

Case-mismatches in Korean left-node-raising: An experimental study*

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Kim, Jeong-Seok, Yunhui Kim, and Duk-Ho Jung. 2020. Case-mismatches in Korean left-node-raising: An experimental study. *Linguistic Research* 37(3): 499-529. The goal of this article is to investigate Case-mismatches in Korean Left-Node-Raising (LNR) via the utility of experimental syntax techniques. To achieve this goal, we use the 2×2 factorial design of two Case-mismatch types (accusative vs. dative Case) of Korean LNR with respect to the locus of Case-licensing/mismatches (the first vs. second conjunct). The result of the experiment suggests that the first conjunct Case-licensing of the fronted NP in LNR is crucial across Case types, indicating that symmetric approaches (cf. Nakao's (2009, 2010) across-the-board (ATB) Scrambling and Chung's (2010) Multidominance) to LNR is not the right avenue to pursue. It also suggests that there is a distinction between structural Case-licensing and inherent Case-licensing in LNR (cf. Chomsky 1986, 1995; Bošković 2008). We review three syntactic analyses of Case-mismatch effects in LNR (ATB Scrambling, Multidominance, and Scrambling + *pro*) and defend the Scrambling + *pro* analysis. (Korea University · UW-Milwaukee · UC San Diego)

Keywords Case filter, Case-mismatches, factorial design, inverse inherent Case filter, left-node-raising (LNR), multidominance, *pro* scrambling, visibility condition

1. Introduction

This study explores Korean Left-Node-Raising (LNR) constructions, focusing on the effect of Case-mismatches between a pivot (i.e., the shared element) and each Case-licensing verb in LNR. (1) and (2) illustrate Japanese LNR and its

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Korean counterpart, respectively.¹

- (1) [Keeki-o]_{pivot} John-ga tukuri, (soshite) Mary-ga tabeta.
 cake-Acc John-Nom make_{Acc} (and) Mary-Nom ate_{Acc}
 '[The cake]_{Acc}, John made, and Mary ate.' (Nakao 2010: (1a))
- (2) [Kheyikhu-lul]_{pivot} John-i mantul-ko, Mary-ka mekessta.
 cake-Acc John-Nom make_{Acc}-and Mary-Nom ate_{Acc}
 (Chung 2010: (2b))

For a successful interpretation, the pivot *cake*-Acc in (1) and (2) should be interpreted as the argument that is missing in each conjunct, which is indicated by the underlined position. In this paper, we will refer to this phenomenon as LNR in a theory-neutral way.

Several analyses have been put forward to account for the nature and derivation of LNR in Japanese/Korean (Yatabe 2001; Nakao 2009, 2010; Abe and Nakao 2009; Park and Lee 2009; Chung 2010; Kim 2019, etc). Among others, Nakao (2009, 2010) proposes that LNR is an instance of across-the-board (ATB) Scrambling of the pivot, as shown in (3).

- (3) Keeki_{t1}-o John-ga t₁ tukuri, Mary-ga t₁ tabeta.
 cake-Acc John-Nom make_{Acc} Mary-Nom ate_{Acc}

She claims that the pivot NP (e.g., *keeki* 'cake') must match in Case with the predicate in both conjuncts. She provides the following as the evidence of her claim:

- (4) ??Mary-ni John-ga hana-o okuri, Tom-ga nagusameta.
 Mary-Dat John-Nom flower-Acc send_{Dat} Tom-Nom comforted_{Acc}
 '[Mary]_{Dat}, John sent a flower, and Tom comforted.' (Nakao 2010: (7a))

In (4) the first conjunct predicate *okuri* 'send' assigns dative Case to its indirect object, and the second conjunct predicate *nagusameta* 'comforted' assigns

1 In this paper, the conjunction *soshite* and *kuliko* 'and' is intentionally omitted in Japanese/Korean LNR contexts, respectively, for the sake of naturalness.

accusative Case to its direct object. According to Nakao's observation, such a Case-mismatch degrades LNR. Nakao's observation is confirmed by Chung (2010) with Korean examples.

Based on their observation, Nakao (2009, 2010) and Chung (2010) argue that the Case-matching requirement in Japanese/Korean LNR suggests that the pivot is syntactically present in both conjuncts. The pivot is subcategorized by each predicate in two conjuncts simultaneously; thus, the predicates should make symmetric subcategorization requirement on the pivot.

However, Kim (2019) observes, via an online survey, that the Case-mismatch in LNR is acceptable when the Case of a pivot is licensed in the first conjunct but unacceptable when it is licensed in the second conjunct as in (5).

- (5) a. Chelswu-eykey chinkwu-ka swul-ul sass-ko
 Chelswu-Dat friend-Nom alcohol-Acc bought_{Dat}-and
 pwumonim-i wilohayssta.
 parents-Nom comforted_{Acc} (Kim 2019: 248, (54a))
 '[Chelswu]_{Dat}, a friend bought a drink, and parents comforted.'
- b. *Chelswu-eykey pwumonim-i wilohayss-ko
 Chelswu-Dat parents-Nom comforted_{Acc}-and
 chinkwu-ka swul-ul sassta.
 friend-Nom alcohol-Acc bought_{Dat} (Kim 2019: 248, (54b))
 '[Chelswu]_{Dat}, parents comforted, and a friend bought a drink.'

(5a) has a very similar syntactic configuration with (4); hence, its well-formedness could be surprising for the symmetric accounts proposed by Nakao (2009, 2010) and Chung (2010). While the *symmetric* accounts predict that any Case-mismatch invariably degrades LNR in Japanese/Korean, Kim's (2019) observation leads us to suspect that there could be a gradience in acceptability among the types of Case-mismatches in LNR. The Case-mismatch property of Korean LNR, therefore, may have considerable repercussions for the symmetric analyses of LNR (Nakao 2009, 2010; Chung 2010). Nevertheless, such a data dispute still remains unresolved. In this regard, this paper investigates, through a formal acceptability experiment, whether Case-mismatches in Korean LNR are invariably ill-formed or certain types of Case-mismatches are better or worse

than others, giving rise to a gradience in acceptability.²

The rest of this article is organized as follows. Section 2 introduces two factors that could make a difference on the well-formedness of Korean LNR constructions: the locus of Case-licensing and the Case type of a pivot. Section 3 presents the acceptability experiment with a factorial design with two factors. Section 4 discusses how our experimental findings impact the three types of syntactic analyses that have been proposed to capture the LNR phenomenon in Japanese/Korean. Section 5 concludes.

2. Predictions from previous studies

In this section, we introduce two factors which could affect the well-formedness of Case-mismatches in Korean LNR. The first factor is the locus where the Case of a pivot is licensed: the first vs. second conjunct. The second one is the Case type of a pivot: structural (accusative) vs. inherent (dative) Case.

