When in-situ languages diverge:
Altaic vs. Non-Altaic wh-adjunct constructions*

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This paper discusses the peculiar interactions between wh-adjunct ‘why’ and the Intervention Effect (Beck and Kim 1997), with a comparative approach to in-situ languages: Korean, Japanese, Turkish, and Chinese. This paper shows that in in-situ languages, there exists a systematic language-internal and cross-linguistic asymmetry between ‘why’ with short distance vs. long distance construal. I maintain that language internal peculiarities of ‘why’ is attributed to the base-merge position of ‘why’, [Spec,CP] (cf. Rizzi 1990). Further, I demonstrate that cross-linguistic divergences between Altaic vs. Non-Altaic why-questions are originated from Scrambling properties of Altaic languages.

1. Introduction

It has been much discussed in the literature that ‘why’ in in-situ languages (why-in-situ, hereafter) behaves differently from other wh-phrases (Huang 1982, Akar 1990, Nishigauchi 1990, Saito 1992, Aoun and Li 1993, Tsai 1994, Sohn 1995, Chung 1995, Arslan 1999, to name a few). This peculiarity of why-in-situ has often been attributed to special mechanisms that target ‘why’, but not other wh-phrases, such as Empty Category Principle (ECP) (Huang 1982), Covert movement (Tsai 1994), or Ban on covert pied-piping (Nishigauchi 1990, Saito 1994). In this paper, however, I investigate less-studied syntactic properties of why-in-situ that cannot be attributed to the previous proposals. In particular, I discuss language-internal and cross-linguistic diversity among why-constructions, with a comparative approach to in-situ languages: Korean (K), Japanese (J), Turkish (T), and Chinese (C). I show that in Altaic (K/J/T), ‘why’

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sometimes does and sometimes does not behave like other wh-phrases. Further, I demonstrate that the behaviors of Altaic and non-Altaic (C) ‘why’ systematically diverge and converge, depending on the scope of ‘why’ at LF. I propose that these diverse behaviors of why-in-situ are due to the restriction on the initial merge position of ‘why’ ([Spec,CP] as I will argue) in in-situ languages (cf. Rizzi 1990, 1999). Crucial evidence for the proposal comes from the non-uniform interactions between ‘why’ and the Intervention Effect (Beck and Kim 1997, Hagstrom 1998).

The paper proceeds as follows. Section 2 discusses the peculiar properties of ‘why’ with respect to the Intervention Effect in K/J, pointing out the problems with previous approaches. Section 3 proposes a new account for the puzzles on K/J ‘why’. Section 4 shows that the proposal extends to Turkish with an interesting implication. Section 5 compares the diverging behaviors of ‘why’ in Altaic and Non-Altaic, and illustrates that our proposal predicts such divergence. Section 6 concludes the paper.

2. A Puzzle: Language-Internal Diversity of Why-constructions in Altaic

2.1 Background: Peculiarity of ‘why’ in K/J

In K/J, there is a well-known word order restriction between a wh-phrase and a Scope-Bearing Element (SBE) (Hoji 1985 and Kim 1989). As shown in (1a) and (2a), a wh-phrase cannot be preceded by an SBE such as NPI, ‘-only’, ‘-also’, ‘someone’, ‘everyone’. The sentences become grammatical when the wh-phrase is scrambled over the SBE, as in (1b) and (2b).

(1) a. *Amwuto mwues-ul ilk-ci-ass-ni?
   Anyone what.Acc read-Neg-Past-Q
   ‘What did no one read?’

   b. Mwues-ul1 amwuto t1ilk-ci-ass-ni1 (K)

(2) a. *Hanako-sika nani-o yoma-nai no?
   Hanako-only what-Acc read-Neg Q
   ‘What will only Hanako read?’

   b. Nani-o1 Hanako-sika t1 yoma-nai no? (J)

This word order restriction was analyzed as an LF-Blocking Effect by Beck and Kim (1997), and later called the Intervention Effect (IE) by Hagstrom (1998). On this approach, the ill-formedness of (1a) and (2a) is attributed to the IE that an SBE blocks the LF movement of a wh-phrase to its checking position [Spec,CP], as stated in (3) (see also Beck 1996, Pesetsky 2000, Kim 2002; For different approaches, see Takahashi 1990, Sohn 1995, Tanaka 1997, Lee and Tomioka 2001, Krutzer and Shimoyama 2002).

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1 D-linked wh-phrases do not show the word order restriction seen in (1) and (2). This paper restricts the discussion to non-D-linked wh-phrases. See Ko (2002) for further discussion about ‘for what reason’ vs. ‘why’ in Korean and Japanese.
(3) **Intervention Effect (IE):** A *wh*-phrase cannot move across certain SBEs at LF. The SBEs triggering the IE include negation, *NPI*, 'only', 'even', 'someone' (nonspecific), and 'everyone'.

