

In Support of the Non-Derivational Analysis of Korean Ditransitive Constructions

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Park, Jayeon & Kim, Hyosik. (2024). In support of the non-derivational analysis of Korean ditransitive constructions. *The Linguistic Association of Korea Journal*, 32(3), 65-84. This paper investigates the ditransitive construction in Korean, where both the dative-accusative and accusative-dative orders are permissible interchangeably. Two competing analyses have been proposed to account for the interchangeable orders. The first argues that the dative-accusative order is the base, from which the accusative-dative order is derived through the scrambling of the accusative (NP) over the dative (NP) (Kim, 2008, 2015). The second analysis views the accusative-dative order as the base order, with the dative-accusative order being derived by the scrambling of the dative (NP) over the accusative (NP) (Baek & Lee, 2004). However, upon closer scrutiny, we argue that the evidence provided by both analyses is inconclusive. We provide new evidence suggesting that the two orders are not derivationally related, consistent with Miyagawa's (1997) view on Japanese ditransitive constructions.

Key Words: ditransitive, chain condition, quantifier scope, proper binding condition, superiority effect

1. Introduction: Ditransitive Constructions in Korean

Ditransitive constructions in Korean exhibit a flexible word order of the internal arguments as shown in (1): the accusative-marked NP (or the direct object) can either precede or follow the dative-marked NP (or the indirect object).

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- (1) a. John-i Mary-eykey chayk-ul cwuessta.
 John-NOM Mary-DAT book-ACC gave
 'John gave a book to Mary.'
- b. John-i chayk-ul Mary-eykey cwuessta.
 John-NOM book-ACC Mary-DAT gave
 'John gave a book to Mary.'

Within the traditional configurational framework, the two interchangeable word orders in (1) are problematic in light of Uniformity of Theta-Assignment Hypothesis (UTAH) (Baker, 1997), as shown in (2).

(2) Uniformity of Theta-Assignment Hypothesis (Baker, 1997)

Identical thematic relationships between items are represented by identical structural relationships between those items at the level of D-structure (i.e., theta-roles are uniformly projected in the syntax).

According to UTAH, the two examples in (1) would have the same underlying structure where the theta roles are uniformly projected. This further indicates that the two orders would be derivationally related in such a way that one is derived from the other. Thus, the point of contention has been which one is the base order and how the other is derived. In this regard, two competing analyses have been proposed in the literature: Kim (2008, 2015) argues that the dative-accusative order (1a) is the base order in which indirect objects asymmetrically c-commands direct objects, and the accusative-dative order in (1b) is derived via scrambling the accusative-marked NP over the dative-marked NP. On the contrary, Baek & Lee (2004) claim the accusative-dative order in (1b) to be the base order in which direct objects asymmetrically c-commands indirect objects, and (1a) is derived via scrambling the dative-marked NP over the accusative-marked NP.

Both authors provide pieces of evidence to support their claims. However, as will be shown later, we found that the evidence proposed by the authors is not as conclusive as it is claimed to be. The authors have used the same diagnoses such as scopal interaction and the chain condition, and yet different conclusions were made. We will address some of the issues associated with the ways in which the diagnoses were used and argue that their claims are not fully supported. In addition, we will provide novel evidence supporting a third analysis that is not necessarily compatible with UTAH: both orders are

independent structures and they are derivationally not related (Miyagawa, 1997).

2. Evidence for Derivational Analyses

2.1. Chain Condition

One of the diagnoses used by both authors was the Chain Condition (Rizzi, 1986) which dictates an anaphor cannot locally c-command a trace of its antecedent. For example, (3a) is ungrammatical as the trace of the scrambled object is locally c-commanded by the anaphor, violating the Chain Condition. When the anaphor is embedded in a larger NP as in (3b), it no longer locally c-commands the trace, satisfying the Chain Condition and the sentence is grammatical.