2.1 Locus of Case-licensing

The aforementioned data dispute centers around whether Case-mismatches in Korean LNR are sensitive to the locus where the Case of a pivot is licensed; i.e., where the Case-mismatch occurs. As shown in (4), Nakao (2009, 2010) and Chung (2010) reported that Japanese/Korean LNR is unacceptable when there is a Case-mismatch in which the pivot receives different Case from each conjunct predicate. However, as shown in (5), Kim (2019) observed that Case-licensing in the first conjunct makes Korean LNR fairly acceptable.

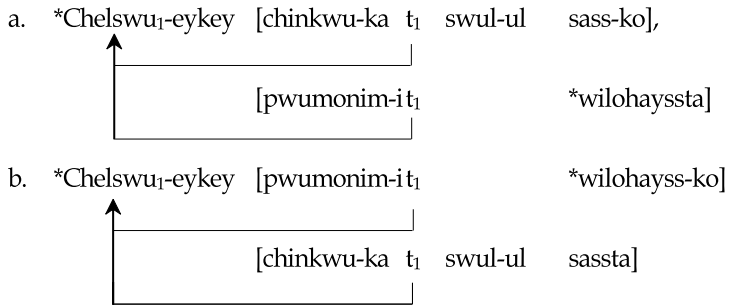
Regarding these discrepant observations, Nakao (2009, 2010) and Chung (2010) argue that the pivot syntactically belongs to both conjuncts: the pivot is a

2 Gradience has become an interesting but challenging topic to many linguists. However, gradience is not a new concept. The trace of gradience is found in Chomsky (1955) as follows: "Different types of violations of syntactic principles do not always lead to the same perception of ill-formedness." For example, (ia) is worse than (ib). In (ia) the basic Phrase Structure rules are violated, while in (ib) only selectional restrictions are violated.

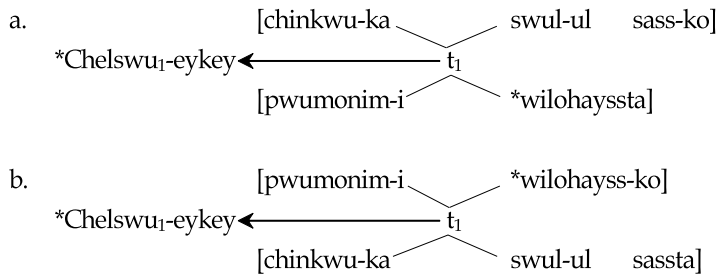
(i) a. *Man the saw cat a.
b. #John frightens sincerity.

complement of each predicate simultaneously. Nakao (2009, 2010) obtains this by assuming that the pivot originates as two separate XPs but has undergone ATB movement into one XP position as in (6), while Nakao (2010) and Chung (2010) assume that the pivot is multidominated by each predicate and has moved out of the shared position as in (7) ((6) and (7) schematize (5)):

(6) Across-the-board movement (Nakao 2009, 2010)



(7) Multidominance (Nakao 2010; Chung 2010)



In the symmetric analyses of Japanese/Korean LNR, any Case-mismatch is predicted to be ill-formed. Since the pivot is Case-assigned by each predicate independently, its Case-marker is supposed to be licensed by each predicate. If the predicates assign different Case—dative Case and accusative Case as in (6) and (7)—there would be a derivational crash due to the Case-mismatch, regardless of where the Case-mismatch occurs.

In contrast, Kim (2019) argues that the pivot in Korean LNR belongs to the first conjunct only. As shown in (8), the pivot is the complement of the first conjunct predicate, and the missing complement in the second conjunct is a null pronoun *pro*

(8) Scrambling + *pro* (Kim 2019)

- a. Chelswu₁-eykey [chinkwu-ka t₁ swul-ul sass-ko],
 [pwumonim-i *pro* wilohayssta]
- b. *Chelswu₁-eykey [pwumonim-i t₁ *wilohayss-ko],
 [chinkwu-ka *pro* swul-ul sassta]

In this asymmetric analysis, the pivot is Case-assigned by the first conjunct predicate. Accordingly, the Case-mismatch in the first conjunct should be ill-formed as in (8b). However, the Case-mismatch in the second conjunct would not be ill-formed as in (8a).

Taken together, we can make two conflicting predictions. First, under the symmetric account, Korean LNR is predicted to invariably disallow any Case-mismatch. Second, under the asymmetric account, Korean LNR would allow the Case-mismatch in the second conjunct as long as the first conjunct predicate licenses the Case of a pivot.

2.2 Case type of a pivot

The traditional distinction between *inherent* Case and *structural* Case (Chomsky 1986, 1995) would further draw an interesting hypothesis on Case-mismatches in Korean LNR. Chomsky distinguishes inherent Case from structural Case, crucially based on the fact that inherent Case is typically paired with a particular theta-role while structural Case is assigned strictly abiding by structural configurations, ignoring the theta-role of the NP. Chomsky (1986) captures the contrast by assuming that inherent Case is assigned along with theta-role, while structural Case is assigned at a later step of the derivation, separated from theta-role.

This assumption leads us to an interesting hypothesis regarding the Case type of a pivot in Case-mismatched LNR. Intuitively, the Case type of a pivot may affect acceptability when two predicates license different Case. A dative predicate can assign a goal theta-role together with dative Case; therefore, the pivot with non-dative Case would fail to be interpreted as the argument of a dative predicate because of Case-mismatches. In contrast, an accusative predicate,

whose theta-assignment is independent of Case-assignment, would not discriminate the pivot with non-accusative Case from the pivot with accusative Case. Consider the following:

- (9) a. Chelswu-eykey [chinkwu-ka swul-ul sass-ko]
 Chelswu-**Dat** friend-Nom alcohol-Acc bought_{Dat}-and
 [pwumonim-i wilohayssta]
 parents-Nom comforted_{Acc}
- b. Chelswu-lul [pwumonim-i wilohays-ko]
 Chelswu-**Acc** parents-Nom comforted_{Acc}-and
 [chinkwu-ka swul-ul sassta]
 friend-Nom alcohol-Acc bought_{Dat}

According to our hypothesis, when the pivot is marked with dative Case as in (9a), the accusative predicate *wilohayssta* 'comforted_{Acc}' would successfully take the pivot as its (theme) argument. However, when the pivot carries an accusative Case-marker as in (9b), the dative predicate *sassta* 'bought_{Dat}' would fail to take the pivot as its (goal) argument. This failure would lead to decrease acceptability.

In this sense, we would expect that the acceptability of Case-mismatches in Korean LNR would differ depending on the Case type of a pivot. Specifically, we hypothesize that Case-mismatches with a dative pivot would be preferred than those with an accusative pivot in terms of acceptability.

3. Experiment

Based on the previous section, this experiment tests the conflicting predictions from previous analyses of Korean LNR, concerning whether Case-mismatches in LNR would be sensitive to the locus of Case-licensing. It also tests the hypothesis drawn from Chomsky's (1986, 1995) distinction of inherent vs. structural Case-licensing, according to which Case-mismatches in LNR would be better with a dative pivot than with an accusative pivot.

