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When in-situ languages diverge:

Altaic vs. Non-Altaic wh-adjunct constructions

The peculiarities of *wh*-adjuncts, as opposed to other *wh*-phrases, have attracted a great deal of attention in the literature (Nishigauchi, 1990; Tsai, 1994; Chung, 1995; Arslan, 1999 to name a few). However, to our best knowledge, cross-linguistic diversities of *wh*-adjunct constructions have not been extensively investigated. In this paper, we examine *why*-questions with a comparative approach to *in-situ* languages: Korean, Japanese, Turkish, and Chinese. We maintain that (i) language-internal peculiarities of ‘why’ are attributed to the base-merge position of ‘why’ in *in-situ* languages, and (ii) cross-linguistic divergences across Altaic vs. Non-Altaic *why*-questions are originated from Scrambling properties of Altaic languages.

Peculiarities: Altaic *why*-questions. Most *wh*-phrases in Korean, Japanese, and Turkish (K/J/T) cannot follow an NPI (2), which is known as the **Intervention Effect (IE)** (1). ‘Why’ in K/J/T, in contrast, may follow an NPI (3) (Cho 1998, Miyagawa 1998). From (2)-(3), one might think that ‘why’ is simply not subject to the IE. However, we argue that this conclusion is incorrect. When ‘why’ is embedded in a declarative clause, it behaves just like other *wh*-phrases. For instance, ‘why’ cannot follow ‘anyone’ in the higher clause (4) (Miyagawa 1998), or even clausemate ‘anyone’ (5). The facts in (4)-(5) also hold in J/T. The asymmetry in (2)-(5) suggests language-internal peculiarities of ‘why’ in K/J/T. When base-merged in an interrogative clause, ‘why’ does not pattern with other *wh*-phrases: (3). On the other hand, when base-merged in a declarative clause, ‘why’ behaves just like other *wh*-phrases: (4)-(5).

- (1) Intervention Effect (IE): In LF, a *wh*-phrase may not move across certain Scope-Bearing Elements (e.g. NPI, not, only, even) to checking (scope) position. (cf. Beck and Kim 1997)
- (2) ***Amwuto** **mwues-ul** ilk-ci-an-ass-ni?
Anyone what-Acc read-CI-not-Past-Q
‘What did no one read?’ (Korean; Japanese and Turkish *wh* behave the same way)
- (3) **Amwuto** **way** saimha-ci-an-ass-ni?
Anyone **why** resign-CI-not-Past-Q
‘Why did no one resign?’ (Korean; Japanese *naze* and Turkish *niye* behave the same way)
- (4) ***Amwuto** [John-i **way** saimha-ass-ta-ko] malha-ci-an-ass-ni?
Anyone [J-Nom **why** resign-Past-Dec-C] say-CI-not-Past-Q
‘What is the reason x such that no one said that John resigned for x?’ (Korean)
- (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
‘What is the reason x such that you said that no one resign for x?’ (Korean)

Divergences: Non-Altaic *why*-in-situ. Given the peculiarity of (3), one might argue that ‘why’ is immune to the IE if base-merged in an interrogative clause. However, cross-linguistic investigation shows that this is not always true. In contrast to K/J/T, ‘why’ in Chinese cannot follow *meiyouren* ‘nobody’ even in a simple interrogative clause: (6) vs. (3). An adequate answer to the puzzle about ‘why’ should also accommodate this cross-linguistic variance.

- (6) ***Meiyouren** **weishenme** cizhi?
Nobody why resign
‘Why did nobody resign?’ (Geurin & Soh 2003)

Proposal. We propose that the peculiar behavior of ‘why’ in *in-situ* languages is explained by the **External-Merge Hypothesis (EMH)**: ‘Why’ in *wh-in-situ* languages is Externally-Merged in its potential checking position [Spec,CP] (cf. Rizzi 1990; 1999). Other properties in *why*-questions follow from the *Intervention Effect* and *Scrambling effect*.

The Peculiarities. Consider first (3), where ‘why’ is base-merged in an interrogative clause. On the EMH view, ‘why’ does not undergo any movement in (3). The interrogative clause contains the licenser [Q]. Thus, ‘why’ is licensed immediately when merged into [Spec,CP]: (7a) (cf. Chomsky 1999). Since K/J/T allows long distance Scrambling over a clause (8), an NPI may scramble over ‘why’ as (7b) (cf. Saito 1985). This Scrambling surely provides the right word order in (3) without giving rising to the IE. In sum, ‘why’ in (3) does not move at all, thus the IE is never violated. An NPI may precede ‘why’ as a consequence of Scrambling in K/J/T.

- (7) a. [CP **why**<sub>[uWH]] Q ... NPI ...]; External-Merge, and licensing of ‘why’
 b. [CP **NPI**_i [CP **why**_{[uWH]] Q ... t_i...]]; (3)}</sub>
- (8) **Amwuekeyto**_i John-un [Mary-ka t_i panci-lul cwucianassta-ko] sangkakhanta
Anyone-Dat J-Top [M-Nom ring-Acc gave.not-Dec] think-Past-Dec
 ‘Anyone_i, John thinks that Mary did not give a ring to t_i’. (Korean)

Let us turn to (4)-(5), where ‘why’ is base-merged in a declarative clause. Since the declarative CP lacks [Q], ‘why’ in (4)-(5) cannot be licensed by External-Merge. In this context, ‘why’ must undergo LF movement to a higher clause [Q]. However, if an NPI intervenes between ‘why’ and [Q] as in (4)-(5), ‘why’ cannot move to [Q] due to the IE. This is illustrated in (9). Hence, ungrammaticality of (4)-(5).

- (9) a. *[Q ... **NPI**... [CP **why**<sub>[uWH]] C]]; LF Structure of (4)
 b. *[Q ... [CP **NPI**_i [**why**_{[uWH]] C.. t_i..]]]]; LF Structure of (5)}</sub>

The Divergences. Under the EMH, the contrast between Altaic vs. Non-Altaic *why*-questions follows from Scrambling effect. On this view, elements may precede ‘why’ via Scrambling or Topicalization over [Spec,CP]. Unlike K/J/T, Chinese does not allow Scrambling over C. Thus, EMH predicts that an element in Chinese may precede *weishenme* only through A’-Topicalization. This prediction is borne out. A definite NP may undergo A’-Topicalization (10), so may precede *weishenme* as an A’-Topic (11). By contrast, *meiyouden* cannot undergo A’-Topicalization (12) (cf. Note that K/J/T counterpart of (12) is grammatical, as in (8)). Hence, (6) cannot be a correct word order in Chinese. This prediction holds for other Anti-Topic items such as *zhiyou* ‘only’ and *henshaoren* ‘few people’.

- (10) **Lisi**_i, Zhangsan shuo [(ta) hen congming]
 Lisi, Zhangsan said (she) very smart
 ‘Lisi_i, Zhangsan said that she_i is very smart’
- (11) **Lisi weishenme** kan-le na-ben shu ?
 Lisi why read that-CL book
 ‘Why did Lisi read that book?’
- (12) ***Meiyouden**, 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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