On the syntax of negative \textit{wh}-constructions in Korean

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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 \textit{mwe-ka} and \textit{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 \textit{wh}-items).\footnote{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.}

\begin{enumerate}[a.]
  \item pi-ka \textit{mwe-ka} o-ni?!
    \begin{itemize}
      \item rain-NOM WHAT-NOM come-QUE
    \end{itemize}
    ‘No way is it raining. (It isn’t raining.)’
  \item ku-ka \textit{ettehkey i pangpep-ulo} he-NOM HOW this-way-in
    \begin{itemize}
      \item sihem-ul thongkwha-ha-l exam-ACC pass-CONN
      \item swu.iss-keyss-ni?! can-FUT-QUE
    \end{itemize}
    ‘No way could he pass the exam in this way. (He couldn’t pass the exam in this way.)’
  \item Mary-ka \textit{eti} Seoul-ul
    \begin{itemize}
      \item ttena-l swu.iss-keyss-ni?! leave-CONN can-FUT-QUE
    \end{itemize}
    ‘No way would Mary be able to leave Seoul. (Mary wouldn’t be able to leave Seoul.)’
  \item ku-ka \textit{encey} sip-nyen ceny chayk-ul
    \begin{itemize}
      \item he-NOM WHEN 10-year ago book-ACC
      \item ss-ess-ni?! write-PST-QUE
    \end{itemize}
    ‘No way did he write the book ten years ago. (He didn’t write the book ten years ago.)’
\end{enumerate}

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 \textit{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).
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-advverbials 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. \[ \text{CP why [IP ... NegP ... }] \]
   b. \[ \text{CP how [IP ... NegP t}_{\text{how}} ... ] \]

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 maykwu-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 \(\text{way}\) and other \(\text{wh}\)-operators, in that unlike the former, the latter cannot be preceded by a Scope Bearing Element (SBE) like \(\text{amwuto} \quad \text{‘anyone’}\). 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. \(\texttt{amwuto} \quad \texttt{mwues-ul} \quad \texttt{mek-ci} \quad \texttt{anh-ass-ni}\?\quad \texttt{not-PST-QUE} \quad \texttt{What did no one eat?}\)

b. \(\texttt{mwues-ul} \quad \texttt{amwuto} \quad \texttt{mek-ci} \quad \texttt{anyone} \quad \texttt{eat-CONN} \quad \texttt{anh-ass-ni}\?, \texttt{not-PST-QUE} \quad \texttt{What did no one eat?}\)

(11) a. \(\texttt{amwuto} \quad \texttt{way} \quad \texttt{sakwa-lul} \quad \texttt{mek-ci} \quad \texttt{anyone} \quad \texttt{apple-ACC} \quad \texttt{eat-CONN} \quad \texttt{anh-ass-ni}\?, \texttt{not-PST-QUE} \quad \texttt{Why did no one eat an apple?}\)

b. \(\texttt{way} \quad \texttt{amwuto} \quad \texttt{sakwa-lul} \quad \texttt{mek-ci} \quad \texttt{anyone} \quad \texttt{apple-ACC} \quad \texttt{eat-CONN} \quad \texttt{anh-ass-ni}\?, \texttt{not-PST-QUE} \quad \texttt{Why did no one eat an apple?}\)

(10) shows that the \(\text{wh}\)-argument \(\texttt{mwues-ul} \quad \texttt{‘what-ACC’}\) must precede the SBE \(\texttt{amwuto} \quad \texttt{‘anyone’}\). On the other hand, (11) illustrates that the \(\text{wh}-\text{adjunct} \quad \text{way}\) 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 \(\text{wh}\)-movement at LF:

\(^3\)I leave further investigation of the exact base position of NWH-advverbials to future work.

\(^4\)SBEs also include \(\texttt{man} \quad \texttt{‘only’}, \quad \texttt{anh} \quad \texttt{‘not’}, \quad \texttt{pakkey} \quad \texttt{‘only’} \quad \text{(NPI)}, \quad \texttt{to} \quad \texttt{‘also’}, \quad \texttt{nvukwanka} \quad \texttt{‘(non-specific) someone’}, \quad \text{and} \quad \texttt{nvukwana} \quad \texttt{‘everyone’}\) (Ko, 2005).

