

Exclusive focus particles and their syntax & scope-taking in English, Vietnamese, and Korean*

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Park, Myung-Kwan. 2020. Exclusive focus particles and their syntax & scope-taking in English, Vietnamese, and Korean. *Linguistics Research* 37(1), 1-28. This paper concentrates on the syntax and scope-taking of the exclusive focus particles in English, Vietnamese, and Korean. We first note that unlike in English, in Vietnamese the focus particle ‘chi’ cannot occur on VP-internal elements. Building on this dichotomy between the two languages, we develop and endorse a movement analysis of focus particles. Specifically, we argue that Vietnamese ‘chi’ and English ‘only’ at VP-peripheral position are moved overtly from VP-internal position to the Spec of the null Sigma head, thereby serving as a scope marker at its landing site. When at pre-subject position, however, they are not granted a licensing Sigma head in the upper TP domain, thus embracing the in-situ strategy for scope-taking. Meanwhile, unlike its Vietnamese counterpart, English ‘only’ overtly staying in VP-internal position undergoes covert movement to take propositional scope. Now in a parallel fashion to English ‘only’ at VP-internal position, the Korean focus particle ‘-man’ unmarkedly undergoes not overt but covert movement to the Spec of the null Sigma head, which also in turn counts as a scope marker. At the same time, it can markedly take the overt movement strategy, landing at the right periphery of VP. (Dongguk University)

Keywords exclusive focus particle, VP-peripheral, pre-subject, movement, in-situ, scope-taking

1. Introduction

This paper investigates the syntax of the exclusive focus particles in three languages: English, Vietnamese, and Korean. (1) and (2) below exemplify their syntax in the first two languages, particularly their distribution at VP-peripheral position and VP-internal position.

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(1) **English sent(ential) and cons(tituent) ‘only’:**

- a. Nam only likes [NGÂN]_F. Sent(ential) ‘only’
- b. Nam likes only [NGÂN]_F. Cons(tituent) ‘only’

(2) **Vietnamese sent(ential) ‘chỉ’ and cons(tituent) ‘mỗi’:**

- a. Nam chỉ mua [cuốn SÁCH]_F.
Nam ONLY-sent buy CL book
- b. *Nam mua chỉ [cuốn SÁCH]_F.
Nam buy ONLY-sent CL book
- c. Nam mua mỗi [cuốn SÁCH]_F.
Nam buy ONLY-cons CL book
‘Nam bought only the BOOK.’
Intended: ‘Nam didn’t buy anything else.’ (e.g. the magazine)

The most striking contrast between Vietnamese ‘chỉ’ and English ‘only’ is that the former cannot occur at VP-internal position, whereas the latter can.

Zooming in on the above yet unnoticed dichotomy in distribution between Vietnamese ‘chỉ’ and English ‘only’, we investigate their syntax, also including the syntax of the exclusive focus particle ‘-man’ in Korean. We show that the well-known strategies proposed for wh-constructions such as the movement strategy or the in-situ strategy are once again employed to capture the distribution of the focus particles in the three languages to be investigated. In this vein, these two strategies are shown not to be restricted to wh-constructions, but to be pervasive across different constructions than wh-constructions.

The organization of the paper is as follows. The next three sections investigate the distribution and the syntax of the exclusive particles in English, Vietnamese, and Korean. Section 5 wraps up with a summary and conclusion.

2. Focus particle ‘only’ in English and its syntax & scope-taking

It is well known that, as pointed out above, the exclusive focus particle ‘only’ can attach either to the periphery of VP as in (3a) or a VP-internal constituent as in (3b), while they are associated with the same phonologically focus-marked (PFM) element ‘NGÂN’. The former use is termed sentential ‘only’,

and the latter use, constituent ‘only’.^{1, 2}

(3) **English sentential and constituent ‘only’:**

- a. Nam only likes [NGÂN]_F. Sentential ‘only’
- b. Nam likes only [NGÂN]_F. Constituent ‘only’

The following examples show that the focus particles at the periphery of embedded and matrix VP (i.e., sentential ‘only’) serve as a scope marker, while they are associated with the same PFM element. In (4a), sentential ‘only’ takes embedded scope, whereas in (4b), the same element takes matrix scope.

(4) **Sentential focus particles take surface scope:**

(based on Taglicht 1984: 150)

- a. They were advised to only learn [Spanish]_F. advised > only
- b. They were only advised to learn [Spanish]_F. only > advised

Likewise, the focus particle ‘only’ that attaches to a VP-internal constituent (i.e., constituent ‘only’) cannot take in-situ scope because like quantified phrases it needs to take as its scope a proposition-denoting element. It is required to undergo covert quantifier raising (QR). Thus, as noted by Taglicht (1984: 150) and Rochemont (2018: 265), in the following example the focus particle ‘only’ on the embedded PFM element can be ambiguously interpreted, either taking embedded or matrix scope.

(5) **Constituent focus particles can lead to scope ambiguities:**

(Taglicht 1984: 150; Rochemont 2018: 265)

- They were advised to learn only [Spanish]_F.
(advised > only, only > advised)

(5) is construed in two ways. It means either (i) that they were advised that the only language they would learn was Spanish (equivalently to (4a), ‘they

1 The English examples in this section illustrating the distribution of ‘only’ are taken from Erlewine (2017).

2 The two variants in (4a) and (4b) have equivalent truth conditions.

would learn no other language'), or (ii) that the only advice they received was that they should learn Spanish (equivalently to (4b), 'they would learn other languages so long as they would also learn Spanish').³

The distinction between sentential and constituent 'only' has been conceptualized using the following requirement.

- (6) **The c-command requirement on association with focus (AWF):** (Jackendoff 1972; Rooth 1985; Tancredi 1990; Aoun and Li 1993; McCawley 1996; Bayer 1996, a.o.)
A focus-sensitive operator must c-command its associate.

Apparently this requirement is enforced both on sentential and constituent 'only'. The following examples illustrate how it applies.

