

The Acquisition of the Double Nominative Construction by Chinese Learners of Korean

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The study investigates the acquisition of the double nominative construction by Chinese speakers learning Korean. Based on the typological difference, two predictions are made. First, Chinese learners will show a worse performance on a two-place predicate than a one-place predicate. Second, Chinese learners will show a worse performance on an alternation with *-eykey* (dative) than non-alternation. Forty-two-Chinese (Mandarin)-speaking learners of Korean as well as 13 controls performed two main tasks: a forced-choice task and a grammaticality judgment task. Results indicate that in the elicited task, the predictions were borne out, though statistics did not provide enough support. On the other hand, in the grammaticality judgment task, the predictions were observed differently depending on the distinction between licit vs. illicit data.

1. Introduction

The double nominative construction (=DNC) is one of the popular topics on which a substantial body of studies in Korean linguistics has been done. This phenomenon is often observable in topic-prominent languages such as Chinese, Japanese, or Korean (Li & Thompson, 1976). However, compared to Korean or Japanese which have particles or case markers and consider SOV as a basic word order, Chinese has typologically different characteristics: no case markers and SVO word order. Moreover, DNCs in Chinese are represented in a different way with DNCs in Korean. It would be interesting to study how Chinese learners acquire Korean DNCs for two reasons. First, we can expect that L1-Chinese affects both in a positive and a negative way the acquisition of the given construction in L2-Korean. Chinese learners are familiar with such a word order as two NPs (seemingly subjects) occurring before a verb. At the same time, however, they often feel confused since their native DNCs do not completely conform to the Korean DNCs. Second, there is no previous FLA or SLA study on this topic. That is why this study is worthwhile.

Types of DNCs in Korean are summarized in (1) and their corresponding counterparts in Chinese in (2).

- (1) Double nominative constructions in Korean
- a. *Minswu-ka|*-eykey son-i khu-ta.*
Minsu-nom|dat hand-nom big-pres
'Minsu has big hands.'

- b. *Minswu-ka|-eykey ton-i manh-ta.*
Minsu-nom|dat money-nom much-pres
'Minsu has a lot of money.'
- c. *Minswu-ka|*-eykey kaswu-ka toy-nta.*
Minsu-nom|dat signer-nom become-pres
'Minsu becomes to be a singer.'
- d. *Minswu-ka|-eykey holangi-ka mwusep-ta.*
Minsu-nom|dat tiger-nom afraid-pres
'Minsu is afraid of a tiger.'

(2) Double nominative constructions in Chinese

- a. *Minswu shǒu dà.*
Minsu hand big
'Minsu has big hands.'
- b. *Minswu qián hěn duō.*
Minsu money very much
'Minsu has a lot of money.'
- c. *Minswu chéngwéi gēshǒu.*
Minsu become singer
'Minsu becomes to be a singer.'
- d. *Minswu hàipà lǎohǔ.*
Minsu afraid-of tiger
'Minsu is afraid of a tiger.'

The a and b in examples (1) and (2) are a one-place predicate whereas the c and d are a two-place predicate. The difference between the two types of predicates is apparent in Chinese examples: [NP NP Pred] in a one-place predicate and [NP Pred NP] in a two-place predicate. The alternation between case markers in Korean is not under consideration since Chinese has no case system. Based on the basic comparison, we can predict the following:

	Non-alternative	Alternative
One-place predicate	1A. <i>Minswu-ka *-eykey son-i khu-ta</i> 'Minsu has big hands.'	1B. <i>Minswu-ka -eykey ton-i manh-ta.</i> 'Minsu has a lot of money.'
	Prediction : L1 Korean (O) L1 Chinese (O)	Prediction : L1 Korean (O) L1 Chinese (?)
Two-place predicate	2A. <i>Minswu-ka *-eykey kaswu-ka toy-nta.</i> 'Minsu becomes to be a singer.'	2B. <i>Minswu-ka -eykey holangi-ka mwusep-ta.</i> 'Minsu is afraid of a tiger.'
	Prediction : L1 Korean (O) L1 Chinese (X)	Prediction : L1 Korean (O) L1 Chinese (X)

First, Chinese learners will show a worse performance on a two-place predicate than a one-place predicate. Because of the L1 transfer, Chinese learners in a

beginning level will perform well on the Korean double nominative construction with a one-place predicate, while they are poor at the construction with a two-place predicate. Even beginners have a subconscious knowledge about the distinction due to the valence in their native language, and they try to discern the two types of predicates. Particularly in case of a two-place predicate, one NP appears before a predicate while the other NP follows a predicate. Thus Chinese learners in a beginning level will mark the two NPs with a different case marker to distinguish each other.

