Double Object Constructions in Korean: Asymmetry between Theme and Goal*

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Much of the generative studies on the double object constructions in English have shown that there exists an asymmetrical c-command relation between the Theme argument and the Goal argument: the Goal uniformly c-commands the Theme at D-structure. This paper attempts to prove that Korean also exhibits an asymmetric relation between the Theme and Goal in double object constructions, but it is the Theme that asymmetrically c-commands the Goal at D-structure in Korean.

Key words: double object constructions, Theme, Goal, backwards binding, quantifier scope, weak crossover, chain condition

1. English Cases: Goal Asymmetrically C-Commands Theme

Larson (1998) claims that the first DP asymmetrically c-commands the second DP in the overt syntax in the V-DP-DP construction in English. His evidence involves anaphor binding, quantifier-pronoun binding, weak crossover, superiority, *each-the other* construction on its reciprocal reading, and negative polarity items. The following examples are all from Larson (1988):

- a. I showed Mary herself.
 b. *I showed herself Mary.
- (2) a. I gave [every worker]_i his_i paycheck. b. *I gave its_i owner [every paycheck]_i.

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- (3) a. [Which man]_i did you send his_i paycheck? b. Whose_i pay did you send his_i mother?
- (4) a. Who did you give which paycheck? b. *Which paycheck did you give who?
- (5) a. I showed each man the other's socks.
 b. *I showed the other's friend each man.
- (6) a. I showed no one anything.b. *I showed anyone nothing.

As Larson (1988) points out, if these phenomena do involve c-command, then (1)-(6) all lead us to conclude that the Goal phrase asymmetrically c-commands the Theme phrase in the double object construction in English.¹⁾

Pesetsky (1995) also argues that the goal phrase uniformly c-commands the theme phrase at D-structure²⁾ in English without regard to their surface structure positions.

(7) [$_{VP}$ give [$_{XP}$ John [X a letter]]]

The structure postulated in (7) correctly predicts that the Theme and Goal will behave as a constituent under coordination, as illustrated in (8):

(8) Mary gave [John a letter] and [Bill a card].

In the following section, we will apply the various tests used in Larson (1988) and Pesetsky (1995) and see if the same asymmetric relation exists between the Theme and Goal in the double object construction in Korean.

¹⁾ Thanks to an anonymous reviewer, who kindly referred us to Kitagawa (1994) and Takano (1998) for discussions of the opposite c-command relation between Theme and Goal in English.

²⁾ As an anonymous reviewer has pointed out, the current generative framework employs the term "base-generation" or "a base-generated position" in place of the traditional "Dstructure". For convenience of discussion, however, we continue to use "D-structure" in this paper, since it does not significantly affect the point being made herein.

2. Korean Cases: Theme Asymmetrically C-Commands Goal

The double object construction in Korean appears to be different from its corresponding construction in English; there is no dative shift involved in Korean.³⁾ The Theme phrase is always realized as an accusative argument and the Goal phrase as a dative argument. The surface order between the two arguments is freely interchangeable without any alteration on case markings or a postposition on the Goal phrase.

- (9) a. I gave Mary a book.b. I gave a book [to Mary].
- (10) a. na-nun Mary-eykey chayk-**ul** cwuessta Mary-Dat I-Top book-Acc gave 'I gave Mary a book' b. na-nun chayk-ul Mary-**eykey** cwuessta I-Top book-Acc Mary-Dat gave 'I gave a book to Mary'

The question that will be dealt with in this section is whether both (10a) and (10b) are the legitimate D-structure representations. Or is one of them derived from the other? If it turns out to be the case that one of the structures in (10) is derived from the other, then the natural question to follow would be which one of the two possible structures is the D-structure representation for the pairs in (10): the Goal-Theme order or the Theme-Goal order.

2.1. Backwards Binding

Binding theory requires that an anaphor be c-commanded by its antecedent. In most cases, this requirement on c-command entails that the anaphor is preceded by its antecedent at S-structure. However, there are some instances that allow an anaphor to precede its antecedent at the

³⁾ As an anonymous reviewer has suggested, the lack of dative shift in Korean casts doubt on treating the "-lul -eykey" construction equivalent to the English double object construction. For the purpose of our discussion in this paper, it suffices to say that the Theme-Goal construction exists in Korean, which exhibits the same thematic relation between the two DP's in English double object constructions.

surface structure and be still bound by it. This particular case has been referred to as backwards binding; the antecedent preceded by the anaphor at the surface structure appears to bind the anaphor from backwards. Backwards binding can be used as a test for determining the D-structure positions of the anaphor and its antecedent, since the antecedent should c-command the co-indexed anaphor at some level of representation, either at D-structure or at LF after reconstruction.