- (7) **Patterns of association with 'only':** (based on McCawley 1996: 172)
- a. John only [put [salt]_F on the potatoes].
 - b. John only [put salt on [the potatoes]_F].
 - c. *[John]_F only put salt on the potatoes.
 - d. John [put only [salt]_F on the potatoes].
 - e. John [put salt only [on the potatoes]_F].
 - f. John [put salt on only [the potatoes]_F].
 - g. *John put [only [salt]] on [the potatoes]_F.

Putting aside (7c)⁴, we adopt the weaker definition of c-command for AWF: though it is dominated not by a category but by a segment, 'only' in adjunction structure c-commands its siblings and all of their descendants. The unacceptability of (7g) follows simply because it does not obey (6). The focus associate 'the potato' needs to be associated with the focus-sensitive operator

3 Note also that in (3b), the focus particle 'only' on the PFM object in the simple sentence can take scope at the periphery of VP, which in turn means that (3b) is construed as (3a). They have equivalent truth conditions.

4 Jackendoff (1972) claims that sentence structure like (7c) is however acceptable with even, and it is also acceptable with also (Krifka 1998, a.o.). Erlewine (2014) argues that there is a systematic difference between different focus-sensitive operators based on their semantics: even and also can associate with focused material which has moved out of their scope, while only cannot.

‘only’, but it fails to be.

To foretell an alternative approach to AWF that we will explore in this paper, we can account for both (7a-b) with sentential ‘only’ and (7d-f) with constituent ‘only’ in terms of movement, which will be argued for in greater details in the discussion of the Vietnamese counterpart of English ‘only’ in the next section. Assuming that the focus particle ‘only’ can undergo movement,⁵ we can say that in English, it optionally does; in other words, it moves either overtly or covertly. In (7a-b) with sentential ‘only’, it moves overtly from the verbal or prepositional object-modifying position to the VP-modifying position.

5 Anyone who is familiar with the literature on the distribution and construal of focus particles in English may raise a question regarding their island-insensitivity noted by Anderson (1972), Jackendoff (1974), and Rooth (1985, 1992) with the following kind of example:

- (i) a. John only introduced [the man that [[Jill]_F admires most] to Sue.
- b. Possible reading: ‘The only person such that John introduced the man that this person admires most to Sue.’

The upshot is that as indicated in the possible reading of (ia) as in (ib), AWF is not restricted by syntactic islands.

But this apparent island-insensitivity of an F-marked element has been a controversial issue still being debated. Kratzer (1991) initially endorses Rooth’s (ibid.) binding-theoretic approach to AWF with the following example:

- (ii) a. I only talked to the person who chairs the ZONING BOARD before you did.
- b. I only [_{VP} talked to the person who chairs the [ZONING BOARD]_{F1}] before you did [_{VP} talked to the person who chairs the [ZONING BOARD]_{F1}].

According to Kratzer’s analysis, in the LF representation of (iia) as in (iib) ‘only’ associates with or binds the focus-indexed (i.e., F1) element not being sensitive to the presence of the intervening island.

However, Erlewine and Koteck (2018) recently show that Kratzer’s analysis over-generates (though its over-generation is not rehearsed here), arguing that not the F-marked element but the pied-piped object containing it moves at LF (See also Krifka (2006) for the similar line of movement analysis), yielding the LF representation of (iia) as in (iii):

- (iii) I only [the person who chairs the [ZONING BOARD]_{F1}] [_{VP} talked to _{t1}] before you did [_{VP} talked to _{t1}].

Even though we do not get into details about this important issue, the analysis explored in the text is consonant with Erlewine and Koteck’s (2018) analysis. The difference between their position and mine on it is that in my analysis, the focus particle rather than the pied-piped object moves overtly, thereby the former focus-associating with the latter.

By contrast, in (7d-f) with constituent ‘only’ the focus particle does not move overtly but covertly (it will be discussed in the next section why English ‘only’ takes the two different overt movement and covert movement/in-situ strategies). Meanwhile, (7g) is ruled out because ‘only’ has moved from the position adjoining to ‘the potatoes’, to the position that does not c-command its trace. To the extent that the movement approach to AWF works, AWF can be dispensed with, its empirical coverage resulting from the overt or LF movement involved. Likewise, the movement approach to AWF gives a useful handle on accounting for the cross-linguistic variation in the syntactic distribution of the focus particles in Vietnamese and Korean as well as English.

The distinction between sentential and constituent ‘only’ emerges when the focus particle occurs at pre-subject position, as in (8). This example can be parsed potentially in two ways such as (8i) and (8ii).

(8) **Two parses for English pre-subject ‘only’:**

Only [the Queen]_F can be depicted on currency.

(i). [_{TP} Only [_{TP} [the Queen]_F can be depicted on currency]].

Sentential ‘only’

(ii). [_{DP} Only [_{DP} the Queen]_F] can be depicted on currency.

Constituent ‘only’

The important question is whether (8i) is available, in other words, whether the pre-subject ‘only’ in TP-adjoined position can associate with a focus in the subject DP ‘the Queen’. The following example shows that the answer is negative. In terms of the movement account for ‘only’, there is no landing site at pre-subject position for ‘only’ starting from a TP-internal position. ‘Only’ at pre-subject position is base-generated in its surface position, which accounts for the lack of AWF⁶ in (8i) and (9).

(9) #[_{TP} only [_{TP} the Queen can be depicted on [currency]_F]].

The generalization that arises is that without involving movement, the focus

6 Obviously the term ‘AWF’ here is being used for the sake of description. As argued in the text, AWF itself is established via (overt or covert) movement.

particle ‘only’ at pre-subject position allows for focus-association with its sister constituent. In (8ii), it does so with the subject DP. The variant form of (8i) with the TP itself being a focus associate is acceptable; in this case, (8i) does not contain the focus associate in TP-internal position.