Second, Chinese learners will show a worse performance on an alternation with *-eykey* (dative) than non-alternation. In the case where the nominative marker associated with the first NP alternates with a dative marker, Chinese learners have one more option to construct a well-formed sentence. If they choose a dative marker, we cannot simply expect that they don't have any knowledge about the double nominative construction. There is a possibility that Chinese learners prefer a dative nominative to a double nominative construction, knowing exactly how to use both constructions. Therefore, with a focus on probability, we can say that Chinese learners will perform better on non-alternative cases.

This paper is structured in the following way: Section 2 introduces a new proposal for the classification of the double nominative construction. Section 3 and 4 describe the empirical study and results. Section 5 is general discussion and conclusion.

2. Double nominative constructions in Korean

The DNC in Korean refers to double occurrences of a nominative marker in the form of 'NP1-i/ka (nom) NP2-i/ka (nom) Predicate'. The main controversy of the construction in question is whether the first NP functions as a subject in a sentence with a one-place predicate. Intuitively, it sounds odd that two subject-like NPs occur with a one-place predicate. For example, in a sentence such as *khokkili-ka kho-ka kil-ta* 'an elephant has a long nose', we do not reach a consistent perspective on the grammatical status of the first NP and the second NP. There are four lines of thinking with regard to this issue. First, Lim (1997) claims that the initial NP serves as a Major Subject, while the second NP is a Subject of a predicate clause. In line with a traditional position, he focuses on the unit of a predicate clause {NP2 Predicate}.

Second, Yoon (2006) maintains that the first NP and the second NP are Major Subject and Grammatical Subject, respectively. Based on Dixon (1994), he tries to explain the split subject properties. In a sentence with a single subject in Korean, the subject nominal is both pivot and the most prominent argument. However, in the double nominative construction (multiple subject construction in his terminology), the two are split- the subject-as-pivot is the Major Subject, while the subject-as-prominent-argument is the Grammatical Subject.

Third, Yim (1974) argues that the first NP functions as a topic, while the second NP is a subject. He pays special attention to topic which is a remarkable

characteristic of Korean, though its identity is still hard to define.

Finally, Mok (2005) asserts that the first NP is subject, while the second NP is object or complement. His main idea comes from the fact that the second NP followed by a nominative marker behaves just like an NP followed by an accusative marker.

Earlier theoretical studies of DNCs have presented various positions on the function of the first or second NP based on several devices which identify subjecthood such as honorification or plural copying. In this paper, I propose a new approach to the double nominative construction based both on an argument structure of a predicate and syntactic alternation pattern. The merits of this approach are two-fold. First, we can explicate the construction ‘NP1-i/ka(nom) NP2-i/ka(nom) Predicate’ in a uniform way. Most of the previous studies deal with the construction partially, either so-called double nominative (e.g., *Minswu-ka holangi-ka mwusep-ta* ‘Minsu is afraid of a tiger’) or so-called double subject (e.g., *khokkili-ka kho-ka kil-ta* ‘an elephant has a long nose’). Although it is revealed that the difference between the two constructions lies on the valence of a predicate, there was hardly any discussion on the semantic similarity caused by the formal analogy. Second, we can explain the difficulty of the acquisition of DNCs for learners of Korean in a systematic way.

The double nominative construction can be classified into four subclasses following two criteria. The first criterion is the number of an argument of a predicate. As a result, the construction is divided by two types, namely, one-place predicates and two-place predicates. The second criterion is the possibility of alternating between NP1-*i/ka* (nom) and NP1-*eykey* (dat). According to the syntactic alternation, we have two subclasses within the two types respectively, which include one alternating group and the other non-alternating.

(3) The classification of the double nominative construction

Type 1. One-place predicates

A. NP1-*eykey* alternation (X)

ex. *Minswu-ka*|*-*eykey* *son-i* *khu-ta.*
 Minsu-nom|-dat hand-nom big-pres
 ‘Minsu has big hands.’

B. NP1-*eykey* alternation (O)

ex. *Minswu-ka*|-*eykey* *ton-i* *manh-ta.*
 Minsu-nom|-dat money-nom much-pres
 ‘Minsu has a lot of money.’

Type 2. Two-place predicates

A. NP1-*eykey* alternation (X)

ex. *Minswu-ka*|*-*eykey* *kaswu-ka* *toy-nta.*
 Minsu-nom|-dat singer-nom become-pres
 ‘Minsu becomes to be a singer.’

B. NP1-*eykey* alternation (O)

ex. *Minswu-ka*|-*eykey* *holangi-ka* *mwusep-ta*.
 Minsu-nom|-dat tiger-nom afraid-pres
 ‘Minsu is afraid of a tiger.’