As has been noted by Burzio (1986), Pesetsky (1995) points out that backwards binding of the Goal into the Theme is possible in English; but backwards binding of the Theme into the Goal is not.

- (11) a. Sue showed John and Mary to each other's friends.
 - b. ?Sue showed each other's friends to John and Mary.
 - c. Sue showed John and Mary each other's friends.
 - d. *Sue showed each other's friends John and Mary. (Pesetsky 1995)

He argues that the impossibility of backwards binding of the Goal into the Theme in (11d) indicates that the Goal uniformly c-commands the Theme at D-structure in English. There is a trace of *each other's friends* c-commanded by *John and Mary* in (11b), but (11d) has no such trace that can be c-commanded by *John and Mary*.

- (12) a. ?Sue showed [each other's friends] $_{i}$ to John and Mary t_{i} .
 - b. *Sue showed [each other's friends] John and Mary.

Let us consider the Korean counterparts of (11) with regard to the backwards binding effects.

- (13) a. Sue-nun [John-kwa Mary]-lul [selo-uy chinkwu]-eykey poyecwuessta Sue-Top John-and Mary-Acc each other's friends-Dat showed 'Sue showed John and Mary to each other's friends.'
 - b. *Sue-nun [selo-uy chinkwu]-lul [John-kwa Mary]-eykey poyecwuessta Sue-Top each other's friends-Acc John-and Mary-Dat showed 'Sue showed each other's friends to John and Mary.'
 - c. Sue-nun [John-kwa Mary]-eykey [selo-uy chinkwu]-lul poyecwuessta Sue-Top John-and Mary-Dat each other's friends-Acc showed 'Sue showed John and Mary each other's friends.'

d. Sue-nun [selo-uy chinkwu]-eykey [John-kwa Mary]-lul poyecwuessta Sue-Top each other's friends-Dat John-and Mary-Acc showed 'Sue showed each other's friends John and Mary.'

Interestingly, we see the reverse possibility of backwards binding in Korean double object constructions. It is possible to have backwards binding of the Theme into the Goal, but not vice versa. The ungrammaticality of (13b) indicates that the Theme is base-generated in its surface structure position that c-commands the Goal. On the other hand, the possibility of backwards binding in (13d) suggests that the Goal phrase containing *selo* 'each other' is c-commanded by the Theme phrase at some level of representation.

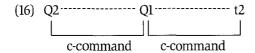
- (14) a. *Sue-nun [selo-uy chinkwu]-lul [John-kwa Mary]-eykey poyecwuessta Sue-Top each other's friends-Acc John-and Mary-Dat showed 'Sue showed each other's friends to John and Mary.'
 - b. Sue-nun [selo-uy chinkwu-eykey]i [John-kwa Mary]-lul ti poyecwuessta
 Sue-Top each other's friends-Dat John-and Mary-Acc showed
 'Sue showed each other's friends John and Mary.'

2.2. Qunatifier Scope

Pesetsky (1995) presents the following set of data cited from Aoun and Li (1989) as still another piece of evidence for the existence of the trace of the Theme c-commanded by the Goal in English. As he points out, structures with the Theme followed by the Goal allow a scope ambiguity that cannot be found in the structures with the Goal followed by the Theme.

- (15) Unambiguous (Aoun and Li 1989)
 - a. Sue gave every child some problem.
 - b. Sue gave some child every problem. *Ambiguous* (Aoun and Li 1989)
 - c. Sue gave some problem to every child.
 - d. Sue gave every problem to some child.

It has been generally assumed that ambiguity arises in the structures with more than one quantifier when a quantifier Q1 c-commands a part of the chain of another quantifier Q2 that c-commands Q1 at the surface structure.