More specifically, the restricted pattern of AWF by the focus particle ‘only’ at pre-subject position leads us to reconsider the way that ‘only’ at pre-verbal position partakes in AWF. The latter is different from the former, in that it focus-associates not only with its sister, but also with a constituent inside it. We suggest that this distinctive behavior of the focus particle ‘only’ at pre-verbal position follows from the overt movement that it experiences. In other words, the focus particle ‘only’ now at pre-verbal position but starting from VP-internal position ‘activates’ the functional head of Sigma or Focus Phrase (or ΣP ; see Laka (1990) and Chomsky (1957), among others). This ‘activated’ functional head Σ enters into Agree relation with and attracts the focus particle on the PFM element in its scope. The AWF between ‘only’ and a focus (i.e., the PFM element), dictated by (6), stems from its association with the focus in the base-generated position. Note that, by contrast, because there is no functional layer for the Sigma head in the upper TP domain, the focus particle ‘only’ at pre-subject position as in (9) cannot rely on such a functional head, thereby ending up only using modification to focus-associate with its sister.

To reiterate, dispensing with AWF, we entertain the movement thesis for the focus particle ‘only’. In this case, we can say that the focus particle ‘only’ moves to the Spec of the postulated Sigma head. Under this movement thesis, AWF is just an artifact, with overt or covert movement itself capturing the association of ‘only’ with a focus in its base-generated position. This line of analysis will be held onto in the next section for the distribution of the exclusive focus particle ‘chi’ in Vietnamese, noting some distinctions between ‘only’ and ‘chi’.

3. Focus particle ‘chi’ in Vietnamese and its syntax & scope-taking

The exclusive focus particle *chi* ‘only’ in Vietnamese behaves in a parallel fashion to its English counterpart. As noted by Erlewine (2017: 331), this particle at pre-verbal position enters into AWF with a focus within VP, as in (10):

(10) **Pre-verbal *chi* ‘only’, which obligatorily associates with a focus in the verb phrase:**

- a. Nam *chi* [MUA]_F cuốn sách.
 Nam ONLY buy CL book
 ‘Nam only BOUGHT the book.’
 ‘Nam didn’t do anything else with the book.’ (e.g. read it).
- b. Nam *chi* mua [cuốn SÁCH]_F.
 Nam ONLY buy CL book
 ‘Nam only bought the BOOK.’
 ‘Nam didn’t buy anything else.’ (e.g. the magazine)
- c. *Nam mua *chi* [cuốn SÁCH]_F.
 Nam buy ONLY CL book
 ‘Nam bought only the BOOK.’
 Intended: ‘Nam didn’t buy anything else.’ (e.g. the magazine)

Despite their parallelism, as pointed out in the Introduction, the most conspicuous distinction between Vietnamese ‘*chi*’ and English ‘only’ is that unlike the latter, the former cannot occur at VP-internal position, as in (10c). In other words, it always occurs at the periphery of VP and entertains the ‘association with focus’ strategy. To account for this peculiar distribution, Erlewine (2017) relies on the conception of lexical array which specifies the set of lexical items to be used up in a certain domain like phase in the course of structure building (Chomsky, 1995, et seq). To account for the fact that Vietnamese ‘*chi*’ always occurs at VP-peripheral position, but not in VP-internal position, Erlewine (2017) just stipulates that this focus particle is included in the lexical array of CP rather than vP/VP. But the outstanding problem with Erlewine’s (2017) analysis is that his analysis gets nowhere in accounting for the distributional difference between Vietnamese ‘*chi*’ and English ‘only’.⁷

Seeking a unified movement analysis of both Vietnamese ‘*chi*’ and English ‘only’ (the analysis of the latter being provided in the previous section), we

7 On top of the inability to explicating the cross-linguistic difference between Vietnamese ‘*chi*’ and English ‘only’, Erlewine’s (2017) lexical array-based account leaves unexplained the fact that, as noted below, pre-verbal ‘*chi*’ enters into AWF with its VP-internal element, but pre-subject ‘*chi*’ cannot enter into AWF with its TP-internal element.

suggest that Vietnamese ‘chi’ is required to move overtly from VP-internal position to the Spec of Sigma phrase (Σ P). While Vietnamese ‘chi’ undergoes overt movement, as noted by Erlewine (2017: 331), there is a variant form of exclusive focus particle *mỗi* ‘only’ that is used to attach to a constituent at VP-internal position, as in (11a). Incidentally, in Vietnamese the pre-verbal focus particle *chi* can occur together with the VP-internal one *mỗi*, as in (11b):

- (11) a. Nam mua mỗi [cuốn SÁCH]_F.
 Nam buy ONLY-cons CL book
 Intended: ‘Nam didn’t buy anything else.’ (e.g. the magazine)
- b. Nam chi mua mỗi [cuốn SÁCH]_F.
 Nam ONLY-sent buy ONLY-cons CL book
 ‘Nam only bought [the book]_F.’

This indicates that in Vietnamese, ‘chi’ corresponds to sentential ‘only’ in English, being required to undergo overt movement to the Spec of Σ P. On the other hand, ‘mỗi’ corresponds to constituent ‘only’ in English, undergoing covert movement to mark its scope (since it also needs to take propositional scope). In other words, Vietnamese distinguishes two different forms of exclusive focus particle depending on when they move. They are distinguished in light of the level of representation where they move.

In contrast to Vietnamese ‘chi’ at pre-verbal position, ‘chi’ at pre-subject position can focus-associate with the subject DP as in (12a), but not with a constituent inside TP as in (12a-b). Recall that its English counterpart at pre-subject position behaves in a parallel fashion:

(12) **Pre-subject constituent-‘only’ chi ‘only’, which cannot associate with foci in the verb phrase:**

- a. Chi [NAM]_F mua cuốn sách.
 ONLY Nam buy CL book
 ‘Only NAM bought the book.’
 ‘No one else bought the book.’
- b. *Chi Nam [MUA]_F cuốn sách.
 ONLY Nam buy CL book

- Intended: 'Nam only BOUGHT the book.'
- c. *Chi Nam mua [cuốn SÁCH]_F.
 ONLY Nam buy CL book
 Intended: 'Nam only bought the BOOK.'

