

The Syntactic Structure of Some Double Nominative Constructions in Korean

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Cho, Sae-Youn. 1999. The Syntactic Structure of Some Double Nominative Constructions in Korean.¹ *Linguistics* 7-2, 335-348. Double Nominative Constructions (DNC) containing more than two nominative-marked NPs within a clause has attracted much attention within many theories (O'Grady (1991), Yoon (1987), Park (1981)). However, there remain some problems to be an adequate theory of the DNC. An adequate analysis of the DNC must answer at least the following questions: (i) is it possible to provide a unified solution to treat the DNC? and (ii) are all nominative-marked NPs of the DNC subjects? or is one of them the real subject of the DNC?. To answer these questions, I claim that there are at least two types of the DNC and in each type, only one subject exists. (Honam University)

1. Introduction

There has been considerable discussion regarding the Double Nominative Constructions (DNC) containing more than two nominative-marked NPs within a clause such as the sentences shown in (1-2).²

1 A portion of this paper has been presented at the Conference on Korean Linguistics in conjunction with the 1999 Linguistic Institute at the University of Illinois at Urbana-Champaign. I am grateful to Jane Grimshaw, James H.-S. Yoon, Alan H.-O. Kim and Chan Chung for their questions and comments.

2 The sentence, *Jerry-ka ai-ka yepputa*, can be ambiguous in the sense that it is construed as either *it is Jerry whose child is pretty* or *Jerry is fond of children*. In this paper, the latter case as well as different types of DNCs from

- (1) Jerry-**ka** (F1) emeni-**ka** (F2) yeypputa(/khuta).
 Jerry-Nom mother-Nom pretty/big
 'Jerry's mother is pretty/big.'
- (2) Jerry-**ka** (F1) elkwul-i (F2) khuta(/yeypputa).
 Jerry-Nom face-Nom big/pretty
 'Jerry's face is big/pretty.'

Much of the literature related to the discussion has mainly focused on (i) are all nominative-marked NPs of the DNC subjects? OR (ii) is one of the nominative-marked NPs the real subject of the DNC? and if one of the nominative-marked NPs is the real subject, what are the others? To answer these questions, Park (1981) has proposed that all nominative marked NPs in (1) and (2) are subjects while Yoon (1987) has suggested that all F1 NPs and F2 NPs in (1) and (2) are focuses and subjects, respectively. The analyses, however, face theory-internal and empirical difficulties in accounting for the DNC.

In this paper, I argue that (1) and (2) are two different types of the DNC. Unlike the previous analyses, I claim that the first NP (=F1) 'Jerry-ka' is a focus and the second one (=F2) 'emeni-ka' is a subject in (1) whereas the first NP (=F1) 'Jerry-ka' is a subject and the second one (=F2) 'elkwul-i' is an adjunct in (2). To support my claim, I provide a 3-part argument based on the different distributional behavior in Scrambling, Relatives and positioning of AP-adverbs.

This paper is organized as follows: In section 2, I point out the difficulties of the previous analyses³ mentioned above after looking into some properties of the DNC. Section 3 shows how my analysis can be formalized into Head-Driven Phrase Structure Grammar (HPSG) and

those in (1-2) will not be treated here.

3 In addition to Park (1981) and Yoon (1987), the difficulty O'Grady (1991) undergoes also will be specified throughout presenting some counter examples. This will differentiate my analysis from his analysis which seems to be similar to mine.

predicts the properties of the DNC. Finally, I conclude that if the claim made in this paper is correct, the difficulties in analyzing the DNC are expected to be solved without any stipulations.

2. Properties of Double Nominative Constructions

2.1. Scrambling

The fact that as in (3-4), the second NP 'elkwul-i' in (2) can precede the first NP 'Jerry-ka' while the second NP 'emeni-ka' in (1) cannot shows that the second NPs have two different functions.

