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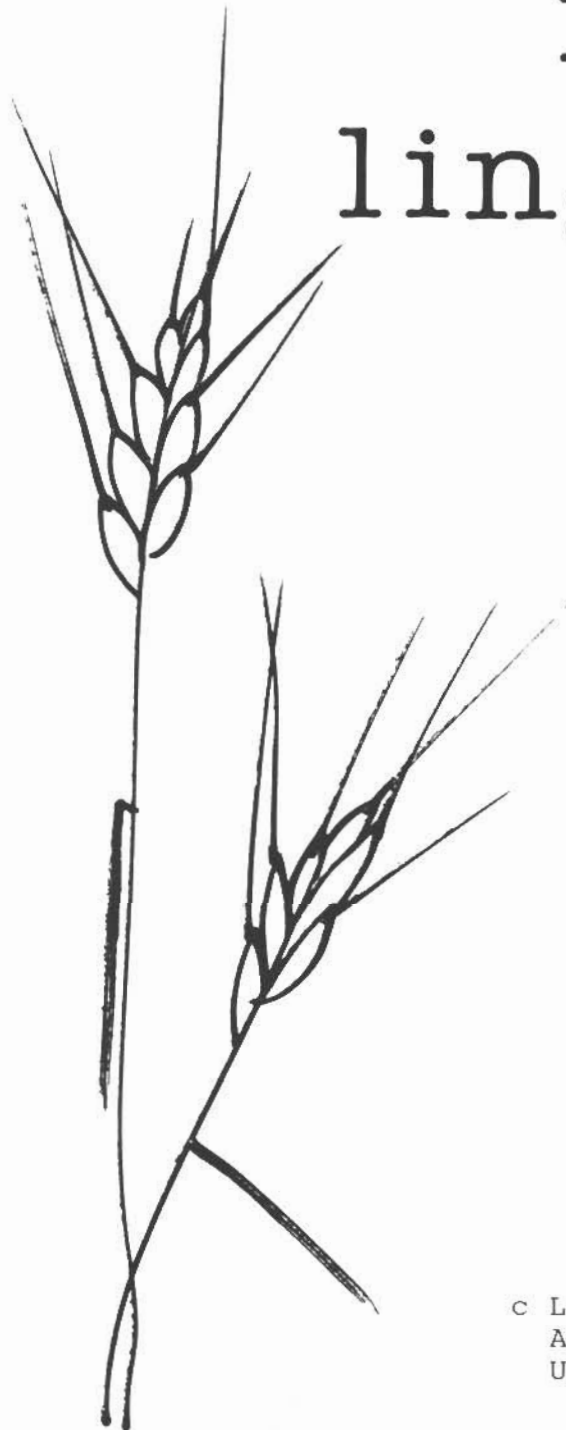
BETH ABU-ALI
JULIE BRUCH

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LEXICAL FUNCTIONAL GRAMMAR ANALYSIS OF KOREAN COMPLEX PREDICATES

Hee-Seob Kim

Abstract: The structure of complementation in complex predicates in Korean has attracted configurational analysis, specially TG and GB. This paper discusses some problems of those approaches and clarifies the non-configurationality of Korean by highlighting typical characteristics of Korean syntax. Within the framework of LFG, it is pointed out that syntactic structures such as Equi-NP deletion and raising would rather be specified by 'control-equation' in the functional structure.

Introduction

Using a Lexical Functional framework (Bresnan 1982 et al) this paper examines the structure of complementation in complex predicates in Korean. The term, 'predicate', in this context is used to describe both verbs and adjectives which are assumed to consist of semantic predicative argument structures, such as AGENT, PATIENT, THEME, and so on, in their lexical entries.

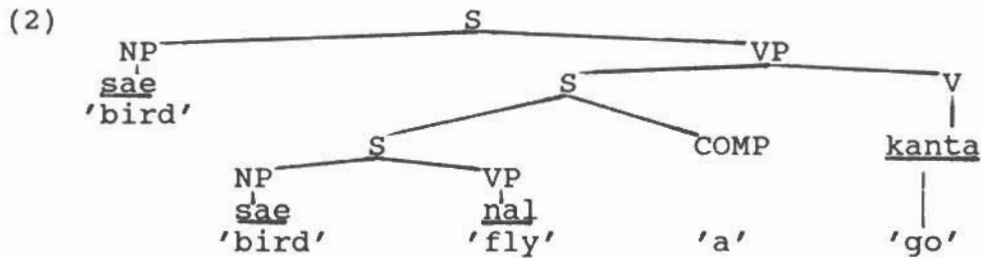
In section (I), we will discuss the non-configurationality of Korean, following Hale's summarised properties of non-configurational languages (Hale 1982). It will be claimed that in Korean there is no VP node configurationally.

In section (II), based on the discussion in (I) V COMP (verb phrase complement) which is an extremely common phenomenon in Korean predicate structure (Park 1972) is examined. The structures are exemplified as follows¹:

- (1) a. Sae-ka nal-a kan-ta.
bird-NOM fly-COMP go-DSE
'The bird flies away.'
- b. Tom-i Susan-il manna-ke to-ass-ta.
Tom-NOM Susan-ACC meet-COMP become-PAST-DSE
'Tom happened to meet Susan.'
- c. Younghi-ka alim-il nok-ke ha-ass-ta.
Younghi-NOM ice-ACC melt-COMP do-PAST DSE
'Younghi caused the ice to melt.'