This means that 'chi' at pre-subject position as in (12a) is distinguished from 'chi' in pre-verbal position, in that the former involves not sentential but constituent modification.

Now, an explication is in order regarding the distinctive uses of Vietnamese focus particle 'chi' and its English counterpart 'only', and those of Vietnamese focus particles 'chi' and 'mỗi'. First, the language-internal distinction between sentential 'chi' and constituent 'mỗi' in Vietnamese indicates that this distinction follows from nothing but lexical properties. Informally speaking, the former 'chi' is required to occur outside VP, but such a restriction does not apply to the latter 'mỗi'. To dictate the distinction between sentential 'chi' and constituent 'mỗi' in Vietnamese, we first maintain the thesis that these items can take either the overt movement or the covert movement/in-situ strategy. In the former case, it bears an uninterpretable [Sigma] feature that needs to be checked off in a local relation with its matching interpretable [Sigma] feature that the postulated [Sigma] head bears. This process of the checking off takes place after the focus particle moves to the [Spec] of the [Sigma] head. Note that as for 'chi' at pre-subject position, it can bank on an alternative way of checking off its uninterpretable [Sigma] feature. Following Barss' (2000) analysis of *wh*'s-in-situ, 'chi' at pre-subject position can be markedly checked off on its own in the environment where the licensing interpretable [Sigma] feature is absent. In contrast, constituent 'mỗi' does not bear the uninterpretable [Sigma] feature altogether, which in turn disallows its overt movement. Meanwhile, we take it that English 'only' has the mixed properties that Vietnamese 'chi' and 'mỗi' both have. When it has the uninterpretable [Sigma] feature, English sentential 'only' undergoes overt movement from VP-internal position to VP-peripheral position, like sentential 'chi'. On the other hand, English constituent 'only' can be in situ owing to the lack of the uninterpretable [Sigma] feature, like constituent 'mỗi' in Vietnamese, which in turn undergoes covert movement instead of overt movement.

The following three sets of examples that Erlewine (2017: 335-336) documents confirm what we have noted concerning the distributional and scope properties of the focus particle ‘chi’. First, in the baseline sentence composed of the “adjunct S(subject) *chi* V O(bject)” sequence, the focus particle in (13) occurs at pre-verbal position. As pointed out above, in Vietnamese the focus particle ‘chi’ at pre-verbal position is obligatorily moved from VP-internal position to the Spec of the Sigma head (Σ), with the AWF itself stemming from the movement involved:

(13) “**Adjunct S ONLY V O**”:

- Hôm qua Nam chi mua cuốn sách (thôi).
 yesterday Nam ONLY-sent buy CL book PRT
 (i) ‘Nam only bought [the book]_F yesterday.’
 (ii) ‘Nam only [bought]_F the book yesterday.’
 (iii) ‘Nam only [bought the book]_F yesterday.’
 (iv) *‘Only [Nam]_F bought the book yesterday.’
 (v) *‘Nam only bought the book [yesterday]_F.’
 (vi) *‘It’s only that [Nam bought the book yesterday]_F.’

With the same sequence, the pre-subject focus particle ‘chi’ in (14) only modifies the subject DP. Without activating the Sigma head (Σ), the pre-subject focus particle does not move from nor can enter into AWF with other elements than the subject DP. It is simply inserted via External Merge to its pronounced position. Consequently, it cannot modify the whole sentence including *hôm qua* ‘yesterday’, as it has the time adverb outside its scope.

(14) “**Adjunct ONLY S V O**”:

- Hôm qua chi Nam (mới) mua cuốn sách (thôi).
 yesterday ONLY-const Nam PRT buy CL book PRT
 (i) *‘Nam only bought [the book]_F yesterday.’
 (ii) *‘Nam only [bought]_F the book yesterday.’
 (iii) *‘Nam only [bought the book]_F yesterday.’
 (iv) ‘Only [Nam]_F bought the book yesterday.’
 (v) *‘Nam only bought the book [yesterday]_F.’

(vi) *‘It’s only that [Nam bought the book yesterday]_F.’

By contrast, having the time adverb inside its scope in (15), the focus particle ‘chi’ in sentence-initial position can modify either the time adverb or the whole sentence, as follows:

(15) **“ONLY Adjunct S V O”:**

Chi hôm qua Nam (mới) mua cuốn sách (thôi).

ONLY-const yesterday Nam PRT buy CL book PRT

(i) *‘Nam only bought [the book]_F yesterday.’

(ii) *‘Nam only [bought]_F the book yesterday.’

(iii) *‘Nam only [bought the book]_F yesterday.’

(iv) *‘Only [Nam]_F bought the book yesterday.’

(v) ‘Nam only bought the book [yesterday]_F.’

(vi) ‘It’s only that [Nam bought the book yesterday]_F.’

This ‘chi’ at pre-subject position in (15) is not derived from overt movement. Like that in (14), it is just inserted via External Merge to its surface position.

We now turn to the role of overtly-moved sentential ‘chi’ as a scope marker. Like their English counterparts in (4a) and (4b) noted above, the following examples taken from Erlewine (2017: 336-337) show that ‘chi’ that has moved from its focus-associate takes scope at its pronounced position. Only ‘chi’ at pre-verbal position that is derived via movement can serve as a scope marker for a PFM element inside its scope, as shown by the contrast between (16a-b) and (16c):

(16) **Matrix and embedded positions for chi, given embedded focus:**

a. Tôi chi nói [_{CP} là Nam thích [NGÂN]_F (thôi)].

I ONLY-sent say that Nam like Ngân PRT

‘I only said Nam likes Ngân.’ say < only

b. Tôi noi [_{CP} là Nam chi thích [NGÂN]_F (thôi)].

I say that Nam ONLY-sent like Ngân PRT

‘I said Nam only likes Ngân.’ say > only

c. *Chi tôi noi [_{CP} là Nam thích [NGÂN]_F (thôi)].

ONLY-sent I say that Nam like Ngân PRT
 Intended: 'I only said Nam likes Ngân.'

