Beyond In-Situ:
Exploring Movement in *Why*-stripping

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Kim, Hyosik. (2024). Beyond in-situ: Exploring movement in *why*-stripping. *The Linguistic Association of Korea Journal, 32*(1), 113-126. This paper is concerned with the structure of *why*-stripping constructions in Korean and English. Two competing analyses have been proposed in the literature: the focus-movement analysis, which argues that *why*-stripping involves the movement of the focused phrase, escaping the TP-ellipsis (Weir, 2014; Yoshida et al., 2015). However, a recent alternative analysis proposed by Ha (2022), building on Abe's (2015) in-situ analysis on sluicing, suggests that the focused phrase in why-stripping construction remains in-situ within the TP-ellipsis. Thus, the primary contention revolves around whether *why*-stripping involves the movement of the focused phrases. In this paper, we present several pieces of evidence supporting the movement analysis. The evidence includes the absence of idiomatic readings, NPI licensing conditions, and other locality constraints on movement. We take these observations as the empirical support for the movement analysis in both languages.

Key Words: Why-stripping, focus-movement, in-situ, idioms, NPI, Clausemate

1. Introduction: *Why*-Stripping

English has a *why-stripping* construction (Weir, 2014; Yoshida et al., 2015), characterized by a clausal ellipsis. In this construction, a wh-phrase *why* is followed by a non-wh focused phrase, as exemplified in (1).

(1) A: John was eating Natto.
    B: Why NATTO (not another food)? (Yoshida et al., 2015)

Yoshida et al. (2015) argue that why-stripping construction in English involves the wh-phrase why being external-merged to a CP layer, followed by the movement of the focused phrase and TP-ellipsis, as illustrated in (2). In this paper, we will refer to this analysis as Focus-Movement analysis.

(2) Focus Movement Analysis
    [$_{CP}$ Why [$_{Foc}$ NATTO$_i$ [$_{TP}$ ~~John was eating t$_i$~~]]]

Yoshida et al. (2015) explores a wide range of properties associated with *why*-stripping and sluicing. They found that the two constructions exhibit similar properties (as well as different properties), suggesting the need for a similar analysis. Through the focus movement analysis they propose, Yoshida et al. effectively account for properties of *why*-stripping constructions.

In contrast, however, within the literature, Ha (2023) proposed, based on the in-situ analysis for sluicing by Abe (2016), that the focused phrase in *why*-constructions also remains in-situ within the ellipsis site, as illustrated in (3).

(3) In-Situ Analysis
    [$_{CP}$ Why [$_{Foc}$ [$_{TP}$ ~~John was eating NATOO~~]]]

Thus, a primary contention within the literature revolves around whether *why*-stripping entails the movement of the focused phrase. In this paper, we aim to present empirical evidence supporting the movement analysis. Notably, despite the intensive study of why-stripping in Korean (Cho & Lee, 2017; Kim, 2017; Bae & Park, 2021; Kim et al., 2021), there has been no significant empirical support proposed regarding whether the focused phrase in why-stripping undergoes movement. Therefore, our study seeks to bridge this gap by examining why-stripping in both English and Korean. We will draw upon examples provided in (4) for Korean *why*-stripping to shed light on this issue.

(4) A: John-i   Mary-lul   coahay
       John-NOM   Mary-ACC   like
       'John likes   Mary.'
    B: Way   Mary-lul?
        Why   Mary-ACC?
       'Why does John like Mary (not others)?'

In (4B), the overt non-wh-phrase *Mary-lul* 'Mary' survives TP-ellipsis, corresponding to *Mary-lul* 'Mary' in (4A). Here, the former is referred to as the "remnant", while the latter is termed the "correlate" (Merchant, 2001).

Korean *why*-stripping can also be subject to the two competing analyses. Hence, the *why*-stripping example provided in (4B) can be interpreted as having two possible underlying structures, as represented in (5).

(5) a. Way Mary-lul, [TP ~~John-i coahay~~]?
　　 b. Way [TP ~~John-i~~ Mary-lul ~~coahay~~]?