- d. na-nin pap-il mak-ci anh-ass-ta.
 I-TOP meal-ACC eat-COMP not-PAST-DSE
 'I didn't eat the meal.'
- e. John-i chaek-il po-ko iss-ta.
 John-NOM book-ACC read-COMP be-DSE
 'John is reading the book.'

As shown in (1), a complete predicate is structured by employing a COMP such as '-a', '-ke', '-ci', or '-ko'. Park(1972) presented under the standard TG framework (2) a deep structure of (1 a). To give an example of his argument:



In order to get cross-construction generalizations, such as in (1) and to derive the surface structure of (2), the transformationalists have produced such transformations as 'raising', 'equi' etc.²

It is not the intention of this paper to enter into analysis of the theoretical bases of the transformational theories (TG and Chomsky's GB) in detail. Rather, it is to show by presenting some c(onstituent)-structures and f(unctional)-structures for the sentences which contain V COMPs how a lexical interpretive grammar (LFG) handles the syntactic phenomena that motivated transformations in Korean predicate structures.³

As the basis for argument, some PS rules and basic principles in LFG will be presented following Mohanan (1982) and Kaplan and Bresnan (1982).

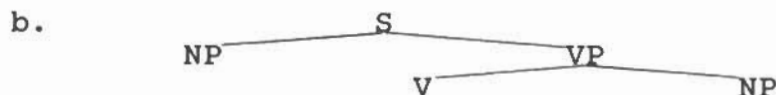
I. The VP-node

It is assumed that a linguistic theory must provide mechanisms for the description of all languages. Certain phonological features, syntactic categories, functional arguments, and semantic elements which are necessary and sufficient for a description of the world's languages are termed 'substantive universals'. On the other hand, the

framework of rules and their organization, that is PS rules and transformational rules, are 'fromal universals' (cf. Chomsky 1957, 1965).

The VP node, as a substantive universal, is considered to be important and essential for determining the subject and direct object of a sentence in standard transformational grammar, even if the node is a very suspect category in SOV languages⁴ (it goes without saying that VSO languages have no surface VP nodes). For example, let us consider two types of PS rules:

- (3) a. S -----> NP VP
 VP -----> V NP



The PS Rules of (3) configurationally show the grammatical functions of NPs in sentence structure: the NP immediately dominated by the node S is the subject of the sentence while the NP immediately dominated by the node VP is the object of the verb. As a result, according to Chomsky (1965) such grammatical functions as subject, direct object and indirect object are derivative. On the other hand, it is claimed in Relational Grammar (Frantz 1980 etc.) and in LFG (Bresnan 1982 etc.) that those are, in fact, primitive. The weakness of Chomsky's functional notions results from his assumption that 'the symbols S, NP, VP, N, and V have been characterized as grammatical universals' (Chomsky, 1965:73). However, as mentioned above, like most S O V languages, Korean is assumed not to have a VP constituent (Young 1985). Furthermore, Korean is a nonconfigurational language like Japanese and Malayalam whose grammatical relations are encoded in terms of morphological features (case, agreement) (Yong 1985). Given the assumption that subject-of, direct object-of and indirect object-of are universal grammatical relations, in Korean there is no way to represent these structures dependently. The details of cases of grammatical functions will not be discussed here. In this section, we examine the status of the VP node in Korean and provide some syntactic evidence for its nonexistence.⁵

Let us first consider sentences which highlight a typical characteristics of Korean syntax.

- (4) a. The gentleman gave that lady a flower.

b 1.	<u>ki</u>	<u>sinsa-ka</u>	<u>ca</u>	<u>sukya-eke</u>	<u>kkoch-il</u>	<u>cu-ass-ta</u>
	the man-NOM		that lady-DAT		flower-ACC	give-PAST-DSE
		NP 1		NP 2	NP 3	V 4
2.	1	3	2	4		
3.	2	1	3	4		
4.	2	3	1	4		
5.	3	1	2	4		
6.	3	2	1	4		

(4 b) shows the possible sentence in their different manifestations which could be produced from NP₁, NP₂, NP₃, V. As shown in (4), the NP constituents in a sentence are not restricted to any specific placement; however the verb must always be in the final position.⁶ Moreover, the sentences in (4 b) fragmentarily indicate what we have already mentioned, i.e. Korean is non-configurational: the word order is free; it uses rich case system; the verb is complex, consisting of STEM+PAST+DSE. These findings are compatible with the characteristics of non-configurational languages as provided by Hale (1982).⁷

Given this fact, it would not be possible to apply a configurational approach such as TG or EST (Chomsky and Lasnik 1977) to the analysis of Korean sentence structure, since it could not explain various syntactic phenomena in Korean adequately.