Recall that the pre-subject position cannot be a landing site for sentential 'only', which accounts for the unacceptability of (16c).

The role of sentential 'chỉ' as a scope marker is more clearly evident in its interaction with the negation 'không'. As noted by Erlewine (2017: 337), in (17a) it takes scope over the negation. By contrast, in (17b) it takes scope below the negation.

(17) a. **Sentential-'only' chỉ in postverbal position:**

Toi chỉ không đọc cuốn sách [NÀY]_F.
 I ONLY-sent NEG read CL book this
 'I only didn't read [this]_F book.' ONLY > NEG; *NEG > ONLY.
 ==> 'I read all other books.'

b. Toi không chỉ đọc cuốn sách [NÀY]_F.
 I NEG ONLY-sent read CL book this
 'I didn't only read [this]_F book.' *ONLY > NEG; NEG > ONLY.
 ==> 'I read (some) other books as well.'

In both cases of (17a) and (17b) 'chỉ' has undergone overt movement to the Spec of ΣP , but the negation 'không' can be placed after or before the focus particle. This placement of the negation below or above the overtly-moved focus particle accounts for the latter's wide or narrow scope with respect to the former.

Regarding its interaction with a quantifier, a subject QP always takes scope over the sentential 'chỉ', as in (18), cited from Erlewine (2017: 339):

(18) **Subject quantifier baseline:**

Ai cũng chỉ mua [cuốn SÁCH]_F.
 who also ONLY buy CL book
 'Everyone only bought the book.' every > only
 *'The book is the only thing that everyone bought.' *only > every

In (18), the pre-verbal sentential ‘chi’ has undergone overt movement from its base-generated position attaching to the object. The surface c-command relation is crucial in determining the scope relation of pre-verbal sentential ‘chi’. Thus, the c-commanding subject QP takes wide scope over the pre-verbal sentential ‘chi’.

As noted above, however, the pre-subject focus particle ‘chi’ cannot enter into AWF with an element in TP-internal position. Thus, the constituent illegitimately focus-associated with it cannot take scope over the subject QP, as follows:

(19) *Chi* cannot be higher, even if it would lead to a different reading:

*Chi ai cũng mua [cuốn SÁCH]_F.

ONLY-const who also buy CL book

Intended. ‘Only [the book]_F is such that everyone bought it.’

only > every

In this case the pre-subject ‘chi’ cannot be derived from the position attaching to the object because the pre-subject position it occupies has nothing to do with the Sigma head Σ . This accounts for the ill-formedness of (19).

To take wide scope over the subject QP, the VP-internal element such as an object can undergo movement crossing the subject QP and is then attached with the constituent-modifying focus particle ‘chi’ at its landing site, as follows:

(20) **Fronting can be used to force *chi* to scope higher, above ‘every’:**

Chi (mỗi) [cuốn SÁCH]_F ai cũng (mọi) mua ____.

ONLY-const only-const CL book who also PRT buy

Intended. ‘Only [the book]_F is such that everyone bought it.’

only > every

Unlike Erlewine’s (2017) suggestion that pre-subject ‘chi’ attaches to TP, we argue based on the contrast in acceptability (19) and (20) that without involving movement, the pre-subject focus particle ‘chi’ adjoins directly to the constituent that it modifies, namely, to the overtly-moved object NP/DP in the case of (20).

‘Tongswu only chases around after Swuni.’

Continuing with the line of movement analysis we have pursued for English ‘only’ in-situ, we suggest that upon activating the (null) Sigma head, the focus particle ‘-man’ attaching to a VP-internal constituent moves covertly to the local domain/Spec of the Sigma head, which in turn determines that its complement vP/VP constitutes the scope of the focus particle at hand. By contrast, the focus particle on the scrambled object cannot employ such a movement strategy since it is placed outside the scope of the Sigma head. It just serves the constituent-modifying function, just like pre-subject English ‘only and pre-subject Vietnamese ‘chi’.⁹

Likewise, the same behavior can be found in (23a), where the focus particle ‘-man’ on the object can undergo covert movement to take scope at the VP-peripheral position, which results in the interpretation that (24) with ‘-man’ at VP-peripheral position allows. However, the focus particle ‘-man’ on the scrambled object in (24b) cannot capitalize on such a movement strategy to take the parallel scope.

- (23) a. Cheli-ka [kimchi]_F-man cal mek-te-la.
 Cheli-Nom Kimchi-only well eat-Retro-Dcl
 ‘Cheli only likes Kimchi.’
 b. [kimchi]_F-man cheli-ka t₁ cal mektela.
 ↑ _____ |
 (24) Cheli-ka [[kimchi-lul]_F cal mekki]-man ha-tel-a.

Unlike that on object elements, the focus particle ‘-man’ on subject elements as in (25a) cannot make use of movement to the local domain of the Sigma head. In other words, (25a) cannot be interpreted as (25b). We assume that, as in English and Vietnamese, in Korean the subject NP in a root clause is outside the projection of the Sigma head. Since the activation of the Sigma head (i.e. having the matching interpretable [Sigma] feature to check off an uninterpretable [Sigma] feature that the focus particle bears) is achieved via Agree with the

9 The pre-subject ‘-man’ in the upper TP-domain can take propositional scope in its situ position without employing movement.

focus particle inside VP-internal position, it follows that the focus particle ‘-man’ on subject elements cannot achieve such a role. In other words, the focus particle ‘-man’ on subject elements serves the constituent-modifying function. Incidentally, like that on scrambled object NPs, this particle without utilizing even covert movement takes propositional scope in the TP domain in its surface position .

- (25) a. [Tongswu]_F-man Swuni-lul ttalatani-nta. (‘-man’ on a subject)
 Tongswu-only Swuni-Acc chase-Dcl
 ‘Only Tongswu chases around after Swuni.’
 b. [[Tongswu-ka]_F Swuni-lul ttalatani-ki]-man ha-nta.
 ‘Tongswu only chases around after Swuni.’