- (3) a. *John- u_i cakicasin- i_i t_i poassta.
 John-ACC self-NOM saw
 ‘Self saw John.’
- b. John- u_i [cakicasin- u_y_i hyeng- i] t_i poassta.
 John-ACC self-GEN brother-NOM saw
 ‘Self’s brother saw John.’ (Kim, 2008, p.121, (26))

Under the derivational analyses, it is expected that either one of the two orders of ditransitive constructions would show the Chain Condition effect since one involves the movement of an object over the other object. Kim (2008) presents the examples in (4) where they found (4b) unacceptable.

- (4) a. Sue-ka John-eykey $_i$ cakicasin- u_i poyecwessta.
 Sue-NOM John-DAT self-ACC showed
 ‘Sue showed self $_i$ to John $_i$.’
- b. *Sue-ka John- u_i cakicasin-eykey $_i$ t_i poyecwessta.
 Sue-NOM John-ACC self-DAT showed
 ‘Sue showed John $_i$ to self $_i$.’

The author explains that the dative-accusative order as in (4a) is the base order of

ditransitive constructions in which Principle A is satisfied, whereas (4b) is derived by scrambling the direct object over the indirect object. As a result, the trace of the direct object is locally c-commanded by the anaphor, violating the Chain Condition.

On the contrary, according to Baek and Lee (2004), who employed the same diagnosis, the Chain Condition effect is observed in the dative-accusative order. Their examples are given in (5).

- (5) a. ?*Na-nun haksayngtul-eykey_i selo-lul_i t_i sokayhayssta.
 I-TOP students-DAT each.other-ACC introduced
 'I introduced the students each other'
- b. Na-nun haksayngtul-ul_i selo-eykey_i sokayhayssta.
 I-TOP students-ACC each.other-DAT introduced
 'I introduced the students to each other'

Similarly, they also attributed the ungrammaticality of (5a) to the Chain Condition violation: (5a) is derived from the accusative-dative order as in (5b) by scrambling the indirect object over the direct object. The trace of the indirect object is then locally c-commanded by the anaphor, resulting in the Chain Condition violation. In (5b), as the base order, there is no trace of the direct object and thus no Chain Condition violation occurs.

However, the examples in (4) and (5) can also be attributed to the fact that in some cases clausal-internal scrambling resembles A'-movement, as it exhibits reconstruction effects in certain contexts (Cho 1994a, 1994b, Y. Lee 1994). For example, the scrambled anaphor *caki* in (6a) can be licensed by the pronoun *ku*, which indicates that the scrambled phrase is interpreted in base-position. The ungrammaticality in (6b) also shows that *Minho's* mother must be interpreted in its original position, resulting in Condition C violation. The examples in (6c) and (6d) suggest that clause internal scrambling over a topic phrase exhibits A'-effect; in the former, the scrambled *John-ul* does not bind the anaphor *caki*, indicating failure of A-binding, while wh-scrambling in the later leads to Weak Crossover effect.

- (6) a. [Caki-uy atul-ul]_j ku-ka t_j ttaylyessta.
 Self-GEN son-ACC he-NOM hit
 'He_i hit self_i's son.' (Cho 1994b: 257)

- b. *[Minho_i-uy emma-lul]_j ku_i-ka t_j coahahnta.
 Minho-GEN mother-ACC he-NOM like
 'He_i likes Minho_i's mother.'
 (Y. Lee 1994:523)
- c. ?*John_i-ul caki_i-uy sensayngnim-un t_i ttaylyessta.
 John-ACC self-GEN teacher-TOP hit
 'As for John, self's teacher hit him.'
 (Cho 1994a)
- d. ?*Nwukwu_i-lul ku_i-uy atul-un t_i conkyengha-ni?
 Who-ACC he-GEN son-TOP respect-Q
 'Who_i does his_i son respect?'
 (Cho 1994b)

