



Definiteness and context in double-accusative ditransitives in Korean: An experimental approach^{*}

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Park, Sang-Hee and Eunkyung Yi. 2024. Definiteness and context in double-accusative ditransitives in Korean: An experimental approach. *Linguistic Research* 41(3): 345-366. This study explores how definiteness and contextual information influence the acceptability and processing of the Korean double-accusative ditransitive construction. Experiment 1 employed an acceptability judgment task, demonstrating that the acceptability of the construction is significantly enhanced when the recipient is marked with the definite *ku* and introduced by prior context, highlighting the role of definiteness supported by context. Experiment 2 utilized a self-paced reading paradigm to investigate the online processing of the construction, revealing that the presence of context facilitates faster reading times at critical regions, particularly at the recipient and theme arguments. Combining the results of the two experiments, it is notable that while contextual facilitation improves processing, it results in only modest improvements in acceptability ratings. We interpret the results as indicating that the double-accusative ditransitive construction is grammatically marginal despite being relatively easy to comprehend when supported by definiteness and context. These findings contribute to our understanding of the double-accusative ditransitive construction in Korean and show an interesting interplay between acceptability and sentence processing. (Hanbat National University · Ewha Womans University)

Keywords ditransitive, double accusative, case marking, definiteness, context, acceptability judgment, self-paced reading, Korean

1. Introduction

The *Ditransitive Construction* refers to a grammatical structure in which a three-place

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predicate, such as ‘give,’ occurs with an Agent (A), a Theme (T), and a Recipient (R) argument. (Malchukov 2010). In Korean, an accusative language with SOV word order, typical ditransitive sentences are structured with a nominative-marked agent, a dative-marked recipient and an accusative-marked theme, as shown in (1).¹ However, being a discourse-oriented language, Korean allows arguments to be implicitly expressed and inferred from context, so the three roles may not always be explicitly stated.

- (1) 미나가 선배에게 선물을 줬어.
 mina-ka senpay-**eykey** senmwul-ul cwu-ess-e.
 Mina-Nom senior-**Dat** present-Acc give-Past-Decl
 ‘Mina gave her senior a present.’

Given this typical syntactic realization of ditransitives in Korean, it is noteworthy that a relatively rarer option exists for syntactically encoding ditransitive meanings, in which the recipient argument is marked with an accusative marker. Then, both the theme and recipient are marked the same way, as shown in (2). This structure is commonly referred to as the *double-accusative* ditransitive construction, in contrast to the canonical ditransitive construction shown in (1) above.²

- (2) 미나가 선배를 선물을 줬어.
 mina-ka senpay-**lul** senmwul-ul cwu-ess-e.
 Mina-Nom senior-**Acc** present-Acc give-Past-Decl
 ‘Mina gave her senior a present.’

These two variants of the ditransitive construction are particularly intriguing due to their comparability with the well-studied phenomenon in English known as the

1 The following abbreviations are used in glosses: Acc = accusative; Adn = adnominal; Bn = bound noun; Dat= dative; Decl = declarative; Hon = honorific marker; Nom = nominative; Past = past tense; Pres = present tense; Q = question

2 In Korean, there are other constructions featuring two accusative-marked arguments in succession, commonly referred to as double accusative constructions. This paper focuses specifically on the case where the accusative-marked arguments fulfill the roles of recipient and theme. Other types of double accusative constructions are qualitatively different from ditransitives and fall outside the scope of this study.

Dative Alternation, as illustrated in (3). The Korean canonical ditransitive construction in (1) is generally considered a counterpart to the English prepositional dative construction in (3a) where the recipient is marked with a postpositional dative marker *-eykey* ‘to.’ In contrast, the double-accusative form corresponds to the English double object construction shown in (3b), in which both the recipient and theme are marked with the accusative *-(l)ul*.

- (3) a. Mina gave a present to a senior.
 b. Mina gave a senior a present.

Although the two variants of the ditransitive construction in Korean are regarded as a potential alternation, their actual use and judged acceptability or naturalness are markedly unbalanced. Specifically, the double-accusative variant is infrequent in everyday language and has often been deemed highly unnatural in previous judgment studies (e.g., Cho 2015; Yi and Park 2022). Nevertheless, there is evidence that certain factors can enhance the naturalness of Korean double-accusative ditransitives. For instance, the meaning of the verb plays a significant role; verbs indicating caused possession tend to improve their acceptability (Lee 2018; Park and Yi 2021). This observation parallels findings regarding the English Dative Alternation, where the double object construction is more compatible with verbs conveying caused possession, while the prepositional dative construction aligns better with verbs of caused motion (Rappaport Hovav and Levin 2008).