In contrast, preceded by a scrambled object, the focus particle ‘-man’ on the subject as in (26a) can take scope at VP-peripheral position, thus yielding the interpretation that (26b) has. When the object is scrambled before the subject, the latter can occur within the VP or its extended domain,¹⁰ which in turn prompts the activation of the Sigma head. In other words, in light of movement, the focus particle on the subject NP after the scrambled object NP undergoes covert movement to take scope in the local domain of the Sigma head, since the subject in question can stay at the periphery of VP.

- (26) a. Swuni-lul [Tongswu]_F-man ttalatani-nta.
 Swuni-Acc Tongswu-only chase-Dcl
 ‘Swuni, only Tongswu chases around after.’
 b. Swuni-lul [[Tongswu-ka]_F ttalatani-ki]-man ha-nta.
 ‘Swuni, Tongswu only chases around after.’

We now turn to the focus particle ‘-man’ on an adjunct. When preceded by the object NP, the focus particle on the adverb as in (27a) can also take larger scope than its apparent surface scope. Thus, (27a) can be construed as (28). However, as in (27b), when followed by the object NP, the focus particle on the

¹⁰ See Miyagawa (2001) for the argument that in Japanese, a subject may stay within the VP in sentences with the scrambled object - subject - verb (OSV) word order.

preceding adverb cannot take the parallel scope. Likewise, when the adverb occurs after the subject NP, the focus particle on it as in (29a) can take larger scope, having the construal in (30). However, preposing of the adverb over the subject NP as in (29b) disables the focus particle on it from taking larger scope.

- (27) a. Chanho-ka kong-ul [ppalu-key]_F-man tency-ess-ta.
 Chanho-Nom ball-Acc fast-only throw-Pst-Dcl
 'Chanho threw a ball only fast.'
- b. Chanho-ka [ppalu-key]_F-man kong-ul tency-ess-ta.
- (28) Cheli-ka [kong-ul [ppalu-key]_F tenci-ki]-man ha-yss-ta.
 'Chanho only threw a ball fast.'
- (29) a. Catongcha-ka [ppalu-key]_F-man talli-nta.
 car(s)-Nom fast-only run-Dcl
- b. [Ppalu-key]_F-man catongcha-ka talli-nta.
 fast-only car(s)-Nom run-Dcl
 'A car/Cars only run fast.'
- (30) Catongcha-ka [[ppalu-key]_F talli-ki]-man ha-nta.

We assume that low-adverbs like *ppalukey* 'fast' can be base-generated in VP-internal position, but when they scramble over the object NP or the subject NP, they carry contrastive focus. This means that structurally, contrastively-focus marked adverbs are placed outside the domain of the Sigma head. Hence the focus particle on such scrambled adverbs cannot activate the Sigma head. Being unable to move to its local domain, this particle just serves the constituent-modifying function.

The generalization that emerges concerning the scope-taking of the focus particle '-man' is that it can take scope via covert movement to the local domain/Spec of the activated Sigma head when it occurs overtly in VP-internal position, namely, the case where it is attached to an argument NP within VP or a post-object adverb. The following example in (31a) also meets this generalization, where the focus particle '-man' takes scope via covert movement to the VP node of the adjunct clause, thus being construed as (32) with F-marking only on the object NP. However, as Kim (2013) notes, (31b) can also be construed as (32) with F-marking only on the subject NP. This means that in

the conditional clause, the focus particle on its subject can take clausal scope, apparently in violation of the generalization just made.

- (31) a. Tongswu-ka [Swuni]_F-man manna-myen pi-ka w-a.
 Tongswu-Nom Swuni-only meet-if rain-Nom come-Inf
 'If Tongswu meets only Swuni, it rains.'
- b. [Tongswu]_F-man Swuni-lul manna-myen pi-ka w-a.
 -only -Acc
 'If only Tongswu meets Swuni, it rains.'
- (32) [[Tongswu-ka]_F [Swuni-lul]_F manna-ki]-man ha-myen pi-ka w-a.
 -Nm-only
 'If (only) Tongswu (only) meets Swuni, it rains.'

Recall that the focus particle ‘-man’ on the subject of a root clause cannot take clausal scope.¹¹ The availability of the clausal scope for the focus particle on the subject in the conditional clause points to the distinction between the subject of a root clause and that of a non-root, embedded clause. The former tends to occur in the projection of T, whereas the latter may stay in lower position than the tense T. The postulation of the structurally different positions for the matrix and the embedded subjects fits together perfectly with Kuno’s (1973) and

11 Kim (2013) notes the contrast between (ia) and (ib), where the former example allows focus domain extension (FDE) or larger scope of the focus particle ‘man’ inside the conditional clause, but the latter example does not. Kim claims that this contrast is due to the eventive (ia) vs. stative (ib) distinction on the part of the matrix predicate.

- (i) a. (Na-nun) koki-man meku-myen, pay-ka aphu-ta.
I-Top meat-only eat-if stomach-Nom ache-Dcl
'If I eat only meat, I have a stomachache.'
b. #Koki-man meku-myen, kenkang-ey haylop-ta.
meat-only eat-if health-to harmful-Dcl
'If one has only meat, it is bad to health.'

However, the following example (ii) with the stative copula in the main clause, it seems to allow FDE. More careful examination is in need to draw a valid generalization.

- (ii) 1-kwa 2-man teha-myen, kyelkwa-nun 3-i-ta.
 1-and3-only add-if, result-Top 3-Cop-Dcl
 'If you add one to three, the result is 3.'

Heycock's (1994, 2008) claim that in Japanese, matrix-initial subject phrases receive unique interpretations. Since the subject in the non-root, embedded clause may occur inside VP, the focus particle on it as in (31b) can utilize the movement strategy to take scope in the local domain of the Sigma head.

Now we turn to the activation of the Sigma head in the higher clause than the clause containing the '-man' marked element. For example, when the focus particle '-man' occurs on the embedded object NP, it can activate not only the Sigma head in the embedded clause, but also the one in the matrix clause, as follows. In this regard, the focus particle '-man' in (33) displays the same behavior as its counterpart in (5) of English:

- (33) Ku-nun [Sewul]_F-man pangmwunha-tolok cisipat-ass-ta.
 he-Top Seoul-only visit-Comp instruct-Pst-Dcl
 'He was instructed to visit only Seoul.'