The diagrams in (4) illustrate the asymmetry between the scrambled and unscrambled sentences in (1) and (2). According to the IE, *mwues* in (1a) and *nani* in (2a) cannot be licensed, because the SBE *amwuto* 'anyone' and *hanako-sika* 'hanako-only' block LF-movement of the *wh*-phrases to their checking position, as illustrated in (4a). Scrambled *mwues* in (1b) and *nani* in (2b), on the other hand, are licensed, because the SBE does not interfere with the LF-movement of the scrambled *wh*-phrases, as shown in (4b).

(4) a. *[Q ←--SBE--------- what ]: (1a),(2a) b. √[Q ← what, SBE t ]: (1b),(2b)

Interestingly enough, however, it has been noted that 'why' in K/J shows a rather peculiar distribution. Unlike other *wh*-phrases, 'why' may be *preceded by* an SBE in K/J (Cho 1998 and Lee 2002 for Korean; Miyagawa 1997, Kuwabara 1998, and Watanabe 2000 for Japanese). The examples are given (5) for Korean and (6) for Japanese (Kuwabara 1998:10).

   'Why did no one read the book?'

   b. Way amwuto ku chayk-ul ilk-ci-an-ass-ni?

   'Why did only Taroo read that book?'

   b. Naze Taroo-sika sono hon-o yoma-nakat-ta no?

Based on this contrast between 'why' and other *wh*-phrases, previous literatures have concluded that 'why' is simply not subject to the IE. I will refer to this line of analyses as the Non-Interaction Approach (7) (see Cho 1998, Kuwabara 1998, and Watanabe 2000 for details).

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2 The exact nature of the SBE triggering IE has been controversial. The SBEs are quantifiers for Beck and Kim 1997, Anti-Topic Items for Lee and Tomoika 2001, and Focus elements for Kim 2002. This paper does not attempt to account for the characteristics of the SBEs, but rather focuses on the interactions between SBEs and 'why'. For concreteness, I assume that the elements reported as QUIB (Quantifier Induced Barrier) in Beck and Kim (1997) are SBEs triggering IE. The list of the SBEs is given in (i) with K/J order. I employ NPI examples for the purpose of presentation, but the same patterns hold for other SBEs in (i).

(i) -man/-sika 'only', -to/-mo 'also', -kkaci/-sae 'even', nukwunka/dareka 'someone' (nonspecific) nukwuna/daremo 'everyone', -an/nai 'not'.

3 The linear order in (4) reflects the hierarchial order in the overt syntax.

4 There is no doubt that (5a) is grammatical in Korean. Some Japanese speakers, however, find (6a) somewhat degraded (Tanaka 1997, Ayumi Ueyama personal communication (p.c.)). The discussion in this paper applies to K/J speakers who accept (5a) and (6a), in contrast to (1a) and (2a).
Non-Interaction Approach: Unlike other wh-phrases, ‘why’ is “exempt” from the Intervention Effect, because ‘why’ undergoes a special licensing process that is not subject to the IE.

2.2 Is K/J ‘why’ really exempt from the Intervention Effect?

The Non-Interaction Approach argues that ‘why’ may be preceded by an SBE in (5) and (6), because ‘why’ in K/J is free from the IE. This approach, therefore, crucially assumes that ‘why’ occupies “a lower position than an SBE” in the overt syntax, but freely licensed “across” the SBE at LF, unlike other wh-phrases. This assumption is described in (8).

(8) √[CP Q ←——SBE ——— why ... ]

I argue that the Non-Interaction approach based on this assumption faces two fatal problems. One problem comes from the scope property of way ‘why’ in Korean, and the other comes from emergence of the Intervention Effect in why-constructions with long-distance construal.

Let me first discuss the problem concerning scope of way. Reason Operators (RO) in Korean such as etten iyu-lo ‘for what reason’ or –se ‘because’ show scope ambiguity with respect to SBEs such as an- ‘not’ and –man ‘only’. This is illustrated in (9) and (10).5 6

(9) Amwuto etten iyu-lo saimha-ci-an-ass-ni?
Anyone which reason-for resign-CI-Neg-Past-Q
‘For what reason, is it the case that nobody resigned?’ (Reason>>Neg)
‘What was the reason (among these) such that there is nobody who had that reason for resigning?’ (Neg>>Reason)

(10) John-man etten iyu-lo saimha-yess-ni?
John-only which reason-for resign-Past-Q
‘For what reason is it the case that only John resigned?’ (Reason>>only)
‘What is the reason (among these) such that it is only John who had that reason for his resigning?’ (only>>Reason)