First, qualitative adjectives such as *khu-ta* ‘big’ or *yeyppu-ta* ‘pretty’ belong to the type 1-A, which is a one-place predicate and does not alternate with the dative construction. Second, quantitative adjectives like *manh-ta* ‘much/many’ or *eps-ta* ‘not exist’ fall under the type 1-B, which is a one-place predicate and alternate with the dative construction. The third is the type 2-A which is composed of a two-place predicate and does not alternate with the dative construction. There are only two members belonging to this type, *toy-ta* ‘become’ and *ani-ta* ‘be not’. Last, psych-adjectives such as *mwusep-ta* ‘afraid’ or *kwiyepp-ta* ‘adorable’ are classified into the type 2-B, whose predicates are two-place predicates and whose NP1-*i/ka* (nom) alternates with NP1-*eykey* (dat).

- (4) Argument structure and syntactic alternation of each type
 - i) 1A: [Possessor, Theme], non-alternating
 - ii) 1B: [Possessor, Theme], alternating
 - iii) 2A: [Theme, Goal], non-alternating
 - iv) 2B: [Experiencer, Theme], alternating
- (5) Examples of a predicate
 - i) Type 1-A: *khu-ta*¹ ‘big’, *cak-ta* ‘small’, *yeyppu-ta* ‘pretty’,... (qualitative adjectives)
 - ii) Type 1-B: *manh-ta* ‘much/many’, *cek-ta* ‘little’, *eps-ta* ‘not exist’,... (quantitative adjectives)
 - iii) Type 2-A: *toy-ta* ‘become’, *ani-ta* ‘be-not’
 - iv) Type 2-B: *mwusep-ta* ‘afraid’, *kwiyepp-ta* ‘adorable’,... (psych-adjectives)

3. Experiment

3.1 Subject

42 adult native Chinese (Mandarin)-speaking learners of Korean participated in this study. Their mean age was 22 (age-range 18-26). At the time of testing, all of them were receiving formal instruction at a university located in Seoul.

The participants were divided into three proficiency groups based on their placement test score: 12 beginners, 13 intermediates, and 17 advanced learners. In addition to the Chinese learners, 13 Korean native speakers who live in Seoul also participated in the study as a control group. Their mean age was 26.08 (age-range

¹ Park & Nam (2004) provided a well-founded explanation why *khu-* ‘big’, *cak-* ‘small’, *manh-* ‘many’, and *cek-* ‘few’ are one-place predicates.

22-36). They were randomly selected from various backgrounds such as graduate students majoring in computer science or psychology or bank clerks.

3.2 Procedure

The participants were asked to complete three tasks: 1) a forced choice elicitation task, 2) a grammaticality judgment task, and 3) vocabulary translation task. Task 1 and 2 are main tasks, which examine the production and comprehension ability of the participants, respectively. The tests were administered to the participants in a classroom environment. The time limit was approximately 45 minutes. After experiment the participants were financially compensated for their participation.

3.3 Material

Task 1 and 2 were constructed in a 2*2 design with factors predicate type (one-place predicate vs. two-place predicate) and alternation pattern of the initial NP (non-alternative vs. alternative).

3.3.1A forced choice elicitation task

The test was designed to elicit the use of the nominative case marker *i/ka* in two blanks in a sentence. The purpose of the elicitation task was to test the subjects' willingness to use the nominative marker with either alternating or non-alternating predicates. The 17 test predicates were distributed across four types: 1A (non-alternating one-valence predicate), 1B (alternating one-valence predicate), 2A (non-alternating two-valence predicate), and 2B (alternating two-valence predicate). Table 1 shows the 17 test predicates. To make the test items accessible to all participants, the high frequency predicates that are included in the beginner level test books are chosen. In total, 24 items were tested (six tokens of four types). In addition, 19 filler sentences were used as distracters. The sentences were randomly ordered.

Type	Examples
1A (non-alternating, one-valence predicate)	<i>khuta</i> 'be big', <i>mescita</i> 'be nice', <i>alumtapta</i> 'be beautiful', <i>napputa</i> 'be bad', <i>yakhata</i> 'be weak', <i>cohta1</i> 'be good'
1B (alternating, one-valence predicate)	<i>issta</i> 'exist', <i>epsta</i> 'not-exist', <i>manhta</i> 'be many'
2A (non-alternating, two-valence predicate)	<i>toyta</i> 'become', <i>anita</i> 'be-not'
2B (alternating, two-valence predicate)	<i>cohta2</i> 'like', <i>silhta</i> 'hate', <i>mwusepta</i> 'be afraid of', <i>kwiyepta</i> 'be affectionate to', <i>kulipta</i> 'miss', <i>philyohata</i> 'need'

Table1. 17 test predicates in an elicited task

In this elicitation task, the subjects were required to choose one case particle among five different options presented in the direction such as 1) *i/ka* (nominative marker), 2) *ul/lul* (accusative marker), 3) *ey* (locative marker), 4) *eykey* (dative marker), or 5) *uy* (genitive marker). Look at the example (6).

