

Specificity and Intervention Effects in Korean

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1 Introduction

Intervention effects refer to phenomena where a Scope-Bearing Element (SBE) intervenes between the surface position of a *wh*-phrase and the LF landing site of the *wh*-phrase and blocks LF movement of the *wh*-phrase. In the following Korean sentences, SBE's such as negation and focus phrases block LF movement of *wh*-in-situ.¹

- (1) a. * *amwuto mwues-ul saci an-ass-ni?*
anybody what-acc buy neg-past-Q
'what did nobody buy?'
- b. *mwues-ul_i amwuto t_i saci an-ass-ni?*
What-acc anybody buy neg-past-Q
- (2) a. * *John-man nwukwu-lul po-ass-ni?*
J-only who-acc see-past-Q
'who did only John see?'
- b. *nwukwu-lul_i John-man t_i po-ass-ni?*
Who-acc J-only see-past-Q
- (3) a. * *John-to nwukwu-lul po-ass-ni?*
J-also who-acc see-past-Q
'Who did John also see?'
- b. *Nwukwu-lul_i John-to t_i po-ass-ni?*
Who-acc J-also see-past-Q

There are several proposals that deal directly with the sentences in (1) (Beck 1996; Beck and Kim 1997; Kim 2000; Miyagawa 2003). The last three works, with minor differences, basically follow Beck's (1996) original Minimal Quantified Structure Constraint (MQSC) analysis.

The goal of this paper is to show that Beck's MQSC analysis of Korean intervention effects has to be supplemented with the following two syntactic assumptions; first, depending on their syntactic positions, *wh*-phrases in Korean yield different readings in terms of specificity/D-linking. Second, Clausal (CP) scrambling must be distinguished from ordinary NP-scrambling in terms of reconstruction.

I propose that while *wh*-phrases such as *nwukwu* 'who' and *mwues* 'what' are nonspecific/non-D-linked by default, they yield specific/D-linked interpretations when they *c*-command a SBE. With respect to the second assumption, I propose that clausal scrambling in Korean obligatorily reconstructs while NP-scrambling doesn't have to. I attribute the obligatory reconstruction

¹Kim (2000) argues that what blocks the LF movement of the *wh*-phrase is not the negation but the NPI *amwuto*. According to Kim, the NPI in Korean is a focus phrase. Following Kim (2000), I will assume that the intervener is the NPI throughout the paper. I will call the interveners Scope-Bearing Elements (SBE's).

properties of the clausal scrambling to the semantic condition that all variables should be of type e . Finally, I show that with these two assumptions and with Pesetsky's (1987) analysis on D-linking, Beck's MQSC analysis nicely handles all the relevant data in Korean.

The organization of the paper is as follows; in section 2, I introduce Beck's (1996) MQSC analysis and provide two counterexamples to her proposal. Section 3 deals with the distribution of (non)specific wh-phrases. In this section, I show that the assignment of specific/D-linked interpretations to wh-phrases depends on the structural relation between wh-phrases and SBE's. In section 4, I propose that Korean intervention effects are directly related to whether wh-phrases are interpreted as specific/D-linked or not. In other words, I propose that specific/D-linked wh-phrases cancel out intervention effects. I also provide evidence from two independent phenomena to support this hypothesis. In section 5, adopting Pesetsky's (1987) classic analysis on (non-)D-linked wh-phrases, I provide an analysis of the counterexamples to Beck's proposal.

2 Beck's (1996) MQSC and Counterexamples

Since the structures of the sentences in (1-3) are identical, let us take (2) for the illustration of Beck's analysis. Under her assumption that wh-phrases in Korean unambiguously undergo LF-movement, the LF representation of (2) will be (3).

