa *ringo-wa* katta.

John-top apple-foc bought

‘John bought AN APPLE.’

b. Presupposed Set: possible purchases

an apple>	$\lambda x[\text{John.bought.x'}](\text{an.apple}) = \text{T}$
an orange>	$\lambda x[\text{John.bought.x'}](\text{an.orange}) = \text{F}$
a peach>	$\lambda x[\text{John.bought.x'}](\text{a-peach}) = \text{F}$

To recapitulate, these readings are obtained by relating the focus/*wh*-phrase with the contextually-presupposed set. In other words, both readings require some kind of D (iscourse)-linking. Taking this property into account, I propose the following condition for Japanese:

(11) Elements that require a D-linked interpretation must move to SPEC-Pr.

Condition (11) can be paraphrased as a mapping instruction: elements occupying SPEC-Pr at an LF representation are mapped to a D-linking section in the C-I processing.

Therefore, if an element requires D-linking, it must move to SPEC-Pr for the interpretation. Since there is no covert movement any longer in the minimalist framework of Chomsky (1998, 1999), movement should be induced overtly by an EPP-feature. It should be noted that I have assumed in (8) that an EPP-feature resides on a goal, not on a probe. Given this assumption, we can account for why contrastive foci undergo obligatory movement and why *wh*-phrases undergo optional movement.

Let us consider contrastive foci first. As (10b) shows, the proposition to be contrasted is an open sentence, with a variable in the focused position. Hence a focus element serves both as an exclusive entity and as a variable to be contrasted with other entities. As a variable, the focus bears a pr(esupposition)-feature when it is introduced into the syntactic derivation. The focus is also assigned an EPP-feature, since its contrastive reading necessarily requires movement for D-linking. Therefore, a structure like (12) is constructed at some stage of the derivation of (10a):

- (12) [_{PrP} [_{v*P} John -wa [_{VP} *ringo-wa* katta] v*] Pr]
 [pr] [pr]
 [EPP]

With the identity of pr-features, Pr and *ringo-wa* ‘apple-foc’ enter into an agreement relation, followed by movement of the goal to SPEC-Pr to have the EPP-feature on the goal deleted. Therefore, the focus obligatorily moves out of VP and occupies SPEC-Pr. When the derivation reaches an LF representation, since the focus occupies SPEC-Pr, it is mapped to a D-linked interpretation, hence yielding a contrastive reading. This accounts for the obligatoriness of focus movement observed in (7). The obligatory assignment of an EPP-feature to a focus enables a focus to move to SPEC-Pr, in order to achieve a contrastive reading.

Then let us turn to the derivation of a multiple *wh*-question with a PL reading. Since a *wh*-phrase is by itself a variable, it bears [pr] as an inherent feature. When a *wh*-phrase is introduced into a syntactic derivation, an EPP-feature is optionally assigned to it. Suppose that an EPP-feature has been assigned to both *wh*-phrases in (9a), and the derivation has arrived at the following stage:

- (13) [_{PrP} [_{v*P} (matigatte) *dare-ga* [_{VP} *nani-o* katta] v*] Pr]
 [pr] [pr] [pr]
 [EPP] [EPP]

Pr agrees both with *dare-ga* ‘who-nom’ and *nani-o* ‘what-acc’.⁴ The agreements are followed by movement of the *wh*-phrases, since both of them bear EPP-features. The resultant structure will hence be (14) below:

- (14) [_{PrP} *dare-ga nani-o* [_{v*P} (matigatte) *t* [_{VP} *t* katta] v*] Pr]

When the derivation proceeds to an LF representation, the two *wh*-phrases in SPEC-Pr are mapped to a D-linked reading, yielding a PL reading. Therefore, when a multiple *wh*-question has a PL reading, each *wh*-phrase with an EPP-feature moves to SPEC-Pr.