Etten iyu-lo in (9) may have two readings with respect to the negation. When the RO is interpreted higher than negation, (9) presupposes that ‘nobody resigned’ and asks the reason for that situation. On the other hand, when the RO is interpreted lower than the negation, (9) does not presuppose that ‘nobody resigned’. It may be the case that somebody resigned. On this reading, the speaker asks the hearer to pick out a reason such that nobody pointed out that

5 Notice that D-linked ‘for what reason’ in (9) is not subject to the IE so that it can be preceded by ‘anyone’, unlike non-D-linked wh-phrases (see footnote 1). I also note that unlike (9), only the Reason>>Neg reading is available with short form negation. Interestingly, the Japanese counterpart of (9) also has ‘Reason>>Neg reading’ only (Shoichi Takahashi p.c.). I speculate that the lack of ambiguity in the Japanese counterpart of (9) comes from the lack of long-form negation in Japanese.

6 Strictly speaking, the scope of ‘for what reason’ in (9) is always the proposition it dominates at LF since the question operator scopes over the proposition. However, for convenience, I will employ a scope marking notation ‘>>’ or terminology under/over to express the possible readings of the sentence. I thank Danny fox for clarifying this point.
particular reason for their resigning. The example in (10) illustrates that the same type of ambiguity occurs between -man ‘only’ and RO in Korean.

Given the ambiguity in (9) and (10), one can conclude that a RO, in principle, may have two readings with respect to negation or ‘only’, as in (11).

(11) \text{REASON} \gg \text{SBE (e.g. Negation long-form, ‘–only’)} \gg \text{REASON}

Considering the fact that ‘why’ is a RO like ‘for what reason’, one might expect that way ‘why’ in Korean would show the same ambiguity as described in (11). In particular, if ‘why’ were base-generated below an SBE, as argued in the Non-Interaction Approach (see (8)), we predict that there would be no problem in obtaining the lower reading of ‘why’ at LF. However, the scope of way contradicts this prediction. As illustrated in (12) and (13), way consistently takes scope over the negation and ‘only’.

(12) Amwuto \text{way} ku chayk-ul ilk-ci-an-ass-ni?
Anyone why the book-Acc read-CI-Neg-Past-Q
‘Why did no one read the book?’ (Reason \gg \text{Neg}, *Neg \gg \text{Reason})

(13) Mary-man \text{way} ku chayk-ul ilk-ess-ni?
Mary-only why the book-Acc read-Past-Q
‘Why did only Mary read the book?’ (Reason\gg\text{only}, *only\gg \text{Reason})

Unlike (9), way-question in (12) always presupposes that ‘nobody read the book’, and asks the reason for the situation. Unlike (10), way-question in (13) always presupposes that ‘only Mary read the book’, and asks the reason for the situation. The non-existence of the lower reading of ‘why’ in (12) and (13), therefore, casts doubts on the Non-interaction approach arguing that ‘why’ moves “across” an SBE at LF. If way had moved from the position below negation or ‘only’, we would wrongly predict scope ambiguity in (12) and (13).

In addition to the problem regarding the scope of ‘why’, the Non-Interaction Approach encounters a more serious problem with respect to the behaviors of ‘why’ with long distance construal. The Non-Interaction Approach argues that ‘why’ in K/J is “exempt” from the IE. If this position is on the right track, we would expect that ‘why’ in K/J can be preceded by an SBE in “any” structural context. Since an SBE does not block the licensing of ‘why’, an SBE must be able to precede ‘why’ in any syntactic position.

Under close investigation, however, this prediction is not borne out. Consider (14) for Korean and (15) for Japanese (see also Miyagawa 1997a), where ‘why’ is merged in an embedded declarative clause.

(14) *Amwuto [John-i \text{way} saimha-yess-ta-ko] malha-ci-an-ass-ni?
Anyone J-Nom way resign-Past-Dec-C say-Cl-Neg-Past-Q
‘What is the reason x such that no one said that John resigned for x?’

(15) *Hanako-sika [Taroo-ga naze kuru to] iwa-nakat-ta no?
H.-only T.-Nom why come C say-Neg-Past Q
‘What is the reason x such that only Hanako said that Taroo came for x?’

The Non-Interaction Approach predicts that the sentences in (14) and (15) would be grammatical, because there is no blocking effect for ‘why’ at LF.
However, this is not the case. As shown in (14) and (15), ‘why’ in an embedded declarative clause cannot be preceded by an SBE in a higher clause. This ungrammaticality of (14) and (15) sharply contrasts with grammatical sentences in (16) and (17), where the matrix subject is replaced with a referential DP (without negation). The ungrammaticality of (14) and (15), thus, challenges the basic premise of the Non-Interaction Approach that ‘why’ is simply free from the IE.