(12) \textbf{Intervention Effect (Ko, 2005: 871):}

At LF, a \(\text{wh}\)-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 \(\text{wh}\)-licensing, according to which \(\text{way}\) in an interrogative clause is directly merged into its checking position \([\text{Spec,Int}(\text{errogative})\text{P}]\), while other \(\text{wh}\)-phrases covertly move to \([\text{Spec,Foc}(\text{us})\text{P}]\), higher than IntP, for feature checking.\(^5\)

In (10a), the \(\text{wh}\)-argument \(\texttt{mwues-ul}\) must undergo LF-movement to \([\text{Spec,Foc}\text{P}]\) to be licensed. However, the SBE \(\texttt{amwuto}\) 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 \(\text{wh}\)-argument over the SBE avoids the intervention configuration. In (11a), unlike the \(\text{wh}\)-argument, the \(\text{wh}\)-adjunct \(\texttt{way}\) can be preceded by the SBE. This is because \(\texttt{way}\) does not move at LF as it is initially licensed in its base position, i.e. \([\text{Spec,Int}\text{P}]\), before the overt scrambling of the SBE over it.\(^6\)

The well-formedness of (11b) is simply because \(\texttt{way}\) is not located in the intervention configuration.

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

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

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

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

\[ ([CP C[+wh] [DistP mindig [FocP kit[+wh] [Foc hitá [...]]]])] \]

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.\(^7\)

\(^7\)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).

\[
\text{(18)} \quad \{\text{mwe-ka/ettehkey}\} \text{motun salam-i}\quad \text{every person-NOM}\quad \text{John-NOM}\quad \text{haksayng-i-ni!}\quad \text{know-QUE}\quad \text{‘(int.) Does every person know that John is not a student?’}
\]

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.

\[
\text{(19)} \quad \{\text{mwe-ka/ettehkey}\} \text{motun salam-i}\quad \text{WHAT-NOM/HOW}\quad \text{every person-NOM}\quad \text{John-i}\quad \text{haksayng-i-ni!}\quad \text{know-QUE}\quad \text{‘It is not the case that every person knows whether John is a student or not.’}
\]

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).\(^9\)

\[
\text{(20)}
\begin{align*}
\text{a.} & \quad \{\text{mwe-ka/ettehkey}\} \text{Mary-ka}\quad \text{WHAT-NOM/HOW}\quad \text{Mary-NOM}\quad \text{haksayng-i-ni!}\quad \text{student-COP-QUE}\quad \text{‘It is not true that Mary is a student.’} \\
\text{b.} & \quad *\{\text{mwe-ka/ettehkey}\} \text{nwu-ka}\quad \text{WHAT-NOM/HOW}\quad \text{who-NOM}\quad \text{haksayng-i-ni!}\quad \text{student-COP-QUE}\quad \text{‘(int.) It is not true that Mary is a student.’} \\
\text{c.} & \quad *\{\text{mwe-ka/ettehkey}\} \text{Mary-ka}\quad \text{WHAT-NOM/HOW}\quad \text{Mary-NOM}\quad \text{haksayng-i-ta}\quad \text{student-COP-DECL}\quad \text{‘(int.) It is not true that Mary is a student.’} \\
\text{d.} & \quad *\{\text{mwe-ka/ettehkey}\} \text{Mary-ka}\quad \text{WHAT-NOM/HOW}\quad \text{Mary-NOM}\quad \text{tnena-la}\quad \text{leave-IMP}\quad \text{‘(int.) It is not true that Mary left.’} \\
\text{e.} & \quad *\{\text{mwe-ka/ettehkey}\} \text{Mary-ka}\quad \text{WHAT-NOM/HOW}\quad \text{Mary-NOM}\quad \text{yeyppu-kwuna}\quad \text{pretty-EXCL}\quad \text{‘(int.) It is not true that Mary is pretty.’}
\end{align*}
\]

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).

\[
\text{(i)} \quad \text{mwe-ka}\quad \text{John-i}\quad \text{mwe-lul}\quad \text{WHAT-NOM}\quad \text{John-NOM}\quad \text{something-ACC}\quad \text{mek-ess-ni!}\quad \text{eat-PST-QUE}\quad \text{‘No way did John eat something.’}
\]
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 qui? what there you.stay to do here ‘What are you going to do here?’

