On the syntax of negative *wh*-constructions in Korean

Okgi Kim

University of Wisconsin-Milwaukee
Department of Linguistics
P.O. Box 413
Milwaukee, WI 53201-0413
`okgikim@uwm.edu`

Abstract

This paper investigates the syntax of Negative WH-Constructions (NWHCs) in Korean and argues, under Coniglio and Zegrean's (2012) split-ForceP framework, that NWH-phrases like *mwe-ka* and *ettehkey*, which are base-generated above or at the edge of IP, undergo covert movement to the split-Force domain to reflect their sensitivity to clause type and turn the original information-seeking force into the speaker-oriented rhetorical force.

1 Introduction

This paper examines so-called Negative WH-Constructions (henceforth, NWHCs) in Korean, which are exemplified by (1) (Cheung, 2008; 2009) (throughout the paper, small capital letters are used in glossing NWH-items to distinguish them from ordinary *wh*-items).[1][2]

(1) a. pi-ka **mwe-ka** o-ni?!
     rain-NOM WHAT-NOM come-QUE
     'No way is it raining. (It isn't raining.)'

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[1]The abbreviations used for glossing Korean data include NOM: nominative, ACC: accusative, QUE: question, DECL: declarative, COP: copular, TOP: topic, CONN: connective, PST: past, IMP: imperative, EXCL: exclamative, MOD: modifier, FUT: future, and PROG: progressive.

[2]Cheung (2008) notes that there are only three NWH-items in Korean: *ettehkey* 'HOW', *encey* 'WHEN' and *eti* 'WHERE'. But, as given in (1a), the *wh*-phrase *mwe-ka* 'WHAT-NOM', where *mwe* is the contracted form of *mwues*, can also be used as an NWH-item. See Saruwatari (2015) for Japanese NWHCs using *nani-ga* 'WHAT-NOM and *doko-ga* 'WHERE-NOM'.

b. ku-ka **ettehkey** i pangpep-ulo
   he-NOM HOW this way-in
   sihem-ul thongkwaha-l
   exam-ACC pass-CONN
   swu.iss-keyss-ni?!
   can-FUT-QUE
   'No way could he pass the exam in this way. (He couldn't pass the exam in this way.)'

c. Mary-ka **eti** Seoul-ul
   Mary-NOM WHERE Seoul-ACC
   ttena-l swu.iss-keyss-ni?!
   leave-CONN can-FUT-QUE
   'No way would Mary be able to leave Seoul. (Mary wouldn't be able to leave Seoul.)'

d. ku-ka **encey** sip-nyen ceney chayk-ul
   he-NOM WHEN 10-year ago book-ACC
   ss-ess-ni?!
   write-PST-QUE
   'No way did he write the book ten years ago. (He didn't write the book ten years ago.)'

As seen from the English translations, NWHCs are used to express the speaker-oriented rhetorical/refutatory force and not the information-seeking force typically conveyed by ordinary *wh* or yes/no-questions (Cheung, 2008; 2009; Saruwatari, 2015; Yang, 2015). That is, positive NWHCs have the illocutionary force of a negative assertion, as in (1), and negative NWHCs have the illocutionary force of a positive assertion, as in (2).

(2) {**ettehkey/mwe-ka**} John-i
HOW/WHAT-NOM   John-NOM
tayhakwensayng-i   ani-ni?!
graduate.student-NOM not-QUE
'No way is John not a graduate student. (He is a graduate student.)'

1.1 Differences from information-seeking and rhetorical *wh*-questions

NWHCs behave differently from both information-seeking and rhetorical *wh*-questions in some respects. First, while an ordinary *wh*-adjunct cannot cooccur with another adjunct of the same kind in the same clause, as in (3), such adjunct doubling is allowed in NWHCs, as in (1b-d) (Cheung, 2008; 2009).

(3) a. *Mary-ka eti   Seoul-ey ka-ss-ni?
Mary-NOM where Seoul-to go-PST-QUE
'Where did Mary go to Seoul?'

b. *Mary-ka   encey ocen hansi-ey Seoul-ey
Mary-NOM when a.m. 1-at   Seoul-to
ka-ss-ni?
go-PST-QUE
'When did Mary go to Seoul at 1 a.m.?'