It should be noted that unlike a contrastive focus, a *wh*-phrase does not necessarily

have a D-linked reading. It can be questioned when the context provides no presupposed information. Accordingly, the assignment of an EPP-feature to a *wh*-phrase to trigger D-linking movement is optional. If the two *wh*-phrases are not assigned EPP-features, they remain in situ as in (15a), whereas if *dare-ga* is assigned an EPP-feature, it moves to SPEC-Pr, as in (15b):

(15) a. [PrP [v*P (matigatte) *dare-ga* [vP *nani-o* katta] v*] Pr] (cf. (2a))

[pr] [pr] [pr]

b. [PrP *dare-ga* [v*P (matigatte) *t* [vP *nani-o* katta] v*] Pr] (cf. (2b))

[pr] [pr] [pr]

~~[EPP]~~

Neither derivation leads to an LF representation that yields a PL reading. In (15a), since neither *wh*-phrase occupies SPEC-Pr, there is no mapping to a D-linking interpretation. In (15b), the moved *wh*-phrase *dare-ga* ‘who-nom’ occupies SPEC-Pr and hence is mapped to a D-linking interpretation. However, this kind of mapping does not yield a PL interpretation, since it is achieved through the interaction between the *two* presupposed sets, as shown in (9b). Accordingly, both derivations (15a) and (15b) yield only a default SP reading. Therefore, a PL reading is not possible when none or only one of the two *wh*-phrases moves to SPEC-Pr: a PL reading is possible only when both *wh*-phrases are moved to SPEC-Pr and mapped to a D-linking interpretation. Generalization (5) obtains in this way.

3. The Substantiality of Pr-Projection: Crosslinguistic Evidence

In the previous section I have argued that Japanese phrase structure contains the projection of Pr (esupposition), and the agreement relation with Pr is overtly reflected by movement of the agreed goal to its SPEC, which is mapped to a D-linking interpretation in the C-I processing. The invention of a new functional category Pr is not a theory-internal contrivance. Under the strongest minimalist thesis, the only guarantee that a certain phrase really exists in syntax is that the phrase has an effect on semantic interpretation. For instance, Chomsky (1998) suggests that D should not be associated with bare NP when the NP conveys no information on specificity/definiteness. To put it differently, the existence of semantic effects guarantees that the movement of contrastive foci/*wh*-phrases

should be syntactic.

One might still wonder whether there is such a thing as Pr or syntactic movement for D-linking. It should be noted that D-linking is literally an interaction of a discourse/context, which seems unlikely to be part of syntactic computation, and that there is a language, e.g. English, in which a contrastive focus does not necessarily move to a focus position. Consider the following example:

(16) Mary bought A HAT.

According to Bush and Tevdoradze (2000), the focus in (16) can convey an exclusive reading when it is pronounced with a rising intonation.⁵ A question arises here: if we can account for D-linking in English without assuming Pr or movement to SPEC-Pr, we might have to account for D-linking in Japanese without such assumptions. (See López (2000), who claims that D-linking is a syntactic feature, but the feature can be realized on various functional categories such as C and D.) It would be preferable if such an analysis with minimal assumptions could be available. However, examination of crosslinguistic relevant data shows that many languages obviously have a syntactic position specified for contrastive foci and *wh*-phrases, as in Japanese.

In this section, therefore, I proceed to consider such relevant data and show the universality of the existence of syntax of D-linking. If this line of discussion is on the right track, then the absence of focus movement in English should be explained in some way, e.g. by the absence of an EPP-feature to associate with a focus phrase. Cf. Kobayashi (in prep.) for a suggested analysis.

Crosslinguistically, there are two kinds of focus movement in world's languages. Firstly, there are languages in which focus phrases move to a sentence-initial position. Observe Italian and Serbo-Croatian examples shown in (17a) and (17b), respectively :

(17) a. *Il tuo libro* he letto(, non il suo).

the your book have read (not the his)

'I have read YOUR BOOK(, not his).'

(Rizzi (1995: 5))

b. *Jovana*₁ su itsukli *t*₁.

Jovan are beaten

'JOVAN, they beat.'

(adapted from Bošković (1999: 162))

In the terminology of the present paper, the focus moves to SPEC-Pr to achieve a D-linked reading. Unlike Japanese, these languages dispose the projection of Pr in some upper position in the sentence structure.