- (4) a. LF: * [Nwukwu-lul_i [John-man (SBE) [t_i^{LF} po]-ass]-ni]? (= 2a)
-
- b. LF: [Nwukwu-lul_i [t_i^{LF} John-man (SBE) [t_i po]-ass]-ni]? (= 2b)
-

To account for the contrast between (4a) and (4b), Beck (1996) proposes the following constraints:

- (5) *Quantifier Induced Barrier (QUIB)*
The first node that dominates a quantifier, its restriction and its nuclear scope is a Quantifier Induced Barrier.
- (6) *Minimal Quantified Structure Constraint (MQSC)*
If an LF trace β is dominated by a QUIB α , then the binder of β must also be dominated by α .

In (4a), while the LF trace of the wh-phrase is dominated by a QUIB, the binder of the wh-phrase is not. Thus, the sentence is ungrammatical by definition. On the other hand, in (4b), the LF trace of the wh-phrase and its binder (Q-operator) are outside the scope of the QUIB. Thus, (4b) is grammatical. Notice that under Beck's analysis, scrambling in overt syntax does not reconstruct. If the scrambled wh-phrases were reconstructed to its base position, the sentence would be ungrammatical just like (4a).

In addition, Beck argues that her analysis also holds for sentences in which wh-phrases undergo long-distance scrambling.

- (7) a. * Amwuto [Mary-ka nwukwu-lul manness-tako] sayngkakhaci an-ni?
Anybody M-nom who-acc met-comp think neg-Q
'whom does nobody think Mary met?'
- b. Nwukwu-lul_i amwuto [Mary-ka t_i manness-tako] sayngkakhaci an-ni?
Who-acc anybody M-nom met-comp think neg-Q

In (7a), since the embedded wh-phrase *nwukwu* has wide scope, it needs to move up to the Spec of the matrix CP at LF. This movement induces ungrammaticality since the binder of

the wh-phrase is not dominated by the QUIB. On the other hand, in (7b), the embedded wh-phrase undergoes long-distance scrambling out of the QUIB. Thus, neither the LF trace of the wh-phrase or its binder is in the scope of the QUIB.²

However, when we take other possibilities of scrambling into consideration, Beck’s (1996) analysis no longer works. Consider the following sentences.

- (8) a. John-un [Mary-ka nwukwu-lul manness-tako] sayngkakhani?
 J-top M-nom who-acc met-comp think-Q
 ‘Who does John think that Mary loves?’
- b. [Mary-ka nwukwu-lul manness-tako]_i John-un t_i sayngkakhani?
 M-nom who-acc met-comp J-top think-Q
- (9) a. * Amwuto [Mary-ka nwukwu-lul manness-tako] sayngkakhaci an-ni?
 anybody M-nom who-acc met-comp think neg-Q
 ‘Who does nobody think Mary met?’
- b. * [Mary-ka nwukwu-ul manness-tako]_i amwuto t_i sayngkakhaci an-ni?
 M-nom who-acc met-comp anybody think neg-Q
- c. Mary-man [nwukwu-lul_i amwuto t_i mannaci an-ass-tako] sayngkakhani?
 M-only who-acc anyone meet-neg-past-comp think-Q
 ‘Who is the one that only Mary thinks that nobody met?’

(8) shows that the whole embedded clause containing the wh-phrase can scramble to sentence-initial position in Korean. Notice that (8a)/(8b) and (9a)/(9b) are minimally different in that the matrix subjects in the latter pair are NPI’s (which are interveners) and the ones in the former are not. The ungrammaticality of sentence (9a) is expected, since a SBE in the subject position blocks LF movement of the wh-phrase. However, the ungrammaticality of (9b) is unexpected under Beck’s analysis; the surface position of the wh-phrase is higher than intervener *amwuto*. Thus, at LF, the NPI does not block LF movement of the wh-phrase at all. The sentence is expected to be grammatical but it isn’t. (9c) is more complex; the sentence has two SBE’s: the NPI *amwuto* in the embedded clause; and the focus phrase *Mary-man* ‘Mary also’ in the matrix subject position. In this sentence, the wh-phrase does not undergo long-distance scrambling. Instead, it scrambles to the left peripheral position of the embedded clause. Under Beck’s account, this sentence should be ungrammatical since the scrambled wh-phrase is still inside the scope of the focus phrase *Mary-man*. However, the sentence is grammatical. (9b) and (9c) are unexplained under Beck’s (1996) MQSC analysis.