Second, the NWH-item *mwe-ka* 'WHAT-NOM' functions as an adverbial, just like the other NWH-items, though it is isomorphic to the ordinary *wh*-argument *mwe-ka* 'what-NOM'. Evidence supporting this idea is that the NWH-item WHAT can occur with a subject in an intransitive construction, as in (1a). In a similar vein, Yang (2015) takes Chinese NWH-items *shenme* 'WHAT' and *nali* 'WHERE', exemplified in (4), as *wh*-adverbials which are highly grammaticalized and have nothing to do with interrogativity (cf. Cheung, 2009).

(4)   zhe-ci huiyi,   {**nali/shenme**} ta hui
this-Cl meeting WHERE/WHAT he will
lai?!
come
'This meeting, it is not the case that he will come.'
(adapted from Yang (2015))

Third, NWH-adverbials have lost their lexical meanings. For example, the NWH-phrases *mwe-ka* 'WHAT-NOM' and *ettehkey* 'HOW' do not quantify over things/entities and manners/methods, respectively, but contribute only to the negative/positive assertion (Cheung, 2008; Yang, 2015).

Finally, NWHCs must be uttered after the interlocutor's statement as a way to express disapproval toward the interlocutor. That is, they cannot be uttered discourse-initially or out of the blue (Cheung, 2009; Yang 2015).

1.2 Research questions

This paper aims to address the following two research questions:

- Where is the base position of NWH-adverbials?

- Do they undergo LF-movement from their base position to a higher functional projection? If so, why?

As for the first question, the paper argues that NWH-adverbials are base-generated above or at the edge of IP (Cheung, 2008). As to the second question, the paper proposes that under Coniglio and Zegrean's (2012) split-ForceP hypothesis where ForceP is split up into two projections, namely C(lause) T(ype) and ILL(ocutionary Force), the NWH-phrase moves covertly from its base position to [Spec,CTP] to reflect its sensitivity to clause type and then moves to [Spec,ILLP] to derive the speaker-oriented rhetorical force.

1.3 Roadmap of the paper

In Section 2, I argue that NWH-adverbials originate above or at the edge of IP. In Section 3, I argue that NWH-phrases undergo LF-movement from their base position to the Force domain in the left periphery. In Section 4, I propose a novel two-step movement approach to NWHCs from the split-ForceP perspective. In Section 5, I summarize the main arguments of the paper.

2 Base-generation above or at the edge of IP

Through investigating how NWH-adverbials behave with respect to negative island effects and scopal interactions with quantifiers, I argue here that NWH-adverbials originate above or at the edge of IP.

• **Negative island effects:** The examples in (5) illustrate the *how-why* asymmetry with regard to

a Negative Island Effect (NIE), a phenomenon in which negation blocks extraction of certain (*wh-*)phrases (Rizzi, 1990; Shlonsky and Soare, 2011):

(5) a. Why didn't Geraldine fix her bike?

    b. *How didn't Geraldine fix her bike? (Shlonsky and Soare 2011: (14))

The asymmetry receives a natural account if we follow Rizzi (2001) and Tsai (2008) in assuming that unlike manner/instrumental *how* base-generated below negation, reason *why* is directly merged in the CP region. On this view, *why* is immune to the NIE since it originates above negation, as illustrated in (6a), whereas *how* violates the NIE as it undergoes LF-movement to its scope position in the CP domain, as illustrated in (6b).

(6) a. $[_{CP}$ why $[_{IP}$ ... NegP ... $]]$

    b. $[_{CP}$ how $[_{IP}$ ... NegP t_{how} ... $]]$

Note that the *how-why* asymmetry in NIEs also holds for ordinary *wh*-questions in Korean:

(7) a. Mary-nun **way** cha-lul kochi-ci
Mary-TOP why car-ACC fix-CONN
anh-ass-ni?
not-PST-QUE
'Why didn't Mary fix the car?'

    b. *Mary-nun **ettehkey** cha-lul kochi-ci
Mary-TOP how car-ACC fix-CONN
anh-ass-ni?
not-PST-QUE
'How didn't Mary fix the car?'

As observed in (7a), *way* 'why' does not exhibit the NIE, just like English *why*, indicating that *way* is base-generated above negation (Ko, 2005; 2006). On the other hand, the ill-formedness of (7b) suggests that manner/instrumental *ettehkey*, which corresponds to English *how*, originates below negation.