(6) Minswu is a basketball player. *Minswu() khi() khuta.*

The first sentence (originally provided in Chinese) introduces the relevant context to the test sentence. The role of the first sentence is just to help activate the topic. If the subject selects *i/ka* (nom) for two blanks, he or she gets one point. If the subject chooses *uy* (gen) for the first blank and *i/ka* (nom) for the second blank, then he or she scores zero. In other words, we check the tendency to use the double nominative construction.

3.3.2A grammaticality judgment task

Along with the elicited choice task, the subjects took a grammaticality judgment task. The test predicates in the elicitation task were also used in the grammaticality judgment task with a slight change in type 1A: Instead of *cohtal* ‘be good’ and *yakhata* ‘be weak’, *cwukta* ‘die’ was employed. In total, 24 test items (six tokens of four types) consisted of 12 correct and 12 incorrect sentences. 19 filler sentences were included in the task as well. All sentences were ordered in a random way to avoid ordering biases.

The subjects were requested to evaluate the grammaticality of the test sentences using the scale which ranged from 1 (ungrammatical), 2 (somewhat ungrammatical), 3 (somewhat grammatical) to 4 (grammatical). With the intention of monitoring what was behind the grammaticality judgment, subjects were asked to correct a sentence if it was assigned a score with 1 or 2.

3.3.3 Vocabulary translation task

The vocabulary translation task was administered in order to ensure that the subjects knew the meanings of all the test items used in the elicitation task and grammaticality judgment task. The subjects were asked to translate the 18 test predicates into Chinese. In computing the results of the two tasks, we only counted responses to those items that the subjects translated correctly in the translation task.

4. Results and Discussion

4.1 A forced choice elicitation task

The means and standard deviations (SD) for the production by Chinese learners of Korean and native Koreans are shown in Table 1. The four types, 1A, 1B, 2A, and

2B were classified on the basis of the argument structure and syntactic alternation of predicates.

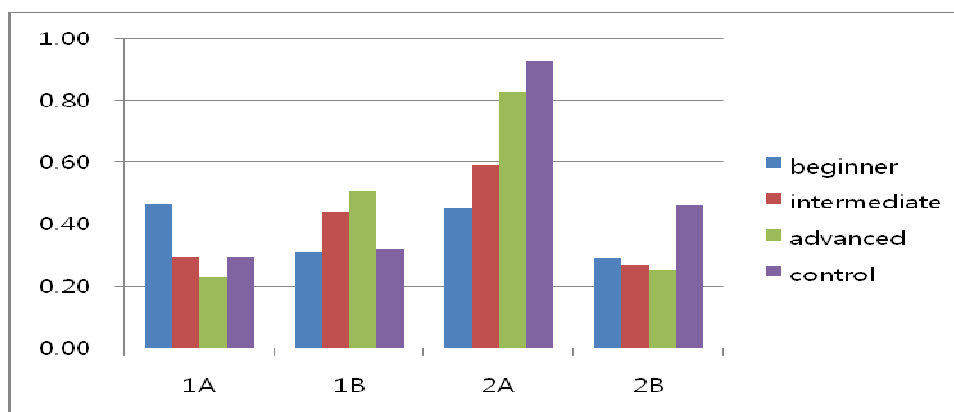


Figure1. Accuracy on a forced choice elicitation task

Group	Mean (SD) for Type of Double Nominative Construction			
	1A	1B	2A	2B
Beginner (<i>n</i> =11)	0.47 (.31)	0.31 (.28)	0.45 (.34)	0.29 (.29)
Intermediate (<i>n</i> =13)	0.30 (.27)	0.44 (.22)	0.59 (.38)	0.27 (.27)
Advanced (<i>n</i> =17)	0.23 (.21)	0.51 (.30)	0.82 (.33)	0.25 (.32)
Control (<i>n</i> =13)	0.29 (.17)	0.32 (.32)	0.92 (.23)	0.46 (.35)

Table2. Descriptive statistics of a forced elicitation task

The descriptive statistics indicate that all the groups except Beginner group marked the highest score in 2A, which suggests they had less trouble with the non-alternating two-place predicates such as *toyta* or *anita*. For the items with non-alternating types (1A and 2A), Chinese learners except Beginner group did better on the two-place predicates than one-place predicates like the native speakers.