In the next section, I will show that there is an interpretational difference between wh-phrases that undergo scrambling and wh-in-situ in Korean.

3 Syntax of Specificity/D-linking in Korean

In fact, we can find one interesting fact from the data introduced above. Compare the positions of the wh-phrases in the grammatical sentences with the position of the wh-phrases in the ungrammatical sentences from (1) and (9). In the grammatical sentences, the wh-phrases occupy the (matrix/embedded) clause-initial position. In the ungrammatical sentences, on the other hand, the wh-phrases occupy their base positions. From this fact, it is not unreasonable to assume that the grammaticality of the relevant sentences has to do with the surface position of the wh-phrases. Indeed, there is an interpretational difference between the wh-in-situ and the wh-phrases in clause-initial positions.

Consider (1a) and (1b), for example. When a speaker asks questions like (1a) in which the wh-phrase is in situ, she/he does not have in mind a particular set over which the choice of *mwues*

²According to Beck, an NPI marks the scope of the negation.

‘what’ ranges. This amounts to saying that the wh-phrase in (1a) is non-D-linked/nonspecific in the sense of Pesetsky (1987) and Enç (1991). On the other hand, (1b) has the wh-phrase in clause-initial position (a scrambled position) and an answer to this question should pick out something from the set specified in a previous discourse. In other words, the scrambled wh-phrase has a D-linked/specific interpretation. In this respect, one might hypothesize that there is a certain correlation between the surface position of wh-phrases and their interpretation.³ I believe that this hypothesis is ultimately on the right track. However, we need to elaborate this assumption based on the data in (10-12).

- (10) Mary-man sey haksayng-ul manness-ta.
M-only three student-acc met-decl.
a. ‘Only Mary met three students’
b. ‘There are three specific students and only Mary met them’
- (11) Sey haksayng-ul_i Mary-man t_i manness-ta.
Three student-acc M-only met-decl.
‘There are three specific students and only Mary met them’
- (12) Sey haksayng-ul_i Mary-ka t_i manness-ta.
Three student-acc M-nom met-decl.
a. ‘Mary met three students’
b. ‘There are three specific students and it is Mary who met them’ (with focal stress on the preverbal subject)

In (10), the subject is the focus phrase *Mary-man* ‘only Mary’ and the object is a numeral indefinite *sey haksayng* ‘three students’. This indefinite object can either be specific or nonspecific. In fact, the specific reading is a little bit hard to get. However, when a context is well established, it is not impossible for the object to yield the specific interpretation. Interestingly, in (12), when the object undergoes scrambling across the subject, it has only the specific reading. So far, the data indicate that our hypothesis is on the right track. However, (12) reveals that the hypothesis is an overgeneralization. In (12), the object *sey haksayng* ‘three students’ scrambles to sentence-initial position. Notice that the subject of the sentence has the nominative case morpheme *-ka*, not the focus particle. In this case, the sentence has two readings. When the sentence is uttered with an ordinary intonation, the scrambled object yields the nonspecific reading. On the other hand, if we stress on the subject *Mary-ka*, the scrambled object obligatorily yields the specific reading. The (12a) reading undermines the hypothesis above in that even though the object is in sentence-initial position, it has the nonspecific reading.

(12) shows that the interpretation of the indefinite NP is dependent not on the syntactic position of the indefinite NP’s *per se*, but on their syntactic positions with respect to Scope-Bearing Elements such as focus and negation. Under the assumption that the subject with a focal stress in (12) is also a focus phrase, the data above show that indefinite NP’s in Korean are specific only when they have a Scope-Bearing Element to c-command. Based on this, I propose a condition that predicts the distribution of specific NP’s in Korean.