Inspired by these similarities, the present study investigates whether the factors known to favor the English double object construction also facilitate the processing of the Korean double-accusative ditransitive construction. Among these factors, we specifically examine the effect of *definiteness* in the recipient argument and *contextual support*. Previous literature has shown that the indirect object or recipient in the double object construction tends to be more definite, pronominal, discourse accessible, and shorter in length (e.g., Collins 1995; Bresnan et al. 2007). Conversely, when the direct object or theme is more definite, pronominal, discourse-accessible, or shorter in length, the prepositional dative construction is more likely to occur, as illustrated in (4).

- (4) a. Mina gave **the senior/him/her** a present.
 b. Mina gave **the present/it** to a senior.

In Korean, definiteness is typically expressed through the demonstrative *ku*, which is roughly equivalent to *that* in English.³ Scholars have long regarded *ku* as an overt definiteness marker, as evidenced by the various terms used in previous studies, such as ‘definite determiner’ (Lee 1989), ‘definite demonstrative’ (Sohn 2001), and ‘anaphoric demonstrative’ (Ahn 2017; Cho 2017). According to Kang (2021), the definiteness of *ku* involves familiarity, requiring the presence of a familiar or co-referring antecedent in prior context. This suggests that simply adding *ku* may not guarantee a noun’s interpretation as definite; some contextual support is required.

In the present study, we examine the potential effect of definite recipients on the double-accusative ditransitive construction using two manipulations. First, we add the demonstrative *ku* to the recipient noun (e.g., Mina *ku senior*-Acc present-Acc gave). Second, we include a context clause (e.g., ‘because it’s the senior’s birthday who often buys her meals’) that introduces the recipient argument beforehand, making it more familiar before the construction. In Experiment 1, we compare the acceptability of double-accusative ditransitives with a *ku* recipient and those with additional contextual support, respectively, to the acceptability of the construction without these manipulations. Experiment 2 further examines the effects of contextual support using the self-paced reading paradigm during online sentence comprehension.

This study is expected to enhance our understanding of the double-accusative ditransitive construction in Korean, particularly regarding how semantic and pragmatic properties, such as definiteness and familiarity, interact with the construction. In addition, by drawing parallels with the English dative alternation, this study contributes to crosslinguistic discussions about the factors that improve the presence of indirect objects.

The paper is organized as follows. In Section 2, we report on Experiment 1, which investigates whether definiteness and contextual support enhance the acceptability of the double-accusative ditransitive construction through a judgment experiment. In Section 3, we present Experiment 2, an online sentence comprehension experiment that attempts to clarify the role of contextual support in real-time sentence processing. Finally, Section 4 provides a general discussion of our findings, reflecting on their implications for understanding the double-accusative construction in Korean.

3 While Korean bare nouns can also denote definiteness, this is restricted to where they refer to unique individuals (‘uniqueness’ definite) or occur as a topical subject marked with *-(n)un* (Kang 2021).

2. Experiment 1: Acceptability judgment study

This experiment investigates the acceptability of double-accusative ditransitive sentences in Korean, with a focus on how the presence of a definite demonstrative on the recipient argument and contextual information influences judgments of naturalness. We hypothesize that the inclusion of definiteness would increase the naturalness of the accusative-marked recipient in double-accusative ditransitive sentences, analogous to English double object ditransitives. Specifically, we expect to see higher ratings of acceptability in the definite condition compared to the baseline condition, with further increase expected in the context condition. This study aims to enhance our understanding of how definiteness interacts with the double-accusative ditransitive construction in Korean.

2.1 Methods

Participants

Thirty-two university students ($M_{age} = 21.69$, range = 19-27, SD = 1.51) participated in the experiment. All were native speakers of Korean. Each was paid 4,000 won for participation.

Material

Eighteen double-accusative ditransitive sentences were constructed using six different ditransitive verbs attested in previous literature: *cwu-* ('to give'), *ponay-* ('to send'), *mathki-* ('to entrust'), *kenney-* ('to hand'), *kwenha-* ('to recommend'), and *kaluchi-* ('to teach'). These sentences were organized into three sets of eighteen sentences, varying conditions as illustrated in (5) below. In the baseline condition (5a), a bare noun phrase (NP) is used for a recipient; in the definite condition (5b), an NP with the definite demonstrative *ku* is used for the recipient; in the context condition (5c), the sentence from the definite condition is preceded by a context clause that introduces the antecedent of the recipient argument in advance. These are counterbalanced across three lists so that participants can see only one of each triplet in the experiment.