With the *ettehkey-way* asymmetry described above in mind, let us consider the following NWHC examples:

(8) a. salam-i **ettehkey** cwuk-ci
human.being-NOM HOW die-CONN
anh-ni?!
not-QUE
'No way do human beings not die. (Human beings die.)'

    b. John-i **mwe-ka** maykcwu-lul
John-NOM WHAT-NOM beer-ACC
masi-ci anh-ass-ni?!
drink-CONN not-PST-QUE
'It is not true that John didn't drink beer. (John drank beer.)'

As observed here, the NWH-adverbials *ettehkey* and *mwe-ka* are not sensitive to negation in the clause with which they are construed, indicating that they are base-generated above negation. Meantime, one may point out here that the insensitivity of NWH-adverbials to the NIE would be due to their non-movement at LF from their base position below NegP. However, as we will see below in Section 3, NWH-adverbials are taken to move at LF.

• **Scopal interactions with quantifiers:** The example in (9) illustrates that the negation evoked by NWH-adverbials always takes scope over the subject Quantifier Phrase (QP) (Cheung, 2008).

(9)   (context: there are only three people in the group: John, Mary, and Mimi.)

    {**mwe-ka/ettehkey**} motwu-ka
WHAT-NOM/HOW everyone-NOM
haksayng-i-ni?!
student-COP-QUE

    (i) It is not the case that everyone is a student. (NEG > everyone)
    (ii) For each person *x*, *x* is not a student. (*everyone > NEG)

(9i) is compatible with a situation where the speaker believes that some members of the group are not students (e.g. only John is a student). (9ii) is compatible with a situation where nobody in the group is a student. However, the second reading is unavailable. This scopal pattern may follow from the assumption that NWH-adverbials are base-generated above IP (or at the edge of IP as argued by Cheung (2008)). Since the NWH-adverbial is initially merged above

IP, it is impossible to interpret the NWH-item under the (raised) subject QP.[3]

3 LF-movement into ForceP

3.1 Intervention effects

Korean exhibits another asymmetry between *way* and other *wh*-operators, in that unlike the former, the latter cannot be preceded by a Scope Bearing Element (SBE) like *amwuto* 'anyone'. This phenomenon has been known as an intervention effect (Beck and Kim, 1997; Beck, 2006; among others).[4] Consider the following relevant examples:

(10) a. *amwuto **mwues-ul** mek-ci
     anyone what-ACC eat-CONN
     anh-ass-ni?
     not-PST-QUE
     'What did no one eat?'

   b. **mwues-ul** amwuto mek-ci
      what-ACC anyone eat-CONN
      anh-ass-ni?
      not-PST-QUE
      'What did no one eat?'

(11) a. amwuto **way** sakwa-lul mek-ci
     anyone why apple-ACC eat-CONN
     anh-ass-ni?
     not-PST-QUE
     'Why did no one eat an apple?'

   b. **way** amwuto sakwa-lul mek-ci
      why anyone apple-ACC eat-CONN
      anh-ass-ni?
      not-PST-QUE
      'Why did no one eat an apple?'

(10) shows that the *wh*-argument *mwues-ul* 'what-ACC' must precede the SBE *amwuto* 'anyone'. On the other hand, (11) illustrates that the *wh*-adjunct *way* can precede or follow the corresponding SBE.

To account for such an asymmetry in intervention effects, Ko (2005), adapting a proposal of Beck and Kim (1997), proposes the following intervention effect constraint on *wh*-movement at LF:

(12) *Intervention Effect* (Ko, 2005: 871):
     At LF, a *wh*-phrase cannot be attracted to its checking (scope) position across an SBE.

Let us examine how the constraint captures the asymmetry, particularly under Ko's (2006) split-CP analysis of *wh*-licensing, according to which *way* in an interrogative clause is directly merged into its checking position [Spec,Int(errogative)P], while other *wh*-phrases covertly move to [Spec,Foc(us)P], higher than IntP, for feature checking.[5] In (10a), the *wh*-argument *mwues-ul* must undergo LF-movement to [Spec,FocP] to be licensed. However, the SBE *amwuto* induces the intervention effect by blocking the LF-movement, resulting in a derivational crash. This is why (10a) is ruled out. The well-formedness of (10b) is because the overt scrambling of the *wh*-argument over the SBE avoids the intervention configuration. In (11a), unlike the *wh*-argument, the *wh*-adjunct *way* can be preceded by the SBE. This is because *way* does not move at LF as it is initially licensed in its base position, i.e. [Spec,IntP], before the overt scrambling of the SBE over it.[6] The well-formedness of (11b) is simply because *way* is not located in the intervention configuration.

