An Empirical Study of Postposing Constructions in Korean*

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Kim, Taeho. 2011. An empirical study of postposing constructions in Korean. Linguistic Research 28(1), 223-238. This study investigates postposing constructions in Korean with colloquial data, focusing on what causes an argument, i.e. subject and object, to be placed post-predicatively. In this study, the author argues that the 'more accessible/urgent information first' principle should be responsible for the postposing of less accessible/urgent information into a post-predicative position. More specifically, the preceding element is more accessible in the speaker's consciousness due to its urgency/relevance, and thus uttered first, overriding the 'given-before-new' principle and the predicate-final constraint. Also, certain types of verbs, e.g. existential verbs, also trigger postposing, although they were considered to be weaker triggers than the 'urgency/relevance of information' factor. This study also addresses the fact that the pragmatic functions of post-predicative arguments include specification of a referent, emphasis, and clarification, as well as the fact that a particle attached to the given post-predicative argument functions to indicate topic/contrast, information focus, etc. (Kyungnam University)

Key Words postposing, postposing constructions, post-predicative, pre-predicative, accessibility, givenness, importance, urgency, relevance

1. Introduction

Korean is a predicate-final language in which the predicate is placed at the final position of a sentence. Yet, some sentential elements often occur in a position following the predicate (Sohn 1999). This is exemplified in (1) and (2) below.

kumyen, kuke-n com saki-nte.
 if.so that-TOP a.little fraud-be.SEM
 "If so, that is a kind of fraud, I think."

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- (2) kumyen, com saki-nte, **kuke-n**if.so a.little fraud-be.SEM that-TOP
 "If so, that is a kind of fraud, I think."
- (1) is an example of a canonical word order, where the subject *kuke* 'that' appears before the predicate *sakita* 'be a fraud'. On the other hand, (2) is an example of a non-canonical word order as the sentence final position is filled not with the predicate but with the subject. Postposing constructions are defined as constructions where certain elements of the sentence appear post-predicatively. Therefore, example (2) is also considered a postposing construction.

Some issues are raised from the examples above: what triggers certain entities to be postposed into the post-predicative position and what are the functional properties of postposed entities. This study aims to answer these two questions by investigating postposing constructions in colloquial Korean. It also argues that the tendency to utter more accessible or urgent information first should be responsible for postposing of less accessible or urgent information into a post-predicative position.

2. Information Structure

There are two strong tendencies as to how to arrange information within an utterance. One tendency is to place given information before new information, which is referred to as the 'given before new' principle in this study (Gundel 1988). That is to say, according to this principle, words in a sentence are arranged in such a way that words that represent old or predictable information come first, and those that represent new or unpredictable information come later. The other tendency is to utter important information before less important information, which this study labels the 'important information first' principle. Simon (1989:189) states that postposings are simply results of important or urgent information coming to the speaker's mind first, thus being verbalized first, especially under time pressure.

In terms of information status, given information is unimportant while new information is important, the 'important information first' principle is consistent with

¹ Kuno (1978) views any non-verbal elements after the predicate as an 'afterthought', not as a post-predicative argument.

new-before-given ordering of information, conflicting with the given-before-new principle. However, this view is erroneous because the two principles are based on different senses of importance. In other words, the two principles are seemingly in opposition to each other but they are not contradictory, since they assume different notions of importance.

'Importance' can be defined in two different ways, i.e. urgency/relevance of information or activation status of information. The 'important information first' principle is based on importance in terms of urgency or relevance of information, but the 'given before new' principle is based on importance defined by the activation status of information

3. Data

The discourse data used for this study is comprised of two-party informal conversations by ten pairs of Korean native speakers, audio-recorded and transcribed. Each pair's conversation is approximately 30 minutes long, and the entire volume of the data consists of five hours of informal conversation. The data set contains more than 9,000 clausal units, which were divided into two different groups: postposing and non-postposing constructions. Only 69 clauses were postposing constructions. Of these 69 postposing constructions, 33 instances were subject postposings, 35 were object postposings, and one was an instance of both subject and object postposing.

4. RD as Measurements of 'givenness'

The notion of 'referential distance' (RD) is often used to measure the activation status of information or referent (Givón 1983, Shimojo 2005). Therefore, it is assumed in this study that RD is related to the speaker's selection of postposing constructions over non-postposing ones, or vice versa, in colloquial Korean. Thus, a brief overview of this term is provided here, along with the discussion of the data.

