

On the Origin of 'Why-in-situ'

Since Beck and Kim (1997), the **Intervention Effect** stated in (1) has been recognized as a *wh*-diagnostic for covert *wh*-movement. This paper argues that (1) not only provides a diagnostic for covert movement of 'why', but also reveals the initial merge position of 'why' in *wh*-in-situ languages.

(1) **Intervention Effect:** At LF, a *wh*-phrase may not move across a Scope Bearing Element (SBE) to its licenser [Q].

'Why' and the Intervention Effect: Most *wh*-phrases in K(orean) and J(apanese) are clearly subject to (1), as illustrated in (2). 'Why' in K/J, however, shows a puzzling behavior with respect to (1). Unlike other *wh*-phrases, 'why' may be preceded by an SBE as illustrated in (3) (Cho 1998; Miyagawa 1998).

- (2) a. ***Amwuto** **mwues-ul** ilk-ci-an-ass-**ni**?
 Anyone what-Acc read-CI-not-Past-Q
 b. **Mwues-ul**₁ **amwuto** t₁ ilk-ci-an-ass-**ni**?
 What-Acc anyone read-CI-not-Past-Q
 'What did no one read?' (Korean)
- (3) a. [**Amwuto** **way** saimha-ci-an-ass-**ni**?]
 [Anyone **why** resign-CI-not-Past-Q]
 'Why did no one resign?' ([Q] is a interrogative marker)
 b. Mary-nun [**amwuto** **way** saimha-ci-an-ass-**nunci**] mwul-ass-**ni**?
 Mary-Top [anyone **why** resign-CI-not-Past-Q] ask-Past-Q
 'Did Mary ask why no one resigned?' (Korean)

From the contrast between (2) and (3), one might argue that 'why' in K/J is simply not subject to (1), or undergoes an exceptional LF licensing process, unlike other *wh*-phrases (Watanabe 2000). I argue that this conclusion is incorrect. As illustrated in (4), 'why' in a declarative clause may not be preceded by 'anyone' in the higher clause (Miyagawa 1998 for Japanese). As shown by the contrast between (3b) and (5), 'why' cannot be licensed across the clausemate 'anyone' if 'why' is in a declarative clause.

- (4) a. ***Amwuto** [John-i **way** saimha-ass-ta-**ko**] malha-ci-an-ass-**ni**?
 Anyone [John-Nom **why** resign-Past-Dec-C] say-CI-not-Past-Q
 'Why did no one say that John resigned ___?' ([C] is a declarative marker)
 b. Mary-nun [John-i **way** saimha-ass-ta-**ko**] malha-ass-**ni**?
 Mary-Top [John-Nom **why** resign-Past-Dec-C] say-Past-Q
 'Why did Mary say that John resigned ___?'
- (5) *Ne-nun [**amwuto** **way** saimha-ci-an-ass-ta-**ko**] malha-ass-**ni**?
 You-Top [anyone **why** resign-CI-not-Past-Dec-C] say-Past-Q
 'Why did you say that no one resigned ___?'

(3)-(5) reveal two aspects of behavior of 'why' in K/J. First, when 'why' and its licenser [Q] are clausemates, 'why' can be preceded by an SBE: (3). In this respect, 'why' differs from other *wh*-phrases seen in (2). Second, when 'why' and [Q] are not clausemates, 'why' may not be preceded by an SBE: (4a) and (5). In this aspect, 'why' patterns with other *wh*-phrases.