- (5) a. 미나가 선배를 선물을 줬어. (baseline)
 mina-ka senpay-lul senmwul-ul cwu-ess-e.
 Mina-Nom senior-Acc present-Acc give-Past-Decl
 ‘Mina gave a/the senior a present.’
- b. 미나가 그 선배를 선물을 줬어. (definite)
 mina-ka ku senpay-lul senmwul-ul cwu-ess-e.
 Mina-Nom the senior-Acc present-Acc give-Past-Decl
 ‘Mina gave the senior a present.’
- c. 자주 밥을 사주는 학과 선배가 생일이어서 (context)
 미나가 그 선배를 선물을 줬어.
 cacwu pap-ul sa-cwu-nun hakkwa senpay-ka
 often meal-Acc buy-give-Adn department senior-Nom
 sayngil-i-ese mina-ka ku senpay-lul
 birthday-be-because Mina-Nom the senior-Acc
 senmwul-ul cwu-ess-e.
 present-Acc give-Past-Decl
 ‘Since it was the birthday of the senior who often treats her to meals,
 Mina gave the senior a gift.’

Fifty-four sentences were also constructed as filler stimuli. They varied in length from four to fourteen words and also in naturalness from ungrammatical/unnatural to completely natural sentences, similar to the variability of the experimental stimuli. For presentation, the experimental and filler stimuli were organized so that any two adjacent experimental stimuli were separated by three filler sentences.

We also prepared ten comprehension questions to ask about the content of the immediately preceding sentence in order to encourage participants to read attentively. These questions were placed after filler sentences throughout the experiment and were used to identify and exclude data from highly inattentive participants.

Procedure

We used PCIbex Farm (Zehr and Schwarz 2018) to conduct a 7-point Likert scale judgment experiment. At the beginning of the experiment, participants were instructed to select the point that first came to mind (1 for the least natural and 7 for the most natural) upon reading the sentences presented on the screen one after another.

We emphasized that this is not a test and asked them to judge the naturalness of the sentences based on their intuition as native speakers of Korean. Participants practiced with seven example trials, two of which were followed by comprehension questions. The experiment took around 15 minutes.

Data analysis

We first computed participants' scores on the comprehension questions. Data from two participants who scored below 8 (i.e., 4 and 5 out of 10, respectively) were excluded from the analysis. The mean score of the remaining participants was 9.33. Acceptability ratings were *z*-transformed within each subject, standardizing the ratings relative to each individual's mean and standard deviation. This transformation accounts for individual variability in the use of the rating scale, making the ratings comparable across subjects.⁴ The data were then analyzed using a mixed-effects regression model. The stimulus condition, which included three levels (*baseline*, *definite*, and *context*), was entered as a predictor, while the *z*-transformed ratings served as the outcome. Subject and item were included as random effects.

2.2 Results

The analysis of judgments on the 7-point Likert scale revealed that the double-accusative ditransitive sentences in the baseline condition had a mean rating of 1.62 (SD = 1.22). Double-accusative ditransitives featuring a recipient argument with the definite *ku* had a mean rating of 1.78 (SD = 1.42), while those with a contextual clause showed a mean of 2.09 (1.50). The mean rating in the context condition was relatively higher than in the other two conditions. The rating distributions are plotted by condition in Figure 1.

⁴ We also conducted an analysis using raw rating scores, and the results were consistent regardless of whether the ratings were *z*-transformed. The findings based on the *z*-transformed ratings are reported in the Results section below.

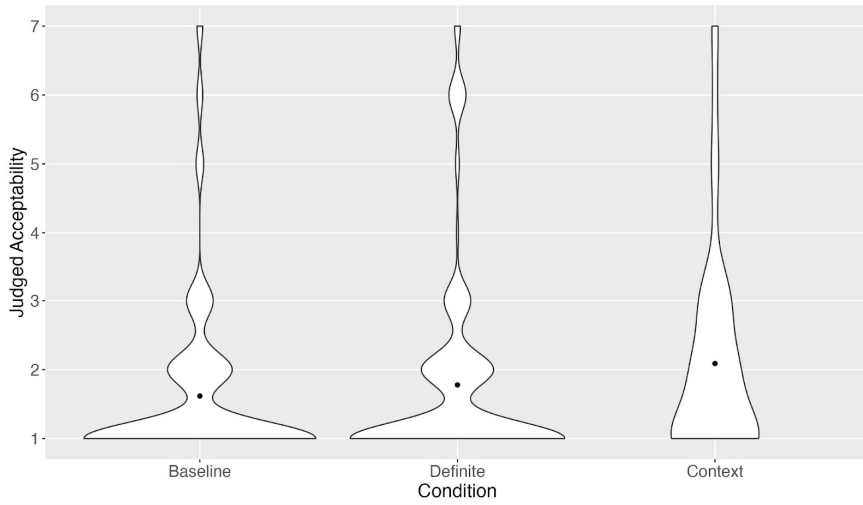


Figure 1. A violin plot of judged acceptability on double-accusative ditransitives by condition