While it is widely accepted that clausal ellipsis involves movement and deletion (Merchant, 2001), empirical evidence for the movement of the focused phrase in Korean *why*-stripping has been insufficiently suggested. Thus, the main goal of this paper is to present evidence for the movement of the focused phrase in *why*-stripping in both languages. This evidence primarily arises from the availability of idiomatic readings, NPI licensing conditions, complementizer deletion, and the clausemate condition on multiple remnants. Before presenting the data, we will discuss the two competing analyses in detail.

2. Movement vs. In-Situ

The focus-movement analysis of why-stripping hinges on two crucial points: the syntax of *why* and that of the focused phrase. As depicted in (2), the wh-phrase *why* is argued to be base-generated and externally-merged at the CP layer, with its head taking FocP as its complement. One piece of evidence supporting this analysis for the wh-phrase *why* being base-generated and externally-merged stems from what is known as "focus-association effects" (Bromberger, 1992; Stepanov & Tasi, 2008; Shlonsky & Soare, 2011).

(6) a. Q: Why did JOHN eat Natto?
　　　　 A: Because John was the only one who could enjoy it.
　　 b. Q: Why did John eat NATTO?
　　　　 A: Because Natto was the only food John had.

    c. Q: Why did John EAT Natto?

      A: Because he couldn't think of anything else to do.

In these examples, when the subject *John* is focused in the *why*-question (6a), the question seeks the reason why it was John, rather than others, who ate Natto. Similarly, in (6b), when the object *Natto* is focused, the question inquires about the reason why Natto, instead of other food, was eaten by John. In (6c), when the verb *eat* is focused, the question seeks the reason why the event of eating, rather than other events, took place. These examples vividly illustrate the association between *why* and the focused phrases in why-questions.

    The focus-association, however, is not available in other types of wh-question.

(7) a. Q: When did JOHN eat Natto?

      A: Today.

    b. Q: When did John eat NATTO?

      A: Today.

    c. Q: When did John EAT Natto?

      A: Today.

    Examples in (7) suggest that regardless of which phrase is focused, the wh-questions inquire about when the event occurred. It is proposed that the focus-association effect is available in wh-questions with focused phrases only when the focus chain falls within the wh-scope (Stepanov & Tasi, 2008; Heim, 1982; Rooth, 1992). This implies that in *why*-questions with focused phrases, there are no variables bound by a focus operator, whereas in other types of wh-questions, there are variables bound by a focus operator. Interestingly, in *why*-stripping constructions, other types of wh-phrases cannot replace *why*, as shown in (8). This contrast naturally follows if *why* in *why*-stripping is base-generated at the CP layer and leaves no trace that can be bound by the focus operator. As shown in (8B'), *why* always take a wide scope over the focused phrase.

(8) A: John was eating Natto.

    B: Why/*How/*When/*Where NATTO?

    B': [$_{CP}$ Why [$_{FocP}$ Op [$_{TP}$ [John was eating [NATTO]]]]]

Under the focus movement analysis proposed by Yoshida et al. (2015), as illustrated in (2), the focused phrase is derived via focus movement and TP deletion. As a piece of supporting evidence for the movement analysis, *why*-stripping satisfies the Preposition-Stranding Generalization (PSG), which is considered a property of movement in ellipsis (Merchant, 2001). For instance, English, as a P-stranding language, allows the omission of the preposition in *why*-stripping (9), whereas German, a non-P-stranding language, does not allow the omission of the preposition in *why*-stripping, as illustrated in (10).

(9) A: John was talking to Mary.
    B: Why (TO) MARY?
(10) A: Anna hat mit   Abel gesprochen.
      Anna has with Abel spoken
      'Anna has spoken with Abel.'
    B: Warum *(mit) Abel?
      Why   with   Abel
      'Why   with   Abel?' (Yoshida et al., 2015, p. 334)

While the claim that *why* in *why*-stripping is base-generated at a position higher than the focused element has earned widespread acceptance among many researchers, the idea that the focused elements are derived by focus-movement has faced challenges. For instance, building on Abe's (2015) *in-situ* analysis, Ha (2022) proposed an in-situ analysis for *why*-stripping in English, as illustrated in (11). The gist of this analysis is that the focus phrase is overtly realized in-situ and checks a focus feature on the Foc head. TP deletion at PF is licensed by the Foc head, but the focused phrase survives the deletion at PF as focused phrases cannot be deleted.