    M.-Top [J.-Nom why resign-Past-Dec-C] say-Past-Q
    ‘Why did Mary say that John resigned __?’ (K)

(17) Hanako-ka [Taroo-ga naze kuru to] itta no?
    H.-Nom T.-Nom why come C said Q
    ‘Why did Hanako say that Taroo will come __?’ (J)

One might modify the Non-Interaction Approach, and claim that ‘why’ is exempt from the IE only when ‘why’ and an SBE are in the same clause (Miyagawa 1997a). This view may accommodate the contrasts between (5)-(6) vs. (14)-(15). Under thorough scrutiny, however, this claim is not correct, either. Consider the following examples.

    John-Top [anyone why the book-Acc read-CI-Neg-Past-Dec-C] say-Past-Q
    ‘What is the reason x s.t. John said that no one read the book for x?’

(19) *John-wa [Mary-sika naze sono hon-o yoma-nakat-ta-to] itta no?
    J-Top [M-only why the.book-Acc read-Neg-Past C] said Q
    ‘What is the reason x s.t. John said that only Mary read the book for x?’

If ‘why’ were exempt from the IE with respect to a clausemate SBE, as Miyagawa (1997a) suggests, we expect that (18) and (19) would be grammatical, under the reading where ‘why’ scopes below the negation and the NPI. This prediction, however, is not borne out. The sentences in (18) and (19) do not have the intended reading. It is, at best, an echo question. Thus, (18) and (19) again show that ‘why’ is not free from the IE, contrary to the previous literatures.

To sum up, this section demonstrates the peculiarity of the behaviors of ‘why’ with respect to the IE. As observed in the previous literatures, ‘why’ may be preceded by an SBE in some context, unlike other wh-phrases ((5), (6)). More importantly, however, ‘why’ may not be preceded by an SBE in other contexts, just like other wh-phrases ((14),(15),(18),(19)). The previous approaches fail to explain these dual aspects of ‘why’ in K/J and make a wrong

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7 As Daeho Chung and Ayumi Ueyama (p.c.) pointed out, the crucial factor contributing the ungrammaticality of (14) and (15) is the Negation rather than the NPI. The sentences are still ungrammatical when the higher clause contains a negation without an NPI. Importantly, however, this pattern extends to other types of SBEs listed in footnote 2. Thus, one cannot attribute the ungrammaticality of (14) and (15) simply to the weak island effect (Rizzi 1990).
prediction about the scope of ‘why’ at LF. In the next section, I provide a new generalization capturing the puzzling behaviors of ‘why’ and propose an analysis on the puzzle.

3. Proposal and Analysis

3.1 The New Generalization

Though the behaviors of ‘why’ look complex on the surface, there is a consistent factor governing the distribution of ‘why’ in K/J. Namely, the distance between ‘why’ and the question morpheme Q in the overt syntax. In particular, I note the systematic fact that ‘why’ behaves differently from other wh-phrases, only when it is locally construed within the clause it merged into. This generalization is given in (20).

\(20\) a. When ‘why’ and Q are clausemates (local construal), ‘why’ may be preceded by an SBE (e.g. (5), (6))
b. When ‘why’ and Q are not clausemates (non-local construal), ‘why’ may not be preceded by an SBE (e.g. (14),(15),(18),(19))

Consider first (20a), which illustrates the disparity between ‘why’ and other wh-phrases. When ‘why’ and Q are in the same clause as in (5) and (6), ‘why’ is interpreted within the clause it is merged in (i.e. local construal). In this context, ‘why’ may be preceded by an SBE, unlike other wh-phrases. The generalization in (20b), on the other hand, captures the similarity between ‘why’ and other wh-phrases. When ‘why’ and Q are in different clauses as in (14),(15),(18), and (19), ‘why’ is interpreted in a higher clause than the clause it is merged in (i.e. non-local construal). In this context, ‘why’ may not follow an SBE, just like other wh-phrases. The puzzle is how to capture this generalization in (20).

3.2 Proposal

In the previous literatures, the peculiarity of ‘why’ in K/J has been attributed to the claim that ‘why’ is “exempt” from the IE. As we have seen in section 2.2, however, this view makes wrong predictions. Rather, I argue that ‘why’ is in fact subject to the IE all the time, just like other wh-phrases. I propose that the non-uniform behaviors of ‘why’ in K/J are originated from the restriction on its External-Merge position (in the sense of Chomsky 1995, 1999).