Since *wh*-phrases also move to a sentence-initial position in these languages, it is hard to detect whether *wh*-phrases move to SPEC-Pr or to SPEC-C. Rizzi (1995) suggests that *wh*-phrases in Italian moves to the same position as foci, since a *wh*-phrase and a focus cannot cooccur. (The position is identified with 'SPEC-Foc' in Rizzi's terminology, though.) Bošković (1998) also claims that in Serbo-Croatian, a *wh*-phrase moves to a focus position, observing that there is no superiority effect in the language: since focus movement is induced by a strong feature (or an EPP-feature in the present analysis) on the foci/*wh*-phrases, economy consideration is irrelevant in focus movement, which explains the absence of superiority. If their arguments are correct, then, foci and *wh*-phrases undergo the same kind of movement to a focus position, i.e. SPEC-Pr. The phrase structure in these languages will then be demonstrated as (18) below:

- (18) [_{PrP} FOCUS/WH Pr [_{TP} Subject T [_{v*P} *t*_{subj} v* [_{VP} V *t*_{focus}]]]]
 [pr] [pr]
 ~~[EPP]~~

Pr is merged with TP. The pr-feature on Pr seeks and finds its goal, i.e. a focus or a *wh*-phrase. Assuming that both foci and *wh*-phrases obligatorily bear EPP-features in these languages, they undergo the same obligatory movement to SPEC-Pr to delete their EPP-features.

Secondly, there are languages in which foci/*wh*-phrases move to some sentence-internal position specified for focus. Among them are Hungarian, Aghem, Basque (cf. Horvath (1986)), Chadic languages (cf. Tuller (1992)), Korean (cf. Kim (1997)) and possibly Chinese (cf. Tsai (1999)). I take up Hungarian (19a) and Basque (19b) for examples:

- (19) a. Attila a földrengéstől félt.

Attila the earthquake-from feared

'Attila feared THE EARTHQUAKE.' (Horvath (1986: 91))

b. Miren *Jonek* maite du.

Miren-abs Jon-erg loved 3-have-3

'JOHN has loved Mary.' (Uriagereka (1999: 405))

Both in Hungarian and Basque, a contrastive focus must occupy an immediate pre-V position no matter what the focus is, as the italicized foci above show. When a contrastive focus is not in that position, the sentence will be excluded.

In these languages, *wh*-phrases move to the same sentence-internal position. Observe the following Hungarian (20a) and Basque (20b) examples:

(20) a. Nem emlékszem hogy Attila *mennyi pénzt* vett ki
 not remember-1sg. that Attila how much money-acc took-3sg. out
 a pénztárcámból.
 the wallet-1sg.poss-from
 'I don't remember how much money Attila took out of my wallet.' (Horvath (1986: 44))

b. *Zer* bidali dio (Jonek) (Mireni)?
 what-abs sent 3-have-3 (John-erg) (Miren-dat)
 'What have John sent to Miren?' (Uriagereka (1999: 407))

In each example, the *wh*-phrase appears in an immediate pre-V position. If it occupies some other position, the sentence will be excluded.

The present analysis explains this fact in the following way. As in Japanese, the projection of Pr appears within a clause. Pr seeks and finds its goal to agree its pr-feature with. Hence Pr agrees with contrastive foci/*wh*-phrases. Assuming that an EPP-feature is obligatorily assigned to foci/*wh*-phrases, the agreement is followed by obligatory movement to SPEC-Pr.

(21) [_{TP} Subject T [_{PrP} FOCUS/WH Pr [_{v*P} t_{subj} v* [_{VP} V t_{focus}]]]]
 [pr] [pr]
~~[EPP]~~

Accordingly, a contrastive focus and a *wh*-phrase undergo the same kind of sentence-

internal movement to SPEC-Pr.

Interestingly, a multiple *wh*-question is restricted in Hungarian in the same way as its Japanese counterpart. Observe the following Hungarian data:

(22) a. Mari tudta hogy Péter *kinek mit* küldött.

Mary knew that Peter who-dat what-acc sent

Mary knew what Peter had sent to whom.'

(Horvath (1986: 227))

b. *Ki látotta kit?*

who saw whom

'Who saw whom?'

(adapted from Kiss (1998: 263fn))

One *wh*-phrase must undergo 'focus' movement to a pre-V position, and the other one can either move to the same position ((22a)) or remain in situ ((22b)). According to É. Kiss (1998), the presence/absence of 'focus' movement of the second *wh*-phrase changes the interpretational possibility of the multiple *wh*-question. When both of the two *wh*-phrases undergo 'focus' movement, as in (22a), the sentence can have a PL reading. On the other hand, when the second *wh*-phrase remains within VP, as in (22b), the sentence cannot have a PL reading. This is just what we have observed in Japanese: both *wh*-phrases must move out of VP to SPEC-Pr to have a PL, hence D-linked interpretation. Hence the same account can be extended to Hungarian. Since SPEC-Pr is a D-linking position, *wh*-phrases must move there to achieve a PL reading, which is made possible by an optional assignment of EPP to the second *wh*-phrase.