RD was first introduced as one of the quantitative measurements which was extensively discussed in Givón (1993) and frequently utilized in subsequent text analyses in many languages (Shimojo 1995, 2005, Kim 2008, inter alia). RD is used to indicate the linguistic distance in clausal units, and it is measured by counting clausal units backward to the most recent representation of the coreferential expression which usually includes those of zero anaphor (Givón 1983). For example, an RD 1 indicates that the most recent representation of the current referent in question is made in the immediately preceding clausal unit, and an RD 2 indicates that the most recent coreferential expression is represented in two clausal units prior to the referent.

RD measurement has been used for individual referents and can be an appropriate method to examine the level of activation that is associated with the given referent (Shimojo 2005). However, as Shimojo (2005) notes, RD only provides an estimating measure for the level of activation, and RD is simply a heuristic way of measuring the level, and RD by itself may not be of great cognitive significance. For instance, referents can be activated by way of other activated referents, if they are associated with each other in one way or the other (Chafe 1987, Shimojo 2005). Also, entities that are visually available in the conversational context can be activated more easily than those that are not available. Nevertheless, RD seems to be the only quantifiable anaphoric measurement currently available, as Shimojo (2005) points out. Thus, RD is used to measure the activation status of a given referent in this study.

4.1 RD for Subjects

In order to find out if the 'given-before-new' principle is the cause of the postposing of subjects or not, the givenness of the subject referent is examined by measuring RD. As noted above, the referential distance was measured by examining up to 20 preceding clausal units. For the statistical analysis, the group of RD was divided into two groups with RD 5 as an arbitrary dividing point. The results are shown as below.

Subject RD	Pre-predicative	Post-predicative	Total
1-5	2,128(55%)	23(70%)	2,151(55%)
6-NPM ²	1,739(45%)	10(30%)	1,749(45%)
Total	3,867(99%)	33(1%)	3,900(100%)

Table 1. RD for subjects

Table 1 displays the finding that a greater number of postposed subjects appear in the range of RD 1-5 (70%) than in the range of 6-NPM (30%). Given the greater occurrence of postposed referents with RDs of 1-5, it can be said that post-predicative encoding is more likely to apply to anaphorically salient subjects. The statistical test, however, indicates that the difference is not significant ($\chi^2=2.846$, p=0.0916).

4.2 RD for Objects

This study also examined RD for objects to see whether the givenness of object referents has a correlation with the postposing of objects. The results are presented in Table 2 below.

Object RD	Pre-predicative	Post-predicative	Total		
1-5	1,131(42%)	23(66%)	1,154(42%)		
6-NPM	1,565(58%)	12(34%)	1,577(58%)		
Total	2,696	35	2,731		

Table 2. RD for objects

In Table 2, I find that for post-predicative objects, the number of RD 1-5 group of objects (23 tokens, or 66%) is much bigger than that of RD 6-NPM group of objects (12 tokens, or 34%), while it is the other way around for pre-predicative objects. In other words, post-predicative encoding, i.e. a postposed object, is more likely to apply to anaphorically salient objects, i.e. objects with a smaller RD, than anaphorically non-salient objects, i.e. objects with a greater RD. In fact, the statistical test shows that the difference between pre-predicative and post-predicative objects, with regard to RD, is statistically significant (χ^2 =3.167, p=0.013).

² NPM stands for no previous mention in the range of 20 preceding clauses, and it is counted as RD 21 (Kim 2008).

³ See the statical result for subjects for comparison.

5. RP as Measurements of 'importance'

The notion of 'referential persistence' (henceforth, RP) was first introduced to measure the degree of decay of information in the cataphoric context (Givón 1983). This study suppose that RP would be related to the speaker's selection of postposing constructions over non-postposing ones, or vice versa because it has been frequently used to measure the importance of information (Givón 1983, Shimojo 2005). Thus, a brief overview of the term 'RP' is provided in this section, along with the discussion of the statistical results of the data.

RP, which was proposed by Givón (1983), is basically a way of measuring importance in the sense that "more important discourse topics appear more frequently in the register, i.e., they have a higher probability of persisting longer in the register after a relevant measuring point." RP can be measured by counting the number of coreferential expressions within the following ten clausal units (Shimojo 2005). For example, RP 1 indicates that there is only one clausal unit containing the coreferential expression within the range of the following ten clausal units. RP 3 means that the three immediately following clausal units contain the coreferential expression of a given referent.

When RP was measured in this study, following Watanabe (1989), a coreferential expression regardless of its grammatical status was counted for the measurement of RP if it was overtly present. However, if it was not overtly present, only the arguments, i.e. subjects and objects, counted toward the RP measurement.

5.1 RP for Subjects

In order to see if the postposing of a subject has a correlation with RP, this study examined subject encodings with respect to the RP. Just like RD, the group of RP was divided into two groups with RP 2 as an arbitrary separating point which was simply based on the number of tokens for the statistical analysis. The results are presented in Table 3.