For the alternating types (1B and 2B), on the other hand, all the Chinese learners performed better on the one-place predicates than on the two-place predicates unlike the native speakers, who did better on the two-place predicates. For one-place predicates (1A and 1B), Beginner group behaved differently from the rest of groups: only Beginner group performed better on the non-alternating type than on the alternating one, while the other three groups performed better on the alternating type, though the statistical significance is not guaranteed.

For two-place predicates (2A and 2B), all of the groups did better on the non-alternating type than on the alternating one. A one-way ANOVA shows that there

exists a statistically significant difference only among the means of type 2A ($F(3,50)=5.422, p=.003$). Furthermore, the results from Post Hoc comparisons (Scheffe) reveal that there are statistically significant differences between the Beginner and {the Advanced and the Control}.

Analysis of variance (General Linear Model, repeated measures) was performed on the accuracy data from DNCs, with group (Beginner, Intermediate, Advanced, Control) as a between-subjects factor, and the type of DNCs (1A, 1B, 2A, 2B) as a within-subject factor. There was a significant effect for the type of double nominative constructions ($F(3,150)=45.39, p=.000$) and an interaction between the two factors ($F(9,150)=7.16, p=.000$). However, there was no significant effect for group ($F(3,50)=.65, p=.59$). It revealed that even Control group was not significantly different in accuracy from all the rest of the groups. All the groups did not differ in accuracy.

4.2 A grammaticality judgment task

The means and standard deviations (SD) for the grammaticality judgments by Chinese learners of Korean and native Koreans are shown in Table 2.

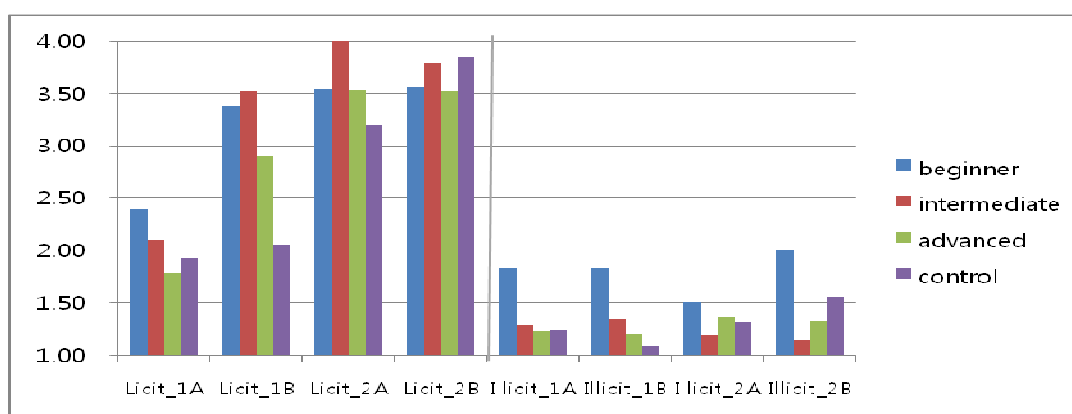


Figure2. Accuracy on a grammaticality judgment task

Group	Mean (SD) for Type of Double Nominative Construction							
	Licit				Illicit			
	1A	1B	2A	2B	1A	1B	2A	2B
Beginner (n=8 3)	2.40 (.99)	3.38 (.95)	3.54 (.50)	3.56 (.73)	1.83 (.29)	1.83 (.29)	1.50 (.50)	2.00 (.00)
Intermediate (n=7 7)	2.10 (.76)	3.52 (.84)	4.00 (.00)	3.79 (.39)	1.29 (.49)	1.33 (.38)	1.19 (.38)	1.14 (.38)
Advanced (n=16 15)	1.78 (.57)	2.90 (.89)	3.53 (.57)	3.52 (.46)	1.22 (.37)	1.20 (.37)	1.37 (.41)	1.32 (.34)
Control (n=13)	1.92 (.47)	2.05 (.65)	3.19 (.72)	3.85 (.22)	1.23 (.28)	1.08 (.20)	1.31 (.37)	1.55 (.48)

Table3. Descriptive statistics of a grammaticality judgment task

Starting with the licit DNCs, it is notable that the Control group was reluctant in accepting the sentences of type 1A, while they overwhelmingly accepted sentences belonging to the type 2B. The same trend was observed in the Intermediate as well as the Advanced. For the items with non-alternating types (1A and 2A) and alternating types (1B and 2B), all four groups did better on the two-place predicates than one-place predicates.