The mixed-effects regression analysis showed that the ratings in the definite condition were not significantly different from those of the baseline condition ($b = 0.078$, $t = 1.43$, $p = 0.16$) despite a small numerical increase in the mean. In contrast, the ratings in the context condition were significantly different from those in the baseline condition ($b = 0.192$, $t = 3.52$, $p < 0.001$). Additionally, a significant difference was found between the context and definite conditions ($b = 0.114$, $t = 2.09$, $p < 0.05$). These results suggest that the presence of a contextual clause enhances the acceptability of double-accusative ditransitive sentences compared to both the baseline and definite conditions. This seems to be in line with the theoretical argument that *ku* alone may not be sufficient for definiteness but is unambiguously definite in contexts where familiarized to the reader or listener through context (Lee 1989; Sohn 2001; Kang 2021, *inter alia*). The findings confirm that truly definite recipients can improve the naturalness of the double-accusative ditransitive construction, similar to their effect in the English double object construction.

3. Experiment 2: Self-paced reading study

The results of Experiment 1 demonstrated that the acceptability of the double-accusative ditransitive construction is significantly enhanced only when the recipient is both marked with the definite *ku* and familiarized through prior context introducing its antecedent, confirming the effect of definiteness and context support on the construction. While Experiment 1 above relied on meta-linguistic judgments of double-accusative ditransitive sentences, the present Experiment 2 further investigates the effects of definiteness and contextual familiarization during online sentence comprehension of these sentences. Since the previous experiment showed null effects between the baseline and definite conditions, the current experiment focuses on comparing the definite and context conditions.

3.1 Methods

Participants

Twenty university students ($M_{age} = 21.65$, range = 18-25, $SD = 1.81$), all native Korean speakers, participated in the experiment. None had participated in Experiment 1. Each was paid 4,000 won for participation.

Material

Thirty-six double-accusative ditransitive sentences from the definite and context conditions in Experiment 1 were adapted to create the experimental stimuli. Eighteen sentences featured a recipient marked by the definite *ku*, while the other eighteen included an additional description introducing the antecedent of the recipient, as illustrated in (6). These are counterbalanced across two lists so that each participant sees only one of each pair in the experiment.

- (6) a. 미나가 / 그 선배를 / 선물을 / 남모르게 / 주려고 / 한다. (definite)
 mina-ka ku senpay-lul senmwul-ul nammolukey
 Mina-Nom the senior-Acc present-Acc secretly
 cwu-lyeko ha-n-ta.
 give-try do-Pres-Decl
 ‘Mina is secretly trying to give the senior a gift.’

- b. 자주 / 밥을 / 사주는 / 학과 / 선배가 / 생일이어서 (context)
 cacwu pap-ul sa-cwu-nun hakkwa senpay-ka
 often meal-Acc buy-give-Adn department senior-Nom
 sayngil-i-ese
 birthday-be-because
 미나가 / 그 선배를 / 선물을 / 남모르게 / 주려고 / 한다.
 mina-ka ku senpay-lul senmwul-ul nammolukey
 Mina-Nom the senior-Acc present-Acc secretly
 cwu-lyeko ha-n-ta.
 give-try do-Pres-Decl
 ‘Since it is the birthday of the senior who often treats her to meals,
 Mina is secretly trying to give the senior a gift.’

The slashes in (6) indicate pre-defined regions for the analysis of reading time, referred to as the **subject** (미나가), **recipient** (그 선배를), **theme** (선물을), **adverb** (남모르게), **V1** (주려고; a ditransitive verb) and **V2** (한다; a final light verb) regions, respectively. Of these, the adverb and V2 regions were new additions that did not appear in the Experiment 1 stimuli. The adverb region consists of a single manner adverb made up of four characters (e.g., *nammolukey* ‘secretly’, *takuphakey* ‘urgently’, *kkunkiisskey* ‘sedulously’, etc.). These appear pre-verbally to help readers anticipate the upcoming verb and facilitate its rapid integration into the double-accusative ditransitive construction. The V2 region contains the light verb *ha-* (‘do’) or the stative predicate *iss-* or *cwungi-* (marking imperfective aspect), positioned at the end of the sentence to detect any delayed processing effects related to the ditransitive verb.