3.1 Method

Materials and procedure The current experiment employs a factorial design that explicitly isolates the effects of the following two components: the effect of conjunct LOCUS and CASE type in LNR. Crucially, each of these components could potentially give rise to decrements in acceptability. As the name suggests, the factorial design treats the Case-licensing position and the Case type of a pivot as two factors (LOCUS and CASE), each with two levels (1st|2nd and Dat|Acc). Crossing the levels of these two factors results in four sentences (each sentence is a combination of one level from each factor). Example stimuli are given in (10).

(10) a. [1st | Dat]

Yenghuy-eykey	oppa-ka	kkochtapal-ul	cwu-ko,
Yenghuy-Dat	brother-Nom	bouquet-Acc	give-and
emma-ka	ttattushakey	macihayssta.	
mom-Nom	warmly	welcomed	

‘[Yenghuy]_{Dat} her brother gave a bouquet, and her mom welcomed warmly.’

b. [2nd | Dat]

Yenghuy-eykey	emma-ka	ttattushakey	maciha-ko,
Yenghuy-Dat	mom-Nom	warmly	welcome-and
oppa-ka	kkochtapal-ul	cwuessta.	
brother-Nom	bouquet-Acc	gave	

‘[Yenghuy]_{Dat} her mom welcomed warmly, and her brother gave a bouquet.’

c. [1st | Acc]

Yenghuy-lul	emma-ka	ttattushakey	maciha-ko,
Yenghuy-Acc	mom-Nom	warmly	welcome-and
oppa-ka	kkochtapal-ul	cwuessta.	
brother-Nom	bouquet-Acc	gave	

‘[Yenghuy]_{Acc} her mom welcomed warmly, and her brother gave a bouquet.’

d. [2nd|Acc]

Yenghuy-lul	oppa-ka	kkochtapal-ul	cwu-ko,
Yenghuy-Acc	brother-Nom	bouquet-Acc	give-and
emma-ka	ttattushakey	macihayssta.	
mom-Nom	warmly	welcomed	

'[Yenghuy]_{Acc} her brother gave a bouquet, and her mom welcomed warmly.'

In the [1st|Dat] condition, the dative Case of the pivot is licensed in the first conjunct, whereas in the [2nd|Dat] condition, it is licensed in the second conjunct. Similarly, in the [1st|Acc] condition, the accusative Case of the pivot is licensed in the first conjunct, whereas in the [2nd|Acc] condition, it is licensed in the second conjunct. The full list of test items is available on the first author's website.³

We constructed 12 sets of the four Case-mismatch conditions of LNR. In each set, one conjunct predicate is a three-place predicate like *cwuta* 'to give', and the other conjunct predicate is a two-place predicate like *macihata* 'to welcome'. These 12 sets of target items were counter-balanced across four lists, so that each participant saw only one item/condition of each target set. 36 pure filler items (of comparable length and varying acceptability) and 40 unrelated experiment items were randomly interspersed with these target items (i.e., 88 items per list). Based on the results from our previous tests, we controlled the acceptability of pure filler items to create three groups of fillers: those that are expected to receive high acceptability rating (good fillers), those that are expected to receive low rating (bad fillers), and sentences whose acceptability was expected to fall in between (middle fillers). Having filler items with varying acceptability may encourage the participants to use a large portion of the scale, which would be critical for revealing subtle contrasts.

Among the filler items, there were 20 "gold standard" items, which were used to ensure if participants were paying attention to the task. These filler items included 10 good and 10 bad filler items, which showed either the highest or the lowest acceptability most clearly in previous tests on about 100

3 <http://bitly.kr/tO8KKZ2oQpc>

participants. We obtained the expected value of these fillers from the results of the previous tests and calculated the difference between each reported value and its expected value. Then, we squared each of the differences and summed each participant's squared value. We decided to filter out any outlying participants whose sum-of-the-squared-differences value is greater than two standard deviations from the mean, suggesting that they would not have been paying attention (cf. Sprouse 2018).

Participants were instructed to rate sentences on a scale from 1 (completely unacceptable) to 7 (perfectly acceptable). Participants first rated 10 pre-test items with varying degrees of acceptability—two highly acceptable, two highly unacceptable, and six marginal ones—which was to make them familiarized with the entire scale. The range of acceptability between the highly acceptable ones and highly unacceptable ones was intended to be very wide, because the target comparison would involve quite unacceptable sentences, giving rise to the danger of a floor effect—a false-negative absent of the contrast. This issue was also taken into account when constructing the filler items. The gold standard items with highest and lowest acceptability constituted a wide enough range of acceptability so that the unacceptable target conditions would not be rated as low as the lower end of the scale. Also, the rest of the fillers were chosen in a way that they can evenly fill up that wide range of acceptability, achieving enough sensitivity to detect a potential contrast among the experimental conditions.

The experimental items were presented on a computer screen, one item at a time, using a web-based experiment platform *Ibex Farm* (Drummond 2016). All of the responses were automatically collected into a log file in the *Ibex Farm* server.

Participants: 42 self-reported native Korean speakers (age: *mean* (*SD*) = 22.74 (2.52)) were recruited, who were all undergraduate students at Korea University. They participated in the experiment by a single visit to the laboratory. They were paid 5,000 won (about \$4.00) for their participation, which took about 15 minutes. This experiment was approved by the Korea University Institutional Review Board, and all participants provided informed consent.

We excluded the responses from two participants who were not paying

attention during the task. They were identified by the procedure introduced in the previous section, looking into the responses to the gold standard items; their sum-of-the-squared-differences values for the gold standard items were more than two standard deviations away from the mean. Accordingly, only the responses from 40 participants (10 for each of the four lists) were included in the analysis.

Data analysis: First, the raw judgment ratings, including both targets and fillers, were converted to z-scores in order to eliminate certain kinds of scale biases between participants (Schütze and Sprouse 2013). This procedure corrects the potential that individual participants treat the scale differently (e.g., using only a subset of the available ratings), because it standardizes all participants' results to the same scale. Linear Mixed-effects Regression (LMER) Models were used to analyze the data; these models allow the simultaneous inclusion of random participant and random item variables (Baayen et al. 2008). Each model was fit using the maximal random effects structure that converged (Barr et al. 2013). These models were run in the R environment (R Core Team 2020) using the *lme4* package (Bates et al. 2015). *P*-value estimates for the fixed and random effects were calculated by the Satterthwaite's approximation, using the *lmerTest* package (Kuznetsova et al. 2017).

3.2 Results

Figure 1 shows the overall distribution of the mean z-score acceptability of the four experimental conditions and the filler items. As noted earlier, achieving sufficient sensitivity was a concern in this study. The fact that the acceptability of the experimental conditions and filler items were very evenly distributed as in Figure 1 suggests that the experiment was successful. Note that none of the four experimental conditions in Figure 1 emerged at either end of the full z-score acceptability range, avoiding a floor effect as well as a ceiling effect. Although significantly less unacceptable than the [1st|Dat] condition, the other three conditions were still located in the mid-range. As seen in Figure 1, the mean acceptability of bad fillers went as low as -1.025 , much lower than the mean

acceptability of the [2nd | Acc] condition (-0.814).