Under this traditional assumption, the ambiguity found in (15c-d), in which the Theme phrase precedes the Goal phrase, indicates that there is a trace of the Theme phrase c-commanded by the Goal phrase at the surface structure. On the other hand, the unambiguous sentences in (15 a-b) have the Goal followed by the Theme, showing that the Goal-Theme order is base-generated. This contrast once again suggests that the Goal phrase uniformly c-commands the Theme phrase in English.

(17) a. Sue gave [some problem]_i to every child t_i.b. Sue gave [every problem]_i to some child t_i.

Again, the opposite situation is found in the Korean counterparts of the English examples in (15). Before we present the examples in Korean, of note here is that Korean exhibits an idiosyncratic aspect with regard to the quantifier scope interaction, which is often referred to as scope rigidity.

(18) Ambiguous

a. **motun salam-ul**i nwukwunka-ka **t**i cohahanta everyone-Acc someone-Nom like 'Everyone, someone likes'

Unambiguous

b. nwukwunka-lul_i motun salam-i t_i cohahanta
 someone-Acc everyoneone-Nom like
 'Someone, everyone likes'

The unambiguity of (18b) follows from the so-called scope rigidity effect in Korean. Whenever an existential quantifier appears to the left of a universal quantifier, the trace of the existential quantifier does not participate in the interpretation of quantifiers; an existential quantifier in a superior position in the surface structure always takes scope over a universal quantifier regardless of their D-structure positions. The unambiguity found in (18b) thus follows from the scope rigidity effect that simply does not count the trace of *nwukwunka-lul* 'someone' left in the object position.

With this scope rigidity phenomenon in mind, let us take a look at the double object constructions with more than one quantifier in Korean. The relevant data are now reduced to two sentences, where a universal quantifier precedes an existential quantifier at the surface structure. Remember that an existential quantifier preceding a universal quantifier simply does not allow for a scope ambiguity in Korean regardless of their structural relation at D-structure.

(19) Ambiguous

a. Sue-nun motun ai-eykey etten mwuncey-lul cwuessta
 Sue-Top every child-Dat some problem-Acc gave
 'Sue gave every child some problem'

Unambiguous

Sue-nun motun mwuncey-lul etten ai-eykey cwuessta
 Sue-Top every problem-Acc some child-Dat gave
 'Sue gave every problem to some child'

When a quantifier with the Dative case marking appears to the left of a quantifier with the Accusative case marking, ambiguity arises, as illustrated in (19a), while the Accusative-Dative construction in (19b) does not exhibit scope ambiguity. This contrast leads us to the same conclusion found in the backwards binding phenomenon in Korean: there is a trace of the Goal phrase left in its base-generated position that can participate in the scope interaction between the two quantifiers in the Theme-Goal structure.

- (20) a. Sue-nun **motun ai-eykey**i etten mwuncey-lul **t**i cwuessta Sue-Top every child-Dat some problem-Acc gave 'Sue gave every child some problem'
 - b. Sue-nun motun mwuncey-lul etten ai-eykey cwuessta Sue-Top every problem-Acc some child-Dat gave 'Sue gave every problem to some child'

2.3. Weak Crossover Effect

Larson (1988) points out that the English double object construction shows asymmetry with regard to the so-called weak crossover effect.

(21) a. [Which man]_i did you send t_i his_i paycheck? b. *[Whose_i pay]_j did you send his_i mother t_i?

A *wh*-phrase c-commanded at D-structure by a DP containing a pronoun cannot be moved across that DP if the *wh*-phrase and the pronoun are coreferential. The Goal *wh*-phrase that is co-indexed with a pronoun contained in the Theme phrase can be moved (=21a); the Theme phrase containing a *wh*-phrase that is coreferential with the pronoun in the Goal phrase, however, cannot be moved, as we can see in the ungrammaticality of (21b). This asymmetry once again suggests that the Goal asymmetrically c-commands the Theme at D-structure in English.

If our speculation is correct that the Theme asymmetrically c-commands the Goal in Korean, we expect to see the opposite result with the weak crossover effects in Korean double object constructions. Indeed, the asymmetry is just the opposite of the English cases:

- (22) a. *ne-nun **[etten salam_i -eykey]_j** [ku_i-uy wolkup]-ul **t**_j ponayss-ni? You-Top which man-Dat his paycheck-Acc sent-Q 'Which man did you send his paycheck?'
 - b. ne-nun [nwukwu_i-uy wolkup]-ul [ku_i-uy emma]-eykey ponayss-ni?
 You-Top whose paycheck-Acc his mother-Dat sent-Q
 'Whose paycheck did you send his mother?'