In addition to the experimental items, 54 filler items were adapted from those in Experiment 1 by modifying the grammaticality of the sentences. All filler sentences were adjusted to be highly acceptable and fully grammatical, as is common in self-paced reading experiments to maintain participants’ engagement in reading. The lengths of the fillers were also adjusted to ensure that the context condition, which would otherwise be notably longer than other items, did not stand out. To help participants maintain focus during the experiment, twenty four fillers were followed by a comprehension question. As illustrated in (7), the questions were simple *wh*-interrogatives, and participants chose between binary options by pressing either 1 or 2 on the keyboard. Written feedback was provided immediately when an incorrect

answer was selected.

- (7) (Displayed after the filler sentence *Jemshim meynywu korukinun hangsang elyepa* ‘Choosing a lunch menu is always difficult’:)

무엇을 고르는 게 어렵습니까?

mwues-ul kolu-nun key elyep-supni-kka?

what-Acc choose-Adn Bn.Nom difficult-Hon-Q

‘What is difficult to choose?’

1: 메뉴

2: 옷

menywu

os

‘Menu’

‘Clothes’

Procedure

The experiment utilized a moving-window self-paced reading paradigm in PCIBex Farm (Zehr and Schwarz 2018), with a region-by-region presentation. Participants were introduced to the task and procedure upon entering the experiment and completed seven practice trials, three of which included comprehension questions. The entire experiment took about 15 minutes.

Each trial began with an asterisk (*) displayed at the center of the computer screen. Participants pressed the spacebar to advance to a display of dashes representing the words in the sentence. Successive presses revealed the sentence one word at a time, with previous words reverting to dashes. After reading the sentence and responding to a comprehension question, if presented, participants pressed the spacebar to proceed to the next trial. Reaction times between spacebar presses were recorded in milliseconds on the PCIBex Farm server.

Questions and predictions

Experiment 1 demonstrated that the acceptability of double-accusative ditransitive sentences is conditioned on the presence of a context clause introducing the recipient argument beforehand. Given that prior context significantly improved offline judgment, the current self-paced reading experiment aims to pinpoint where context-related processing advantages are likely to emerge. The recipient argument region is the most critical one, as a prior mention of its antecedent renders it familiar

or anaphorically definite. Assuming that the recipient argument is expected to be definite, and definiteness in Korean is unambiguously marked through an anaphoric relationship between a *ku*-marked nominal and its antecedent, we anticipate faster reading times at or shortly after the recipient region in the context condition compared to the definite condition. Another critical region is V1, where the ditransitive verb appears and the parser integrates the verb with the previously processed arguments into the construction. We also expect to observe some context effects at the adverb region between the recipient and V1 regions as the processor is getting ready to integrate previous arguments with an upcoming predicate. V2 is prepared for any delayed effects at V1, a potential spillover region.

Previous research on anticipatory processing suggests that case markers are rapidly utilized to predict upcoming structure (Altmann and Kamide 1999; Kamide et al. 2003; Hopp 2015; Mitsugi and MacWhinney 2016). These studies demonstrated that an accusative argument following a subject leads the parser to anticipate a strict transitive verb (e.g., *Mina-Nom senpay-Acc mannassta* ‘Mina met the senior’), while a dative argument makes a third argument more likely to occur (e.g., *Mina-Nom senpay-Dat senmwul-Acc cwuessta* ‘Mina gave the senior a present’). Processing difficulty arises when the input diverges from what is expected, leading to a slowdown in processing. If the recipient argument is initially interpreted as part of a simpler transitive construction, encountering a subsequent theme argument would incur processing costs because this structure is less expected given the prior input. Thus, a slowdown in reading times is expected at the theme and potentially later regions as expectations need to be revised. This expectation-based processing cost may interact with the availability of a prior context, influencing the degree of slowdown across regions.

Data analysis

Prior to statistical analysis, participants’ reading time data for the experimental items were reviewed and trimmed. During screening based on comprehension scores, all participants exceeded the 80% comprehension accuracy threshold (an average 22.95 correct answers out of 24), so no data were excluded. Next, outliers below 100 ms and above 3,000 ms were excluded, resulting in a 1.39% data loss. Finally, reading times that exceeded 2.5 standard deviations from each participant’s mean per region were replaced with the threshold values, affecting 3.24% of the data.⁵

Linear mixed-effects analysis (Baayen et al. 2008) was used to fit the reading times for the six regions of interest. In all models, Participant and item were included as random intercepts and context as the sole predictor.

3.2 Results

Raw reading times are plotted in Figure 2, which shows region-by-region measures beginning at the subject through the end of the sentence. The results of mixed-effects regression models are summarized in Table 1 below.