Proposal: Contra Watanabe (2000), I argue that (1) always holds for covert movement of 'why' in K/J, just like movement of other *wh*-phrases. I propose that the puzzling behavior of 'why' in (3) is due to a restriction on the initial merge position of 'why' in K/J:

- **External-Merge Hypothesis (EMH):** 'why' in K/J is externally merged in [Spec,CP] in the overt syntax – where the CP may be declarative or interrogative. (cf. Rizzi (1990) for French *pourquoi*; Rizzi (1999) for Italian *perche* II)

Consider first (3a-b). Under the EMH, 'why' does not undergo any movement when 'why' and [Q] are clausemates. The [uWH] (Uninterpretable-WH-feature) of 'why' is checked off immediately when 'why' is base-merged in [Spec,CP] (contra Chomsky 1999), since the interrogative head has the licenser [Q]. This step is illustrated in (6). After we check off [uWH] of 'why' in (6), we may scramble an SBE over 'why', as shown in (7).

- (6) [CP why_[uWH] Q ... SBE ...]
 (7) [CP SBE₁ [CP why_[uWH] Q t₁..]]

The Scrambling in (7), however, does not pose any problem for licensing of 'why' since 'why' has already checked off [uWH] by External-Merge. Hence, 'why' may be preceded by an SBE when 'why' and [Q] are clausemates. In other words, there is no LF movement of 'why' in (3) at all, and thereby (1) is never violated in (3). 'Why' may follow 'anyone' in (3) due to the Scrambling of 'anyone'.

Second, consider (4) and (5). 'Why' in a declarative clause cannot check off its [uWH] by External-Merge in [Spec,CP], since the declarative CP does not have [Q]. Thus, 'why' in a declarative clause must undergo LF movement to a higher clause that does contain [Q]. However, if an SBE intervenes between 'why' and [Q] as in (8a,b), 'why' cannot move to [Q] due to the Intervention Effect. Hence, 'why' cannot be preceded by an SBE when 'why' and [Q] are not clausemates. 'Why' in (4)-(5) does move at LF, so it shows the Intervention Effect just like other *wh*-phrases.

- (8) a. ***[Q SBE...** [CP why_[uWH] C ...]] (= > (4a) under the EMH)
 b. ***[Q** [CP **SBE_i** [CP why_[uWH] C... t_i]] (= > (5) under the EMH)

Further Prediction on Chinese: In K/J, Scrambling of an SBE to [Spec,CP] obscures the basic word order between 'why' and the SBE, as stated in (7). In contrast, a *wh*-in-situ language Chinese does not allow Scrambling crossing CP. If the EMH also holds in Chinese, we predict that unlike K/J, 'why' in Chinese will never follow an SBE since Chinese does not allow (7). This prediction is borne out, as shown in (9). In contrast to 'why' in (3a-b), 'why' in (9a) may not follow 'no one' even when 'why' and [Q] are clausemates (Soh 2001).

- (9) a. ***Meiyouren weishenme** cizhi?
 Nobody why resign
 b. **Weishenme meiyouren** cizhi?
 Why nobody resign
 'Why did nobody resign?' (Chinese)

In the light of the EMH, I further discuss the correlation between the position preceding 'why' and A'-topicalization in Chinese. Unlike an SBE in (9a), a definite NP may precede 'why' in Chinese, as in (10).

- (10) **Lisi weishenme** kan-le na-ben shu ?
 Lisi why read that-CL book
 'Why did Lisi read that book?'

(10), however, does not disprove the EMH in Chinese since Chinese does allow A'-Topicalization crossing CP. I show that an NP in Chinese may precede 'why' only when it can also undergo A'-Topicalization. A definite NP in Chinese can be topicalized across CP, so it may precede 'why' by A'-Topicalization over 'why'. An SBE in Chinese, on the other hand, cannot be topicalized across CP as illustrated in (11). Therefore, an SBE in Chinese cannot precede 'why' either as a consequence of A'-Topicalization, or as a consequence of Scrambling: Hence, (9a) is ungrammatical.

- (11) a. Zhangsan shuo [**meiyouren** hen congming]
 Zhangsan said nobody very smart
 'Zhangsan said that nobody is very smart'
 b. ***Meiyouren,** Zhangsan shuo [(tamen) hen congming]
 Nobody, Zhangsan said (they) very smart
 'Nobody_i, Zhangsan said that they_i are very smart'

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