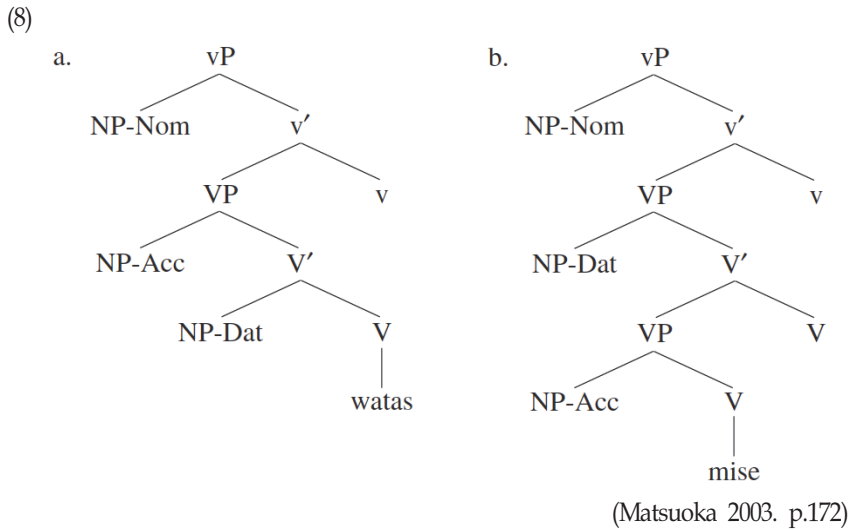
Given this possibility, the unacceptability of (4b) and (5a) can be attributed to the obligatory reconstruction of the clause-internally scrambled NP, wherein the anaphors are not properly bound and Principle A is violated. Thus, to fully substantiate the arguments based on the Chain Condition effect, as demonstrated in examples (4) and (5), it is necessary to test whether the Chain Condition effect dissipates when the anaphors are embedded within a larger NP, as shown in (7) (cf. (3b)), which appears to be acceptable to us.

- (7) a. Sue-ka John_i-ul [cakicasin_i-uy hyeng-eykey] t_i poyetwessta.
 Sue-NOM John-ACC self-GEN brother-DAT showed
 'Sue showed John_i to self_i's brother.'
 (cf. (4b))
- b. Na-nun haksayngtul-eykey_i [selo_i-uy chinkwutul-ul] t_i sokayhayssta.
 I-TOP students-DAT each.other-GEN friends-ACC introduced
 'I introduced the students_i each other_i.'
 (cf. (5a))

If our judgment is correct, the examples in (7) exclude the alternative possibility: if the clause-internally scrambled NP were to reconstruct, Principle A would be violated, rendering the examples unacceptable. Thus, we conclude that the examples in (4)-(7) can be solely explained by the Chain Condition.

Assuming that the arguments made by both authors based on the Chain Condition are valid, it leads to the following conclusion: both accusative-dative and dative-accusative orders are base orders for dative constructions in Korean. However, this conclusion contradicts itself within the framework of derivational analyses as it violates UTAH. This is so because if one order is derived from the other, it is impossible for both to be the

base orders. To resolve this issue, we propose a non-derivational analysis: the two orders can be independently generated structures (Miyagawa 1997). For example, Matsuoka (2003) argues that ditransitive constructions in Japanese can be divided into two subtypes: the *pass*-type and the *show*-type. He claims that *pass*-type verbs form the accusative-dative order as their base order, while *show*-type verbs constitute the dative-accusative order as their base order, as represented in (8).



One piece of evidence supporting this analysis comes from the observation that the two predicates behave differently in their inchoative variants. Inchoativization, a process which involves forming a verb that expresses the beginning or emergence of a state or action, requires either the direct or indirect object to raise to the subject position. Matsuoka (2003) observed that with *pass*-type verbs, only the direct object can become the subject, whereas with *show*-type verbs, only the indirect object can become the subject, as demonstrated in (9) and (10), respectively.

- (9) a. John-ga hanataba-o Mary-ni wata-s(i)-ta.
 John-NOM bouquet-ACC Mary-Dat pass-LC-PAST
 'John passed a bouquet to Mary.'
- b. Hanataba-ga Mary-ni wata-r-ta. (wata-r-ta → watatta)
 bouquet-NOM Mary-DAT pass-INC-PAST
 'A bouquet passed to Mary.'

- c. *Mary-ga hanataba-o wata-r-ta.
 Mary-NOM bouquet-ACC pass-INC-PAST
 ‘Mary_i got a bouquet passed to her_i.’
- (10) a. Mary-ga sono hon-o John-ni mi-se-ta.
 Mary-NOM that book-ACC John-DAT show-LC-PAST
 ‘Mary showed that book to John.’
- b. John-ga sono hon-o mi-ta.
 John-NOM that book-ACC show-PAST
 ‘John saw that book.’
- c. *Sono hon-ga John-ni mi-ta.
 That book-NOM John-DAT show-PAST
 ‘That book got shown to John.’