(11) A: John was eating Natto.
    B: Why NATTO?
    B': [$_{CP}$ Why [$_{Foc}$ [NATTO]$_{[FF]}$ [$_{TP}$ ~~John was eating~~ NATTO$_{[Focus]}$]]]

To explain the Preposition-Stranding Generalization (PSG) property in *why*-stripping constructions, particularly the optionality of the preposition in English *why*-stripping in (6B), Ha (2022) suggests two possibilities, as depicted in (9). In (9a), the PP *to Mary* is F-Marked, and the entire phrase survives the TP-ellipsis. In contrast, in (9b), only the DP *Mary* is F-Marked, and the preposition cannot escape the TP-ellipsis.

(12) a. [$_{CP}$ Why [$_{Foc}$ [to MARY]$_{[FF]}$ [$_{TP}$ ~~John was eating~~ [to MARY]$_{[Focus]}$]]]
    b. [$_{CP}$ Why [$_{Foc}$ [MARY]$_{[FF]}$ [$_{TP}$ ~~John was eating to~~ MARY$_{[Focus]}$]]]

Although while it is uncertain how this analysis would extend to German *why*-stripping and its PSG property, if the optionality of prepositions in English *why*-stripping can be adequately explained by the in-situ analysis, then relying solely on the PSG property in English *why*-stripping may not effectively support the movement analysis.

In sum, English why-stripping constructions have received two competing analyses. The major issue is whether or not the focused phrase in why-stripping undergoes movement. In the following section, we will provide further pieces of evidence that indicate the movement of the focused phrase in why-stripping constructions.

3. Evidence for Movement in English *Why*-Stripping

3.1. Non-Decomposable Idioms

Non-decomposable idioms, such as *kick the bucket*, are unable to occur in *why*-stripping or fragmenting constructions. When a part of the idiomatic expression is included in *why*-stripping, such as in (13A), the idiomatic expression vanishes, leaving only the literal meaning of *the bucket*, resulting in an infelicitous response.

(13) A: John *kicked the bucket*.
    B: #Why the bucket?

Under the movement analysis, (13B) would have the structure of (14a), where *the bucket* has been moved from its base position. However, it is a characteristic property of non-decomposable idioms that their idiomatic meaning disappears when parts of the expression are separated/decomposed. Thus, the movement analysis correctly accounts for the lack of idiomatic interpretation in *why*-stripping. On the contrary, under the in-situ analysis, (13B) would have the structure of (14b). Here, the entire idiomatic expression remains intact as the whole idiomatic expression remains whole. This analysis would predict that the idiomatic meaning should be available in (14B), contrary to fact.

(14) a. Movement Analysis
      #Why the bucket$_i$, ~~John kicked t$_i$~~
   b. In-situ Analysis
      Why ~~John kicked~~ the bucket

Another piece of evidence supporting the movement analysis comes from the observation that even in English, a P-stranding language, the omission of a preposition is not optional when the preposition is part of an idiomatic expression. For instance, in (15B), when the preposition *with* from the idiomatic expression *do away with* is used in *why*-stripping, the construction is judged by native speakers to be unacceptable.

(15) A: John wanted to do away with Mary.
   B: Why (*with) MARY?

The movement analysis accurately explains the obligatory omission of the preposition in *why*-stripping. Under the movement analysis, (15B) would have the underlying structure of (16), where the preposition can either be stranded or pied-piped. However, native speakers we consulted with identified a clear contrast between these two structures.

(16) Movement Analysis
   a. Why Mary$_i$, ~~John wanted to away with t$_i$~~?
   b. *Why with Mary$_i$, ~~John wanted to do away t$_i$~~?

On the other hand, the in-situ analysis fails to account for the obligatory omission of the preposition. This is because, under the in-situ analysis, the omission of the preposition depends on whether the preposition simply survives the ellipsis or not, as illustrated in (17). However, it is not clear what would prevent (17b), given that the exact same operation was available in (12).