It has been suggested that ‘why’ in wh-fronting languages is base-generated high in its potential checking position, so does not move (overtly) at all in some context (Bromberger 1985 for English; Rizzi 1990, Boškovic 2000 for French; Rizzi 1999 for Italian). I argue that this suggestion should also extend to in-situ languages like K/J. I will call this proposal External-Merge Hypothesis (EMH). The detailed description of EMH is given in (21).

\(21\) **External-Merge Hypothesis (EMH):** ‘Why’ in wh-in-situ languages is externally-merged into its potential checking position [Spec,CP] in the
overt syntax. Crucially, the CP that ‘why’ merges into is a declarative or interrogative CP that it semantically modifies.

According to (21), ‘why’ in K/J is merged into [Spec,CP] of a clause that it semantically modifies. This is illustrated in (22a). If the CP is interrogative, it is interpreted within the clause without any movement. If the CP is declarative, it moves to a higher clause at LF to get its WH-feature licensed. As described in (22b), other items like XP and YP may precede ‘why’ in [Spec,CP] via Scrambling or Topicalization in K/J.

\[
\begin{align*}
\text{(22) a. } &\quad [\text{CP why [IP XP YP V]}] \\
\text{b. } &\quad [\text{CP XP, YP [CP why [IP t_i t_j V]}]]
\end{align*}
\]

3.3 Analysis

3.3.1 Why-in-situ in local construal

Under the EMH, let us consider the first part of our puzzle: the behavior of why-in-situ in local construal (see (20a)). A relevant Korean example is repeated here as (23). The account for Korean extends to Japanese.

\[(23)\] Amwuto way ku chayk-ul ilk-ci-an-ass-ni?
\[\text{Anyone why the book-Acc read-CI-Neg-Past-Q}
\]
\[\text{‘Why did no one read the book?’}\]

The grammaticality of (23) is peculiar in the sense that \textit{way} may follow \textit{amwuto}, in contrast to other \textit{wh}-phrases. On the EMH view, however, this peculiarity is, in fact, expected from the consequence of the External-Merge. Consider the derivation of (23). First, \textit{way} in (23) is externally-merged in [Spec,CP] of the interrogative clause, as shown in (24).

\[(24)\] [CP way ...Q ...NEG... amwuto... ]

Importantly, the syntactic requirement of \textit{way} is satisfied just by the External-Merge operation in (24). In more theoretical terms in the Minimalist Program (Chomsky 1995), the uninterpretable WH-feature ([uWH]) of \textit{way} is checked off immediately by \{φ features, +Q\} in Q, since \textit{way} is externally-merged in the checking domain of Q, namely in [Spec,CP] (cf. Chomsky 1999). Under this view, therefore, \textit{way} in (24) does not undergo any movement at LF.

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8 This analysis may conflict with Chomsky’s (1999) Derivation by Phase framework (DbP), since DbP does not allow Spec-Head relationship as a legitimate agreement configuration (as pointed out by David Pesetsky and Chris Collins p.c.). However, I suggest that we may reconcile the EMH with the DbP as in (i).

(i) The EMH in the DbP: \textit{way} is externally-merged with C, as a non-branching head. The DbP does allow External-Merge to value features if it is head-to-head relation. For instance, consider the expletive constructions: \textit{there} as a “head” may value the uninterpretable features in the head \textit{I} via head-to-head agreement. Hence, if \textit{way} is base-merged with C as a head, no conceptual
What makes the matter more interesting is the following. It is well-known that K/J allow long distance Scrambling of SBEs (Saito 1985, Lee 1993), as illustrated in (25) and (26).

(25) Amwu-ekey-to, John-un [Mary-ka t, panci-lul
Anyone-Dat J-Top [M-Nom ring-Acc
cwu-ci-an-ass-ta-ko] mitnunta believe
gave-Cl-Neg-Past-Dec-C] ‘Anyone, John believes that Mary did not give a ring to ti.’ (K)

(26) Dare-ni-mo, John-wa [Mary-ga t, yubiwa-o age-nakat-ta to]
Anybody-Dat J-Top M-Nom ring-Acc give-Neg-Past C
omotteiru think
‘Anyone, John thinks that Mary did not give a ring to ti.’ (J)

Given the possibility of NPI movement shown above, I argue that amwuto may undergo Scrambling over way in (24), as described in (27) (cf. Saito 1985, but see also Sohn 1995).9

(27) [CP amwuto [CP way [Q NEG... t1... ]]]

The NPI Scrambling in (27) yields the correct word order in (23), in which amwuto precedes way. More importantly, however, the Scrambled NPI in (27) does not give rise to the IE. Since way has already been licensed by External-Merge, way does not move at LF at all. Hence, the NPI may precede way without triggering licensing problems at LF.