He explains that, based on the analysis in (8), raising the lowest object over the higher object violates the Minimal Link Condition (Chomsky 1995), which requires movement to be the shortest possible.

Interestingly, some ditransitive verbs in Korean, specifically used in (11) and (12), e.g., *cenhata* ‘to pass’ and *alita* ‘to tell’, exhibit a similar pattern in their inchoative variants. The verb *cenhata* ‘to pass’ allows only the direct object to become the subject, whereas the verb *alita* ‘to tell’ allows the indirect object to become the subject in their inchoativized variants, as shown in (11) and (12).¹⁾

- (11) a. John-i pyunci-ul Mary-eykey cenhayssta.
 John-NOM letter-ACC Mary-DAT passed
 ‘John passed a letter to Bill.’
- b. Pyunci-ka Mary-eykey cenhay-e ciessta.
 Letter-NOM Mary-DAT pass became
 ‘A letter passed to Mary.’
- c. *Mary-ka pyunci-ul cenhay-e ciessta.
 Mary-NOM letter-ACC pass became
 ‘Mary_i got a letter passed to her_i.’

1) While the most well-known morphological markers indicating inchoativity in Korean are *-i/-hi/-li/-ki*, the markers such as *-e ci* and *-key toy* are also analyzed as sharing the semantic features of inchoativity (see Choi 2005, Myeong 2023 for a relevant discussion).

- (12) a. John-i ku pimil-ul Mary-eykey alliessta.
 John-NOM the secret-ACC Mary-DAT told
 ‘John told the secret to Mary.’
- b. Mary-ka ku pimil-ul al-key toyessta.
 Mary-NOM the secret-ACC know-became
 ‘Mary came to know the secret.’
- c. *Ku pimil-i Mary-eykey al-key toyessta.
 The secre-NOM Mary-DAT know-became
 ‘The secret got known to Mary.’

This raises the possibility that, in Korean, the verb *introduce* corresponds to the *pass*-type verb in Japanese, with the accusative-dative order as its underlying structure, and the *show*-type verbs form the dative-accusative order as their base structure. This non-derivational approach, i.e., both accusative-dative and dative-accusative orders can independently be generated in Korean, can potentially explain why the two authors, using the same diagnostic method, arrived at different conclusions.

2.2. Quantifier Scope

Another major diagnosis employed for identifying the base order of ditransitive constructions comes from the quantifier scope. Kim’s (2008, 2015) argument is the following: in Korean, scopal ambiguity between the existential quantifier and the universal quantifier does not occur in the canonical word order, but only when the universal quantifier is scrambled over the existential quantifier, as shown in (13), known as the scope freezing effect.

- (13) a. Etten haksayng-i motun chayk-ul ilkessta.
 Some student-NOM every book-ACC read
 ‘Some student read every book.’ (some every, *every some)
- b. Etten chayk-ul_i motun haksayng-i t_i ilkessta.
 Some book-ACC every student-NOM read
 ‘Every student read some book.’ (some every, every some)

In dative constructions, it is observed that the dative-accusative order in (14a) is not scopally ambiguous, but the accusative-dative order in (14b) is. This indicates that the existential quantifier in (14a) is not scrambled, but the one in (14b) is, which in turn suggests that the dative-accusative order in (14a) is the canonical word order and the accusative-dative order in (14b) is the derived order.

- (14) a. Tom-un etten ai-eykey motun chayk-ul cwuessta.
 Tom-TOP some kid-DAT every book-ACC gave
 ‘Tom gave every book to some kid.’ (some every, *every some)
- b. Tom-un etten chayk-ul_i motun ai-eykey t_i cwuessta.
 Tom-TOP some book-ACC every kid-DAT gave
 ‘Tom gave some book to every kid.’ (some every, every some)

In contrast, Baek and Lee (2004) also employed quantifier scope as a probe for identifying the presence of traces but reported different judgments and reached a different conclusion. For example, they observe that (15a) is scopally ambiguous, whereas (15b) is not. Although both examples involve the scrambling of a quantified object over the subject, it is claimed that the scrambling of the universal quantifier over the existential quantifier specifically generates the scopal ambiguity.