(17) In-situ Analysis
   a. Why ~~John wanted to do away with~~ [Mary]?
   b. Why ~~John wanted to away~~ [with Mary]?

Two key points were highlighted. First, we demonstrated that when parts of

non-decomposable idioms are used in *why*-stripping, the construction loses its idiomatic meaning. This suggests that the *why*-stripping construction involves a structure where the non-decomposable idiomatic expression is decomposed. Such decomposition is predicted only under the movement analysis, as the required movement operation would render the idiomatic expression decomposed. Furthermore, we showed a case where the omission of a preposition in why-stripping is obligatory even in English, a P-stranding language, especially when the preposition is part of an idiomatic expression. This obligatory omission of the preposition also supports the movement analysis.

3.2. Negative Polarity Item (NPI)

In the literature, it has been demonstrated that Negative Polarity Items (NPIs) cannot be licensed under reconstruction (Takano, 2003; Laka, 1990; Phillips, 1996; Johnson, 1997; Kayne, 1998). Example (18a) illustrates that NPIs such as *any* can be licensed when they are c-commanded by negation. However, as shown in (18b) and (18c), when the phrase including *any* is fronted, the sentences become ungrammatical. It is widely assumed that the fronted phrases reconstruct into their thematic positions, in which case the NPI should be c-commanded and licensed.

(18) a. John didn't buy any records.
　　 b. *[$_{NP}$ Any records], John didn't buy.
　　 c. *[$_{VP}$ Buy any records], John didn't buy.

With this in mind, consider the following examples. When a NPI is used in *why*-stripping, as in (19B) in response to (19A), it is judged to be unacceptable. At least, (19B) cannot convey the meaning "why didn't John buy any records?"

(19) A: John didn't buy any records.
　　 B: *Why any records?
　　　　 (intended. Why didn't John buy any records?)

Similarly, the verb phrase (VP) including *any* cannot occur in *why*-stripping, as shown in (20). In this context, (20B) can, if anything, mean "why would John buy any records at all?" but not "why didn't John buy any records?"

(20) A: John didn't buy any records.

    B: *Why buy any records?

      (intended. Why didn't John buy any records?)

The movement analysis accurately captures the failure of NPI licensing in *why*-stripping. Under the movement analysis, (19B) and (20B) would have the structures of (21) as the underlying structure, where the phrase including NPI is fronted via movement. As NPIs cannot be licensed under reconstruction, this analysis correctly accounts for the ungrammaticality of *why*-stripping in (19) and (20).

(21) Movement Analysis

    a. *Why [$_{NP}$ any records]$_i$, John didn't buy t$_i$?

    b. *Why [$_{VP}$ buy any records]$_i$, John didn't buy t$_i$?

On the other hand, under the in-situ analysis, the phrase containing NPI stays in-situ and is c-commanded by the negation, as shown in (22). Thus, this analysis incorrectly predicts the NPI to be licensed in why-stripping, which contradicts the observed ungrammaticality of the constructions.

(22) In-Situ Analysis

    a. Why ~~John didn't buy~~ [any records]?

    b. Why ~~John didn't~~ [buy any records]?

In the following sections, we will further present some pieces of evidence supporting the movement of the focused phrase in *why*-stripping in Korean.

4. Evidence for Movement in Korean *Why*-Stripping

4.1. Idioms

Similar to English why-stripping, Korean *why*-stripping also demonstrates a comparable pattern regarding idiomatic expressions. As shown in (23), part of the idiomatic expression *kkangtong chata* "to go bankrupt" cannot occur in *why*-stripping constructions. This

observation aligns with the pattern observed in English, further suggesting that *why*-stripping in Korean involves the decomposition of idiomatic expressions, supporting the movement analysis.

(23) A: John-i   kkangtong-ul   chassta.
       John-NOM   can-ACC   kicked
       'John went bankrup."
    B: #Way kkangtong-ul?
        Why can-ACC
       'Why did John go bankrupt?"

Specifically, (23B) would have the underlying structures of (24), depending on the analysis being considered.

(24) a. Movement Analysis
       #Way kkangtong-ul~i~, [~TP~ ~~John-i   chass-ni t~i~~]?
       Why can-ACC   John-NOM   kicked-Q
    b. In-situ Analysis
       Way [~TP~ ~~John-i~~   kkangtong-ul ~~chass-ni~~]?
       Why John-NOM   can-ACC   kicked-Q
       'Why did John go bankrupt?'