- | | | | |
|-----|-----------------------------|-----------------------|-----------|
| (3) | <i>*emeni-ka</i> (F2) | Jerry- <i>ka</i> (F1) | yeypputa. |
| | mother-Nom | Jerry-Nom | pretty |
| | 'Jerry's mother is pretty.' | | |
| (4) | <i>elkwul-i</i> (F2) | Jerry- <i>ka</i> (F1) | khuta. |
| | face-Nom | Jerry-Nom | big |
| | 'Jerry's face is big.' | | |

If all nominative-marked NPs are subjects, it seems to be hard to explain why (3) is ungrammatical but (4) is grammatical. Similarly, if F1s are focuses and F2s are subjects, the question why (3) is ungrammatical but (4) is grammatical immediately follows. However, the difference in grammaticality between (3) and (4) follows from my claim that the first NP is a sentential specifier and the second one is a subject in (1) whereas the first NP is a subject and the second one is an adjunct in (2). More specifically, the fact that the second NP 'emeni-ka' cannot precede the first NP 'Jerry-ka' while the second NP 'elkwul-i' can follows from the independently motivated evidence that non-adjunct NPs with *-ka* cannot be scrambled while a non-adjunct NP with *-ka* and an adjunct with *-ka* can, as illustrated in (5-6).

- (5) a. Jerry-ka **kay-ka** mwusepta.
 Jerry-Nom dog-Nom frighten
 'The dog frightens Jerry.'
- b. ***kay-ka** Jerry-ka mwusepta.
 dog-Nom Jerry-Nom frighten
 'The dog frightens Jerry.'
- (6) a. cicin-i yekise **twu pen-i** palsaynghayta.
 earthquake-Nom here two times-Nom happened
 'The earthquake happened here twice.'
- b. yekise **twu pen-i** cicin-i palsaynghayta.
 here two times-Nom earthquake-Nom happened
 'The earthquake happened here twice.'

Given the independently motivated evidence mentioned above, the asymmetry between (3) and (4), hence, can be accounted for without additional stipulations under my analysis. On the other hand, it appears to be hard to explain the grammatical difference of scrambling in DNCs in the previous analyses.

2.2. Relativization

It is a well-known fact that the first NPs of the DNC can be antecedents of the counterpart relativized DNC but the second NPs cannot. The relative clauses (7a) and (8a) are well-formed strings because the F1s of the DNC, *ku-*, can be the antecedents of the relatives, but the relative clauses (7b) and (8b) are ill-formed strings since the F2s of the DNC cannot be the antecedents of the relatives.

- (7) a. t_i emeni-**ka** (F2) yeyppun **ku-** (F1).
 mother-Nom pretty man-
 'the man whose mother is pretty.'
- b. ***ku-ka** (F1) t_i yeyppun emeni- (F2).
 man-Nom pretty mother-

some degree of acceptability with respect to where they occur in a sentence. The sentence (11a), where the adverb, *maywu*, occurs immediately before the adjectival verb, *yepputa* ('pretty'), sounds perfect whereas (11b), where the adverb occurs between the F1 and the F2, sounds awkward. On the other hand, both sentences in (12) sound perfect, regardless of where the adverb occurs within the sentence.

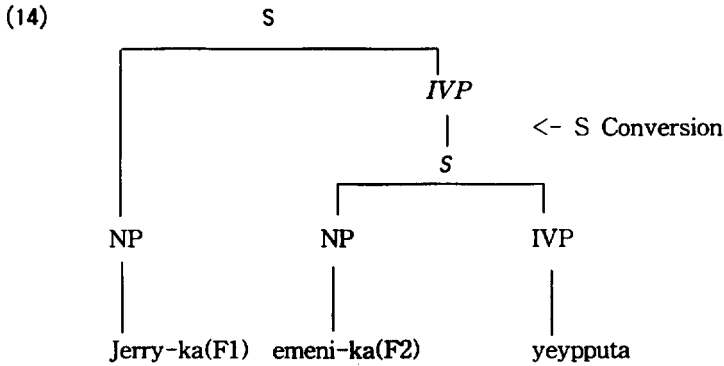
- (11) a. Jerry-**ka**(F1) emeni-**ka**(F2) *maywu* yepputa.
 Jerry-Nom mother-Nom very pretty
 b.??(*) Jerry-**ka**(F1) *maywu* emeni-**ka**(F2) yepputa.
 Jerry-Nom very mother-Nom pretty
 'Jerry's mother is very pretty.'
- (12) a. Jerry-**ka** (F1) elkwul-i (F2) *maywu* khuta.
 Jerry-Nom face-Nom very big
 b.(?)Jerry-**ka** (F1) *maywu* elkwul-i (F2) khuta.
 Jerry-Nom very face-Nom big
 'Jerry's face is very big.'