- (15) a. Motun salam-ul_i nwukwunka-ka t_i coahanta.
 Every one-ACC someone-NOM like
 ‘Someone likes everyone.’ (some>every, every>some)
- b. Nwukwunka-lul_i motun salam-i t_i coahanta.
 Someone-ACC everyone-NOM like
 ‘Everyone likes someone.’ (some>every, *every>some)

They dubbed this effect the scope rigidity effect, i.e., when an existential quantifier precedes a universal quantifier, the trace left by the existential quantifier does not contribute to the interpretation of the quantifiers. In other words, an existential quantifier occurring higher in the surface structure consistently takes the wide scope over a universal quantifier, irrespective of their positions in the D-structure. Consequently, the test cases in (14) would not be valid for identifying the existence of the trace because the existential quantifier appears to the left of the universal quantifier. In this configuration,

does. Conversely, for those who do not find the examples ambiguous, the accusative-dative order will likely be concluded as the underlying structure as Baek and Lee (2004) do. We take this as evidence that the two orders of dative constructions are independently generated structures. Depending on which structure is considered to be the underlying one, we observe either the scope freezing effect or the scope rigidity effect.

2.3. Backward Binding

Additionally, Baek and Lee (2004) present evidence based on backward binding phenomenon, where the antecedent that comes after the anaphor at the surface structure seems to bind the anaphor from backwards. Given that the anaphor should be c-commanded by its antecedent at a certain level of representation, the authors utilize backward binding to identify the positions of the anaphor and its antecedent at D-structure. Using the examples in (18), the authors argue that the backward binding is only available when the direct object binds into the indirect object, but not the other way around. Assuming the underlying structure of the Korean ditransitive constructions as (18a), the authors argue that the example in (18b) is ungrammatical because the direct object is base-generated in its surface structure position where it asymmetrically c-commands the indirect object. On the other hand, the backward binding of the direct object into the indirect object appears to be possible in (18d), suggesting that the indirect object as the anaphor is c-commanded by the direct object as its antecedent at some level of representation. This means that the contrast between (18b) and (18d) indicates that there exists the trace of scrambled anaphora in the latter, but not in the former, which leads to the violation of binding principle A in (18b).

- (18) a. Sue-nun [John-kwa Mary]-lul [selo_i-uy chinkwu-eykey]
 Sue-TOP John-and Mary-ACC each.other-GEN friends-DAT
 poyecwuessta.
 showed
 'Sue showed John and Mary to each other's friends.'
- b. *Sue-nun [selo_i-uy chinkwu]-lul [John-kwa Mary]-eykey
 Sue-TOP each.other-GEN friend-ACC John-and Mary-DAT
 poyecwuessta.
 showed
 'Sue showed each other's friends to John and Mary.'

- c. Sue-nun [John-kwa Mary]_i-eykey [selo_i-uy chinkwu]-lul
 Sue-TOP John-and Mary-DAT each.other-GEN friends-ACC
 poyecwuessta.
 showed
 'Sue showed John and Mary each other's friends.'
- d. Sue-nun [selo_i-uy chinkwu]-eykey [John-kwa Mary]_i-lul
 Sue-TOP each.other-GEN friends-DAT John-and Mary-ACC
 poyecwuessta.
 showed
 'Sue showed each other's friends John and Mary.'

However, there are several issues with their claim. First, it is known that the scrambled anaphor may not reconstruct. For example, As Ko (2018) points out, a clause-internal scrambling generally exhibits A-effects, as exemplified in (19) - the clause-internally scrambled anaphor cannot be bound by the plural NP subject (cf. Cho 1994, Mahajan 1990, Saito 1992). If the scrambled anaphor can reconstruct, the plural NP should be able to bind the anaphor, contrary to fact.