This sentence with the matrix scope of the focus particle is read as "he was instructed that the only city he should visit was Seoul" (he could visit no other city). By contrast, this sentence with the embedded scope of the focus particle is read as "the only instruction that he received was that he should visit Seoul" (he could visit other cities so long as they would also visit Seoul.)

Note incidentally that Korean (33) involving the covert movement plus scope-taking strategy is clearly distinguished from Vietnamese (16a-b) involving the overt movement plus scope-taking strategy. (16a) and (16b) are repeated below:

- (16) **Matrix and embedded positions for chi, given embedded focus:**
- a. Tôi chi nói [_{CP} là Nam thích [NGÂN]_F (thôi)].
 I ONLY-sent say that Nam like Ngân PRT
 'I only said Nam likes Ngân.' say < only
- b. Tôi noi [_{CP} là Nam chi thích [NGÂN]_F (thôi)].
 I say that Nam ONLY-sent like Ngân PRT
 'I said Nam only likes Ngân.' say > only

The strategy for Vietnamese determines the scope of the focus particle via

overt movement once and for all. Thus both (16a) and (16b) are disambiguated, the focus particle here being 'frozen' in its pronounced position and serving as a scope marker. By contrast, the strategy for Korean determines the covert scope in either way. (33) is interpreted ambiguously. The focus particle moves covertly and lands at the Spec of the embedded Sigma head, or crossing this potential target, it can land at that of the matrix Sigma head.

4.2 A movement approach to scope-interaction with another scope-sensitive element

Aside from the scope-taking of the focus particle preceded by the activation of the Sigma head, the focus particle ‘-man’ also interacts scope-wisely with another scope sensitive element in a clause, as follows:

- [illegible]

We continue with the thesis that the focus particle activates the Sigma head at the periphery of VP and serves as a scope marker. In (34a), the Sigma head activated by the focus particle on the object *esysuphuleyso* 'only espresso' takes wide scope over the VP-internal adverb *mayil* 'every day'. Thus, this sentence is construed as 'he only drinks espresso every day' (while he drinks another kind of coffee, for example, every 2 or 3 days). By contrast, in (34b) the Sigma head activated by the focus particle on *esysuphuleyso* 'only espresso' takes narrow scope below the VP-external adverb *mayil* 'every day'. Thus this sentence is construed as 'every day he drinks only espresso' (while he does not drink another kind of coffee at all). This contrast in scope and interpretation between (34a) and (34b) indicates that the surface word order or c-command relation is crucial in determining the scope relation between (the Sigma head activated by) '-man' and

another scope-sensitive element. This is in keeping with the rigidity condition on scope originally formulated by Huang (1982).

(35) mirrors (34b) in scope relation, too. The universal subject QP in (35) only takes wide scope over the focus particle ‘-man’ on the object NP, thus this sentence being construed as (35i) but not as (35ii). (The examples in (35)-(37) and their construals available are taken from Lee (2004)).

- (35) Motun-salam-i [[John]_F-man-ul] salanghanta.
 every-person-NOM John-only-ACC love
 ‘Everyone loves only John.’
 (i) Everyone loves John and no one else. (every > only)
 (ii) *John is the only one whom everyone loves. (*only > every)

(36) shows that the scrambling of the ‘-man’ marked object over the universal QP does not create a new scope relation. The base word order prior to scrambling is respected for scope interpretation:

- (36) [[John]_F-man-ul]₁ [motun-salam-i t₁ salanghanta.]
 John-only-ACC every-person-NOM love
 ‘Only John, everyone loves t.’
 (i) Everyone loves John and no one else. (every > only)
 (ii) *John is the only one whom everyone loves. (*only > every)

When the focus particle is followed by the case marker, it is attached in its base-generated position, subsequently the Case marker being assigned to the focus particle-marked object. In other words, though a focus particle-marked object is scrambled over the subject QP, the Sigma head that the former in its base-generated position activates serves as a scope marker. To reiterate, it is to be underscored that though the focus particle is carried by the scrambled object NP, not this focus particle but the Sigma head activated by it counts as a scope-marking pivot, just like Q-markers in interrogative clauses.¹² Thus, the

12 In this regard, the radical reconstruction of the scrambled focus particle-marked object to its base-generated position as in (36) of the text is assimilated to that of the scrambled wh-phrase to its base-generated position as in (i), which is argued for by Saito (1989):

sentence in (36) is interpreted unambiguously. The subject QP takes wide scope over the Sigma head that it c-commands. But the other opposite scope relation does not hold.

However, the dropping of the Acc Case marker from the scrambled object in (36) makes available the reading otherwise unavailable to this sentence:

- (37) [[John]_{F-man}]_(t) [motun-salam-i t_(t) salanghanta.]
 John-only every-person-NOM love
 'Only John, everyone loves t.'
 (i) Everyone loves John and no one else. (every > only)
 (ii) John is the only one whom everyone loves. (only > every)

Why does this contrast between (36) and (37) arise? The answer lies in the timing of focus particle assignment. As pointed out above, when the focus particle is embedded before the Case particle or adposition, it is inserted before displacement. In this case, the Sigma head is activated by the focus particle on the object NP prior to scrambling and serves as a scope marker. Thus, the universal NP takes scope over the Sigma head activated by the focus particle on the NP in situ as in (36). By contrast, when the focus particle 'man' occurs at the rightmost edge of a constituent,¹³ it can be assigned to its base-generated position or its displaced position. In the latter case, the focus particle on the displaced element can take scope in its pronounced position. Since the focus

-
- (i) Nani-o₁ John-ga [Mary-ga t₁ katta ka] sitteiru
 whatACC JohnNOM MaryNOM bought Q knows
 'John knows what Mary bought.'