Now let us take a look at the following NWHCs regarding intervention effects:

(13) A: Nobody is a student here.

   B: {**mwe-ka/ettehkey**} amwuto
      WHAT-NOM/HOW   anyone
      haksayng-i   ani-ni?!
      student-NOM not-QUE
      'It is not the case that nobody is a student here. (Some of the members are students.)'

   B′: amwuto {?***mwe-ka**/??**ettehkey**}
       anyone WHAT-NOM/HOW

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[3]I leave further investigation of the exact base position of NWH-adverbials to future work.

[4]SBEs also include *man* 'only', *anh* 'not', *pakkey* 'only' (NPI), *to* 'also', *nwukwunka* '(non-specific) someone', and *nwukwuna* 'everyone' (Ko, 2005).

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[5]For the split CP domain, Ko (2006) suggests only two functional heads, Int and Foc, for licensing ordinary *wh*-phrases and uses the terms C_{Int} and C_{Foc} to avoid unnecessary confusion with Rizzi's (1999, 2001) split-CP system in Italian in (i), where Int is configured higher than Foc.

(i)   Force (Top) Int (Top) Foc (Top) Fin IP ... (Rizzi, 1999)

[6]If *way* occurs in an embedded declarative clause, it is required to move covertly to the matrix IntP[+Q] to take scope (Ko, 2005; 2006).

haksayng-i ani-ni?!
student-NOM not-QUE
'(int.) It is not the case that nobody is a student here. (Some of the members are students.)'

As shown in (13B′), the NWH-adverbials are not allowed to follow the SBE. If the intervention effect constraint in (12) is on the right track, the contrast between (13B) and (13B′) suggests that NWH-adverbials undergo LF-movement.

The sensitivity of NWH-adverbials to intervention effects induced by quantificational adverbs further supports the argument that NWH-phrases move at LF. To illustrate such an intervention effect, let us first look at the Hungarian data in (14).

(14) a. *Mindig **kit** hitá meg?
always who-ACC invited PV
'Who did you invite all the time?'

b. **kit** hitá meg mindig?
who-acc invited PV always
'Who did you invite all the time?' (adapted from den Dikken (2003))

The examples here illustrate that the *wh*-phrase *kit* 'who-ACC' cannot follow but must precede the adverb of quantification *mindig* 'always'. To explain this paradigm, Lipták (2001) suggests that the ill-formedness of sentences like (14a) is attributed to intervention effects: the quantificational adverb harmfully intervenes between the *wh*-phrase and the interrogative $C_{[+wh]}$, as roughly represented below.

(15) *$[_{CP}$ $C_{[+wh]}$ $[_{DistP}$ mindig $[_{FocP}$ $kit_{[+wh]}$ $[_{Foc}$ hitá [...]]]]]

To be more specific, the quantificational phrase, which occupies [Spec,Dist(ributive)P] higher than FocP, blocks the feature movement of the *wh*-phrase from [Spec,FocP] to $C_{[+wh]}$, resulting in a derivational crash.

Yang (2007; 2015) discusses Chinese NWHCs (in his term, refutatory *wh*-questions) in terms of the aforementioned intervention effect so as to suggest that NWH-items merged at FocP undergo covert movement to ForceP to derive the speaker's refutatory force. To illustrate, consider the following contrast:

(16) a. {*meitian/*changchang} {**nail/shenme**}
everyday/often WHERE/WHAT
ta hui lai?!
he will come
'Everyday/often it is not the case that he will come.'

b. {**nail/shenme**} ta {meitian/changchang}
WHERE/WHAT he everyday/often
hui lai?!
will come
'Everyday/often it is not the case that he will come.' (adapted from Yang (2007))

He argues that the deviance of (16a) is because the quantificational phrase like *meitian* 'everyday' and *changchang* 'often' blocks LF-movement of the NWH-phrase into ForceP, giving rise to the intervention effect within the CP field (Cheung, 2008). Meantime, there is no such intervention effect in (16b) since the NWH-phrase is located in a higher position than the SBE and thus freely moves to ForceP at LF.