There are several reasons for these limitations to the configurational approach with a VP node. First, 'the existence of a VP node would unnecessarily complicate the word order phenomena, obscuring the generalization that it is only the sister constituents directly dominated by S that are order-free' (Mohan 1982:525). Second, a VP node in Korean grammar would require us to postulate stylistic scrambling rules such as supposed in Chomsky and Lasnik 1977 (even in GB 1981). The problem is that if such a node were postulated, we would limit ourselves in the sense that the organization of the GB grammar requires that stylistic rules and rules of logical form be independent of one another (Chomsky 1981:17). But in Korean surface word order, the output of scrambling would be the input to rules of logical form such as pronominal noncoreference. The noncoreference rule for Korean can be stated as follows:

(5) (Mohan, 1982:525)

If NP₁ precedes NP₂, and NP₁ is a pronoun while NP₂ is not, then NP₁ and NP₂ are noncoreferential.

Let us consider the effects of scrambling on noncoreference.

(6) a. John-i ki-iy amani-lil poassta.
 i i 2
 1 2
 NOM GEN mother-ACC saw
 'John saw his mother'

b.* ki-iy amani-lil John-i poassta
 i 2 i
 2 1

As shown in (6), the rule of noncoreference operates upon surface word order. Thus, if it is necessary that stylistic rules do not affect the rules of logical form, then the phenomenon of free word order in Korean must be built into the PS rule instead of being handled in terms of stylistic scrambling.

II. Verbal Compounding

In Korean, verbals (verbs and adjectives) are central to semantic structure.⁶ Based on variations in inflections or suffixations, they compose most communicative information, such as TENSE, ASPECT AND MOOD.

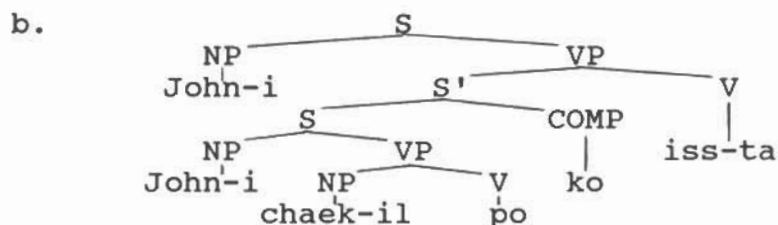
One of the patterns which changes the 'verbalness' into 'adverbialization', 'relativization' and 'nominalization', is traditionally called 'Cammpokpap' (qualification rule) (Choi 1929).⁷ All of these rules are assumed to have COMPs in their constructions in a view of TG. In this paper, we will concentrate on adverbialization, which is formed by such morphemes as -a, -ke, -ci and -ko as illustrated in (1), because the adverbialization corresponds to V COMP constructions.

Whereas in traditional grammar these were treated in terms of a verbal morphology something like V1-X-V2 compounding, in TG they are viewed in terms of a syntactic process. As in many other aspects of Korean syntax, studies on complementation have been divided into transformational approaches (Cook 1968, Nam 1973) and phrase-structure approach (Park 1972 etc.). It is not our concern to recapitulate their arguments. Since COMP is not semantically empty, and the choice of COMP largely depends on individual lexical items, as shown in (1), we generally follow the phrase-structure approach in which COMP is a matter of subcategorization rather than transformations (Bresnan 1970). One fairly consistent assumption in TG is the morphologically complex

verbs (e.g., causative, passive, etc.) involve syntactically complex structures in which a matrix verb requires a sentential complement.

So it is claimed that the distinction of deep and surface structures and certain transformations are indispensable in accounting for embedded structures with complex predicates. For illustration, consider the following, which contains COMP-ko in their structure.

- (7) a. John-i chaek-il po-ko iss-ta.
'John is reading a book.'



The structure in (7) illustrates that it is an Equi-type sentence. The subject NP of the lower cycle would have to be deleted to arrive at (7 a). Let us take some other examples which show deep structures similar to (7). Note the different case arraies, illustrated by an underline in (8).

- (8) a. John-i Mary-ka yeppta-ko saenkakhanta.
NOM -NOM beautiful-COMP think
'John thinks that Mary is beautiful.'
- b. John-i Mary-lil yeppta-ko saenkakhanta.
NOM -ACC
'John considers Mary to be beautiful.'

The two NPs with NOMs in (8 a) clearly indicate that the sentence comprises two clauses¹⁰, whereas the case array of (8 b) alludes to a single clause. To support our observation we will utilize the property of word order in Korean, as illustrated by (4). Consider the following in which an adverb pulhaenhaketo, 'unfortunately', is added into the sentence (8 a).

- (8a) 1. pulhaenhaketo John-i Mary-ka yeppta-ko saenkakhanta.
2. John-i pulhaenhaketo Mary-ka yeppta-ko saenkakhanta.
3. John-i Mary-ka yeppta-ko pulhaenhaketo saenkakhanta.

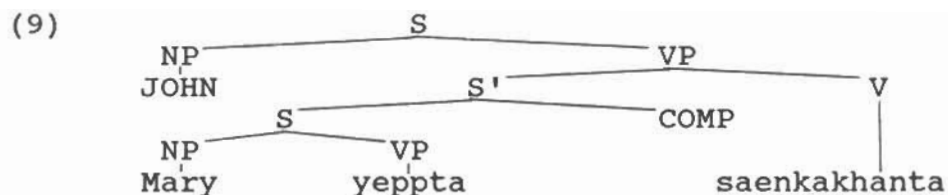
- * 4. John-i Mary-ka pulhaenhaketo yeppta-ko saenkakhanta.
'Unfortunately John thinks that Mary is beautiful.'