- (13) *Specificity Interpretation Condition*
If an indefinite NP c-commands a Scope-Bearing Element in overt syntax, it must be specific.

The condition above does not predict all the distribution of specific NP’s, since, as shown in (10), the specific interpretation is also facilitated by various discourse contexts. However, the

³For a similar proposal, see Son (2001).

condition in (13) does predict when the specific reading of indefinite NP's is obligatory within certain structural configurations.

I propose that the condition in (13) is also responsible for wh-phrases in Korean. According to Karttunen (1977), wh-phrases are existentially quantified indefinites, and Watanabe (1992) and Hagstrom (1998) decompose Korean and Japanese wh-phrases into a Q-operator and an indefinite NP. In this respect, the interpretation of wh-phrases in Korean has to follow from the Specificity Interpretation Condition in (13).

Returning to the sentences in (1-3), in the (b) sentences, the wh-phrases in clause-initial position c-command the Scope-Bearing Elements. Thus, they are specific/D-linked. On the other hand, the wh-in-situ in the (a) sentences are nonspecific. Now I provide empirical data in favor of the Specificity Interpretation Condition proposed above.

It is a well-known fact that Korean wh-phrases such as *mwues* 'what' and *nwukwu* 'who' are interpreted as indefinites such as *something* and *someone* in declarative sentences.⁴ This is shown in (14).

- (14) a. Mary-ka nwukwu/mwues-ul poass-ni?
M-nom who/what-acc see-Q
'Who/what did Mary see?'
b. Mary-ka nwukwu/mwues-ul poass-ta.
M-nom someone/something-acc see-decl.
'Mary saw someone/something'

I will refer the indefinites in (14b) as wh-indefinites. There is one peculiarity about the wh-indefinites. That is, they are inherently nonspecific. Consider the following sentences.

- (15) (Context: I went to a party for linguists yesterday. I met a group of syntacticians working on intervention effects and talked about the issue with them)

Onul achim, ku tongsaloncatul cwung-esye **han salam**/?*nwukwu-ul manness-ta.
this morning the syntacticians among-loc. a **man/someone** met-decl.

'This morning, I ran into a **linguist/someone** from that group'

(15) shows that while indefinites like *someone* and *a linguist* in English can be specific, the wh-indefinite *nwukwu* cannot be used in the same slot. Based on this, I propose that the wh-indefinites *nwukwu* 'someone' and *mwues* 'something' are inherently nonspecific. In other words, their nonspecificity is lexically specified.⁵ If this is a correct observation, sentences in which wh-indefinites are in a syntactic position where the Specificity Interpretation Condition is met are

⁴These wh-phrases can also be used as indefinites in interrogative sentences. With focal stress, they are interpreted as wh-phrases, but without focal stress they are indefinite NP's. Thus, the sentence below becomes a yes-no question.

John-i mwues-ul sa-ss-ni?
J-nom what/something buy-past-Q

'WHAT did John buy?'
'Did John BUY something?'

⁵Under the assumption that Korean wh-indefinites are inherently nonspecific, one might wonder why a wh-phrase which is composed of a Q-operator and an (nonspecific) indefinite can be specific in certain configurations. One way to avoid this discrepancy is to propose that the specific interpretation of the wh-phrase comes from the operator, not the indefinite part. In fact, Enç (1991) argues that all operators are specific.

Another solution is to assume that D-linked wh-phrases are in fact definite NP's. Indeed Beck and Rullmann (1998) propose that D-linked wh-phrases such as *which* in English be treated as definites, based on the observation that the behavior of *which* phrases is identical to that of definite descriptions in terms of presupposition projection. For now, I don't have any solution for this. I will leave the issue for future research.

expected to be ungrammatical; the condition forces the wh-indefinites to be specific. However, since they are inherently nonspecific, a semantic incompatibility will cause the ungrammaticality. Indeed, this expectation is borne out.