Although Korean does not have overt *wh*-movement, we still get the weak crossover effect as illustrated in (22). Interestingly, when a *wh*-phrase precedes a DP containing a pronoun that is coreferential with the *wh*-phrase, the sentence is ungrammatical in the Goal-Theme structure, but not in the Theme-Goal structure. This asymmetry is entirely predictable with the assumption that the Theme-Goal order is the only base-generated structure for the double object constructions in Korean. In the Theme-Goal structure such as the one in (22b), the *wh*-phrase is never moved over the Goal DP containing a pronoun co-indexed with the *wh*-phrase; the *wh*-phrase in the Theme position in Korean c-commands the DP in the Goal position at D-structure as well as at the surface structure.

2.4 Chain Condition

Korean observes the Chain Condition, which prevents an anaphor from

locally c-commanding a trace of its antecedent.

(23)	a.	[John-kwa Mary] _i -ka John-and Mary-Nom 'John and Mary saw each ot	selo i-lul each other-Acc other'		poassta saw
	b.	*[John-kwa Mary] _i -lul	selo _i -ka	t _i	poassta
		John-and Mary-Acc 'John and Mary, each other:	each other-Nom saw'		saw

Consider now the following double object constructions in Korean with regard to the Chain Condition.

(24) a. ?*na-nun haksayngtul_i-eykey selo_i-lul *t_i sokayhayssta
I-Top students-Dat each other-Acc introduced
'I introduced the students each other'
b. na-nun haksayngtul_i-ul selo_i -eykey sokayhayssta
I-Top students-Acc each other-Dat introduced
'I introduced the students to each other'

Again an asymmetry is observed that indicates the c-command of the Goal by the Theme at D-structure in Korean. When the antecedent in the Goal phrase precedes the anaphor in the Theme phrase as given in (24a), the Chain Condition is violated, since the trace of the antecedent Goal phrase left in its base-generated position is c-commanded by the co-indexed anaphor in the Theme phrase. The sentence, thus, improves if the anaphor in the Theme phrase is embedded into another DP and fails to c-command the trace of its antecedent, the trace of the Goal phrase.

(25) na-nun **haksayngtul**_i-eykey [selo_i-uy chinkwu]-lul **t**_i sokayhayssta I-Top students-Dat each other's friends-Acc introduced 'I introduced the students each other'

3. Implications For The Exceptional Case Marking Constructions

We have shown that the double object constructions in Korean exhibit an asymmetrical c-command relation between the Theme and the Goal phrase; the Theme asymmetrically c-commands the Goal⁴⁾ in the base-generated structure regardless of their positions at the surface structure. Since the Theme is uniformly realized as an accusative argument and the Goal as a dative argument, it seems to be the case that the accusative argument always c-commands the dative argument at D-structure in Korean.

If our speculation about the structural relation between the accusative and dative argument in Korean is on the right track, we can provide an account for the following contrast.

- (26) a. na-nun [John-kwa Mary]-lul selo_i-eykey sokayhayssta I-Top John-and Mary-Acc each other-Dat introduced 'I introduced John and Mary to each other'
 - b. ?*na-nun [John-kwa Mary]_i-lul selo_i-eykey [t_i chakhata-ko]
 I-Top John-and Mary-Acc each other-Dat be good-comp malhayssta
 said

'I told each other that John and Mary were good'

In both (26a) and (26b), the accusative argument precedes the dative argument at S-structure. The only difference is that there is an embedded clause in the so-called Exceptional Case Marking constructions in (26b), while (26a) is a root clause. Our speculation that the accusative occupies a position superior to the dative argument can account for the above contrast. There is no violation of the Chain Condition in (26a), since there is no movement of the accusative over the dative. In contrast, the ECM movement of the embedded accusative subject in (26b) should take place across the matrix dative, resulting in the violation of the Chain Condition.

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⁴⁾ As an anonymous reviewer has pointed out, a similar analysis of double object constructions in Japanese can be found in Hoji (1985), Kitagawa (1994), and Takano (1998).

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