Subject RP	Pre-predicative	Post-predicative	Total
0-2	3,475(90%)	27(82%)	3,704(95%)
3-10	392(10%)	6(18%)	196(5%)
Total	3,867	33	3,900

Table 3. RP for subjects

According to Table 3 above, both pre-predicative and post-predicative subjects tend not to persist in cataphoric context of discourse. Furthermore, the statistical test for Table 3 turns out not to be statistically significant (χ^2 =2.311, p=0.1285), which means that RP does not play a role in the postposing of a certain sentential element in Korean. Therefore, RP is irrelevant for the purpose of describing the function of postposing in Korean.4

5.2 RP for Objects

This study also looked at object postposing with relation to RP to investigate if there is a correlation between the postposing of objects and RP, i.e. the importance of object referents. As was with subjects, the group of RP for objects was divided into two groups with RP 1 as an arbitrary separating point, which was merely based on the number of tokens, for the statistical analysis. The results are shown in Table 4.

Object RP	Pre-predicative	Post-predicative	Total
0-1	2,383(90%)	29(83%)	2,412(88%)
2-10	313(10%)	6(17%)	319(12%)
Total	2,696	35	2,731

According to Table 4, both pre-predicative and post-predicative objects exhibit cataphoric nonsaliency, which implies RP does not play any role in the postposing of objects in colloquial Korean ($\chi 2=1.025$, p=0.3113). In short, the measurement of RP, for both subjects and objects, is not a useful method to describe the function of postposing in Korean.

⁴ Unlike Korean, RP was found to be very useful in describing postposing constructions in Japanese (Shimojo 2005:110).

In summary, RD only plays a role in the postposing of subjects or objects while RP does not. In other words, the notion of cataphoric saliency is not useful in differentiating pre-predicative arguments from post-predicative ones.⁵ Yet, for both subjects and objects, the number of tokens found in RD 1-5 groups increased in the post-predicative position as opposed to the pre-predicative counterpart. This indicates that anaphorically salient referents are more likely to be realized as post-predicative arguments than anaphorically non-salient referents. Nevertheless, every referent with low RD is not always postposed in discourse. Therefore, low RD may be a necessary condition for postposing but it is not a sufficient condition.

6. A Trigger for Postposing

This study has shown that the two notions, 'RD and RP', are not very useful for explaining why subjects and objects are postposed in colloquial Korean. Then, the natural question to follow is: what causes a certain argument to be placed into the post-predicative position. This section is devoted to answering this question, using the notion of 'accessibility.'

6.1 More Accessible Information First

This study claims that the reason for a speaker to use a postposing construction is that the preceding element is more accessible or urgent at the time of utterance than the postposed element. Otherwise, the speaker's utterance would result in a canonical word order, which suggests that the preceding element is not any more accessible than the postposed one at the time of utterance.

In general, the more accessible information is linearized early in an utterance, and then comes less accessible information. This tendency is referred to as 'more

⁵ The term *saliency* can be used in similar but distinct ways for different purposes. This study uses Shimojo's (2005:17) definition: "A referent is *salient* if it continues to be activated in one's cognitive focus of attention. Continued activation of a referent occurs if there is recurrent focusing of the referent."

⁶ The word 'accessible' here do not mean relative accessibility of referents in discourse but conceptual accessibility of parts of an utterance in the speaker's consciousness.

accessible information first' principle in this study. The 'more accessible information first' principle is also consistent with an incremental view of production, "in which speakers do not always wait until their utterance is completely formulated before they start speaking" (Arnold et al. 2000:48). Furthermore, most utterances in discourse observe given-before-new ordering in which case more accessible information is given, whereas typically new information is more accessible in postposing utterances. Thus, more accessibility acts on both non-postposing and postposing constructions.

Finally, the 'more accessible information first' principle results in typically new-before-given ordering of postposing construction and thus licenses the violation of the verb-final constraint in Korean. That is to say, conceptual accessibility can override a pragmatic constraint such as the information flow principle and a syntactic constraint such as the verb-final constraint.

6.2 More Accessibility of the Preceding Element

The argument, such that the use of postposing construction is motivated when the preceding element is more accessible in the speaker's processing, may be backed up in a number of ways such as the conversion test.

First, all of the postposing constructions found in this study were converted into their corresponding canonical constructions, yet they all sounded perfect in the given context. This conversion test rules out at least a semantic factor as the trigger for postposing because no difference in proposition is observed between them. Therefore, more accessibility is likely to be the trigger for postposing.