- (16) *? Nwukwu-lul_i Mary-man t_i mannass-ta.
 Someone-acc M-only met-decl.
 ‘Only Mary met someone’
- (17) Nwukwu-lul_i Mary-ka t_i mannass-ta.
 Someone-acc M-nom met-decl.
 a. ‘Mary met someone’ (with ordinary intonation)
 b. * ‘It is Mary who met (specific) someone’ (focal stress on the subject)
- (18) a. [Mary-ka nwukwu-lul mannass-tako]_i amwuto t_i sayngkakhaci an-nun-ta.
 M-nom someone-acc met-comp anyone think neg-pres-decl.
 ‘Nobody thinks that Mary met someone’
 b. * Mary-man [nwukwu-lul_i amwuto t_i mannaci an-ass-tako] sayngkakhaci-ta.
 M-only someone-acc anyone meet neg-past-comp think-decl.
 ‘Only Mary thinks that nobody met someone’

In (16), the wh-indefinite *nwukwu* c-commands the focus phrase. Thus, it should be specific according to the Specificity Interpretation Condition, but it is inherently nonspecific. Thus, the sentence semantically crashes. In (17), with a normal intonation, the sentence is grammatical. This shows that the wh-indefinite can be interpreted as nonspecific in sentence-initial position when it has no SBE to c-command. Notice that the sentence doesn’t have the specific reading. On the other hand, when the subject is assigned a focus with focal stress as shown in (17b), the wh-indefinite c-commands it and the indefinite should be specific. This causes the semantic crash.⁶ The sentences in (18) are the declarative versions of the counterexamples in (9b) and (9c). In (18a), the wh-indefinite in the embedded object position does not c-command the NPI in the matrix subject position. Thus, it cannot be specific, and no incompatibility arises. On the other hand, the wh-indefinite in (18b) c-commands the NPI. Thus, the ungrammaticality of (18b) is expected.

In sum, I propose that the interpretation of indefinite NP’s (including wh-phrases) in Korean depends on their syntactic position with respect to Scope-Bearing Elements in the sentence. In the next section, I will discuss the relation between the interpretation of wh-phrases and intervention effects.

4 Specificity/D-linking and Intervention Effects

In this section, I argue that the D-linking/specificity status of wh-phrases is closely related to intervention effects in Korean. I will show that if we adopt Pesetsky’s (1987) original analysis, the intervention effects can be accounted for under Beck’s (1996) original analysis without modifying it.

⁶In order for the sentence in (17) to yield the (17b) reading, the wh-indefinite must be in its base position and the subject must be assigned focal stress.

MARY-ka nwukwu-lul mannass-ta.
 M-nom someone-acc met-decl.

‘It is Mary that met someone (nonspecific)’

Since the wh-indefinite in the object position does not c-command the focus phrase in the subject position, it is interpreted as nonspecific by default. This also confirms that my proposal is on the right track.

4.1 D-linking/Specificity Matters

From the discussion so far, we obtain the following generalization: if a wh-phrase c-commands a SBE, it has a specific/D-linked interpretation and the sentence is grammatical. On the other hand, if a wh-phrase does not c-command a SBE, it has a nonspecific/non-D-linked reading and the sentence is ungrammatical. Based on this observation, I propose that a D-linked/specific wh-phrase is indifferent to intervention effects. In other words, a D-linked/specific wh-phrase is not subject to Beck's MQSC. To support my proposal, I show that even if a wh-phrase is in situ (thus, it is within the scope of a SBE), the sentence will turn out to be grammatical when the wh-phrase is forced to be D-linked/specific by context or by an overt phrase. There are two cases to consider.

First, the verb *ccikta* 'choose, select, vote for' is one of the verbs that forces D-linking. To choose something/someone means that you choose a certain member from a pre-established set. And in this case, suddenly the sentence becomes grammatical. Compare (a) with (b) in (18-20).