Note that in (i), the wh-phrase that has scrambled to sentential-initial position crossing the embedded Q-marker is required to be undone to its launching site.

- 13 The following example with the focus particle outside the scrambled Dat-marked recipient is interpreted as ambiguous (See also Hwang (1983) for the claim that unlike the focus particle embedded inside the Case or adposition marker, the one outside it can partake in scope interaction with another scope-sensitive element).

- (i) John-eykey-man₁ [motun-salam-i t₁ ku chayk-ul cwu-ess-ta.]
 John-to-only every-person-NOM that book-Acc give-Pst-Dcl
 'Only John, everyone loves e.'
 (a) Everyone gave the book only to John and to no one else. (every > only)
 (b) John is the only one whom everyone gave the book to. (only > every)

particle in (37) can exploit the two options, it can induce scope ambiguities.¹⁴ It can take scope in its base-generated position (via the activation of the Sigma head) or in its moved position.

We finally turn to the interaction of the focus particle ‘-man’ with negation. As Kim (2013) notes, (38) involving the short-form negation before the main verb only allows the negation to take narrow scope below the subject with ‘-man’. We take this scope relation to follow from the fact that, as mentioned above, the focus particle on the subject NP serves the constituent-modifying function. Thus, the focus particle-marked subject NP takes wide scope over the negation that it c-commands.

- (38) [Chelswu]_F-man an w-ass-ta.
 Chelwu-only not come-Pst-Dcl
 ‘Only Chelswu didn’t show up.’
 (i) The person that didn’t show up was Chelswu. (only > negation)
 (ii) #It is not the case that only Chelswu showed up.
 (#negation > only)

By contrast, (39) involving the long-form negation composed of the negation an ‘not’ and the auxiliary verb ha- ‘do’ allows the negation to take scope below or above the subject with ‘-man’. To account for scope ambiguity in (39), what is critical is the structural properties of the negative auxiliary verb ‘ani + ha-’. We assume following Park (1994) that this auxiliary verb is a raising verb and its complement headed by -ci is an infinitival phrase where the subject NP is

14 For a different account for the scope relation of (37), see Lee (2005), where the position of the null ONLY head can be postulated to be switched above or below the subject NP. Recall, however, that in our account suggested in the text, the null Sigma head that corresponds to Lee’s null ONLY is always postulated between T and VP, but not in the higher TP domain. The focus particle ‘-man’ in Korean at pre-subject position is inserted but does not involve the null Sigma head, in the way that its English and Vietnamese counterparts are. We have seen that its English and Vietnamese counterparts at pre-subject position never enter into AWF with an element inside TP-internal position. In a parallel fashion, in Korean the focus particle on the clause-initially scrambled object cannot focus-associate with an element in TP-internal position, either, as in (i):

(i) #Chayk-man [Con-i [ku haksayng-eykey]_F cwu-ess-ta].
 book-only John-Nom that student-to give-Pst-Dcl
 ‘A book John gave to the student.’

based-generated and its raising to [Spec,TP] is optional. When it raises to [TP,Spec], the focus particle on it as a constituent modifier takes wide scope over the negation on the reconstructed verbal complex (i.e., *o-ci anh*). By contrast, when it stays within an infinitival phrase, it activates the Sigma head which is below the negative auxiliary verb. In consequence, the Sigma head as a scope marker takes narrow scope below the negation on the auxiliary verb.

- (39) [Chelswu]_F-man o-ci anh-ass-ta.
 Chelswu-only come-Nm do.not-Pst-Dcl
 ‘Only Chelswu didn’t show up.’
 (i) The person that didn’t show up was Chelswu. (only > negation)
 (ii) It is not the case that only Chelswu showed up.
 (negation > only)

Note that when the contrastive focus marker -nun is placed on the right edge of the infinitival phrase in (39), the resulting sentence as in (40) suppresses the other ‘only > negation’ scope reading, only allowing for the ‘negation > only’ reading.

- (40) [Chelswu]_F-man o-ci-nun anh-ass-ta.
 Chelswu-only come-Nm-Contr.Top do.not-Pst-Dcl
 ‘Only Chelswu didn’t show up.’
 (i) #The person that didn’t show up was Chelswu.
 (#only > negation)
 (ii) It is not the case that only Chelswu showed up.
 (negation > only)

In this case, the intervening contrastive focus marker -nun precludes the reconstruction of the main verb with the negative auxiliary verb. Thus the only option available here is that the subject stays within an infinitival phrase, thereby the focus particle on it activating the Sigma head which is below the negative auxiliary verb. This results in the ‘negation > only’ reading, a welcome result.

5. Summary and conclusion

This paper has investigated the distributional properties and scopal facts of the exclusive focus particles in English, Vietnamese, and Korean. Based on their allowed distributional configurations and available scope relations in the three typologically different languages at issue, we have argued that there is one (null) functional category (i.e., the Sigma head) between T and VP that plays an instrumental role in deriving the distributional features and scope-taking aspects of the focus particles in these languages. More specifically, the Vietnamese exclusive particle ‘chi’ always takes the overt movement strategy to move from base-generated VP-internal position to the Spec of Sigma phrase. Its English counterpart ‘only’ in the same underlying environment takes either the overt movement or the in-situ/covert movement strategy. On the other hand, the Korean counterpart ‘-man’ generally takes the in-situ/covert movement strategy. Regardless of whether they move overtly or not, the focus particles generated at VP-internal position take scope at the Spec of the Sigma head that serves as a scope marker. By contrast, when these focus particles can be generated on the subject NP/DP or a pre-subject element, they can also be licensed on their own without employing such a functional head as the Sigma head that the focus particles generated in VP-internal position exploit, at the same time taking a scope in their pronounced positions. All in all, this proposed dichotomy in licensing the focus particles in the three languages in question (i.e., the Sigma head-related licensing of VP-internal focus particles and the independent licensing of focus particles outside the scope of the Sigma head) can account for otherwise puzzling distributional aspects and scope relations of the focus particles in English, Vietnamese, and Korean.

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