When it comes to Korean NWHCs, the following examples illustrate that they exhibit the same intervention effect as Chinese counterparts:

(17) a. *hangsang {**mwe-ka/ettehkey**}
always WHAT-NOM/HOW
John-i sinmwun-ul ilk-ni?!
John-NOM newspaper-ACC read-QUE
'(int.) No way does John always read a newspaper.'

b. {**mwe-ka/ettehkey**} hangsang John-i
WHAT-NOM/HOW always John-NOM
sinmwun-ul ilk-ni?!
newspaper-ACC read-QUE
'No way does John always read a newspaper.'

Assuming that the quantificational phrase like *hansang* 'always' is sitting in [Spec,DistP] higher than FocP as argued by Lipták (2001), the contrast in (17) suggests that the NWH-phrase undergoes LF-movement from its base position to a higher functional projection above DistP in the CP region.[7]

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[7]Yang (2015) takes Top(ic)P as the functional projection hosting quantificational adverbs.

3.2 The interaction with illocutionary force and clause type

It has been proposed that NWH-phrases move at LF to a higher functional projection. In this respect, then, two important questions arise as to (i) what is the functional projection to which NWH-phrases move at LF and (ii) why they undergo LF-movement to the assumed functional projection. In addressing the first issue, I argue here that NWH-phrases move covertly to ForceP, given that they closely interact with both clause type and illocutionary force encoded in ForceP (Rizzi, 1997; cf. Coniglio and Zegrean, 2012). In what follows, let us look at some evidence for the argument.[8]

The interaction of NWH-adverbials with illocutionary force is evidenced by their inability to occur in embedded clauses, as in (18): pragmatically, elements conveying the expressive force (i.e. the speaker's subjective opinion and attitude) can only be carried out by direct speech (Pan, 2015).

(18) *motun salam-i   John-i
       every   person-NOM John-NOM
       {**mwe-ka/ettehkey**} haksayng-i-nci
       WHAT-NOM/HOW   student-COP-QUE
       a-ni?!
       know-QUE
       '(int.) Does every person know that John is not a student?'

If the NWH-phrase in (18) occurs in the matrix clause instead of the embedded one, then the resulting sentence becomes well-formed, as in (19). In this case, as one can expect, the NWH-phrase is only associated with the matrix clause, as seen from the English translation, since it cannot originate within the embedded clause.

(19) {**mwe-ka/ettehkey**} motun salam-i
       WHAT-NOM/HOW   every person-NOM
       John-i   haksayng-i-nci   a-ni?!
       John-NOM student-COP-QUE know-QUE
       'It is not the case that every person knows whether John is a student or not.'

NWH-adverbials' interaction with clause type can be verified by the fact that they can occur only in yes/no questions, as in (20a), but not in *wh*-questions, as in (20b), declaratives, as in (20c), imperatives, as in (20d), or exclamatives, as in (20e).[9]

(20) a. {**mwe-ka/ettehkey**} Mary-ka
           WHAT-NOM/HOW   Mary-NOM
           haksayng-i-ni!?
           student-COP-QUE
           'It is not true that Mary is a student.'

      b. *{**mwe-ka/ettehkey**} nwu-ka
           WHAT-NOM/HOW   who-NOM
           haksayng-i-ni!?
           student-COP-QUE
           '(int.) It is not true that Mary is a student.'

      c. *{**mwe-ka/ettehkey**} Mary-ka
           WHAT-NOM/HOW   Mary-NOM
           haksayng-i-ta.
           student-COP-DECL
           '(int.) It is not true that Mary is a student.'

      d. *{**mwe-ka/ettehkey**} Mary-ka
           WHAT-NOM/HOW   Mary-NOM
           ttena-la!
           leave-IMP
           '(int.) It is not true that Mary left.'

      e. *{**mwe-ka/ettehkey**} Mary-ka
           WHAT-NOM/HOW   Mary-NOM
           yeyppu-kwuna!
           pretty-EXCL
           '(int.) It is not true that Mary is pretty.'