- (19) a. * Amwuto nwukwu-lul poci an-ass-ni?
 Anyone who-acc see neg-past-Q
 'Who didn't anyone see?'
 b. Amwuto nwukwu-lul ccikci an-ass-ni?
 Anyone who-acc choose neg-past-Q
 'Which one didn't anyone choose/select/vote for?'
- (20) a. * Mary-to nwukwu-lul po-ass-ni?
 M-also who-acc see-past-Q
 'Who did Mary also see?'
 b. Mary-to nwukwu-lul ccik-ess-ni?
 M-also who-acc choose-past-Q
 'Which one did Mary also choose?'
- (21) a. * Mary-man nwukwu-lul po-ass-ni?
 M-only who-acc see-past-Q
 'Who did only Mary see?'
 b. Mary-man nwukwu-lul ccik-ess-ni?
 M-only who-acc choose-past-Q
 'which one did only Mary choose?'

Second, the phrase *i salam/kes-tul cwung-eyse* 'among these people/things' explicitly makes the wh-in-situ D-linked. Compare (a) with (b). The (b) sentences are grammatical with this phrase.

- (22) a. * Amwuto nwukwu-lul coahaci an-ni?
 Anyone who-acc like neg-Q
 'who doesn't anyone like?'
 b. I salam-tul cwung-eyse amwuto nwukwu-lul coahaci an-ni?
 Among these people anyone who-acc like neg-Q
 'Among these, which one doesn't anyone like?'
- (23) a. * Mary-to mwues-ul sa-ass-ni?
 M-also what-acc buy-past-Q
 'What did Mary also buy?'
 b. I kes-tul cwung-eyse Mary-to mwues-ul sa-ss-ni?
 Among these things M-also what-acc buy-past-Q
 'Among these things, which one did Mary also buy?'

- (24) a. *Mary-man mwues-ul sa-ss-ni?
 M-only what-acc buy-past-Q
 ‘What did only Mary buy?’
 b. I kes-tul cwung-eyse Mary-man mwues-ul sa-ss-ni?
 Among these things, M-only what-acc buy-past-Q
 ‘Among these things, which one did only Mary buy?’

The above data support my proposal that a D-linked/specific wh-phrase in Korean does not show intervention effects at all. In the next section, I provide a syntactic analysis for my proposal.

4.2 Movement, Binding and Obligatory Reconstruction

Two approaches have been proposed regarding the assignment of scope to wh-in-situ. One is that they undergo movement at LF to the Spec of CP (cf. Huang 1982). The other approach is that a question has an abstract Q morpheme and it directly binds wh-in-situ (cf. Baker 1970). Utilizing both approaches, Pesetsky (1987) argues that D-linked wh-phrases are bound in situ by Q while non-D-linked wh-phrases undergo LF movement. Since intervention effects in Korean are sensitive to the D-linking status of the wh-phrases, it is expected that an analysis that incorporates Pesetsky’s idea into Beck’s (1996) MQSC should account for the counterexamples in (9b) and (9c). In this section, I show that this expectation is borne out.

First consider the following sentences.