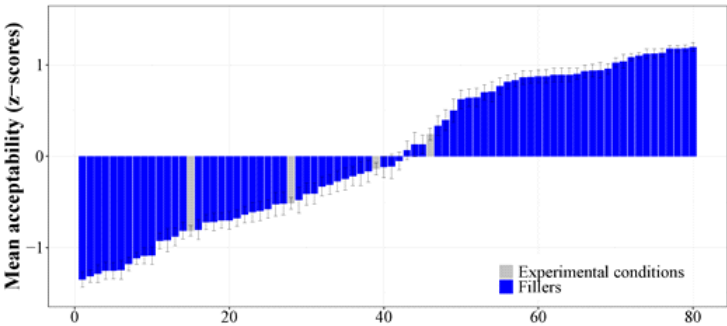


Figure 1. Distribution of the mean acceptability of experimental conditions vs. fillers (z-scores; error bars indicate SE)

Figure 2 presents the mean and standard error of the z-scored responses for the four experimental conditions.

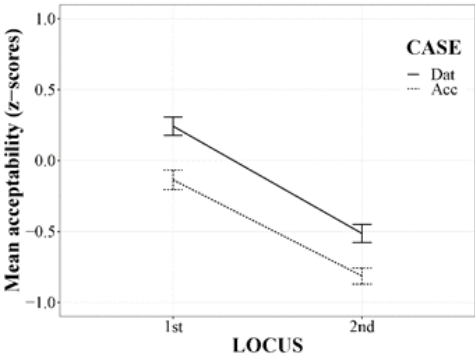


Figure 2. Mean acceptability of experimental conditions (z-scores; error bars indicate SE)

In Figure 2, the effect of LOCUS (the 1st vs. 2nd conjunct) can be inferred from the downward slope of the lines, and the effect of CASE types (the dative vs. accusative pivot) is represented by the vertical distance between the two lines. The results indicated that the first conjunct Case-licensing (1st) conditions were

rated as more acceptable than the second conjunct Case-licensing (2nd) conditions. Within the dative conditions, the 1st condition was rated as far more acceptable than the 2nd condition (0.242 vs. -0.514; $\beta = -0.756$, $SE = 0.147$, $t = -5.156$, $p < 0.001$). Similarly, within the accusative conditions, the 1st condition was rated as far more acceptable than the 2nd condition (-0.136 vs. -0.814; $\beta = -0.678$, $SE = 0.096$, $t = -7.049$, $p < 0.001$).

In addition, we found that the dative conditions were rated as more acceptable than the accusative conditions. Specifically, within the 1st conditions, the dative condition was rated as more acceptable than the accusative condition (0.242 vs. -0.136; $\beta = 0.378$, $SE = 0.118$, $t = 3.213$, $p < 0.01$). Similarly, within the 2nd conditions, the dative condition was rated as more acceptable than the accusative condition (-0.514 vs. -0.814; $\beta = 0.300$, $SE = 0.137$, $t = 2.192$, $p < 0.05$).

Table 1 presents the fixed effects summary for the LMER Model we ran with LOCUS and CASE as fixed effects, and random intercepts and slopes for participants and items.

Table 1. Fixed effects summary for the experiment
with maximal by-participant and by-item random effects

	<i>Estimate</i>	<i>SE</i>	<i>t-value</i>	<i>p-value</i>
(Intercept)	-0.136	0.098	-1.387	0.171
LOCUS	-0.678	0.128	5.286	***
CASE	0.378	0.128	2.950	**
LOCUS \times CASE	-0.078	0.181	-0.433	0.667

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

There was a significant main effect of LOCUS such that 1st conditions are significantly more acceptable than 2nd conditions. There was also a significant main effect of CASE such that dative conditions are significantly more acceptable than accusative conditions. However, there was no significant interaction of LOCUS and CASE.

In summary, the results of our experiment provide two findings. First, Case-mismatches in Korean LNR were conjunct-sensitive. Specifically, the Case-mismatch in the second conjunct (i.e., Case-licensing in the first conjunct) was more acceptable than that in the first conjunct (i.e., Case-licensing in the second conjunct). Second, Case-mismatches in Korean LNR showed sensitivity to

the Case type of a pivot; Case-mismatches were more acceptable with a dative pivot than with an accusative pivot.

4. Discussion

Our experimental results suggest that Case-mismatches in Korean LNR are not invariably unacceptable. The LNR constructions showed sensitivity to both the locus of Case-licensing and the Case type of a pivot. In what follows, we discuss the implications for previous analyses of Korean LNR.

4.1 Sensitivity to the locus of Case-licensing

In Korean Case-mismatched LNR, Case-licensing in the first conjunct was more acceptable than Case-licensing in the second conjunct. To put it differently, the acceptability of Case-mismatches in the second conjunct was better than that of Case mismatches in the first conjunct. This conjunct-sensitivity of Case-licensing/mismatches presents a challenge to the symmetric account of Japanese/Korean LNR (Nakao 2009, 2010; Chung 2010), while supporting the asymmetric account (Kim 2019).⁴

Symmetric accounts: ATB scrambling and multidominance The symmetric account argues that a pivot syntactically belongs to both conjuncts in Japanese/Korean LNR, being simultaneously subcategorized by each predicate in the two conjuncts. There are two popular analyses in this approach: the Across-the-Board (ATB) Scrambling analysis (Nakao 2009, 2010) and the Multidominance analysis (Nakao 2010 and Chung 2010).

The ATB Scrambling analysis (Nakao 2009, 2010) argues that

4 Alternatively, one might argue that conjunct-sensitive Case-licensing appears to be simply modulated by the linear adjacency to a pivot—the Closest Conjunct Agreement (e.g., Munn 1999 for English). However, while it has been often claimed that Closest Conjunct Case-licensing is attested in nominal conjunction (McCloskey 1986; Johannessen 1998; Walkow 2014), Case-licensing in Korean LNR appears in a clausal conjunction structure. Also, see Weisser (2017) for the argument against the existence of Closest Conjunct Case-licensing. We will not be further concerned with this possibility in the paper.