This distributional constraint may indicate that NWH-adverbials undergo covert movement to ForceP to reflect their sensitivity to clause type.

In what follows, I will address the remaining issue of why NWH-adverbials undergo LF-movement to ForceP, within Coniglio and Zegrean's (2012) split-ForceP framework.

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[8]Tsai (2008) argues that while Chinese causal *zenme* 'how' is placed at Int, denial *zenme* originates at the head of ForceP to reflect the change of illocutionary force, i.e. from eliciting information to denial.

[9]It is possible for the NWH-word to occur in a yes/no question with a *wh*-indefinite like *mwe* (the contracted form of *mwues*), as shown in (i).

(i)   **mwe-ka**   John-i   mwe-lul
      WHAT-NOM John-NOM something-ACC
      mek-ess-ni?!
      eat-PST-QUE
      'No way did John eat something.'

4 Proposal

4.1 Similarities with adverb-based discourse particles

The close interaction of NWH-adverbials with both illocutionary force and clause type is reminiscent of adverb-based discourse particles like Italian *tanto*. Dohi (2020) suggests that sentence-initial *tanto* interacts with clause type, given that it occurs only in *wh*-questions, as in (21a), or declaratives, as in (21b), but not in other clause types like imperatives, as in (21c).

(21) a. *Tanto* cosa ci   stai   a fare qua?
        Prt   what there you.stay to do here
        'What are you going to do here anyway? (You have nothing to do here.)'

    b. *Tanto* non succederà   mai.
        Prt   not will.happen never
        'It will never happen in any case.'

    c. *Tanto* lascialo sul   tavolo.
        Prt   leave.it on.the table
        (Dohi, 2020)

In addition, he suggests that *tanto* also interacts with illocutionary force, in that it pragmatically functions to modify the original illocutionary force of the utterance where it occurs. To illustrate this, let us consider (22).

(22) a. cosa ci   stai   a fare que?
        what there you.stay to do   here
        'What are you going to do here?'

    b. *Tanto* cosa ci   stai   a fare que?
        Prt   what there you.stay to do   here
        'What are you going to do here anyway? (You have noting to do here.)'
        (Dohi, 2020: 5)

(22a) can be interpreted as an information-seeking question (or a rhetorical one), but if *tanto* is inserted into the utterance, the result in (22b) is interpreted only as a rhetorical question, which has been derived by the discourse particle modifying the original information-seeking force on Dohi's view.

To account for the peculiar properties of *tanto*, Dohi modifies Zimmermann's (2004) analysis of the German discourse particle *wohl*, within Coniglio and Zegrean's (2012) split-ForceP hypothesis where ForceP is split up into two different projections, namely C(lause) T(ype) and ILL(ocutionary Force). By so doing, he argues that the adverb-based discourse particle *tanto* is base-generated in [Spec,CTP] and enters into a Spec-Head agreement relationship with the CT head codified as a clause-type operator such as *decl* for declaratives and *int* for interrogatives. This agreement relationship captures the discourse particle's sensitivity to clause type. He further argues that *tanto* merged in [Spec,CTP] moves at LF to [Spec,ILLP] to derive the rhetorical force through modifying the default illocutionary force codified as a privative operator like *assert(ion)* for declaratives and *?* for interrogatives. On this split-ForceP analysis, for example, (22b) is derived as follows:

(23) $[_{ILLP}$ Tanto$_i$ *?* $[_{CTP}$ t$_i$ *int* $[_{FocP}$ cosa $[_{VP}$ ci stai a fare que]]]]?

4.2 A split-ForceP approach to NWHCs

Given the similarities between NWH-adverbials and adverb-based discourse particles like *tanto* in closely interacting with both clause type and illocutionary force, it would be reasonable to apply Dohi's (2020) split-ForceP analysis to NWHCs.[10] Therefore, from the split-ForceP perspective, I propose the following two-step movement approach to licensing NWH-adverbials with no interrogativity:

- **Step 1**: The NWH-adverbial first moves covertly from its base position to [Spec,CTP] to agree with a question morpheme like *ni* with [+Q, -WH], in a Spec-Head relationship, to reflect its sensitivity to clause type, i.e., obligatory occurrence in yes/no questions.