- (19) *Selo-lul_i [John-kwa Mary]_i-ka t_i pinanhayssta
 Each.other-ACC John-and Mary-NOM criticized
 '[John and Mary]_i criticized each other_i.'

Thus, the scrambling of the anaphor in (18d), if their analysis is correct, is clause-internal scrambling. This implies that the trace of the anaphor in (18d), even if it exists, may not participate in the binding relationship. Consequently, the trace of the anaphor may not be the source of the backward binding.

Another issue is that the backward binding phenomenon can also be explained without appealing to (overt) scrambling. For instance, the English counterpart of (18b), repeated in (20a), is also known to exhibit the backward binding phenomenon. Fujita (1996) proposes (20b) as the derivation of (20a): in his analysis, due to "reanalysis" (Larson 1988), P adjoins to V, leaving the NP complement of P with unchecked Case. To check Case, he argues that the NP *John and Mary* undergoes covert movement to [Spec, AgrP]. Crucially, this covert movement allows the NP to locally bind the anaphor, satisfying Binding Condition A.

- (20) a. ?Sue showed each other's friends to John and Mary.
 b. [_{AgpP} [_{VP} each other's friends [_V showed+to_i [_{PP} t_i [_{NP} J & M]]]]]

It is not clear at this point if the same analysis can be extended to Korean ditransitive constructions. However, Fujita's analysis suggests that the (overt) scrambling of the anaphor may not be the only source of the backward binding phenomenon observed in (18).

Lastly, the judgments do not appear to be solid. Though backward binding phenomenon has not been discussed in Kim (2008, 2015), she would report the opposite results with respect to backward binding possibility. Kim (2008, 2015) considers the dative-accusative order as the underlying structure for the ditransitive construction in Korean, and thus the example in (18b) is predicted to be grammatical, but the one in (18d) to be ungrammatical. Specifically, the backward binding in (18b) should be available because the anaphor can be bound by its antecedent at the D-structure. On the contrary, in (18d), both objects are base-generated and the anaphor cannot be bound by its antecedent at any representations.

Contra Baek and Lee's (2004) judgment on (18), we find both examples in (18b) and (18d) are ungrammatical - backward binding is very unlikely in both examples. We believe that there exist various judgments regarding the relevant data. Our judgment on (18), which is predicted by both of the derivational analyses, again leads us to analyze the Korean ditransitive constructions involving two independent structures. If the speaker variation is indeed true, we believe the non-derivational approach offers greater flexibility in accounting for variations in judgments, making it superior to other methods.

3. New Evidence for the Non-Derivational Analysis

3.1. Proper Binding Condition

Ko (2018) asserts that scrambling in Korean obeys the Proper Binding Condition (Fiengo 1977; Saito 1985, 1992), which prevents a scrambled phrase from containing an unbound trace, as illustrated in (21). In this example, the embedded object is scrambled out of the embedded clause, and subsequently, the remnant clause is also scrambled out of the matrix clause. Consequently, the scrambled clause contains an unbound trace of the object, thereby violating the Proper Binding Condition.

- (21) *_{[CP Sam-i t₁ mantulesstako]₂ ku umsik-ul₁ [ne-ka t₂ malhayssta]}
 Sam-NOM made-COMP the food-ACC you-NOM said

'Intended. You said that Sam made the food.'

(Johnston and Park 2001:731)

With this in mind, consider the following examples. Example (22a) represents a dative construction with the dative-accusative order, and its VP component is scrambled, as shown in (22b). If the dative construction in (22a) indeed included the trace of the indirect object, as claimed by Baek and Lee (2004), the scrambled VP in (22b) would contain an unbound trace, thereby violating the Proper Binding Condition (PBC). However, the grammaticality of the sentence suggests that the scrambled VP does not contain an unbound trace. This finding further indicates that the underlying structure of (22a) is the dative-accusative order.

- (22) a. John-i Mary-eykey₁ [_{VP} chayk-ul t₁ cwuessta]

John-NOM Mary-DAT book-ACC gave

'John gave a book to Mary.'

- b. [_{VP} Chayk-ul t₁ cwuessta]₂ John-i Mary-eykey₁ t₂

Book-ACC gave John-NOM Mary-DAT

'lit. A book gave, John to Mary.'