- (25) a. *Amwuto mwues-ul saci an-ass-ni? (=1a)
 anybody what-acc buy neg-past-Q
 ‘What didn’t anybody buy?’
 b. Mwues-ul_i amwuto t_i saci an-ass-ni?
 What-acc anybody buy neg-past-Q
 ‘Which one doesn’t anyone buy?’
- (26) a. Mary-man [nwukwu-lul_i amwuto t_i mannaci an-ass-tako] sayngkakhani?
 M-only who-acc anyone meet-neg-past-comp think-Q
 (=9c)
 ‘Who is the one that only Mary thinks that nobody met?’
 b. [Q_i... [SBE (focus phrase)... [wh_i...SBE (NPI)...t_i...]]
- (27) a. * [Mary-ka nwukwu-ul mannass-tako]_i amwuto t_i sayngkakhaci an-ni? (=9b)
 M-nom who-acc met-comp anybody think neg-Q
 ‘Who doesn’t anyone think that Mary met?’
 b. [Q_{LF} [CP...wh_{LF}...]]_j [SBE (NPI)...t_j.....]
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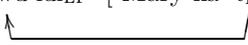
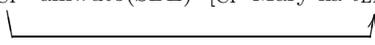
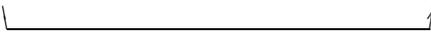
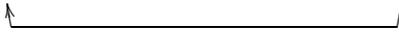
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(25a) and (25b) are ordinary simple sentences. (25a) is ungrammatical since the NPI blocks the LF movement of the wh-phrase. (25b) is grammatical since nothing intervenes between the LF trace of the wh-phrase and its landing site. It is assumed that the scrambled element does not reconstruct to its base position. (26a) is a counterexample to Beck’s proposal; since the focus phrase in the matrix subject position blocks the LF movement of the wh-phrase in the embedded clause, the sentence should be ungrammatical, yet it is grammatical. However, with the Specificity Interpretation Condition and Pesetsky’s D-linking analysis, we can now account for the grammaticality of the sentence. Since the wh-phrase in (26a) c-commands the SBE, it

is specific/D-linked. Thus, the wh-phrase acquires its scope via binding. Since Beck’s MQSC is only sensitive to LF movement, the sentence does not violate the MQSC at all. If wh-phrases are D-linked, their surface positions with respect to SBE’s do not matter.

Now, let’s see whether the D-linking analysis accounts for (27), which is another counterexample to Beck’s proposal. In (27), all of the embedded CP scrambles to sentence-initial position. In this case, the embedded wh-phrase is not D-linked/specific, since the wh-phrase cannot c-command the NPI in the matrix subject position. It is embedded too deeply. Thus, the embedded wh-phrase undergoes LF movement. Under Beck’s assumption that scrambled elements do not reconstruct, the LF representation of (27a) will be (27b). And this representation obviously creates a problem for the current analysis in that there is no intervener between the LF trace and the wh-phrase in the Spec of the matrix CP. The ungrammaticality of the sentence is unexpected under Beck’s current proposal.

To account for the ungrammaticality without any modification of Beck’s MQSC and Pesetsky’s D-linking analysis, we have to assume that NP-scrambling is different from clausal (CP) scrambling in terms of reconstruction. That is, clausal scrambling must reconstruct while phrasal scrambling need not. In this case, two options are available.

- (28) a. [Nwukwu-lul_{LF} [Mary-ka t_{LF} manness-tako]_i amwuto(SBE) t_i sayngkakhaci an-ni?

- b. [Nwukwu-lul_{LF} t_{CP} amwuto(SBE) [CP Mary-ka t_{LF} manness-tako] sayngkakhaci an-ni?

 (movement > reconstruction)
- (29) a. [t_{CP} amwuto (SBE) [CP Mary-ka nwukwu-lul manness-tako] sayngkakhaci an-ni?

- b. [Nwukwu-lul_{LF} amwuto(SBE) [Mary-ka t_{LF} manness-tako] sayngkakhaci an-ni?

 (reconstruction > movement)

In (28), at LF, the embedded (non-D-linked) wh-phrase undergoes movement to the Spec of CP and then the rest of the embedded clause reconstructs. Or, as in (29) the order can be reversed. But, importantly, the LF traces of the wh-phrases in both cases are within the scope of the SBE *amwuto*. Thus, the sentence is ungrammatical.

To show that this approach is not an *ad hoc* solution, I show that the reconstruction effect of clausal movement is attested cross-linguistically. According to Arregi (2003), there are two types of wh-movement in Basque.

- (30) a. Se₁ pentzate su [CP t₁ idatzi rabela Jonek]?
 What you-think written has Jon
 ‘What do you think Jon wrote?’
- b. [CP Se idatzi rabela Jonek] pentzate su t_{CP}?