For one-place predicates (1A and 1B), all of the groups did better on the alternating type than on the non-alternating one. A one-way ANOVA shows that there exists a statistically significant difference among the means of type 1B ($F(3,50)=5.706$, $p=.002$). Furthermore, the results from Post Hoc comparisons (Scheffé) reveal that there are statistically significant differences between the two sub-groups of learners (the Beginner and the Intermediate) and the control group. There is no statistically significant difference between the Advanced and {the Beginner, the Intermediate, and the Control}.

For two-place predicates (2A and 2B), however, all the groups showed a similar performance both on the alternating and non-alternating types. A one-way ANOVA shows that there exists a statistically significant difference among the means of type 2A ($F(3,46)=2.989$, $p=.041$). Furthermore, the results from Post Hoc comparisons (Bonferroni) reveal that there is statistically significant difference between the Intermediate and the Control.

Analysis of variance (General Linear Model, repeated measures) was performed on the accuracy data from DNCs, with group (Beginner, Intermediate, Advanced, Control) as a between-subjects factor, and the type of DNCs (1A, 1B, 2A, 2B) as a within-subject factor. There was a significant effect for the type of double nominative constructions ($F(3,120)=79.64$, $p=.000$) and an interaction between the two factors ($F(9,120)=4.59$, $p=.000$). There was also a significant effect for group ($F(3,40)=3.34$, $p=.029$). Post-hoc Bonferroni tests reveal that only the Intermediate group was significantly different in accuracy from the Control group, but the Beginner, the Intermediate, the Advanced and the Control groups did not differ in accuracy.

Next, we look into the results of the illicit DNCs. Here illicit DNCs mean no use of the DNC in the context where its use is obligatorily required or possible. It is worth noting that the Beginner group assigned a relatively high score to all the types of illicit DNCs. It can be interpreted that they are not sensitive to the possible use of double nominative constructions in Korean.

A one-way ANOVA shows that there exists a statistically significant difference only among the means of 1B ($F(3,46)=6.998$, $p=.001$). Furthermore, the results from Post Hoc comparisons (Bonferroni) reveal that there are statistically significant differences between the Beginner and {the Advanced and the Control}. Analysis of variance (General Linear Model, repeated measures) was performed on the accuracy data from DNCs, with group (Beginner, Intermediate, Advanced, Control) as a between-subjects factor, and the type of DNCs (1A, 1B, 2A, 2B) as a within-subject factor. There were no significant effects for type of double nominative construction ($F(3,102)=2.27$, $p=.085$) and group ($F(3,34)=2.74$,

$p=.059$). There was a significant effect for an interaction between the two factors ($F(9,102)=3.03$, $p=.003$). Moreover, Post-hoc Scheffe tests reveal that only the Beginner group was relatively different in accuracy from the other groups. It means that there might be the effect of a Group averaged over the type of double nominative constructions at some points.

5. Discussion and conclusion

5.1 Individual results by predicates on a forced choice elicitation task

As seen in Figure 1 above, there is variation in availability of the double nominative constructions even in the Control group.