Japanese/Korean LNR is derived via ATB Scrambling as in (3), repeated below as (11):

(11) ATB scrambling analysis of LNR (Nakao 2009, 2010)

Keeki_i-o John-ga t_i tukuri, Mary-ga t_i tabeta.
 cake-Acc John-Nom make_{Acc}-and Mary-Nom ate_{Acc}

In this analysis, as shown in (11), the pivot was base-generated in both conjuncts, and has moved simultaneously to the front. Therefore, it should satisfy the requirements for the missing complement position of both predicates, mandating the requirements to be symmetric between the predicates. One of Nakao's major arguments for this analysis was the Case-matching effect—the pivot should match with the Case-requirement of both predicates simultaneously; otherwise, Japanese/Korean LNR is unacceptable as in the following:⁵⁶

(12) ??Mary-ni John-ga hana-o okuri, Tom-ga nagusameta.
 Mary-Dat John-Nom flower-Acc send_{Dat} Tom-Nom comforted_{Acc}
 '[Mary]_{Dat} John sent a flower, and Tom comforted.' (Nakao 2010: (7a))

- 5 Our Japanese informant points out that the degradedness of (12) might result from the possibly unexpected and awkward transition from the first conjunct event to the second conjunct event. Suppose that the two events are construed as having happened for the same reason or having been provided chronologically. For those who (instantaneously) associate 'giving a flower' to someone with a happy event, Tom's comforting behavior might sound unnatural. Compared with (12), our informant reports that the following sounds much better:

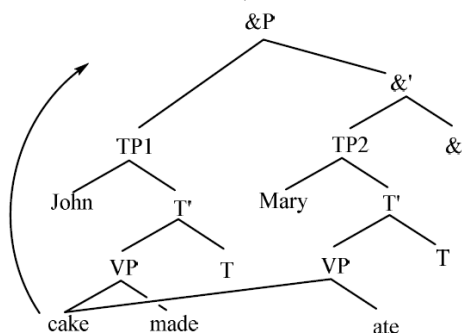
(i) ?Mary-ni John-ga hana-o age, Tom-ga hooyooshita.
 Mary-Dat John-Nom flower-Acc give_{Dat} Tom-Nom embraced_{Acc}
 '[Mary]_{Dat} John gave a flower, and Tom embraced.'

- 6 Nakao also points out that ATB *wh*-movement requires Case-matches as well (Dylą 1984; Franks 1993, 1995; Citko 2005a), as shown in the Polish data below, arguing that it further supports her ATB Scrambling analysis of LNR. However, this might be not entirely true in Korean. See Kim et al. (2020) for an experimental demonstration that the Case-mismatch of *wh*-pivots in Korean ATB *wh*-movement is allowed once their morphological Case is licensed in the first conjunct, confirming the assumption that reconstruction into the first conjunct is systematic while reconstruction into the second is not (Munn 2001; Citko 2005a).

(i) Co Jan lubi __ i Maria uwielbia/*nienawidzi __?
 what_{Acc} Jan likes_{Acc} and Maria adores_{Acc}/hates_{Gen}
 'What_{Acc} does Jan like and Maria adores_{Acc}/*hates_{Gen}?' (Citko 2005a: (8))

This Case-matching requirement would also be well captured in the Multidominance analysis. As admitted by Nakao herself (2009: 269-271; 2010), the ATB Scrambling analysis of Japanese/Korean LNR may be reformulated from the perspective of multidominance. Nakao (2010) explores this perspective, adopting Citko's (2005b) multidominance analysis of LNR. According to Citko, the pivot is parallelly merged with the predicate in each conjunct, as shown in (13).

(13) Multidominance analysis of LNR (Nakao 2010: (28))



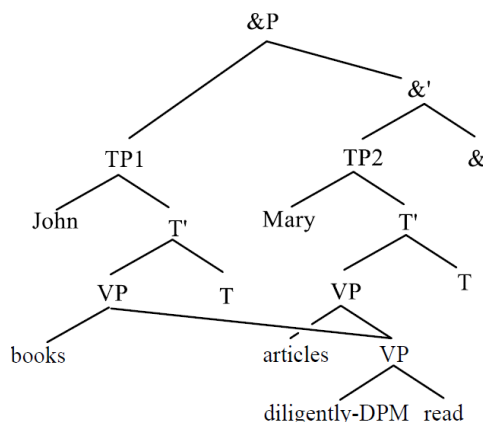
Similar to the ATB Scrambling analysis, the pivot in (13) was base-generated as the complement of the predicate in each conjunct, capturing the Case-matching requirement. In this analysis, the pivot must move to a higher position for linearization, obeying Kayne's (1994) Linear Correspondence Axiom (LCA), which dictates that the precedence in linearization be directly mapped from the c-command relation: XP precedes YP if and only if XP asymmetrically c-commands YP. Accordingly, if a multidominated element stays in-situ, it cannot be linearized.

This perspective is echoed in Chung (2010), except that the movement of LNRRed pivots is forced by Wilder's (1999, 2008) version of the LCA. Departing from Citko (2005b), Chung argues that multidominated elements do not necessarily leave their base position, establishing a derivational connection between Right-Node-Raising (RNR) as in (14) and LNR as in (16). The derivations are given in (15) and (17), respectively (DPM = dependent plural marker):⁷

7 However, RNR and LNR do not show a strong connection in Korean. For example, as shown by

- (14) John-un chayk-ul, Mary-nun nonmwun-ul [yelsimhi-tul ilkessta].
 John-Top book-Acc, Mary-Top article-Acc diligently-DPM read
 'John (read) books (diligently), and Mary read articles diligently.'
 (Chung 2010: (18))

(15)



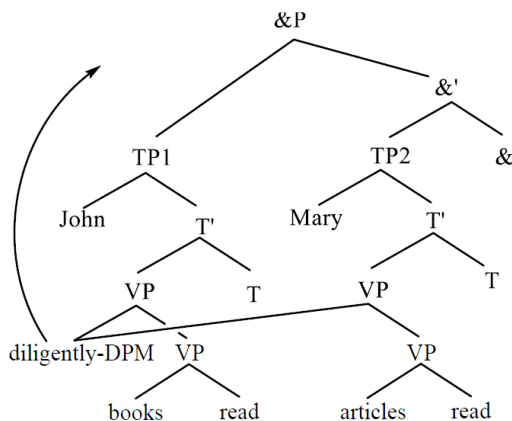
In (14)-(15), the multidominated pivot VP *yelsimhi-tul ilkessta* remains in-situ, which would provoke a contradiction in linearization under Kayne's (1994) LCA; since the pivot is dominated by both conjuncts, it has to precede itself, violating reflexivity. Chung, however, argues that there arises no linearization problem under Wilder's (1999, 2008) LCA, according to which an in-situ pivot gets linearized at the right-edge of the conjuncts, deriving an RNR construction as in (14)-(15). According to Chung, moving out of the conjunct involving multidominance is an alternative way to deal with the linearization problem, which is employed in LNR constructions, as shown in (16)-(17); the multidominated pivot *yelsimhi-tul* moves leftward out of the coordination structure:⁸

Kim (2019), LNR is not subject to what constrains RNR; while non-RNRed-elements must be in a contrastive focus relation in RNR (Féry and Hartmann 2005; Kim 2006), non-LNRed-elements do not require contrastivity in LNR.

8 As admitted by Chung (2010: fn. 14), Korean allows a pivot to appear within a non-left-peripheral left conjunct, superficially violating Wilder's (1999, 2008) LCA as follows:

(i) John-i [kheikhu-lul]_{pivot} mantul-ko, (kuliko) Mary-ka mekessta.
 John-Nom cake-Acc make-and (and) Mary-Nom ate.
 'John made, and Mary ate the cake.'
 (Chung 2010: (ib) in fn. 14)

- (16) [Yelsimhi-tul], John-un chayk-ul, Mary-nun nonmwun-ul ilkessta.
diligently-DPM John-Top book-Acc, Mary-Top article-Acc read
'Diligently, John (read) books, and Mary read articles.' (Chung 2010: (18))



Chung argues that the Multidominance analysis has an advantage over the ATB Scrambling analysis; it can accommodate the distribution of DPM as well as the Case-matching requirement.⁹ Based on Choe's (1988) observation, he points out that the DPM *tul*, which is licensed by a c-commanding plural antecedent in the local domain, is licensed in both RNR (Chung 2004) and LNR even when the subject of each conjunct is singular as in (14)-(15) and (16)-(17), respectively. According to Chung, the well-formedness of such constructions can be explained via multidominance; the two singular subjects in the two conjuncts simultaneously c-command and license the pivot, collectively functioning as a plural antecedent.