3.3.2 ‘why’ in non-local construal

Now let us turn to the behavior of ‘why’ in non-local construal. A relevant Korean example is repeated here as (28).

Anyone J-Nom way resign-Past-Dec-C say-Cl-Neg-Past-Q
‘What is the reason x such that no one said that John resigned for x?’

proves arise in DbP: way may probe Q, just as there probes I. Since way is, indeed, a non-branching item, it may count both as a minimal and maximal node. Thus, I suggest that (i) might be a possible ramification of the EMH.

9 It has been controversial whether a subject may undergo Scrambling or not. Saito (1985) argues that a subject may not Scramble either clause-internally or externally. On the other hand, building on Frasier (1978), Sohn (1995) suggests that a subject, in principle, may Scramble unless parsing difficulty arises (See also Y. Lee 1993 for this position). As for this issue, the EMH takes a position that a subject may undergo Scrambling, at least over ‘why’ in K/J. Therefore, to the extent that the EMH is successful, it supports the view that Scrambling is in principle possible. Further, since Scrambling in (27) does not give rise to parsing problems unlike clause-external scrambling, the EMH view is compatible with Sohn (1995). In my recent work (Ko, in progress), I suggested that the data in Saito (1985) should be account for different principles (Cyclic Linearization, Fox and Pesetsky 2003) rather than Ban on subject scrambling.
Under the EMH, the ungrammaticality of (28) is simply reduced to the IE, as in other \textit{wh}-constructions. Consider the derivation of (28). First, by the requirement of the EMH, \textit{way} is externally-merged in [Spec,CP] of a declarative clause that it modifies. This is illustrated in (29a).

(29) a. \[
\text{[CP \textit{way}]_{\text{uWH}} \ \text{C} \ ...}\]

b. \[
\text{[Q \leftarrow am\textit{wuto} \rightarrow \text{NEG} \rightarrow [CP \textit{way}]_{\text{uWH}} \ \text{C} \ ...]}\]

Unlike (24), however, the External-Merge in (29a) cannot license \textit{way}, because the declarative CP lacks the licenser Q. Hence, \textit{way} in a declarative clause must move to a higher clause that does contain Q, as illustrated in (29b). However, since an SBE intervenes between \textit{way} and Q in (29b), \textit{way} cannot move to Q because of the IE. Thus, the IE rules out (28), just like other \textit{wh}-constructions.

In sum, the EMH approach accounts for the local vs. non-local asymmetry of K/J ‘why’ with two inherent properties in K/J: Scrambling and the IE. When locally construed, ‘why’ is licensed in its base position. Hence, the Scrambled SBE does not matter at all. When non-locally construed, on the other hand, ‘why’ must move to a higher clause as other \textit{wh}-phrases. Therefore, the preceding SBE does matter, triggering the IE.

3.3.3 The scope of ‘why’ at LF

In section 2, we have seen that unlike Reason Operators, ‘why’ in Korean may not take scope under SBEs such as Negation or ‘only’ ((9)-(10) vs. (12)-(13)). These scopal differences between ‘for what reason’ and ‘why’ are indeed expected under the EMH. On this approach, ‘why’ is merged into [Spec,CP] unlike other Reason Operators. Hence, as illustrated in (30), there is no trace of ‘why’ under Negation or ‘only’ when they are clausemates.

(30) a. \[
\text{[CP \textit{why} \ [IP \ \text{NEG} \ \text{only} \ V]]}\]

b. \[
\text{[CP \textit{for what reason} \ [IP \ \text{NEG} \ \text{only} \ t_1 \ V]]}\]

Since there is no trace of ‘why’ below the SBEs, there is no reason to expect the lower reading of ‘why’ at LF. In other words, unlike the problematic previous approaches, the EMH derives the lack of lower reading of ‘why’ from the same principle accounting for obviation of the IE.\(^{10}\)\(^{11}\)

\(^{10}\) For the sake of space, I do not discuss a weaker version of the EMH in this paper (but see Ko 2002 for the extensive review). On this view, the EMH assumes that ‘why’ \textit{can be}, rather than, \textit{must be} merged into [Spec,CP]. This approach is compatible with the IE data and Scope data reported in the paper. However, there is empirical evidence against the weak EMH. If ‘why’ \textit{can be} merged into the lower position than [Spec,CP], we may expect that Scrambling over ‘why’ \textit{may be} A or A’-Scrambling. On the other hand, if ‘why’ \textit{must be} merged in [Spec,CP], Scrambling over ‘why’ \textit{must be} A’-Scrambling. Based on anaphor binding test (Mahajan 1990, Saito 1992) and idiom chunk test (Miyagawa 1997b), Ko (2002) shows that the fact favors the strong EMH assuming that ‘why’ is obligatorily merged into [Spec,CP] in the overt syntax.