Second, as was previously noted, the givenness did not serve as the sufficient condition for postposing, in that there were still many pre-predicative subjects and objects that were considered anaphorically salient, i.e. those with low RD. Thus, this would also suggest more accessibility as a possible trigger for postposing.

Lastly, the argument that cataphoric defocusing is the reason for employing postposing construction in Japanese (Shimojo 2005) is not compatible with Korean, at least not with the Korean data used in this study. Therefore, the possibility of more accessibility as the trigger for postposing would increase.

Some of my data show evidence that the preceding element, i.e. everything except the postposed entities, is made accessible by the preceding clause. Taking the clause immediately preceding the postposed construction as evidence such that the preceding element is more accessible is consistent with the notion of urgency/relevancy that was utilized in Maynard (1989).

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(3) A:1 pam-ey ca-l ttay-to
night-at sleep-REL time-also
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A:2 kkaywe-se

wake.up-and

A:3 meki-nikka

feed-because

"Because at night when (we) sleep, (we) wake up (our baby) and feed (her)."

B:1 a, ilena-yo, **ci-ka**ah get.up-SEM self-NOM
"Ah, (she) herself gets up."

- In (3), B rejects A's suggestion saying that B does not need to wake up his baby at night by negating the assumption that he and his wife must wake up their baby. The preceding element 'get up' is the immediately relevant information, which needs to be uttered first to negate A's suggestion, and it thus results in the postposing construction.
 - (4) A:1 Ph.D. candidates of economics study at one place.⁷
 - B:1 Oh, really?
 - A:2 Ph.D. candidates of economics stay at one place.
 - B:2 Don't (you) have an individual office too?
 - A:3 The management department provides individual offices.
 - A:4 The department of Economics doesn't provide that kind of office.
 - B:3 Oh

A:5 khun tey com khun tey chayksang ccwaak na place big a.little big place desk spread put iss-ko keki ka iss-eyo, ta. be-and there go stay-SEM everyone

⁷ Due to the limitation of the space as well as the lack of necessity, only English was provided without the corresponding Korean for utterances A:1 through B:3.

"Everyone goes to a somewhat big place with desks spread-out and stays there."

A:6 thievi alevi-nun ta keki kaiss-eyo. TA RA-TOP all there gostay-SEM "Every TA and RA goes and stays there."

In (4), B's question is whether A has his own office or not. Speaker A answers that his department does not provide individual offices for its students. Then, where the students of economics stay would be the immediately relevant information. Therefore, speaker A first describes the big place where all the students stay and study. The postposed subject ta 'everyone' is deducible information as the word made accessible by 'the department of Economics' in the preceding clause.

6.3 Verb Types

Some verb types (e.g. existential verbs, negative verbs, etc.) seem to be related to postposing because they are associated with urgency/relevance, although it is not a strong factor.

- (5) A:1 ani toykey wuskin key eyichieysupisi-ey cheum-ey nay-myen very funny think HSBC-LOC first.time-at pay-if neg sasip pwul-ø A:2 ttu-n-ta, pop.up-PRES-DEC forty dollar-ø "Very funny thing is, if I pay to HSBC first time, \$40 pops up (on the
 - screen)."
 - A:3 kulayse tto evichieysupisi payllensu po-nikka. again HSBC so balance see-when "So when I saw HSBC balance again,"
 - A:4 tto epsecy-ess-e, ku sasip pwul-i. again disappear-PAST-SEM that 40 dollar-NOM "That 40 dollars disappeared again."

In (5), the speaker talks about the shortage of forty dollars in his HSBC account that he was not aware of. He paid \$40 for a bill and when he checked HSBC online banking, the screen showed \$40 as paid. When he checked his account later, \$40 was shown unpaid. Here, both the verbs meaning 'appear' and 'disappear' involve postposing. In (5), the (dis)appearance of balance information in the bank website is urgent information because the speaker describes the strange behavior of the website that he cannot explain. In short, the verbs of 'appear' and 'disappear' tend to be uttered first when the (dis)appearance of some entity is more urgent/relevant information and thus more accessible information. On the contrary, when the (dis)appearance of a given entity is not urgent information, the word order is expected to be canonical.

(6) A:1 kuntey eps-e, hotheyl-to
but not.exist-SEM hotel-even
"But there wasn't even a hotel (available)."

In (6) above, while talking about an expensive lodging house he stayed during Thanksgiving break, the speaker complains that there was no hotel available in New York City. In this example, the existential verb is uttered first, resulting in the postposing of the subject, *hotheylto* 'even hotel'. The unavailability of the hotel is urgent information because the speaker defends himself by saying that he had no choice but to stay at the expensive lodging house after the other interlocutor said that he could have stayed cheaper, for example by getting a sublet from someone.