Similarly, (23a) illustrates a dative construction with the accusative-dative order, and its VP component is scrambled, as shown in (23b). If the dative construction in (23a) indeed included the trace of the direct object, as claimed by Kim (2015), the VP-scrambling in (23b) would contain an unbound trace, thereby violating the Proper Binding Condition (PBC). However, the grammaticality of the sentence suggests that the scrambled VP does not contain an unbound trace, indicating the accusative-dative order as the underlying structure of (23a).

- (23) a. John-i chayk-ul₁ [_{VP} Mary-eykey t₁ cwuessta]

John-NOM book-ACC Mary-DAT gave

'John gave a book to Mary.'

- b. [_{VP} Mary-eykey t₁ cwuessta]₂ John-i chayk-ul₁ t₂

Mary-DAT gave John-NOM book-ACC

'lit. Gave to Mary, John a book.'

Based on the observation that no PBC violation occurs with VP-fronting in the examples in (22) and (23), we conclude that the two orders can independently be generated as the underlying structures for the dative constructions.

3.2. Superiority Effects

Takahashi (1993) argues that long-distance scrambling of wh-phrases in Japanese may behave similarly to wh-movement. One piece of evidence supporting this claim is that it exhibits superiority effects—when multiple wh-phrases are present, the structurally highest wh-phrase must move to CP_Spec. As shown below, Korean also exhibits superiority effects (Kim 2006; Shim 2010). The examples below are the Korean counterparts of Takahashi’s examples in Japanese. In (24a), the wh-phrase *nwukwu-eykey* is located in the matrix clause and *mwues-ul* in the embedded clause. Both wh-phrases stay in situ, and the sentence is grammatical. However, when the embedded wh-phrase moves over the higher wh-phrase via long-distance scrambling, the sentence becomes only marginally acceptable. The fact that the superiority effect disappears when the scrambled wh-phrase is replaced with a lexical item, as shown in (24c), indicates that long-distance scrambling is an A’-movement.

- (24) a. John-i **nwukwu-eykey** [Mary-ka **mwues-ul** mekess-tako]
 John-NOM who-DAT Mary-NOM what-ACC ate-COMP
 malhayss-ni?
 tell-Q
 ‘Who did John tell that Mary ate what?’
- b. ??**Mwues-ul**_i John-i **nwukwu-eykey** [Mary-ka t_i mekess-tako]
 What-ACC John-NOM who-DAT Mary-NOM ate-COMP
 malhayss-ni?
 tell-Q
 ‘lit. What did John tell who that Mary ate?’
- c. **Pica-ul**_i John-i **nwukwu-eykey** [Mary-ka t_i mekess-tako]
 Pizza-ACC John-NOM who-DAT Mary-NOM ate-COMP
 malhayss-ni?
 tell-Q
 ‘lit. Pizza, did John tell who that Mary ate?’

In dative constructions, however, no superiority effect is observed. For instance, (25a) includes two objects in the form of wh-phrases. In (25b), one of the wh-phrases undergoes long-distance scrambling over the other wh-phrase. Nevertheless, (25) does not exhibit the same degradedness as seen in (24).

- (25) a. John-i [Mary-ka **mwues-ul** **nwukwu-eykey** cuess-tako]
 John-NOM Mary-NOM what-ACC who-DAT gave-COMP
 sayngkakha-ni?
 think-Q
 'lit. What does John think that Mary gave to who?'
 b. **Mwues-ul**_i John-i [Mary-ka (t_i) **nwukwu-eykey** (t_i) cuess-tako]
 What-ACC John-NOM Mary-NOM who-DAT gave-COMP
 sayngkakha-ni?
 think-Q
 'lit. To who does John think that Mary gave what?'

The lack of a superiority effect in this case is unexpected if the underlying structure were the dative-accusative order, where the indirect object asymmetrically c-commands the direct object. Instead, this suggests that the direct object is the structurally highest one, indicating that the underlying structure for (25) is the accusative-dative order as in (25a).