\(^{11}\) As James Yoon (p.c) suggests, this paper does not show direct evidence that in a declarative embedded clause, ‘why’ \textit{must be} merged into [Spec,CP]. Thus, one might argue that ‘why’ \textit{is} merged into [Spec,CP] in an interrogative clause, but not in an declarative clause. However, I do not accept this alternative for the following reason. I argue that the EMH is both semantic and syntactic
4. Implications: The EMH extends to Turkish ‘why’

One straightforward implication of the EMH is that the IE provides a diagnostic for the External-Merge position of ‘why’ in other in-situ languages. It is difficult to tell the base-merge position of a wh-adjunct, since it is not constrained by lexical selection. Furthermore, if a language allows Scrambling, it is even more challenging to pinpoint the base-position of a wh-adjunct. The EMH, however, provides a legitimate test for this. If ‘why’ in a language X shows the same distribution as K/J with respect to the IE, we may infer that ‘why’ is externally merged in [Spec,CP] in the language X. By this logic, I argue that we can extend the EMH to Turkish ‘why’, niye. As shown in (31) and (32), niye behaves exactly like way in Korean and naze in Japanese. 12

(31) **Kimse niye kitab-ı oku-ma-dı?**
Anyone why book-Acc read-Neg-Past
‘Why did no one read the book?’

(32) a. *(Hiç) **kimse** [Ali-nin **niye** ayrıl-dığ-ı-n] g söyle-me-di?
Anyone [A-Gen why leave-Nom-3sgPoss]-Acc say-Neg-Past
‘What is the reason x s.t. no one said that Ali resigned for x?’
b. *Sen [**kimse**-nin **niye** kitab-ı oku-ma-dı-g-lı-n] g söyle-di-n?
You anyone-Gen why book-Acc read-Neg-Nom-3sgPoss]-Acc say-Past-2sg
‘What is the reason x s.t. you said that no one read the book for x?’

The grammaticality of (31) shows that when niye is interpreted within its clause (local construal), the IE is obviated as in K/J. On the other hand, (32) shows that when niye is interpreted in the higher clause (non-local construal), the IE emerges, as in K/J. Thus, this systematic asymmetry between the behaviors of niye strongly suggests that niye is merged into [Spec,CP] as in K/J. 13

Further, the EMH approach has an interesting consequence for the word order contrasts between niye and other wh-phrases in Turkish. In Turkish, wh-phrases cannot precede a subject, “except” ‘why’. This is illustrated in (33) (Akar 1990: 64-65).

(33) a. *?Nereye Ayse git-ti?
Where Ayse go-Past
‘Where did Ayse go?’

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12 I am thankful to Ceyda Arslan and Jaklin Kornfilt for their judgment and transcriptions of the Turkish sentences.
13 Turkish NPI may also undergo long distance scrambling like KJ (25) and (26) (Jaklin Kornfilt and Ceyda Arslan p.c.). Hence, I argue that the word order in (31) (kimse<niye) is derived in the same way as in KJ: long distance scrambling of kimse over C.
b. Niye Sevim Teyze Nergis-e kiz-dik?
   ‘Why did Aunt Sevim get angry at Nergis?’

The contrasts in (33) straightly follow from the EMH. Since niye is merged in [Spec,CP], it may precede the subject Sevim in (33a) (note also that subj<niye order may still be derived by Scrambling of the subject in Turkish). Other wh-phrases, on the other hand, must stay in the preverbal focus position due to Turkish focus structure. Therefore, they cannot precede the subject, as in (33b).


It has been known that ‘why’ in in-situ languages (K/J/T/C) behaves the same way in island contexts (Huang 1982, Nishigauchi 1990, Chung 1995, Arslan 1999). As far as the IE is concerned, however, Altaic (K/J/T) vs. Non-Altaic (C: Mandarin Chinese) why-constructions show systematic divergence. In this section, I demonstrate that such phenomena are, in fact, predicted by the EMH.

As illustrated in (34), weishenme ‘why’ in C may not follow an SBE even in local construal, in contrast to ‘why’ in K/J/T ((34a) is good in K/J/T). On the other hand, (35) shows that weishenme in long distance construal behaves the same way as ‘why’ in K/J/T ((35a) is also bad in K/J/T).

(34) a. *Meiyouren weishenme cizhi?
    Nobody why resign
    ‘Why did nobody resign?’

b. Weishenme meiyouren cizhi?

(35) a. *Ni zhi renwei [Lisi weishenme cizhi]?
    You only think Lisi why resign
    ‘What is the reason x s.t. you only think Lisi resinged for x?’

b. Ni renwei [Lisi weishenme cizhi]?
    You think Lisi why resign
    ‘Whyi do you think Lisi resigned ti?’