If all F1s and F2s are considered to be subjects or the F1s and F2s are focuses and subjects, respectively, the difference in acceptability between (11) and (12) would be hard to explain. Under my analysis, the string *emeni-ka*(F2) *yepputa* in (11b) constitutes an S so that the AP or A adverb, *maywu*, cannot modify the whole S while the string *elkwul-i* (F2) *khuta* in (12b) constitutes an AP so that the adverb can modify the AP, as illustrated in (13). Thus, the difference between (11b) and (12b) just follows from my analysis.

- (13) a. ??(*)Jerry-**ka** (F1) *maywu* [emeni-**ka** (F2) yepputa.]_S
 b. (?)Jerry-**ka** (F1) *maywu* [elkwul-i (F2) khuta.]_{AP}

Similar to my analysis, O'Grady (1991) has claimed that sentences like (1) are focus constructions while sentences such as (2) consist of a subject, an adjunct and an adjective. But there is a structural difference

in analyzing (1) between O'Grady (1991) and my analysis proposed here. According to O'Grady (1991), sentence (2) is represented as (14). It is notable that under his analysis, the italicized S *emeni-ka(F2) yeypputa* in (14) is converted into an IVP and then the NP *Jerry-ka(F1)* combines with this newly created IVP, resulting in an S.



Though it appears to work, this S conversion operation poses difficulties in accounting for positioning of the AP adverb *maywu*. More specifically, if the S *emeni-ka(F2) yeypputa* is converted into an IVP via the S conversion, the question why this IVP cannot be modified by the AP adverb *maywu* in (11b) but the IVP *elkawul-i khuta* in (12b) can immediately follows. (Cf. Kang (1988)) Unlike O'Grady (1991), my analysis, however, does not undergo such difficulty because the string *emeni-ka(F2) yeypputa* is regarded as an S.

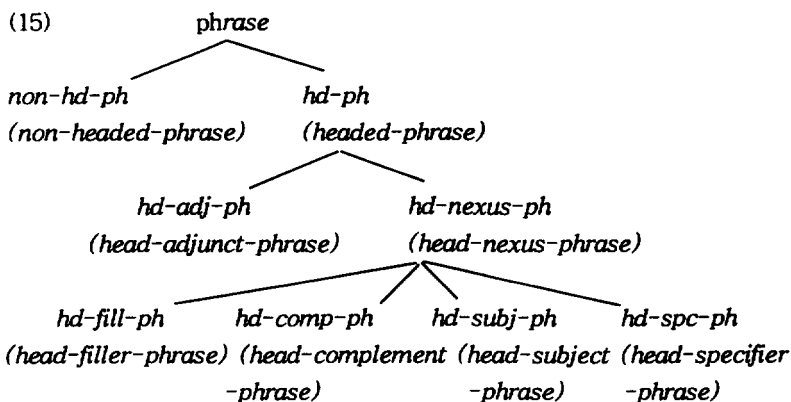
All the evidence above based on the distributional behavior, I think, points to the fact that (1) and (2) are two different types of the DNC. On the basis of the hypothesis that the first NP is a sentential specifier and the second one is a subject in (1) whereas the first NP is a subject and the second one is an adjunct in (2), I will now present an analysis of these constructions within Head-driven Phrase Structure Grammar (HPSG).

3. A Constraint-based Analysis of the DNC

3.1. Theoretical Tools

To represent my idea on the DNC in HPSG, I need to introduce some theoretical tools such as the partial hierarchy of phrasal types including *head-adjunct-phrase* and *head-specifier-phrase*, the Valence Feature and the semantic CONTENT and/or the pragmatic CONTEXT part.

In HPSG, phrases are classified as follows:



Among the various phrasal types above, the *hd-spc-ph* and the *hd-adj-ph* play a key role in generating the DNCs in (1) and (2), respectively. It is worth keeping in mind the type hierarchy of phrases and associated type constraints related to the two phrases.