Although there is no overt restriction as regards word order, an adverb of the matrix sentence (verb) could not be placed in the embedded clause, as clearly shown by (8a 4), for the adverb does not modify the embedded verb but rather the matrix verb. Therefore, sentence (8a 4) is not acceptable. What happens if this kind of test is applied to sentence (8 b)?

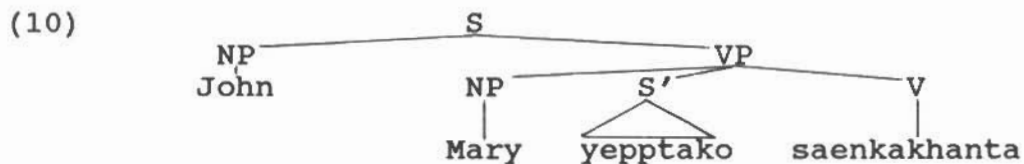
- (8b) 1. pulhaenhaketo John-i Mary-lil Yeppta-ko saenkakhanta.
2. John-i pulhaenhaketo Mary-lil yeppta-ko saenkakhanta.
3. John-i Mary-lil yeppta-ko pulhaenhaketo saenkakhanta.
4. John-i Mary-lil pulhaenhaketo yeppta-ka saenkakhanta.
'Unfortunately John thinks Mary to be beautiful.'

Unlike (8a 4), sentence (8b 4) is considered to be grammatical. The fact that the adverb of the matrix sentence (verb) can be placed between 'Mary-lil' and 'yeppta-ko' indicates that there is no longer a complement sentence and that 'Mary-lil' is a immediate constituent of the matrix sentence.

In comparing the sentences in (8) to those in (7), we can see, as mentioned earlier, that they have similar deep structures but are different in that (7) is an Equi-type and (8) is a Raising-type. The sentences in (8) have the same meaning, even though they differ in the case arraies in terms of case marking rules. Therefore, they might have the following deep structure:



To get (8 a), case marker insertion is applied to (9). Since NP is a subject in the low cycle-S, a nominative marker '-ka' can be marked. On the other hand, in order to derive (8 b), subject-to-object raising may be applied first, yielding the structure (10):



Since in (10) 'Mary' is immediately dominated by a VP node, the accusative case marker '-il' is inserted.

It may be claimed that the explanations above using a TG framework contribute to revealing the native speakers' internal knowledge of Korean Grammar in a limited sense. That is, despite differences in surface structures, native speakers of Korean know that the two sentences have the same meaning and that they are related in some way. But if we look at the problem more closely, we can see that TG theory is inconsistent in case assignment, and is unnecessarily complex in Equi NP-deletion, Raising, etc..

For example, consider the case in which an embedded clause takes a transitive verb, given in (11).

- (11) a. John-in Tom-i ton-il humchassta-ko mitninta.
 -TOP -NOM -ACC stole-COMP believe
 'John believes that Tom stole the money.'
- *b. John-in Tom-il ton-il humchassto-ko mitninta.
-ACC

In contrast to (8), in which the embedded clause has an intransitive verb and the underlying subject ('Mary') is realized as an object ('Mary-lil') at the surface structure, the underlying subject ('Tom') in (11 b) cannot be assigned the accusative case. In other words, in the TG framework nothing can prevent ungrammatical sentences such as (11 b) from being produced.

It is claimed by Bresnan (1982) that however we may elaborate a theory of TG, there seems to be little hope of constructing a descriptively and explanatorily adequate grammar. In this respect, LFG reorganizes and restructures what has been assumed in the theory of TG. In the following section, LFG is introduced as a new mechanism for syntactic description. We will discuss how verb complementation in Korean can be explained using this theory.

III. Lexical Functional Approach

In the first section, we argued that Korean is a non-configurational language and that instead of accepting the VP hypothesis we should adopt a flat structure to explain various syntactic phenomena such as those related to the freedom of word order. LFG can be easily applied to analysis of the freedom of word order phenomena to the extent that the lexical items can be freely inserted and that their grammatical functions can be defined in a universal fashion at superficial levels of derivations.

It is understood that a linguistic theory must incorporate three independent levels of description schematized as follows (Mohanan 1982:587).

- (12) categorial level : phrase markers, case features, etc.
 relational level : grammatical relations
 thematic level : thematic roles

Following Bresnan (1982), we assume that in LFG, lexical entries specify a direct mapping between semantic arguments and configurations of surface grammatical functions, and that syntactic rules then identify these surface functions with particular morphological and constituent configurations.