Chung claims that (i) is not an LNR construction with a multidominated pivot, but a Null Object Construction (NOC), where there is a null pronoun *pro* in the second conjunct. The subsequent question is then why the typical LNR examples cannot have a NOC structure as well. Note that the NOC in (i) and the LNR counterpart in (11) pattern together regarding Case-mismatches: it is sensitive to both the locus of Case-licensing and the Case type of a pivot (Kim et al. 2019).

9 As discussed in Jackendoff (1977) and others, relational modifiers like *same* or *different* are ambiguous between an NP-internal reading and a discourse reading. The former reading is available when relational modifiers are dependent on plural antecedents, while the latter reading is available when they refer to contextual antecedents. We concede that this is the merit of the multidominance account of RNR (and LNR).

However, as observed by Kim (2019), there is a judgmental contrast between RNR and LNR involving a plural marker. The LNR construction in (16) is much worse than the RNR construction in (14), repeated below as (18), which raises the empirical question of whether the DPM in RNR and LNR is licensed in the same way:¹⁰

- (18) a. ?John-un chayk-ul, Mary-nun nonmwun-ul [yelsimhi-tul ilkessta].
 b. ?*[Yelsimhi-tul], John-un chayk-ul, Mary-nun nonmwun-ul ilkessta.
 (Kim 2019: 182)

Above all, our experimental finding suggests that the Case-matching requirement, which serves as a common argument for the symmetric accounts of LNR, needs to be revised in a way that undermines the premise of those accounts. The symmetric accounts regard the pivot to syntactically originate from both conjuncts, requiring both predicates to assign the same Case to the pivot; thus, any Case-mismatches in LNR would be ruled out irrespective of the locus where the Case morphology of the pivot is licensed. However, this prediction is not compatible with our experimental results:

- (19) a. Yenghuy-eykey oppa-ka kkochtapal-ul cwu-ko,
 Yenghuy-Dat brother-Nom bouquet-Acc give_{Dat}-and
 emma-ka ttattushakey macihassta.
 mom-Nom warmly welcomed_{Acc}
 '[Yenghuy]_{Dat}, her brother gave a bouquet, and her mom welcomed warmly.'
- b. ??Yenghuy-eykey emma-ka ttattushakey maciha-ko,
 Yenghuy-Dat mom-Nom warmly welcome_{Acc}-and
 oppa-ka kkochtapal-ul cwuessta.
 brother-Nom bouquet-Acc gave_{Dat}
 '[Yenghuy]_{Dat}, her mom welcomed warmly, and her brother gave a bouquet.'

10 Our 15 native informants all perceived the acceptability difference between (18a) and (18b). The average rating on a 1 (completely unacceptable) – 5 (perfectly acceptable) scale was 4.20 for (18a) and 1.83 for (18b).

In (19), which repeats (10a) and (10b), the accusative predicate *macihassta* ‘welcomed_{Acc}’ places a Case-requirement that mismatches with the Case morphology of the pivot. The symmetric accounts would invariably rule out both (19a) and (19b), regardless of the location of the mismatching predicate. However, our results showed that the Case-mismatch in the first conjunct as in (19b) was significantly worse than that in the second conjunct as in (19a), demonstrating that Case-licensing in Case-mismatched LNR is conjunct-sensitive. To the best of our knowledge, however, no symmetric account has provided an explanation for this contrast, which encourages us to favor the asymmetrical account of LNR.

Asymmetric account: Scrambling + pro Our experimental finding that Case-mismatches in Korean LNR is conjunct-sensitive would be properly explained by an asymmetric account of LNR. In fact, Nakao (2010) has explored this direction: Scrambling + *pro* analysis. Nakao (2010) observed the following contrast between the LNR construction and the Null Object Construction (NOC) as in (20) and (21), respectively:

- (20) ??Mary-ni John-ga hana-o okuri, Tom-ga nagusameta.
 Mary-Dat John-Nom flower-Acc send_{Dat} Tom-Nom comforted_{Acc}
 ‘(To) Mary, John sent a flower, and Tom comforted.’
 (LNR; Nakao 2010: (7a))
- (21) Mary₁-ni John-ga hana-o okutta. Tom-ga *pro* nagusameta.
 Mary-Dat John-Nom flower-Acc sent_{Dat} Tom-Nom comforted_{Acc}
 ‘John gave a flower to Mary. Tom comforted (her).’
 (NOC; Nakao 2010: (8a))

Nakao reports that Japanese/Korean NOC as in (21), which resembles LNR as in (20) except that NOC consists of two sentences without coordination, allows the null pronoun *pro* and its antecedent to have different Case. Despite the resemblance, however, Nakao did not explore the possibility of reducing LNR to NOC.

However, Nakao seems to adopt a Scrambling + *pro* analysis in accounting

for the LNR involving an island as in (23):

- (22) *Ku cikap-ul John-i [t cwuwun salam-ul] chacass-ko,
 the wallet-Acc John-Nom picked.up person-Acc looked.for-and
 Mary-ka [t hwumchin namca-lul] ccochassta.
 Mary-Nom stole man-Acc chased
 '[The wallet], John looked for the person who picked up, and Mary
 chased the man who stole.' (based on Nakao 2010: (18))
- (23) Ku cikap-ul John-i t cwup-ko, Mary-ka [t hwumchin
 the wallet-Acc John-Nom picked.up-and Mary-Nom stole
 namca-lul] ccochassta.
 man-Acc chased
 '[The wallet], John picked up, and Mary chased the man who stole.'
 (based on Nakao 2010: (19))

In (22) the pivot was based-generated within an island in both conjuncts, and has scrambled ATB across a relative clause island, which is ruled out according to her ATB Scrambling analysis. Although admitting interspeaker variation, Nakao judges (23) as being acceptable, where only the second conjunct has a relative clause island. She claims that (23) does not display the properties of typical LNR, while proposing that this non-typical apparent LNR resorts to a resumptive *pro* strategy (Ishii 1991) to avoid an island violation. Consider also the following example in which the pivot was base-generated within an island only in the second conjunct:

- (24) Ku yepaywul-lul John-i t wiloha-ko, Mary-ka
 the actress-Acc John-Nom comfort_{Acc}-and Mary-Nom
 [*pro* khisuhan seutokeo-lul] ccochassta.
 kissed_{Dat} stalker-Acc chased
 '[The actress]_{Acc}, John comforted_{Acc}, and Mary chased the stalker who
 kissed_{Dat}.' (based on Nakao 2010: (20))