Interestingly, no superiority effect occurs even when the indirect object *nwukwu-eykey* 'to who' undergoes long-distance scrambling, as shown in (26b). This is unexpected if the underlying structure is the accusative-dative order since, in that case, the movement of the indirect object over the higher direct object would result in a violation of the superiority condition. Therefore, the absence of a superiority effect in (26) also suggests that the underlying structure of dative constructions could be the dative-accusative order as in (26a).

- (26) a. John-i [Mary-eykey **nwukwu-eykey** **mwues-ul** cuess-tako]
 John-NOM Mary-DAT who-DAT what-ACC gave-COMP
 sayngkakha-ni?
 think-Q
 'lit. What does John think that Mary gave to who?'
 b. **Nwukwu-eykey**_i John-i [Mary-ka (t_i) **mwues-ul** (t_i) cuess-tako]
 Who-DAT John-NOM Mary-NOM what-ACC gave-COMP

sayngkakha-ni?

think-Q

'lit. To who does John think that Mary gave what?'

In sum, the examples in (25) and (26) show that dative constructions in Korean exhibit no superiority effect, regardless of which object undergoes long-distance scrambling. This indicates that both orders can independently be the underlying structures for dative constructions, supporting the non-derivational analysis. However, this result poses a problem for the derivational analysis. According to derivational analyses, either the direct object asymmetrically c-commands the indirect object (Baek and Lee 2004) or the indirect object asymmetrically c-commands the direct object (Kim 2015). Thus, derivational analysis would expect to observe a superiority effect depending on which object undergoes long-distance scrambling over the other.

3.3. Bare NPs are not Scrambled NPs

In some cases, bare NPs do not scramble. For instance, as shown in (27a) and (27c), when NPs are in their base position, they can be bare NPs, meaning the accusative and dative markers are optional. In contrast, as illustrated in (27b) and (27d), scrambled NPs cannot be bare NPs.

- (27) a. John-i chinkwu(-lul) mannassta.
 John-NOM friend-ACC met
 'John met his friend.'
- b. Chinkwu*(-lul)_i John-i t_i mannassta.
 Friend-ACC John-NOM met
 'John met his friend.'
- c. Ne ppali chinkwu(-ekey) cenhwahay.
 You quickly friend-DAT call
 'You should quickly call your friend.'
- d. Chinkwu*(-ekey)_i ne ppali t_i cenhwahay.
 Friend-DAT you quickly call
 'You should quickly call your friend.'

The restriction on scrambling for bare NPs can therefore serve as a valuable tool for determining whether the objects in dative constructions are scrambled. Interestingly, we found that both objects can be bare NPs in both the accusative-dative and dative-accusative orders, as demonstrated in (28).²⁾

- (28) a. Choicinsa-ka **seysccay ttal(-ul)** **Chilboki(-ekey)** cuessta.
 Choicinsa-NOM third daughter-ACC Chilboki-DAT gave
 ‘Choi Jinsa gave his third daughter to Chil-bok.’
- b. (?)Choicinsa-ka **Chilboki(-ekey)** **seysccay ttal(-ul)** cuessta.
 Choicinsa-NOM Chilboki-DAT third daughter-ACC gave
 ‘Choi Jinsa gave his third daughter to Chil-bok.’

In (28a), the presence of bare NPs for both objects indicates that they occupy their base positions and are not scrambled, suggesting that the accusative-dative order is the base order for (28a). Furthermore, in (28b), the dative-accusative order is also possible without the accusative and dative markers, reinforcing the idea that the two objects are not scrambled and that the dative-accusative order is the base order for (28b). These seemingly contradictory conclusions can be reconciled if we accept that dative constructions contain two underlying structures: the accusative-dative and the dative-accusative orders.

4. Conclusion

Dative constructions in Korean allow both accusative-dative and dative-accusative orders. In previous studies, the flexible word order in these constructions has been analyzed with one order being derived from the other. However, after examining the evidence supporting the derivational analyses, we concluded that it is not as conclusive as claimed. We noted that the differing conclusions reached by previous studies using the same diagnostics suggest that the two orders can indeed be independently generated as underlying structures. In line with Miyagawa (1997), we provided new evidence supporting the non-derivational analysis.

2) We would like to thank the anonymous reviewer for suggesting this point.

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