- **Step 2**: The NWH-adverbial then moves to [Spec,ILLP] to derive the speaker-oriented rhetorical force through modifying the original information-seeking force codified as the privative operator *?* in ILL^0.[11]

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[10]Here I avoid discussing whether NWH-adverbials are adverb-based discourse particles. I leave the issue to future research.

[11]Yang (2015) notes that the speaker-oriented rhetorical force is strong enough to override the original interpretation of an interrogative *wh*-question.

On this split-ForceP analysis, for instance, the NWHC in (20a), repeated below in (24a), is assumed to be derived like (24b):

(24) a. {**mwe-ka/ettehkey**} Mary-ka
WHAT-NOM/HOW   Mary-NOM
haksayng-i-ni!?
student-COP-QUE
'It is not true that Mary is a student.'

b. [$_{ILLP}$ mwe-ka$_i$/etthekey$_i$ [$_{CTP}$ t$_i$ [$_{TP}$ Mary-ka haksayng-i]-ni$_{[+Q, -WH]}$]$^?$]

In the meantime, *wh*-phrases used in ordinary information-seeking questions do not need to undergo covert movement into the split-ForceP region, since, unlike NWH-adverbials, they do not modify the original interrogative force and are insensitive to clause type, occurring in (embedded) declaratives as in (25a), (embedded) imperatives as in (25b), and exclamatives as in (25c).

(25) a. ne-nun [Mary-ka **mwues-ul**
you-TOP Mary-NOM what-ACC
mek-ess-ta-ko]   sayngkakha-ni?
eat-PST-DECL-COMP think-QUE
'What do you think Mary ate?'

b. ne-nun [Mary-eykey **mwues-ul**
you-TOP Mary-to   what-ACC
mek-ula-ko]   malhayss-ni?
eat-IMP-COMP said-QUE
'What did you order Mary to eat?'

c. nay yecachinkwu-ka **elmana**
my girlfriend-NOM how
yeyppu-tako!
be.pretty-EXCL
'My girlfriend is really pretty!'

4.3 The assumed left peripheral map

Based on the observations so far, we can postulate the following left periphery for ordinary *wh*-phrases (Ko, 2006) and NWH-adverbials at LF:

(26)   [$_{ILLP}$ **NWH$_i$** [$_{CTP}$ t$_i$ [$_{DistP}$ [$_{FocP}$ **wh** [$_{IntP}$ **way** [$_{IP}$ ...]]]]]]

According to the proposed LF structure, we can predict that different from NWH-phrases, ordinary *wh*-phrases may not be sensitive to the intervention effect induced by quantificational adverbs, since they are assumed not to move covertly to the split-Force domain and DistP is located higher than both FocP and IntP where ordinary *wh*-phrases are licensed. This prediction is borne out by the following attested examples:

(27) a. hangsang **way** John-un sinmwun-ul
always   why John-TOP newspaper-ACC
ilk-ni?
read-QUE
'Why does John always read a newspaper?'

b. hangsang **mwues-ul** way mek-ko
always   what-ACC why eat-PROG
iss-ni?
be-QUE
'Why are you always eating what?'

In (27a), the SBE *hangsang* can precede *way* 'why' without inducing the intervention effect since *way*, directly merged in [Spec,IntP], does not move across the SBE at LF. In (27b), the *wh*-argument *mwues-ul* has scrambled over *way*, indicating that it is located in the CP region in overt syntax. In this case, the *wh*-argument can be preceded by the SBE, simply because DistP is configured higher than FocP. That is, the SBE in [Spec,DistP] does not have an effect on LF-movement of the *wh*-argument to its checking position [Spec,FocP].

5 Summary

This paper has investigated the syntax of negative *wh*-constructions in Korean, which, to my knowledge, has not been much discussed in the literature. Under the split-ForceP hypothesis, it has been argued that NWH-adverbials like *mwe-ka* 'WHAT-NOM' and *ettehkey* 'HOW', which are base-generated above or at the edge of IP, covertly move to [Spec,CTP] to reflect their sensitivity to clause type and then move to [Spec,ILLP] to turn the original information-seeking force into the speaker-oriented rhetorical force. I hope the discussion presented in this paper contributes to a better understanding of the left periphery of the clause in Korean.

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