As in (30a), the wh-phrase *se* ‘what’ originating in an embedded clause can be extracted to sentence-initial position. Alternatively, the whole part of the embedded CP can be moved to sentence-initial position as in (30b). Both procedures mark the same scope for the wh-phrase. Interestingly, while the phrasal (NP) wh-movement is allowed to cross the negation *es*, the clausal (CP) wh-movement is not.

- (31) a. Sein₁ es tau esan Mirenek [CP t₁ jun danik]?
 Who not has said Miren gone has
 ‘Who didn’t Miren say left?’

- b. *_{[CP Sein jun danik] es tau esan Mirenek t_{CP}?}

Based on this, Arregi (2003) argues that clausal pied piping must reconstruct and that the ungrammaticality of (31b) can be explained under Beck’s (1996) MQSC analysis.

- (32) LF of (31b): [Sein₁ [es tau esan Minerak [_{CP} t₁ jun danik]]]
 who not has said Miren gone has

In (32), the LF-trace of the wh-phrase is within the scope of the negation. Thus, this violates Beck’s MQSC. Arregi (2003) attributes the obligatory reconstruction property of clausal pied piping to his hypothetical semantic condition that traces can only be of type *e*. In other words, when a syntactic object moves, the object obligatorily reconstructs if its trace cannot be interpreted as a variable over individuals. Otherwise, it would violate the condition above. Obviously, the CP-scrambling in Korean and the CP-movement in Basque leave variables. But their variables are not over individuals but over propositions. Thus, their reconstructions are obligatory.

5 Summary

In this paper, I have provided two potential counterexamples to the proposals put forth in Beck (1996) and Beck and Kim (1997). I argued here that, with two additional syntactic assumptions, the counterexamples can be accounted for under Beck’s analysis without modifying her original idea that a QUIB is a barrier that blocks LF movement of wh-in-situ.

First, Korean wh-phrases such as *mwues* ‘what’ and *nwukwu* ‘who’ can be either specific/D-linked or nonspecific/non-D-linked based on their syntactic positions with respect to Scope-Bearing Elements. Second, unlike NP-scrambling, clausal scrambling must reconstruct.

I have observed that specific/D-linked wh-phrases do not induce intervention effects at all. I attributed this fact to Pesetsky (1987). Since specific/D-linked wh-phrases get their scopes via (unselective) binding, they are not subject to a movement-oriented constraint such as the MQSC. There was one sentence whose ungrammaticality is unexpected under Pesetsky’s and Beck’s analyses. In the sentence, the whole embedded clause scrambles across the QUIB in overt syntax and this configuration does not violate Beck’s MQSC. I proposed that clausal scrambling must reconstruct and provided cross-linguistic evidence from Basque.

I would like to point out two things to clarify my argument. First, as briefly mentioned in Section 3, the Specificity Interpretation Condition affects only a wh-phrase with a particular structural configuration. In other words, this condition is not the only way for wh-phrases in Korean to get a specific/D-linked reading. Specificity can be also assigned contextually or lexically.⁷

Second, even though Pesetsky’s (1987) adoption of Heim’s (1982) unselective binding analysis for D-linked wh-phrases has been criticized recently, (c.f. Reinhart 1998) I believe my main point here is not affected by the criticism. The reason why I adopt Pesetsky’s analysis is that it is the original work that argues that D-linked wh-phrases should be distinguished from ordinary wh-phrases in terms of the scope-taking mechanism. In this respect, I believe that whatever proposals

⁷It is assumed that Korean *etten* ‘which’ is a lexically D-linked wh-phrase. However, it is ambiguous between a ‘which’ reading and a ‘what kind of’ reading.

Etten chayk-ul ilkoiss-ni?
Which book-acc read-Q

- a. ‘which book are you reading?’
b. ‘what kind of book are you reading?’

In this respect, its interpretation is also dependent on discourse.

on (non-)D-linking are available in the current literature, my proposal here is compatible with the proposals.

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