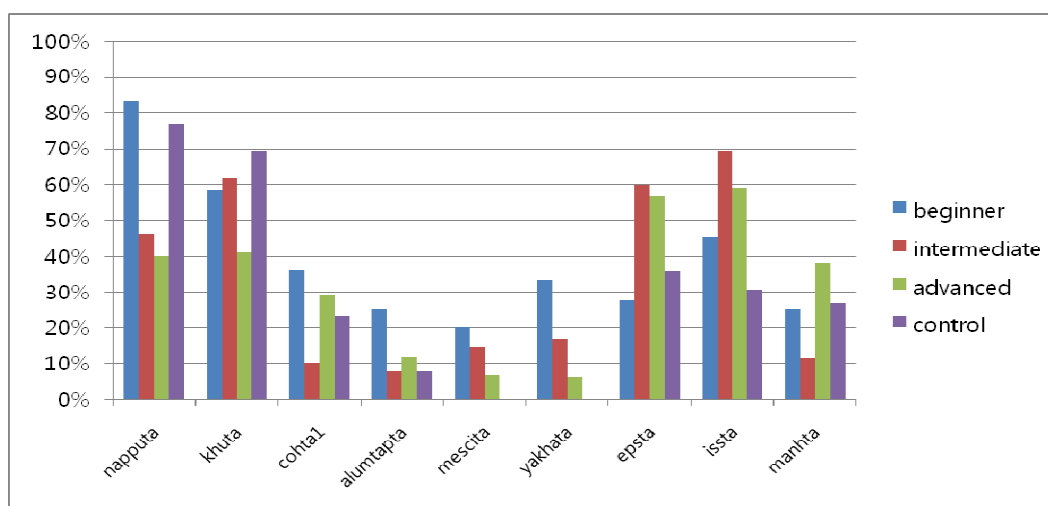


Figure3. Breakdown of results of the elicitation task by one-place predicates

In Figure 3, *napputa* ‘be bad’ to *yakhata* ‘be weak’ belong to type 1A, while *epasta* ‘not-exist’ to *manhta* ‘be many’ are pertinent to type 1B. The graph is presented in a descending order of the Control group. For four out of six predicates in type 1A, native Korean speakers either did not accept the double nominative construction at all (*mescita* ‘be nice’, *yakhata* ‘be weak’) or accepted it at a very low rate (*cohta1* ‘be good’, *alumtapta* ‘be beautiful’). However, with the remaining predicates (*napputa* ‘be bad’, *khuta* ‘be big’), they accepted the double nominative construction at a rate higher than 60%. The results of the Beginner group were unique in that they accepted the double nominative construction with all the predicates in type 1A at a higher rate than the Control group did.

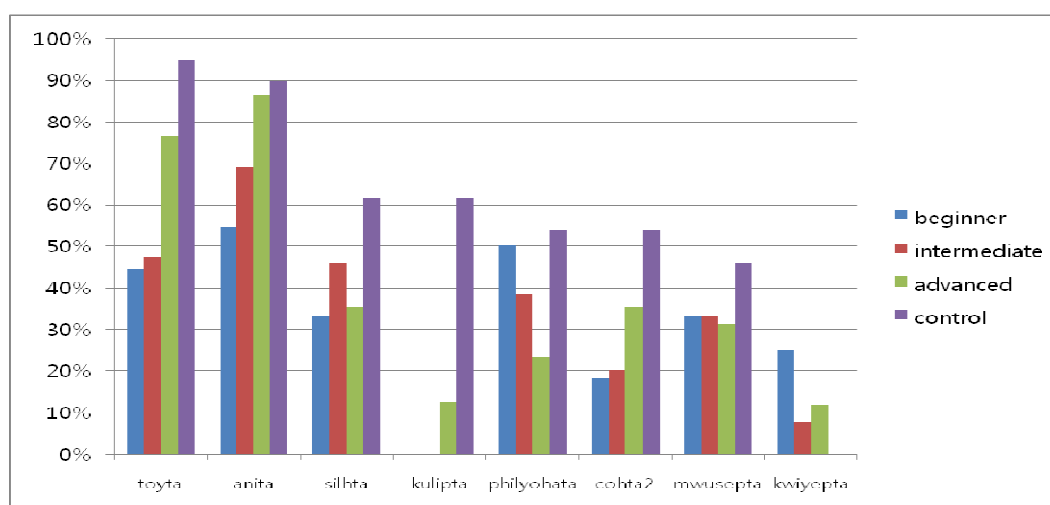


Figure4. Breakdown of results of the elicitation task by two-place predicates

In Figure 4, *toyta* ‘become’ and *anita* ‘not-exist’ belong to type 2A, while *silhta* ‘hate’ to *kwiyepta* ‘be affectionate to’ are pertinent to type 2B. The graph is presented in a descending order of the Control group as well. For both predicates of type 2A, native Korean speakers overwhelmingly accepted the double nominative construction and the developmental pattern was observed clearly. For five out of six psych-predicates in type 2B, they accepted the double nominative construction at a rate higher than 46% (*silhta* ‘hate’, *kulipta* ‘miss’, *philyohata* ‘need’, *cohta2* ‘like’, *mwusepta* ‘be afraid of’). However, with the remaining predicate (*kwiyepta* ‘be affectionate to’), they (somewhat unexpectedly) did not accept it at all.

5.2 Development of knowledge of double nominative constructions in Korean

The central concern of this study was whether adult Chinese-speaking Korean learners could acquire linguistic competence of the double nominative construction, converging on the grammar of native speakers. Specifically, we tested whether or not adult learners can use the double nominative construction in a natural setting where the first NP is activated as a Theme or a Topic (an elicited task) and if they can feel easy with the double nominative construction (a grammaticality judgment task).

In an introductory section, we put forth the following predictions in (7) based on the transfer effect.

- (7) a. Chinese learners (especially the low proficiency learners) will show a worse performance on a two-place predicate than a one-place predicate.

- b. Chinese learners (especially the low proficiency learners) will show a worse performance on an alternation with *-eykey* (dative) than non-alternation.