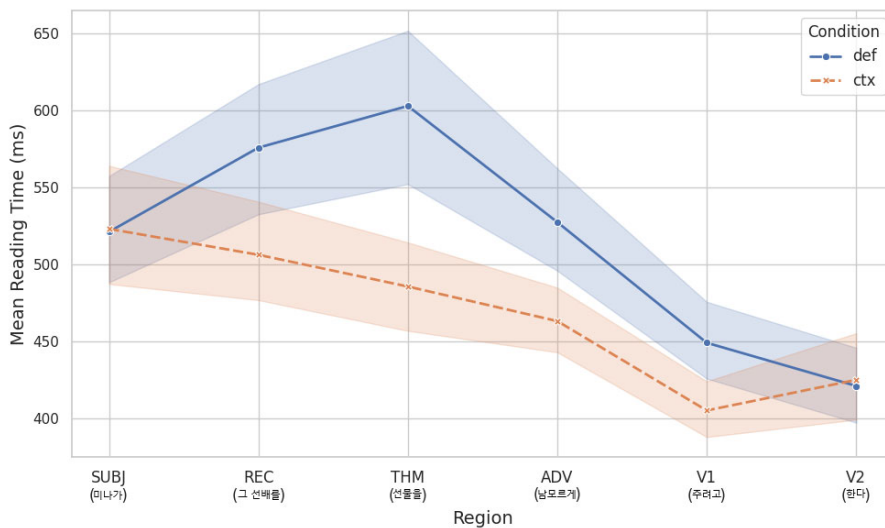


Figure 2. Mean reading times by region for the conditions in Experiment 2

As seen in Figure 2, reading times of double-accusative ditransitive sentences were critically influenced by the presence of a context clause that introduced the antecedent of the recipient argument. The context condition resulted in faster reading times compared to the definite condition, with the divergence in reading times emerging at the recipient argument and persisting through V1, where the ditransitive verb appears.

5 We examined both the raw and log-transformed reading times and obtained consistent results across both approaches. For convenience and clarity, here we report the findings based on the raw reading times.

In the statistical analysis, the effect of context began to manifest at the recipient region, where a marginal facilitation was observed for sentences with a prior context introducing the argument compared to those without ($b = 82.48$, $SE = 46.21$, $t = 1.785$, $p = 0.083$). This finding suggests that a *ku*-marked recipient was processed more easily when familiarized through a preceding context, whereas the absence of such prior introduction led to a processing cost for the *ku*-marked recipient.

The slowdown at the theme in the definite condition reflects violated anticipation for upcoming elements. Namely, encountering another accusative-marked argument would introduce processing difficulty due to its uncommon and thus unexpected structural complexity. In contrast, the context condition shows a reversal of this pattern: reading times were faster at the theme region compared to previous regions, leading to a significant difference ($b = 120.68$, $SE = 38.09$, $t = 3.169$, $p < 0.01$). This suggests that prior introduction of the antecedent for a *ku*-marked accusative argument facilitates the processing of consecutive double-accusative arguments. At this point, three arguments have been processed, and the processor is likely attempting preliminary integration of these elements, leading to the expectation that the sentence will conclude as a double-accusative ditransitive construction. While the definite condition showed processing difficulty consistent with unexpected structural complexity, the presence of context mitigated this effect, likely by making the structure more predictable and reducing processing demands.

Reading times decreased at the adverb, V1, and V2 regions in both conditions. The difference in reading times was marginally significant at both the adverb ($b = 73.58$, $SE = 39.20$, $t = 1.877$, $p = 0.0695$) and V1 regions ($b = 51.51$, $SE = 28.54$, $t = 1.805$, $p = 0.0802$). Faster processing at the adverb region likely reflects a spillover from earlier effects. Namely, processing facilitation initiated at the recipient or theme regions may have persisted into the adverb region. The marginal effect at V1, where the ditransitive verb appears, indicates that a preceding context that introducing the recipient argument could facilitate the integration process. Despite the infrequent occurrences of the double-accusative ditransitive construction in Korean, there was no slowdown effect at this ditransitive V1 region. This can be attributed to the nature of head-final languages, where verbs can be syntactically predicted based on the preceding nominal constituents (Nakatani and Gibson 2008). The predictability of the verb in such constructions likely mitigated the integration challenges that might otherwise arise in processing the double-accusative ditransitive construction.