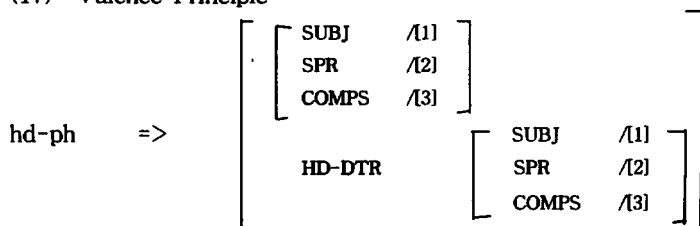
For those who are familiar with Transformational Grammar or its descendants, the function of (16) in HPSG would be easier to be understood as a sort of the X-Bar theory.

(16) Phrasal Types:⁴

TYPE	CONSTRAINTS	ISA
phrase		sign
hd-spc-ph	$\left[\begin{array}{l} \text{SPR} \quad < > \\ \text{HD-DTR} \text{ [COMPS } <[1],\dots,[n]> \\ \text{NON-HD-DTRS } <[\text{SS } [1],\dots, [\text{SS } [n]]> \end{array} \right]$	hd-ph
hd-adj-ph	$\left[\begin{array}{l} \text{HD-DTR} \quad \text{[SYNSEM } [1] \\ \text{NON-HD-DTRS } <[\text{HEAD } [\text{MOD } [1]]> \end{array} \right]$	hd-ph

Second, as in (17), the super type of the two phrase types *hd-ph* has a special constraint, namely the Valence Principle which is similar to the Projection Principle in the Government and Binding theory. The important thing to remember is that *hd-ph* always has 3 valence features: SUBJ, SPR, and COMPS. Especially, the SPR feature plays an important role in analyzing sentence (1).

(17) Valence Principle



The last thing we must consider is that there is some semantic or

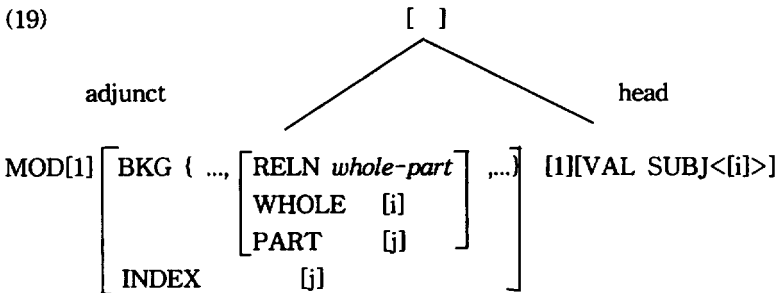
4 In the table, HD-DTR stands for HEAD-DAUGHTER and NON-HD-DTR, NON-HEAD-DAUGHTERS.

pragmatic relation between the F1 and the F2 in each sentence of (1-2). By and large, it appears that the F1 and the F2 of (1) stand in an inalienable possession relation with respect to the predicate while the F2 of (2) is in a whole-part relation with the F1. However, it is not easy to succinctly define what the inalienable possession and whole-part relation are, since this concept seems to vary depending on native speakers. (Cf. Cho (1997, 1998), Chung (1993))

- (1) Jerry-ka (F1) emeni-ka (F2) yeypputa.
 Jerry-Nom mother-Nom pretty
 'Jerry's mother is pretty.'
- (2) Jerry-ka (F1) elkwul-i (F2) khuta.
 Jerry-Nom face-Nom big
 'Jerry's face is big.'

This information, nonetheless, needs to be encoded as a value of the CONTEXT|BACKGROUND feature so as to eliminate such sentences as in (18). In HPSG, adjuncts select their heads so that the MOD (MODIFIER) value of the adjunct is identical to the SYNSEM value of its head. So, the F2 of (2) can be represented as (19), which correctly predicts that (18) is bad.

- (18) *Jerry-ka (F1) haul-i (F2) khuta.
 Jerry-Nom sky-Nom big
 'Jerry's sky is big.' (Lit. meaning)



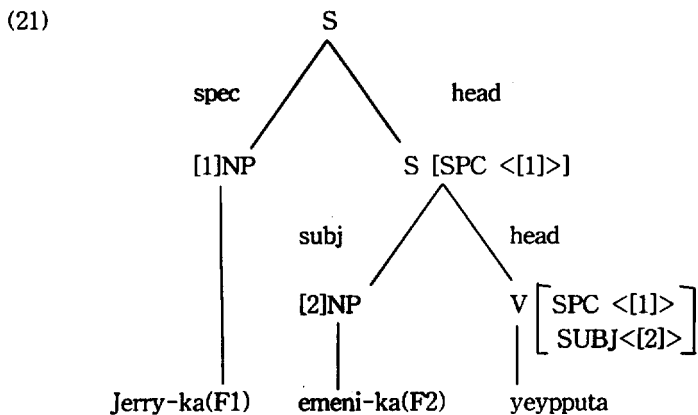
To rule out (20), it is also required that the F1 of (1) must be a specific NP to be focused.