In the structure of (24a), the focused phrase undergoes movement, leading to the decomposition of the idiomatic expression. The separation of part of the idiomatic expression by the movement of the focused phrase disrupts the cohesive meaning of the idiom, making it difficult to achieve its idiomatic interpretation. Conversely, in (24b), the focused phrase remains in-situ within the ellipsis site. The whole idiomatic expression remains as whole, and the idiomatic meaning should be available, contrary to what is observed. This discrepancy further supports the movement analysis over the in-situ analysis.

4.2. Multiple Remnants

It has been known that in Korean fragments, multiple remnants can survive ellipsis (Ahn and Cho 2011, Park and Kim 2015, Park 2016 among many others), as illustrated in (25).

(25) A: Nwu-ka   mwues-ul   mekess-ni?
          who-NOM   what-ACC   ate-Q
          'Who ate what?'
     B: John-i   ppang-ul
        John-NOM   breat-ACC
        'John ate bread.'

Multiple remnants in multiple fragments exhibit a property of movement known as a clause-mate condition (Lasnik, 2002). This condition postulates that remnants of fragments must originate from the same clause. For example, the multiple fragments in (26B) include multiple remnants whose correlates in (26A) are in different clauses, rendering the multiple fragments unacceptable.

(26) A: Nwu-ka   [Bill-i   mwues-ul   mekess-tako]   malhayss-ni?
          who-NOM   Bill-NOM what-ACC   ate-COMP   said-Q
          'Who said Bill ate what?'
     B: *John-i   ppang-ul
        John-NOM   bread-ACC
        'John said Bill ate bread.'

This property of multiple fragments can be well-accounted for by the movement analysis. For instance, in (26B), the movement of *John* and *ppang* 'bread' occurs, as shown in (27a), with each originating from different clauses. As such, this movement violates the clause-mate condition. Conversely, under the in-situ analysis, no movement of the remnants occurs, as in (27b), and therefore, no violation of the clause-mate condition is predicted.

(27) a. *John-i$_i$ ppang-ul$_j$ [$_{TP}$ ~~t$_i$~~ [$_{TP}$ ~~Bill-i t$_j$ mekesstako]~~ malhayssta]]
     b. [$_{TP}$ [John-i] [$_{TP}$ ~~[Bill-i]~~ [ppang-ul] ~~mekesstako] malhayssta]]~~

Interestingly, why-stripping also adheres to the clause-mate condition. In (28B), two remnants occur after *why*, with their correlates in (28A) in the same embedded clause. In this case, the why-stripping construction with multiple remnants is acceptable. Conversely, (28B') includes two remnants whose correlates in (28A) are in different clauses, resulting in the violation of the clausemate condition.

(28) A: John-i   Mary-ka   ppang-ul   mekesstako malhayssta.
        John-NOM Mary-NOM bread-ACC ate   said
        'John said that Mary ate bread.'
   B: Way   Mary-ka   ppang-ul?
        Why   Mary-NOM   bread-ACC
        'Why did John say that MARY ate BREAD?'
   B': *Way   John-i   ppang-ul?
        Why   John-NOM   bread-ACC
        'Why did JOHN say that Mary ate BREAD?'

Under the movement analysis, the contrast observed in (28) can be attributed to the violation of the clause-mate condition, suggesting that the underlying structure for why-stripping must involve the movement of the remnants. Conversely, the contrast remains unclear if the underlying structure for why-stripping construction does not involve the movement of the remnant. Thus, the in-situ analysis is not suitable for the case in (25B) unless it provides an independent account that does not rely on the clause-mate condition.

5. Conclusion

In this short paper, we have demonstrated that both Korean and English *why*-stripping constructions can be analyzed using the same framework, namely the movement analysis. We have presented several empirical pieces of evidence supporting the movement analysis over the in-situ analysis. Although both analyses are theoretically well-established, based on the data we have presented, we conclude that the movement analysis offers broader empirical coverage than the in-situ analysis.

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