She first reports that certain speakers including her accept (24), and then claims that the second conjunct gap/trace is a null resumptive pronoun, evading an

island violation. However, if resumptive *pro* is not much different from the so-called small *pro*, the emerging option is that all instances of Japanese/Korean LNR can be accommodated under the umbrella of the NOC proposal: Scrambling + *pro* analysis.¹¹

Crucially, Nakao points out that the Case-mismatch in (24), unlike that in (20), is acceptable. In (24) the first conjunct predicate *wiloha* ‘comfort_{Acc}’ assigns accusative Case, while the second conjunct predicate *khisuha* ‘kiss_{Dat}’ inside the island assigns dative Case. Nakao acknowledges that (24) is as acceptable as (23) for the speakers who accept (23) in spite of the Case-mismatch. This could be well captured by the Scrambling + *pro* analysis; the Case-matching requirement would be null and void in LNR involving an island in the second conjunct, because there is a resumptive pronoun that can independently receive Case.

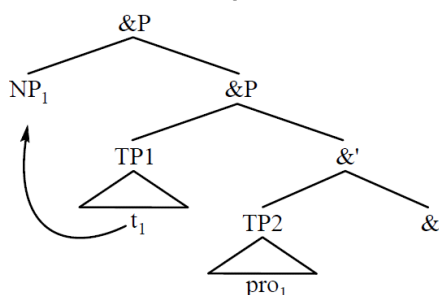
In this respect, in line with Kim (2019), we propose that Korean LNR constructions can be reduced to NOC constructions, where the pivot is asymmetrically scrambled from the first conjunct and there is a null pronoun *pro* in the second conjunct, which is anaphoric to the LNRed pivot as in (25). In (25) the pivot (NP₁) is base-generated only in the first conjunct (TP₁) and is assigned Case from the first conjunct predicate.¹²

11 It is questionable whether null resumption can repair island violations. Under the standard assumption, resumptive pronouns have phonetic values, compared with their trace counterparts. As illustrated below, the relative clause island violation is ameliorated when the trace is replaced with an overt resumptive pronoun (cf. McCloskey 2006; Boeckx 2008):

(i) All the students who the papers which {they_{resumptive}, *__ } submitted were lousy
I’m not going to allow to register next term. (Ross 1967: 239)

12 The first conjunct seems to be structurally higher than the second conjunct. As shown below, the bound pronoun reading between *John* (the antecedent) and *ku-uy yechin* ‘his girlfriend’ (the pronominal) is only possible when the antecedent is in the first conjunct and the pronominal is in the second conjunct. (We consulted 15 native speakers, and they all recognized the contrast between (ia) and (ib), whose average rating on a 1 (completely unacceptable) – 5 (perfectly acceptable) scale was 4.93 and 2.53, respectively.) Such a contrast thus indicates that the first conjunct is structurally higher than the second conjunct in Korean. We simply adopt the &P structure (cf. Zoerner 1995) in capturing the asymmetry between conjuncts.

(i) a. John₁-i sosel-ul ilkess-ko, ku₁-uy yechin-i swuphil-ul ilkessta.
 John-Nom novel-Acc read-and he-Gen girlfriend-Nom essay-Acc read
 ‘John read a novel, and his girlfriend read an essay.’
 b. ?*Ku₁-uy yechin-i swuphil-ul ilkess-ko, John₁-i sosel-ul ilkessta.
 he-Gen girlfriend-Nom essay-Acc read-and John-Nom novel-Acc read

(25) Proposal: Scrambling + *pro* (NOC) analysis of LNR

In the second conjunct (TP2), the superficially missing argument is *pro*, which does not care about the morphological Case of its antecedent, i.e., the pivot. In short, this asymmetric—Scrambling + *pro*—analysis would be more advantageous than the symmetric analyses in capturing the acceptable instances of Case-mismatches in Korean LNR.

4.2 Sensitivity to the Case type of a pivot

Our second finding was that the dative pivot is more acceptable than the accusative pivot in Korean LNR with Case-mismatches. As mentioned in section 2, this could be well explained under Chomsky's (1986) structural vs. inherent Case licensing mechanism; unlike structural Case, inherent Case requires a theta-relation between Case-assigners and Case-assignees.¹³ According to Chomsky (1986), inherent Case is different from structural Case in three ways. First, it is assigned at D-structure, whereas structural Case is assigned at S-structure. Second, it is assigned in a head-complement configuration. Third, inherent Case-assigners must assign a theta-role as well as a Case to Case-assignees (cf. Lasnik 1995).¹⁴ The reason why LNR with a dative pivot is

'His girlfriend read an essay, and John read a novel.'

13 While nominative Case on the subject and accusative Case on the direct object are typical representatives of structural Case, genitive Case and dative Case are usually taken as representatives of inherent Case.

14 It has been often assumed that inherent Case in Korean is an instance of *semantic Case* such as dative *eykey* 'to', goal *eylo* 'toward', or source *lopwuthe* 'from', which is licensed by a predicate (cf. Kim 2015: fn. 5).

more acceptable than LNR with an accusative pivot seems to be related to the Visibility Condition. In a later stage of the GB era, it was proposed that Case theory and theta-theory are linked by the Visibility Condition:

(26) The Visibility Condition (Chomsky 1986: 94)¹⁵

An element is visible for theta-marking only if it is assigned Case.

The essence of the Visibility Condition is that Case-assignment feeds into the computation of theta-licensing but not vice versa. There is empirical evidence for the Visibility Condition. As an illustration, consider the following:

- (27) a. I met the man [*OP*_i that Mary believed *t*_i to be a genius].
 b. *I met the man [*OP*_i that it was believed *t*_i to be a genius].

The null operator (*OP*) in (27) is an NP. According to the Visibility Condition in (26), it must be assigned Case although it does not have phonetic content. Accordingly, the failure in Case-licensing the *OP* in (27b) leads to a violation of the Theta-criterion: the theta-role of the *OP* is not visible at LF because it is not Case-marked.