- (20) *emeni-ka (F1) emeni-ka (F2) yeypputa.
 mother-Nom mother-Nom pretty
 'the mother's mother is pretty.' (Lit. meaning)

In order to be a complete analysis for all types of DNCs, this analysis should have demonstrated a full picture of the lexicon in HPSG related to Korean adjectival verbs⁵. Yet, I limit myself to analyzing the DNC in (1) and (2) on the basis of the theoretical tools above.

3.2. HPSG Analysis of the Two Types of the DNC

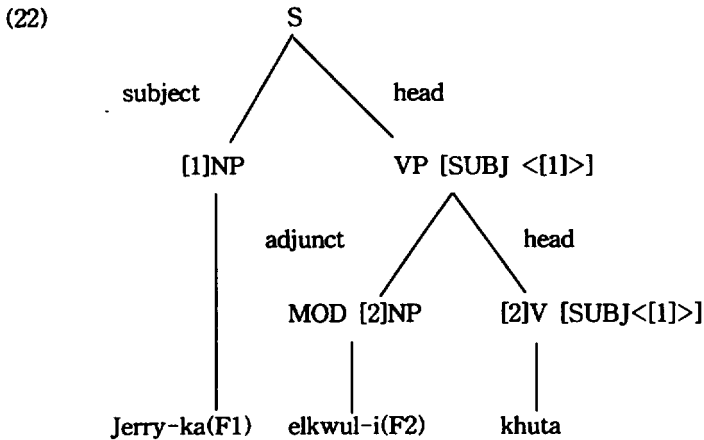
As discussed previously, sentence (1), in which the F1 is a focus and the F2 is a subject, is considered to be a focus construction under my analysis. In conjunction with the information of the CONTEXT|BACKGROUND value, the phrasal type enables us to represent sentence (1), as in (21).



5 It would be a big project to build a complete theory of all kinds of the DNC in Korean. So, other types of the DNC are beyond the scope of this paper.

Given the assumption that the F1 is a specific NP and the F1 and the F2 stand in an inalienable possession relation in (1), the sentence as a focus construction can be considered to be grammatical, since it satisfies all constraints postulated above.

On the other hand, sentence (2), where the F1 is a subject and the F2 is an adjunct, can be represented as (22).



Given the assumption that the F1 and the F2 of (2) stand in a whole-part relation, sentence (2) with the adjunct *elkwul-i* also can be construed to be grammatical, since it satisfies all associated constraints.

4. Conclusion

The Double Nominative Constructions like (1-2) are an interesting phenomenon in the sense that more than two elements with *-ka* exist in a clause. In considering this, it is rather natural that this construction has attracted much attention within many theories. No theory, however, has satisfactorily accounted for the properties of the DNC.

To provide an adequate theory for the constructions, I claim that unlike the previous analyses, (1) and (2) are two different types of the

DNC. More specifically, in (1), the first nominative-marked NP is a focus and the second one, a subject. In (2), the first nominative-marked NP is a subject and the second one is an adjunct. Empirically, this enables us to explain the various properties of the DNC provided not only by myself but also by O'Grady (1991). But the properties of the DNC seem to cause theory-internal and/or empirical problems for the previous analyses including O'Grady (1991). If (1) and (2) have different structures and one of them in each sentence is a real subject, then the terms like Double or Multiple Subject Constructions for (1-2) must be a misnomer. Theoretically, my analysis suggests that in HPSG, the SPECIFIER feature might be needed for specifying the subcategorization information of an S as well as that of an NP. This symmetry in the specification of the Valence feature between two the categories can be a theoretical achievement in this paper, even though further data must be tested.

Therefore, all this empirical and theoretical evidence points to the fact that the analysis proposed here is on the right track.

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