In this way, the present analysis can correctly predict the presence of such languages in which a focus and a *wh*-phrase undergo the same kind of movement, triggered by a shared feature, i.e. [pr], and an EPP-feature associated with it. This fact would be hard to explain without stipulating the projection of Pr. The examination of a wide variety of crosslinguistic data indicates that Pr and its pr-feature is part of UG.

4. Conclusion

The fact that foci and *wh*-phrases behave similarly has been noticed in the previous studies. The fact that a *wh*-phrase moves to a focus position has been attributed to the assumption that it is a focus, or bears a focus-feature. This approach does not account for

why a *wh*-phrase is regarded as a focus, why the ‘focusness’ of the *wh*-phrase should be reflected in syntax, why such ‘focus’ movement is optional for a *wh*-phrase in Japanese, or, more simply, what focus is. These questions do not arise in the present analysis. D-linking is a syntactic property shared by a focus and a *wh*-phrase. A focus moves obligatorily to a D-linking position, i.e. SPEC-Pr, since D-linking is crucial to a focus interpretation. On the other hand, a *wh*-phrase optionally moves to a D-linking position since a *wh*-phrase to be questioned can be a question word without any presupposition. Hence *wh*-phrases move there only when they need a D-linked interpretation such as a PL reading, with an optional assignment of EPP-features to the *wh*-phrases. Crosslinguistic data reveal that the same or very similar phenomena are observed in many other languages, which strongly suggests the existence of Pr as part of UG.

NOTES

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1. Bošković (1998) claims that an SP reading is not available in English multiple *wh*-questions, and attributes this fact to the existence of overt *wh*-movement to SPEC-C. Following him, an SP reading is always possible in Japanese since *wh*-phrases never undergo overt *wh*-movement. If his claim is correct, SP is not a cost-free reading but should be guaranteed in some way by the nonexistence of overt *wh*-movement, which I do not go into here. See Bošković (1998) for a suggested analysis.

2. See Kitagawa (1982) for a suggested analysis of why this is the case.

3. The generalization holds true only for nominal elements. Consider the following examples containing two *wa*-marked elements.

(i) a. John-*wa* kinoo-*wa* kita.

John-top yesterday-foc came

‘John came YESTERDAY (, but not on the other days).’

b. kinoo-*wa* John-*wa* kita.

yesterday-top John-foc came

‘JOHN came yesterday (, but the other persons didn’t).’

(ii) a. John-*wa* isoide-*wa* ko-nakat-ta.

John-top hurriedly-foc come-not-past.

‘John came but NOT IN HURRY.’

b. Isoide-*wa* John-*wa* ko-nakat-ta.

hurriedly-foc John-top come-not-past

‘John came but NOT IN HURRY.’

(Cf. *‘Hurriedly, JOHN didn’t come but the others did.’)

In (i), where the subject *John* and the temporal adverb *kinoo* ‘yesterday’ are marked with-*wa*, the sequentially-second phrase receives a focus interpretation. (It has been pointed out that temporal adverbs behave like nominals.) On the other hand, in (ii), where the subject *John* and the manner adverb *isoide* ‘hurriedly’ are marked with-*wa*, the adverbial phrase always receives a focus interpretation, regardless of the sequential appearance.

Adverbials that describe the manner of action do not usually stand out as a topic, let alone as a contrastive focus. Highlighting is possible only when it is involved in partial negation, as (ii) shows. To put it differently, when an adverbial can get particle-*wa*, it can only be a focus in partial negation. Consequently, it is interpreted as a focus both in (iia) and (iib).

4. Under Chomsky’s (1999) framework, a probe/goal can undergo more than one agreement. When one instance of Agree occurs, the uninterpretational parts of the probe and the goal are deleted, but they still ‘remain until the phase level’ (Chomsky 1999: 9).

5. The ‘exclusiveness’ of the focus is somewhat different from a genuine focus as in the sentence below:

(i) It was *a hat* that Mary bought.

While the focus position in (i) does not allow quantificational expressions like *every* or *no*, the focus position in (16) does. Bush and Tevdoradze (2000) propose that the scope of focus quantification is different between (i) and (16): in the former, only an entity, *a hat*, is focalized, while in the latter, the entire proposition, $p = \text{Mary bought a hat}$, is focalized.

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