Furthermore, 'the constraints on the syntactic mapping problem-creativity, finite capacity, reliability, order-free composition, and universality- impose important limitations on the possible forms of syntactic knowledge representation, ruling out many possible systems of grammar- even apparently descriptively adequate ones- as systems of the mental representation of language' (Bresnan & Kaplan 1982: Introduction). In this respect, it follows that LFG exactly corresponds to Chomsky's original proposal for the goals in the study of language that linguistic theories can only attain explanatory adequacy if they are based on a maximally constrained, psychologically plausible, universal set of general principles.

LFG assigns two levels of syntactic description to every sentence of a language: c-structure and f-structure. C-structure represents the superficial constituency of a sentence, which is phonologically interpreted, and f-structure represents its meaningful grammatical relations, which is semantically interpreted. C-structures are formally quite different from f-structures in that c-structures are defined in terms of syntactic categories,

whereas f-structures are composed of grammatical function names, semantic forms, and feature symbols.

Based on the above background, we can formulate a set of PS rules that will characterize the clause structure of Korean. As mentioned, Korean is a nonconfigurational language in which grammatical relations are encoded in terms of morphological features (cases). Therefore, partial syntactic encoding which shows a PS rule and F-description would be something like (13):

- (13) a. S -----> XP * V"
- b. i. (↓ CASE) = NOM ii. (↓ CASE) = DAT
 (↓ SUBJ) = ↑ (↓ OBJ2) = ↑
 iii. (↓ CASE) = ACC
 (↓ OBJ) = ↑

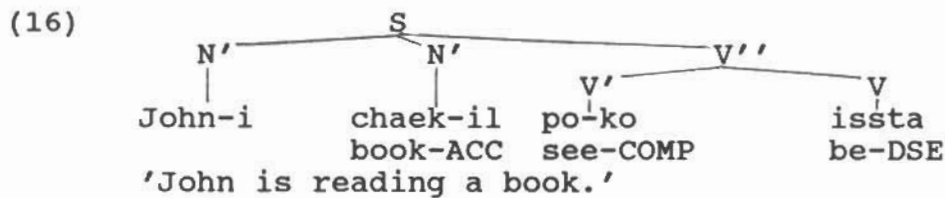
The schema (↑ SUB) = ↓ may be read as 'my mother's f-structure's SUBJ is my f-structure's value.' In other words, the mother's variable is the root node's 1-variable. So they represent the f-structure of the sentence as a whole. For illustration, consider the following sentence (14):

- (14) sinsa-ka suknya-eke kkoch-il cuassta
 gentleman-NOM lady-DAT flower-ACC gave
 'The gentleman gave a lady some flowers.'

An f-structure for (14) would indicate that 'sinsa-ka' is the grammatical subject, 'suknya-eke' is the grammatical object2 in the sentence and so on. F-structure represents this information as a set of ordered pairs, each of which consists of an attribute and a specification of that attribute's value for this sentence. The following is a plausible f-structure for (14):

- (15) (SUBJ (PRED 'SINSA')
 (CASE NOM)
 OBJ2 (PRED 'SUKNYA'
 (CASE DAT)
 OBJ (PRED 'KKOCH'
 (CASE ACC)
 TENSE PAST
 PRED 'CU <(↑ SUBJ) (↑ OBJ2) (↑ OBJ)>')

We can analyse the V COMPs of the sentences in the same way. Let us consider the so called Equi-type first. The c-structure for (7 a) is provided as (16):



The lexical entry for 'issta' can be given as follows:

- (17) ISSSTA : V, (\uparrow TENSE) = PRESENT
 (\uparrow PRED) = 'ISS <(\uparrow SUBJ) (\uparrow VCOMP)>'
 (\uparrow VCOMP SUBJ) = (\uparrow SUBJ)

With this lexical entry, the f-structure for (17) correctly defines John-i as an argument (agent) of 'PO' in (18).

- (18)
- | | | | | | |
|-------|---|---|--|---|--------|
| SUBJ | i | [| PRED | JOHN | |
| | |] | CASE | NOM | |
| VCOMP | | [| SUBJ | i |] |
| | |] | OBJ | PRED | CHAEEK |
| | | | CASE | ACC | |
| | | | PRED | 'PO <(\uparrow SUBJ) (\uparrow OBJ)>' | |
| TENSE | | | PRESENT | | |
| PRED | | | 'ISS <(\uparrow SUBJ) (\uparrow VCOMP)>' | | |

Now, let us see how the Raising-type VCOMP differs from the Equi type. The sentences in (8) are repeated below as (19):

- (19) a. John-i Mary-lil yeppta-ko saenkakhanta.
 'John considers Mary to be beautiful.'
 b. John-i Mary-ka yeppta-ko saenkakhanta.
 'John considers that Mary is beautiful.'