Table 1. The results of linear mixed-effects models by regions in Experiment 2

	Estimate	Std.Error	<i>t</i> -value	<i>p</i> -value
Subject (미나가)				
(Intercept)	529.778	36.839	14.831	
cond_def	-1.178	33.678	-0.035	0.972
Recipient (그 선배를)				
(Intercept)	507.13	47.71	10.629	
cond_def	82.48	46.21	1.785	0.0836 .
Theme (선물을)				
(Intercept)	487.92	44.45	10.977	
cond_def	120.68	38.09	3.169	0.00327 **
Adverb (남모르게)				
(Intercept)	466.91	33.77	13.827	
cond_def	73.58	39.20	1.877	0.0695 .
V1 (주려고)				
(Intercept)	405.61	26.27	15.439	
cond_def	51.51	28.54	33.07	0.0802 .
V2 (한다)				
(Intercept)	427.544	26.337	16.233	
cond_def	1.732	26.768	0.065	0.949

4. Summary and discussion

This study investigated how definiteness and contextual information affect the acceptability and processing of the Korean double-accusative ditransitive construction. We found a significant positive effect of a definite recipient, but only when definiteness is supported by prior context that familiarizes the definite-marked argument. This finding aligns with research on English, which suggests that the double object

construction works better with a definite indirect object that is given in context.

A comparison of the results from the acceptability judgment and self-paced reading experiments also reveals intriguing insights into the nature of these constructions. Although prior context significantly facilitated the processing of double-accusative ditransitives, it only modestly increased acceptability ratings, from approximately 1.78 to 2.09 when the presence of the definite *ku* was kept constant. This limited increase, despite statistical significance, suggests that this construction is grammatically marginal, though not necessarily difficult to understand. This pattern aligns with Nagata's (1990) findings indicating that people often take longer to judge sentences with uncertain grammaticality compared to clearly grammatical or ungrammatical ones. While contextual facilitation enhances processing, acceptability judgments may still exhibit a degree of uncertainty regarding the grammatical status of the constructions (Beltrama and Xiang 2016).

In addition to the findings on definiteness and context, it seems to be worth considering the role of case markers regarding the overall low acceptability of the double-accusative ditransitive construction in Korean. Typically, case markers serve either as discriminatory (Comrie 1978) or indexing (Hopper and Thompson 1980) devices, helping to clarify grammatical relations within a sentence. However, in the double-accusative ditransitive construction, this functionality is compromised. The repetition of identical accusative markers fails to provide the necessary discrimination between recipient and theme, leading to ambiguity and processing difficulties. This ineffective case marking may contribute to the limited acceptability of these constructions, particularly in the absence of additional semantic and pragmatic support from context.

Moreover, while the presence of context can improve processing times and aid comprehension of double-accusative ditransitives, the overall acceptability of these constructions remains notably restricted when compared to canonical ditransitive constructions. The processing pattern seems fragile as it is clearly influenced by some linguistic support. The inherent structural and functional differences suggest that further exploration is warranted to understand the unique challenges posed by double-accusative ditransitives in Korean. This further suggests that treating double-accusative ditransitives as equivalent alternatives to canonical ditransitives could result in misleading conclusions in related research.

In conclusion, this study highlights the complex interplay between definiteness,

context, and case marking in shaping the acceptability and processing of double-accusative ditransitive constructions. The findings underscore the importance of considering both linguistic structure and contextual information when examining grammaticality and sentence processing.

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Appendix

Stimuli for Experiment 1 & 2

There were three stimulus conditions in Experiment 1. The baseline condition included simple double-accusative sentences with bare nouns as the recipient arguments (e.g., senpay ‘senior’). In the definite condition, *ku* appeared before the recipient (e.g., *ku* senpay ‘the senior’). In the context condition, the sentences from the definite condition were preceded by a context clause, bracketed ([]) in the list below.

In Experiment 2, we reused the stimuli from the definite and context conditions of

Experiment 1, adding an adverb before the main verb and inserting light verbs after them, as indicated by underlines.

For clarity, the full stimuli for Experiments 1 and 2 are provided for the first item; for the remaining items, only the context condition from Experiment 2 is shown, as it is the most inclusive.

Experiment 1

Baseline 미나가 선배를 선물을 줬어.

Definite 미나가 그 선배를 선물을 줬어.

Context [자주 밥을 사주는 학과 선배가 생일이어서] 미나가 그 선배를 선물을 줬어.
 ‘[Because a senior from her department who often buys her meals is having a birthday,] Mina gave the senior a gift.’

Experiment 2

1. Definite 미나가 그 선배를 선물을 남모르게 주려고 한다.

Context [자주 밥을 사주는 학과 선배가 생일이어서] 미나가 그 선배를 선물을 남모르게 주려고 한다.