b. Tanto cosa ci stai a fare qui? Prt what there you.stay to do here ‘What are you going to do here anyway? (You have nothing 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 wohI, 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 tantoi ? [CTP ti 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. 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.\[10]\[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/etthekey [CTP t [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 w [CTP t [DistP t [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 etthekey ‘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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References

Beck, Sigrid. 2006. Intervention Effects Follow from Focus Interpretation. *Natural Language Semantics*, 14:1-56. DOI: https://doi.org/10.1007/s1050-005-4532-y

Beck, Sigrid and Shin-Sook Kim. 1997. On wh-and operator scope in Korean. *Journal of East Asian Linguistics*, 6(4):339–384. DOI: https://doi.org/10.1023/A:1008280026102

Cheung, Lawrence Yam-Leung. 2008. *The negative wh-construction*. PhD dissertation, UCLA.

Cheung, Lawrence Yam-Leung. 2009. Negative wh-construction and its semantic properties. *Journal of East Asian Linguistics*, 18:297-321. DOI: https://doi.org/10.1016/j.s10831-009-9051-2

Coniglio, Marco and Iulia Zegrean. 2012. Splitting up Force: Evidence from discourse particles. In Lobke Aelbrecht, Liliane Haegeman, and Rachel Nye (eds.), *Main clause phenomena: New horizons*, 229-255. Amsterdam: John Benjamins.

Dohi, Atsushi. 2020. CP-internal discourse particles and the split ForceP hypothesis. *Lingua* 233. DOI: https://doi.org/10.1016/j.lingua.2019.102757

Ko, Heejeong. 2005. Syntax of why-in-situ: Merge into [Spec, CP] in the overt syntax. *Natural Language & Linguistic Theory*, 23(4):867-916. DOI: https://doi.org/10.1007/s11049-004-5923-3

Ko, Heejeong. 2006. On the Structural Height of Reason Wh-Adverbials: Acquisition and consequences. In N. C. Lisa Lai-Shen Cheng and Norbert Corver (eds.), *Wh-Movement: Moving on*, 319-349. MIT Press, Cambridge, MA.

Lipták, Anikó. 2001. *On the syntax of wh-items in Hungarian*. Doctoral dissertation, University of Leiden.

Pan, Victor Junnan. 2015. Mandarin peripheral construals at the syntax-discourse interface. *The Linguistic Review*, 32(4):819-868. DOI: https://doi.org/10.1515/tlr-2016-1005

Rizzi, Luigi. 1990. *Relativized Minimality*. MIT Press, Cambridge, MA.

Rizzi, Luigi. 1997. The Fine Structure of the Left Periphery. In L. Haegeman (ed.), *Elements of Grammar*, 281-337, Kluwer, Dordrecht.

Rizzi, Luigi. 1999. On the Position of “Int(errogative)” in the Left Periphery of the Clause. Ms, Università di Siena.

Rizzi, Luigi. 2001. On the position of ‘Int(errogative)’ in the left periphery of the clause. In Guglielmo Cinque and Giampaolo Salvi (eds.) *Current studies in Italian syntax*, 267-296. Amsterdam: Elsevier.

Saruwatari, Asuka. 2015. Wh-NP rhetorical questions in Japanese and Chinese. *Shizen Gengo-e-no Riron-teki Apurooti* [Theoretical Approaches to Natural Languages], 21-30. Osaka University.

Shlonsky, Ur and Gabriela Soare. 2011. Where’s ‘Why’? *Linguistic Inquiry*, 42:651-669. DOI: https://doi.org/10.1162/LING_a_0064

Tsai, Wei-Tien Dylan. 2008 Left periphery and how-why alternations. *J East Asian Linguist*, 17(83):83-115. DOI: https://doi.org/10.1007/s10831-008-9021-0

Yang, Barry Chung-Yu. 2007. Rhetoric/Disapproving wh and Intervention Effect. unpublished manuscript. Harvard.

Yang, Barry Chung-Yu. 2015. Locating Wh-Intervention Effects at CP. In Wei-Tien Dylan Tsai (ed.), *The Cartography of Chinese Syntax*, 153-186. Oxford: Oxford University Press.

Zimmermann, Malte. 2004. Discourse particles in the left periphery. *ZAS Papers in Linguistics*, 35:543-566.