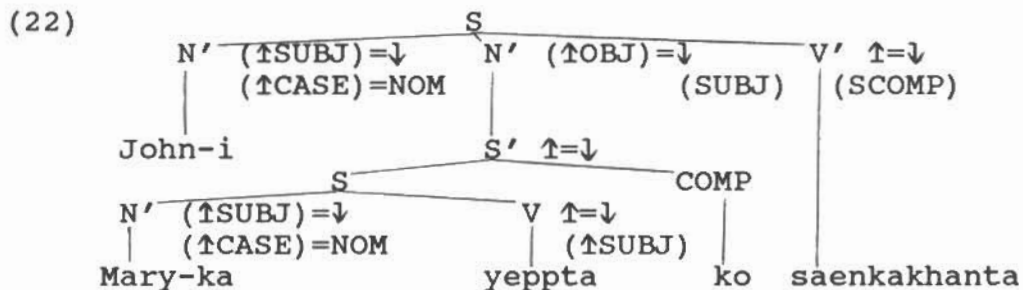
(19 a) has the same c-structure as (16), but has a different f-structure. In this case, the object of the matrix verb controls the understood subject NP in the embedded clause. The plausible f-structure of (19 a) is:

- (20)
- | | | | | | |
|-------|---|---|---|-----------------------------|---|
| SUBJ | | [| PRED | John | |
| | |] | CASE | NOM | |
| OBJ | i | [| PRED | Mary |] |
| | |] | CASE | ACC | |
| VCOMP | | [| SUBJ | i |] |
| | |] | PRED | 'Yepp <(\uparrow SUBJ)>' | |
| TENSE | | | PRESENT | | |
| PRED | | | 'saenkakhanta <(\uparrow SUBJ) (\uparrow OBJ) (\uparrow VCOMP)>' | | |

In contrast, (19 b) has quite a different pair of structures. The f-structure of (19 b) is as follows:

(21)	<table style="border-collapse: collapse; margin: 0; padding: 0;"> <tr> <td style="padding: 2px 5px;">SUBJ</td> <td style="padding: 2px 5px;">[</td> <td style="padding: 2px 5px;">PRED</td> <td style="padding: 2px 5px;">John]</td> </tr> <tr> <td></td> <td style="padding: 2px 5px;">CASE</td> <td style="padding: 2px 5px;">NOM</td> <td style="padding: 2px 5px;">]</td> </tr> <tr> <td style="padding: 2px 5px;">SCOMP</td> <td style="padding: 2px 5px;">[</td> <td style="padding: 2px 5px;">SUBJ</td> <td style="padding: 2px 5px;">[</td> </tr> <tr> <td></td> <td></td> <td style="padding: 2px 5px;">PRED</td> <td style="padding: 2px 5px;">Mary]</td> </tr> <tr> <td></td> <td></td> <td style="padding: 2px 5px;">CASE</td> <td style="padding: 2px 5px;">NOM]</td> </tr> <tr> <td></td> <td></td> <td style="padding: 2px 5px;">TENSE</td> <td style="padding: 2px 5px;">PRESENT</td> </tr> <tr> <td></td> <td></td> <td style="padding: 2px 5px;">PRED</td> <td style="padding: 2px 5px;">'YEPPTA <(\uparrowSUBJ)>']</td> </tr> <tr> <td style="padding: 2px 5px;">TENSE</td> <td style="padding: 2px 5px;">PRESENT</td> <td colspan="2"></td> </tr> <tr> <td style="padding: 2px 5px;">PRED</td> <td style="padding: 2px 5px;">'</td> <td style="padding: 2px 5px;">SAENKAKHANTA <(\uparrowSUBJ) (\uparrowSCOMP)></td> <td style="padding: 2px 5px;">'</td> </tr> </table>	SUBJ	[PRED	John]		CASE	NOM]	SCOMP	[SUBJ	[PRED	Mary]			CASE	NOM]			TENSE	PRESENT			PRED	'YEPPTA <(\uparrow SUBJ)>']	TENSE	PRESENT			PRED	'	SAENKAKHANTA <(\uparrow SUBJ) (\uparrow SCOMP)>	'
SUBJ	[PRED	John]																																		
	CASE	NOM]																																		
SCOMP	[SUBJ	[
		PRED	Mary]																																		
		CASE	NOM]																																		
		TENSE	PRESENT																																		
		PRED	'YEPPTA <(\uparrow SUBJ)>']																																		
TENSE	PRESENT																																				
PRED	'	SAENKAKHANTA <(\uparrow SUBJ) (\uparrow SCOMP)>	'																																		

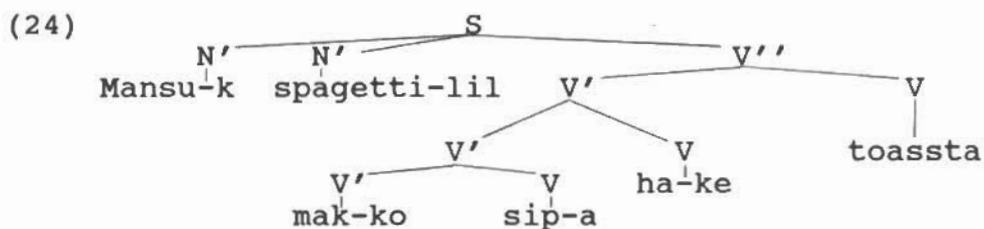
The main difference between (20) and (21) is, above all, that (21) has a SCOMP in which the subject (Mary) is assigned as the nominative case (Mary-ka) whereas (20) contains a VCOMP in which the subject (Mary) is controlled by the object argument (Mary) in the main clause, realised as the accusative case (Mary-lil). To observe the difference, the annotated c-structure of (19 b) is depicted below:



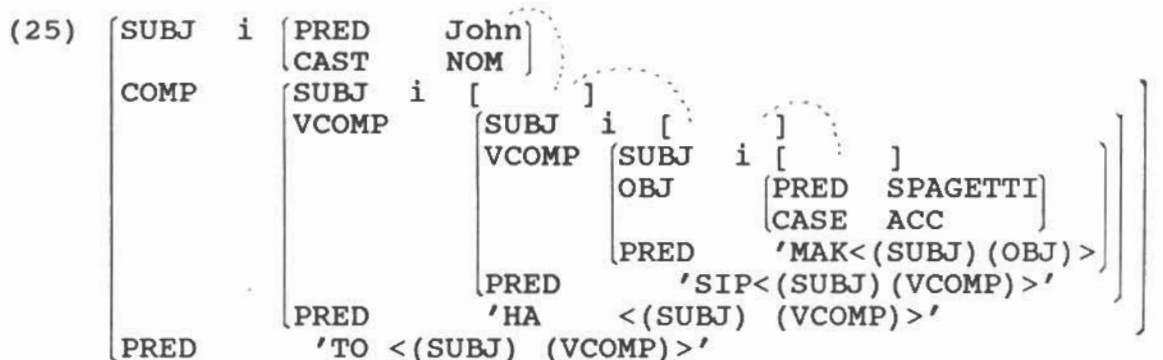
However, the sentential complement is not our main concern here. Rather, let us go back to the V COMP. How can we represent the c- and f-structures in cases where a sentence has more than one complement among -a, -ke, -ci, and -ko? (22) would illustrate such a case:

- (23) Mansu-ka spagetti-lil mak-ko sip-a ha-ke toassta.
eat want do became
'Mansu began to want to eat spaghetti.'

Its c-structure is given below as (24):



The f-structure for (23) is as follows:



IV. Conclusion

In this paper, we have argued that Korean has no VP node. It was pointed out that verb compounding is very productive in Korean and that traditional and TG approaches to this phenomenon are not successful in revealing a native speaker's knowledge of the language.

As a new means of describing grammar, LFG was introduced. As for sentences which consist of verb complementation, several c- and f-structures were presented. It was also pointed out that syntactic processes such as Equi-NP deletion and Raising may well be specified by 'control equation' in the f-structure. In addition, since predicates in Korean play a major role in syntax, varying their forms, it is our hope to study syntactic properties of predicate structure in view of possible LFG applications more closely and broadly in late studies.

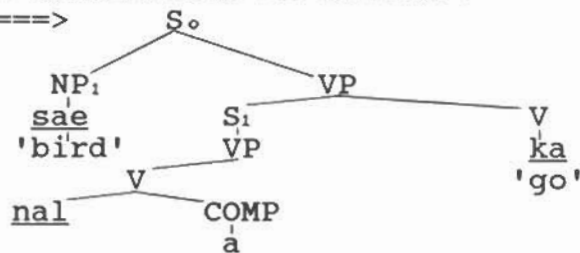
NOTES

1. A list of abbreviations used in this paper is as follows:

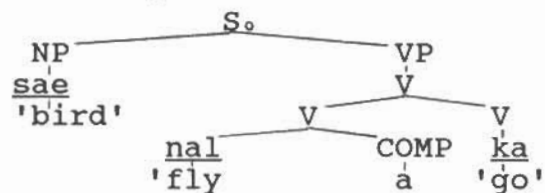
NOM = nominative: -ka/ -i	DAT = Dative: eke
ACC = accusative : -il/ -lil	GEN = genitive: iy
COMP = complement	TOP = topic: -nin/ -in
DSE = declarative sentence ending : -ta	

2. In fact, according to Park (1972), the deep structure in (2) is transformed as follows:

Equi-NP deletion =====>



Verb-Raising =====>



3. To sum up briefly, there are three sorts of mechanisms that instantiate 'non-transformations' in LFG (Pinker 1982:660). (i) lexical redundancy rules such as

Passivization: (OBJ) ----> (SUBJ)
 (SUBJ) ----> (BY OBJ)
 ----> PART = PAST

These rules state that OBJ in a predicate argument structure can be converted to SUBJ and that SUBJ can simultaneously be converted to BY OBJ. (ii) Control equation asserts an equivalence between one of the functions associated with its own predicate and one of the functions associated with the predicate embedded in a complement constituent: (A) 'Irwin tried to leave'. In this example, the lexical entry for 'try' would indicate that its subject is also the subject of its V COMP (to leave). The f-structure (B) would indicate the identity of two substructures by associating them with the same superscript.

(B)
$$\left[\begin{array}{l} \text{SUBJ} \quad [\text{PRED} \quad 'IRWIN'] \\ \text{PRED} \quad 'TRY < (\text{SUBJ}), (\text{V COMP}) > ' \\ \text{V COMP} \quad \left[\begin{array}{l} \text{SUBJ} \quad [\text{PRED} \quad 'IRWIN'] \\ \text{PRED} \quad 'LEAVE < (\text{SUBJ}) > ' \end{array} \right] \end{array} \right]$$

(iii) subiacency metavariables to accomplish long distance binding usually attributed to movement transformations.