In the elicited task, these predictions were borne out, though statistics did not provide enough support. With respect to non-alternating types (ex. *khuta* ‘be big’ vs. *toyta* ‘become’), only the Beginner group produced the double nominative construction more frequently on the one-place predicates (ex. *khuta* ‘be big’) unlike the native speakers. Furthermore, with respect to alternating types (ex. *manhta* ‘be many’ vs. *mwusepta* ‘be afraid of’), all the learner groups showed a better performance on the one-place predicates (ex. *manhta* ‘be many’) as expected. With respect to one-place predicates (ex. *khuta* ‘be big’ vs. *manhta* ‘be many’), only the Beginner group used the double nominative construction more actively on the non-alternating types (ex. *khuta* ‘be big’) unlike the native speakers. However, with respect to two-place predicates (ex. *toyta* ‘become’ vs. *mwusepta* ‘be afraid of’), all the learner groups chose the double nominative construction on the non-alternating types (ex. *toyta* ‘become’) like native speakers.

In the grammaticality judgment task, the predictions were observed depending on the distinction between licit vs. illicit data. In case of licit sentences, regardless of alternation pattern, all the learner groups feel easier with the two-place predicates (ex. *toyta* ‘become’, *mwusepta* ‘be afraid of’) than the one-place predicates (ex. *khuta* ‘be big’ vs. *manhta* ‘be many’) like native speakers. Furthermore, with respect to one-place predicates (ex. *khuta* ‘be big’ vs. *manhta* ‘be many’) all the four groups assigned a higher score on the alternating type (ex. *manhta* ‘be many’) as opposed to expected. With respect to two-place predicates (ex. *toyta* ‘become’ vs. *mwusepta* ‘be afraid of’), however, all the four groups showed a similar performance. In case of illicit sentences, on the other hand, the Beginner group marked a relatively high score on all the types of illicit sentences where the double nominative construction is not used, though it is required or permitted. It means that they did not acquire the knowledge of the double nominative construction in Korean.

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Appendix1. Test items on an elicited task

1A	<p>Minsu is a basketball player. 민수() 키() 크다.</p> <p>Mina has a sick son from the birth. 미나() 아들() 약하다.</p> <p>This bag is famous for its zipper decoration. 가방() 지퍼() 멋지다.</p> <p>Mina has a model friend. 미나() 친구() 아름답다.</p> <p>Minsu wears glasses. 민수() 눈() 나쁘다.</p> <p>Minsu bought a brand-new cell phone. 민수() 핸드폰() 좋다.</p>
1B	<p>Minsu was fired last month. 민수() 돈() 없다.</p> <p>Minsu forgot his lunch box . 민수() 도시락() 없다.</p> <p>My company forces employees to work late at night. 우리 회사() 아줌마() 없다.</p> <p>Mina is a pretty and outgoing person. 미나() 친구() 많다.</p> <p>This bag is decorated with a lot of zippers. 가방() 지퍼() 많다.</p> <p>Minsu got a lot of dogs from Mina. 민수() 강아지() 많이 있다.</p>
2A	<p>Mina has a lot of freckles and short ginger-coloured hair. 미나() 미인() 아니다.</p> <p>Mina knows what you mean. 미나() 바보() 아니다.</p> <p>Minsu was graduated from university. 민수() 학생() 아니다.</p> <p>Minsu passed the audition. 민수() 가수() 된다.</p> <p>The ice on the river melts. 얼음() 물() 된다.</p> <p>Mina is seven months pregnant. 미나() 엄마() 된다.</p>
2B	<p>Minsu feels lonely. 민수() 친구() 필요하다.</p> <p>Mina was much cuter as a child. 미나() 옛날() 그립다.</p> <p>Mina did not bring her homework again. 미나() 선생님() 무섭다.</p> <p>Mina has a lot of works to do. 미나() 숙제() 싫다.</p> <p>Minsu became a father last month. 민수() 아들() 너무 귀엽다.</p> <p>Mina is a cute and smart girl. 민수() 미나() 좋다.</p>

Appendix2. Test items on a grammaticality judgment task

Licit	1A: 민수가 머리가 크다. 미나가 반지가 아름답다. 미나가 친구가 죽었다.
	1B: 민수가 직장이 없다. 민수가 신발이 많다. 미나가 집 열쇠가 있다.
	2A: 꽃이 열매가 된다. 민수가 의사가 된다. 민수가 범인이 아니다.
	2B: 미나는 재즈 음악이 좋다. 나는 우리 아버지가 무섭다. 민수는 수학 공부가 싫다.
Illicit	1A: 미나에게 머리가 나쁘다. 미나가 목걸이를 멋지다. 민수에게 친구가 죽었다. (A friend of Minsu died of cancer.)
	1B: 책장이 책을 없다. 민수가 고양이에겐 없다. 미나가 친척을 많다.
	2A: 미나가 범인에게 아니다. 미나가 의사를 된다. 꽃이 열매에 된다.
	2B: 미나는 엄마를 그림다. 미나는 동생을 귀엽다. 나는 도움을 필요하다.