Serbo-Croatian data provide further evidence for the Visibility approach to Case and theta-licensing. Below, *pet muškaraca* ‘five men’ is a numeral phrase with genitive quantification:

- (28) a. On će pozvati pet muškaraca. (Serbo-Croatian)
 he will invite_{Acc} [five men-Gen]_{Caseless}
 ‘He will invite five men.’
 b. *On se zahvalio pet muškaraca.
 he refl thanked_{Dat} [five men-Gen]_{Caseless}
 ‘He thanked five men.’ (Bošković 2008)

In (28a) *pet muškaraca* ‘five men’ is the complement of the accusative predicate

¹⁵ See Chomsky (1981: Ch. 5) for the discussion of the Visibility Condition, inspired by Aoun (1979), and Jean-Roger Vergnaud’s 1977 letter to Noam Chomsky and Howard Lasnik which was circulated in the linguistic field and later printed in Freidin et al. (2008: Ch. 1).

pozvati 'invite', which assigns structural (accusative) Case. This sentence is grammatical. On the other hand, in (28b) *pet muškaraca* 'five men' is the complement of the dative predicate *zahvalio* 'thanked', which assigns inherent (dative) Case. Interestingly, this sentence is ungrammatical. Then, the question is why. Regarding this, Bošković (2008) argues that in (28b) higher numerals like *pet* 'five' are Caseless in Serbo-Croatian, which makes it impossible for the verb to check its Case against *five men*. Let us refer to this as a violation of the *Inverse Inherent Case Filter* (Bošković 2008; Stjepanović 2012), which requires an inherent Case-assigner to assign inherent Case to some Case-absorbing element. According to the Visibility Condition, an inherent Case-assigning verb (e.g., a dative predicate) will theta-mark its object only if it assigns inherent Case. Given this, having a numeral phrase in (28b) as an object of an inherent Case-assigning verb inevitably causes a Theta-criterion violation. On the other hand, (28a) is grammatical because structural Case is not associated with theta-assignment. Even if the verb cannot check its structural Case feature against its numeral phrase complement, the derivation does not crash because there is no Theta-criterion violation. In other words, there is no Inverse Case Filter for structural Case.

In this light, consider again the experimental data in (10). (29) shows the underlying schemata of (10) prior to LNR (SC is short for structural Case, and IC for inherent Case) according to our Scrambling + *pro* analysis given in (25). Note that the second conjunct gap is *pro*, which is assumed to be Caseless (Jaeggli 1986; Roberge 1986; Authier 1992) and not subject to the Case Filter, but necessarily theta-marked as an argument.

- | | | |
|---------|---|--|
| (29) a. | $[NP_{Dat} \leftarrow +C, +\Theta \leftarrow V_{IC}]$ | $[pro \leftarrow +\Theta \leftarrow V_{SC}]$ |
| b. | $[NP_{Dat} \leftarrow -C, +\Theta \leftarrow V_{SC}]$ | $[pro \leftarrow -\Theta \leftarrow V_{IC}]$ |
| c. | $[NP_{Acc} \leftarrow +C, +\Theta \leftarrow V_{SC}]$ | $[pro \leftarrow -\Theta \leftarrow V_{IC}]$ |
| d. | $[NP_{Acc} \leftarrow -C, -\Theta \leftarrow V_{IC}]$ | $[pro \leftarrow +\Theta \leftarrow V_{SC}]$ |

Let us compare first (29a) and (29c). The second conjunct predicate in (29a) is an SC-assigner, whereas the second conjunct predicate in (29c) is an IC-assigner. Given the Visibility Condition, the *pro* in (29c) violates the Theta-criterion because the IC-assigner cannot discharge a theta-role without Case-assignment.

Since *pro* is Caseless by assumption, the IC-assigning verb cannot check its Case against it, violating the Inverse Inherent Case Filter. On the other hand, (29a) is fairly acceptable because SC is not associated with theta-role assignment in Chomsky's (1986) Case system. As the result, even if the verb cannot check its SC feature against its complement *pro*, the derivation does not crash because there is no Theta-criterion violation, unlike in (29c). In other words, under this analysis, there is no Inverse Structural Case Filter. In short, in (29a) the *pro* receives a theta-role, but not in (29c), capturing the contrast between (29a) and (29c).

A similar reasoning can be applied to the comparison of (29b) and (29d). At the outset, their acceptability is degraded, compared with (29a) and (29c), because the first conjunct Case-licensing requirement of LNR is not satisfied. Of particular interest is why (29d) is far worse than (29b). We attribute this contrast to the type of the first conjunct predicate, which ultimately leads to a difference with respect to the Visibility Condition. In (29b) the first conjunct predicate is an SC-assigner, whose theta-role assignment to the pivot is independent and successful even though Case-licensing is not successful due to the Case-mismatch with the dative pivot. In contrast, in (29d) the first conjunct predicate is an IC-assigner; thus, the failure in Case-licensing infallibly results in an unsuccessful theta-role assignment to the pivot, giving rise to a Visibility Condition violation. In this sense, we argue that the Visibility Condition is responsible for the difference between (29a) and (29c) as well as (29b) and (29d).^{16,17}

16 Under Chomsky's (1995, 2000, 2001, 2004) minimalist program, Boeckx (2008) proposes that Case-checking makes the element visible for interpretation. Generalizing the Visibility Condition, he claims that Case-checking makes an element as being interpretable, not only for thematic purposes, but also for scope. The underlying thesis is that insofar as an NP has an unchecked Case feature, its feature set is uninterpretable. Once Case is checked, the element is ready for theta-interpretation.

17 As a reviewer points out, non-LNR monoclausal constructions could also show a similar sensitivity to the Case type of the left-edged NP in Case-mismatch environments as in (i):

- (i) a. Yenghuy-eykey emma-ka ttattushakey macihassta.
 Yenghuy-Dat mom-Nom warmly welcomed_{Acc}
 'Yenghuy]_{Dat} her mom welcomed_{Acc} warmly.'
 b. Yenghuy-lul oppa-ka kkochtapol-ul cwuessta.
 Yenghuy-Acc brother-Nom bouquet-Acc gave_{Dat}
 'Yenghuy]_{Acc} her brother gave_{Dat} a bouquet.'

5. Conclusion

In this paper, the Case-match requirement for Japanese/Korean left-node-raised (LNRed) objects was examined via an acceptability experiment. We found that certain instances of Case-mismatches in Korean LNR were not as unacceptable as previously thought, and that the match between the pivot's morphological Case and the Case assigned by the first conjunct predicate is crucial. This suggests that the Case-mismatch of LNRed pivots may be tolerated once their Case is licensed in the first conjunct. Also, the Case-mismatch in LNR was more acceptable when the Case of the pivot was dative than when it was accusative. Taken together, the current study poses a challenge to the symmetric analyses of LNR (Nakao 2009, 2010; Chung 2010) which take the Case-match requirement for LNRed objects as compelling evidence.

As a theoretical consequence, we have attempted to reinterpret, in more modern terms (Boeckx 2008; Bošković 2008), the nature of the Visibility Condition (Chomsky 1986). In Chomsky (1986), it was proposed that the Case Filter (Chomsky 1981) follows from the more general requirement of visibility for interpretation at the levels of LF and PF. Under this view, the Case Filter is not an independent module of UG, but derives from the Visibility Condition. A predicate can only assign a theta-role to NPs that are visible, and Case is what renders NPs visible for theta-role assignment. NPs irrespective of their phonetic contents are arguments, and must have theta-roles; therefore, they need Case to become visible for further syntactic operations. Thus, theta-licensing is parasitic to Case-licensing and can take place either in the syntax or on LF.

Similar to what is happening in the first conjunct of (29b) and (29d), (ia) and (ib) show Case-mismatches between the dative NP vs. the accusative predicate and the accusative NP vs. the dative predicate, respectively. Depending on the acceptability result/contrast of (i), we could see whether the sensitivity to Case types is specific to LNR or not. We leave this issue to future research.

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