The EMH provides an answer for this interesting divergence and converge between Altaic and Chinese why-in-situ. Under the EMH, ‘why’ precedes all the elements dominated by CP in the base structure (36a), and that elements may undergo long distance movement over ‘why’ to precede it (36b).

(36) a. [CP why [IP XP YP V]]

b. [CP XP i YP] [CP why [IP ti tj V]]

Suppose, however, that an in-situ language, unlike K/J/T, allows long distance movement only for very limited elements. Then, the EMH predicts that this

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14 Other SBEs such as zhiyou NP ‘only NP’, henshao ‘few people’ behave the same way as meiyou NP (see Aoun and Li 1993, Cheng and Rooryck 2001, Guerin and Soh 2003 for examples and further discussion).
restriction should play a role in deciding the word orders with *why-in-situ* in the language. I argue that this is the case in Chinese.

In particular, I note the fact that Chinese allows less freedom in word order changing operations, in comparison to K/J/T: (i) Chinese does not allow long distance Scrambling (Soh 1998 for short Scrambling in C). (ii) Chinese allows long distance Topicalization, but only for a certain limited items.\(^\text{15}\) Therefore, if Chinese is subject to the EMH,\(^\text{16}\) we predict that an element may precede *weishenme* only if it may undergo A'-Topicalization (long distance) over C. This is illustrated in (37).

(37) \[ CP \ [ XP_i \ A'-\text{topic} \ [ CP \ weishenme \ ti \ ... \ ]] \]

In fact, this prediction is borne out and explains the discrepancy between Chinese vs. Altaic. A definite NP in Chinese may undergo long distance Topicalization (Huang 1982, Li 1996). Not surprisingly, a definite NP may precede *weishenme* (Lin 1992). More interestingly, however, SBEs in Chinese cannot undergo long distance Topicalization, as described in (38).

(a) *Meiyouren, Zhangsan shuo [(tamen) hen congming] Nobody, Zhangsan said (they) very smart
   ‘Nobody, Zhangsan said that they are very smart’

(b) *Zhiyou Lisi, Zhangsan shuo [(ta) hen congming] Only Lisi, Zhangsan said (she) very smart
   ‘Only Lisi, Zhangsan said that she is very smart’

Under the (37), the EMH correctly predicts that SBEs in Chinese cannot precede *weishenme* in (34). In this respect, Chinese is crucially different from K/J/T. As seen in the previous sections, SBEs in K/J/T can undergo long distance movement ((25),(26), footnote 13), and thereby may precede ‘why’ with local construal. On the contrary, SBEs in Chinese cannot undergo long distance movement, so cannot precede ‘why’, either. In short, the divergence between Altaic vs Chinese *why*-constructions reduces to the fact that Chinese disallows long distance scrambling, unlike K/J/T.

One remaining issue is the convergence between Altaic vs. Chinese *why-in-situ* with non-local construal (see (35)). On the EMH, this emergence of uniform behaviors of ‘why’ in Altaic and Chinese is naturally explained by the simple assumption that these languages are subject to the same LF constraint, the IE. Since ‘why’ in non-local construal does move at LF both in Altaic and Chinese, it manifests the IE uniformly. The convergence between Altica and Chinese is derived without further stipulation. This view is also desirable, given the uniform behavior of ‘why’ in other islands in Altaic and Chinese.

\(^\text{15}\) I abstract away from the issue of whether Topicalization involves movement or base-generation (refer to Li 1996, and references therein). For presentation purpose, I follow the movement analysis defended by Huang (1982). Our argument, however, does not hinge on a particular analysis on Topicalization. The restriction on Topical movement may well be translated into the restriction on binding pro from the base-generated Topic.

\(^\text{16}\) See also Lin (1992). For independent reasons from the discussion developed here, Lin (1992) argued that *weishenme* is base-generated in [Spec,CP].
6. Conclusion

This paper argues that ‘why’ in in-situ languages is directly merged into its potential checking position [Spec,CP] in the overt syntax (EMH). This proposal accounts for the various complex behaviors of ‘why’ in Altaic and Chinese, which cannot attributed to the previous claims that ‘why’ is an exception to the IE. In particular, I showed that the EMH accounts for the distinctions between why-in-situ in Altaic (K/J/T) with local vs. non-local construal. The divergence between Chinese vs. Altaic in why-constructions follows from the restrictions on the word order changing operations in each language. The cross-linguistic convergence in the behaviors of ‘why’ with non-local construal is derived from the account that why-in-situ is uniformly subject to the IE.

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