(A) a. NP ----> NP S'
 ↓, HEAD MOD (IFIER)
 b. NP ----> e
 ↑↑

Whenever there are two constituents within a bounded domain of the c-structure, such that one constituent is annotated with 11 and the second, the lower one is annotated with 11, and the interpretive procedures link their respective f-structures. In this paper, we are mainly interested in the second mechanism.

4. Schwartz (1972) claimed that SOV languages have no VP node.

5. Radford (1981:69) provided diagnostic guides for determining whether a given set of words is a constituent or not. This list included 'distribution', 'coordination', 'intrusion', 'proform', and 'omissibility'. However, they were originally explored in order to establish a hierarchical structure of configurational languages such as English. As far as non-configurational languages are concerned, it may be meaningless to test these criteria. In non-configurational languages, the word order is so free that the constituents can switch around to any place in a sentence. Thus an NP and a V can behave as a single structural unit or as separate units. For example, in sentences (4 b), there is a subject NP between verb and object NPs. If it is the case that these criteria are based on the surface structure, then we would not apply them to establish a VP node. As mentioned earlier, the criteria are not informative for non-configurational languages.

6. Chomsky assumes a modified W* base rule:
 $X \rightarrow W^* X$, capturing the head final properties of Japanese in GB(1981). I think that it can be assumed for Korean too.

7. Besides what we have mentioned, there are more criteria in Hale 1982:

use of discontinuous expressions

free of frequent "pronoun drop"

lack of NP movement

lack of pleonastic NPs (like 'it', 'there', 'il')

We have no space in this paper to examine all the properties of a non-configurational language but may safely assume that most of them, except the use of discontinuous, are found in Korean.

8. For semantic trends in studying verbal compounding in Korean, see Abasolo (1977).

9. Examples of these are below:

Relativization

ne-ka cu-n kkoch-in arimtapta.
 you-NOM give-COMP flower-TOP beautiful
 'The flowers that you gave are beautiful'.

Nominalization

Mike-ka saensum-il muk-ki -nin chaimita.
 Mike-NOM raw fish-ACC eat-COMP -TOP first
 'It is the first time for Mike to eat raw fish.'

10. When an NP with NOM is preceded by another NP with NOM or with TOP, it is considered to be a "double subject" construction (cf. Na 1986).

A. na-nin ki-ka kita.
 I-TOP height-NOM tall
 'I am tall.'

B. nae-ka ki-ka kita.
 I-NOM
 'I am tall.'

It is not our concern to examine the usage of (A) and (B) in different contexts. We will treat them as the same construction. Thus, (A) is interchangeable with (B) without affecting its meaning.

REFERENCES

- Abasolo, Rafael. 1977. "Semantic trends in verbal compounding" Papers in Korean Linguistics, ed. by Chin-W. Kim.
- Bresnan, J. 1970. "On Complementizers: Toward Syntactic Theory of Complement Types". Foundations of Language, Vol. 8.
- Bresnan, J. 1982. "Control and Complement." in The Mental Representation of Grammatical Relations, edited by Bresnan, MIT Press.
- . 1982. "Lexical Functional Grammar" in The Mental Representation of Grammatical Relations, edited by Bresnan, MIT Press.
- and Kaplan, R.M. 1982. "Introduction." in The Mental Representation of Grammatical Relations, edited by Bresnan, MIT Press.

- Choi, Hyun-Bae. 1929. Urimalbon [Our Grammar], Seoul: Jongumsa.
- Chomsky, N. 1957. Syntactic Structures. MIT Press.
- 1965. Aspects of the Theory of Syntax. MIT Press.
- 1981. Lectures on Government and Binding : The pesa Lectures, Fories, Dordrecht.
- Chomsky, N. and H. Lasnik. 1977. "Filters and Control." Linguistic Inquiry 8.3.
- Cook, Ung-Do. 1968. Embedding Transformations in Korean Syntas, Ph.D dissertation, University of Alberta.
- Frantz, Donald G. 1981. "Grammatical Relations in Universal Grammar." IULC
- Hale, Kenneth. 1982. "Preliminary Remarks on Configurationality." in Proceedings of the New England Linguistic Society, Vol. 12, edited by J. Pestejovsky and P. Sells.
- Mohanan, K.P. 1982. "Grammatical relations and clause structure in Malayalam". in The Mental Representation of Grammatical Relations, edited by Bresnan, MIT Press.
- Na, Younghee. 1986. "The Conventionalization of Semantic Distinctions." CLS 22 (1986) PART I.
- Nam, Ki-Sim. 1973. Korean Grammar, Taegu: Kaemyong University Press
- Park, B. S. 1972. A study of Korean Verb phrase and noun phrase complementation with special attention to the verb HA. Ph.D. dissertation of University of Pittsburgh.
- Radford, A. 1981. Transformational Syntax. Cambridge University Press.
- Schwartz, A. 1972. "The verb constituent of SOV". Working Papers on Language Universal, Vol. 8.
- Yong, Chul-Won. 1985. Case relations in some nonconfigurational languages. Ph.D. dissertation of Indiana University.