‘[Because a senior from her department who often buys her meals is having a birthday,] Mina is trying to give the senior a gift secretly.’

2. [이용 실적이 높은 우수 회원을 선정한 후에] 지후가 그 회원을 경품을 신속하게 보내는 중이다.

‘[After selecting the top-performing member,] Jihoo is in the process of promptly sending a prize to that member.’

3. [물품보관소에 직원으로 보이는 여자가 앉아있어서] 수미가 그 여자를 가방을 다급하게 맡기는 중이다.

‘[Because a woman who appeared to be an employee was sitting at the baggage claim,] Sumi is leaving a bag with her urgently.’

4. [짝사랑하는 아이에게 마음을 전하고 싶어서] 희재가 그 아이를 쪽지를 조심스레 건네려고 한다.

‘[Because Heejae wants to express feelings to a crush,] he is trying to hand a note to that person cautiously.’

5. [힘든 일을 털어놓던 친구가 잠시 말을 머뭇거리자] 유미가 그 친구를 담배를 슬

그머니 권하고 있다.

‘[When a friend who was sharing troubles paused for a moment,] Yumi is offering the friend a cigarette quietly.’

6. [반에서 키가 제일 작은 학생이 늘 맞고 다니는 것을 보고] 태주가 그 학생을 권투를 끈기있게 가르치고 있다.

‘[After seeing that the shortest student in the class is constantly getting bullied,] Taeju is teaching the student boxing persistently.’

7. [친한 이웃이 식당을 개업해서] 미주가 그 이웃을 화분을 기분 좋게 주는 중이다.

‘[Because a close neighbor has opened a restaurant,] Miju is giving the neighbor a flower pot happily.’

8. [중학교 동창이 소개팅을 주선해준다고 해서] 지호가 그 동창을 사진을 재멋대로 보내려고 한다.

‘[Because an old middle school friend promised to set him up on a blind date,] Jiho is planning to casually send that friend a photo.’

9. [놀이기구를 타기 전에 안내 직원이 소지품을 보관하라고 해서] 소미가 그 직원을 지갑을 안전하게 맡기는 중이다.

‘[Because the attendant told her to store her belongings before getting on the ride,] Somi is safely leaving her wallet with the attendant.’

10. [아내가 큰 수술을 한 동료로 위로하고 싶어서] 기주가 그 동료로 봉투를 조용하게 건네고 있다.

‘[Because Kiju wants to comfort a colleague whose wife underwent major surgery,] he is handing the colleague an envelope quietly.’

11. [신임 후배가 말없이 고기만 굽고 있는 걸 보고] 서우가 그 후배를 소주를 친절하게 권하는 중이다.

‘[After seeing the new junior silently grilling meat,] Seowu is offering the junior a glass of soju kindly.’

12. [어렵게 운전면허를 딴 남자가 자꾸 사고를 일으키자] 유희가 그 남자를 운전을 상세하게 가르치는 중이다.

‘[When the man who recently earned a driver's license kept causing accidents,] Yuho

- is teaching the man how to drive thoroughly.
13. [형편이 어려운 동생이 명문대에 합격하자] 주미가 그 동생을 용돈을 넉넉하게 주려고 한다.
 ‘[When Jumi’s younger sibling, who is in financial difficulty, was admitted to a prestigious university,] she is preparing to generously give the sibling some money.
14. [경품에 당첨된 손님이 직접 받으러 갈 수 없다고 해서] 시우가 그 손님을 택배를 꼼꼼하게 보내고 있다.
 ‘[Because the prize-winning customer said he/she could not come to collect it,] Siwu is carefully sending him/her the prize via delivery.’
15. [회사에서 새로운 비서를 뽑자마자] 태희가 그 비서를 열쇠를 비밀리에 맡기고 있다.
 ‘[As soon as the company hired a new secretary,] Taehee is entrusting the secretary with the keys discreetly.’
16. [취재를 마친 기자가 연락처를 물어보자] 우재가 그 기자를 명함을 어색하게 건네고 있다.
 ‘[When the reporter who finished the interview asked for contact details,] Wujae is handing over a business card to the reporter awkwardly.
17. [열정적으로 강의를 마친 강사 선생님이 피곤해보여서] 세아가 그 강사를 커피를 상냥하게 권하는 중이다.
 ‘[Because the passionate instructor looked tired after finishing a lecture,] Seah is kindly offering the instructor some coffee.
18. [동네 한 청년이 음식점을 창업하고 싶어해서] 하주가 그 청년을 요리를 차근차근 가르치고자 한다.
 ‘[Because a young man in the neighborhood wants to start a restaurant, Haju is preparing to teach the young man how to cook step by step.’

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