- (7) A:1 ten, ten, ten-ilako wuli-hanthey maynnal kuimeyil-ø
 Dunn, Dunn, Dunn-QT 1PL-DAT everyday DP email-ø
 ponaycwu-nun acwumma.
 send-RELmarried.woman
 "The married woman who sends emails to us every day is called
 Dunn."
 - B:1 molla-yo, na-ø etten nom-in-ci-ø not.know-SEM 1SG-ø what.kind fellow-be-COMP-ø "I don't know what kind of fellow (she is)."
- In (7), speaker A tries to describe a person but speaker B does not recognize that person. When someone describes a person, the hearer is supposed to show an

indication of recognition or lack thereof. Such indication is urgent or relevant information. Hence, the verb 'not know' tends to be uttered first while making subjects and objects be postposed.

- (8) A:1 kyesokhayse kito-ø ha-ko iss-nun-de. continually pray-ø do-and be-PROG-SEM "(I) am praying continually."
 - B:1 mace right "Right."
 - B·2 kito-lul nemwu an ha-ko iss-e, nay-ka prayer-ACC too.much NEG do-CONN be-SEM 1SG-NOM "I am not praying much (recently)."

Speaker A and B in (8) are husband and wife, and B's comment contrasts to A's: Speaker A states that she prays continually. Speaker B comments on it by uttering the contrasting part 'not doing prayer' first, which is considered to be the immediately relevant information. In short, the contrast between 'doing prayer' and 'not doing prayer' makes the preceding element in postposing construction more relevant or urgent information.

7. Functions of Post-predicative Arguments

This study argues that there are two kinds of motivation to use a post-predicative argument in a postposting construction. The first motivation is for pragmatic functions which is related to the action of manifesting the referent that the post-predicative argument represents, such as specification of referent, emphasis, or clarification. The second motivation is for pragmatic functions of the particle attached to the given post-predicative argument. These two motivations are exemplified in (9) and (10) respectively.

(9) A:1 yulichang-eyta ilehkhey nakse-lul hay non-ta, salam-tul-i. vou.know scribble-ACC do place-DCL window-on person-PL-NOM

"People scribbled on the window, you know."

Before the utterance in (9) above, the interlocutors talked about A's trip to New York City during the Thanksgiving break. In (9), the speaker describes the strange scribbles that she found on the windows of NYC subways. For its purpose, she uttered the preceding element first, which was urgent and relevant information in the given context, and then made a specification for the referent because the addressee would not have known who scribbled on the windows otherwise.

(10) A:1 cincca eps-ta, phalsipo nyen sayng-ø really not.exist-DCL 85 year birth-ø
 "Wow, there is essentially no one who was born in 1985."

Before the utterance in (10), the interlocutors talk about several girls who differ in their ages. Without the post-predicative argument, i.e., *phalsipo nyen sayng*, confusion over who does not exist may arise. Therefore, in order to avoid possible confusion on the part of addressee, the speaker strategically includes the post-predicative argument when he plans an information structure for his utterance.

(11) A:1 chainathawun-ey ka-to eps-tela **ccacangmyen-un**China.town-LOC go-though not.exist-SEM black.noddle-TOP
"Although (I) went even to China town, there wasn't a black noddle dish."

In an utterance immediately preceding the utterance in (11), the other interlocutor asked speaker A if she was able to try a black noodle dish while she was in NYC. Speaker A comments on the other interlocutor's assumption, i.e., the speaker A had a black noodle dish in NYC, by saying there was no available place to eat a black noodle dish even in China town, while maintaining the continuity of the given topic. This contrastive meaning can only be obtained with the use of the contrastive topic marker '-un', as shown in (11) above.

8. Concluding Remarks

Several generalization can be made in this study. First, both the 'given-beforenew' principle and the 'important information first' principle are not always useful for accounting for postposing constructions in Korean, though it may well explain postposing in other languages such as Japanese. The preceding element is more accessible in the speaker's consciousness due to its urgency/relevance, and thus uttered first, overriding the 'given-before-new' principle and the predicate-final constraint. Third, it seems that certain types of verbs, e.g. existential verbs, also act as triggers for postposing although they are considered weaker triggers than the 'urgency/relevance of information' factor. Fourth, post-predicative arguments have pragmatic functions of uttering post-predicative arguments (e.g. specification of referent, emphasis, clarification, etc.) as well as pragmatic functions of a particle attached to the given post-predicative arguments (e.g. topic/contrast, information focus, etc.).

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