An examination of children's sentence structure in Korean argues for a verb phrase (VP) constituent in child grammar, but suggests that this does not necessarily support its existence in adult Korean grammar. Korean children, it is noted, generally restrict their sentences to one word order, subject-object-verb, despite the existence of another order in adult grammar. It is proposed that, as children acquire various word order possibilities and scope relations, they may realize that the VP constituent is no longer consistent with the word order facts of adult language and thus will abandon it. (MSE)
Evidence for the VP Constituent from Child Korean*

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0. Recently many interesting discussions (Hale 1982, Mohanan 1982, Saito 1985, Whitman 1979, 1986) have centered around a typological distinction between configurational and nonconfigurational languages. Loosely defined, configurational languages are those in which word order is fixed, whereas scrambling type free word order is observed in nonconfigurational languages. Korean and Japanese have been identified as nonconfigurational, due to their relatively free word order. Consider the following:

(1) a. nay-ka Suni-eykey sakwa-lul cwu-ess-ta.
   I-NOM DAT apple-ACC give-PAST-VE 'I gave an apple to Suni.'

   b. nay-ka sakwa-lul Suni-eykey cwu-ess-ta.
   c. Suni-eykey nay-ka sakwa-lul cwu-ess-ta.
   e. sakwa-lul nay-ka Suni-eykey cwu-ess-ta.
   f. sakwa-lul Suni-eykey nay-ka cwu-ess-ta.

   As demonstrated in (1), the words in a sentence can occur in any order, with the exception of the verb, which should be rigidly final.

1. The freedom in word order leads to an important question regarding a verb constituent. A simple generalization which we can make from (1) is that only the sister directly dominated by S are freely ordered. Due to this fact, recent studies of Korean question the existence of a VP constituent. Consider (2):

(2) a.  
   S
   /   
  NP VP
   / 
 PP NP V

   If we assume (2a) to be the constituent structure of the sentences in (1), there is a VP constituent and the first NP is not a sister node of the PP or of the second NP. Accordingly, it is difficult to explain why scrambling is possible without relying on other factors such as different representation levels or movement. In contrast, if we assume a flat structure lacking a VP constituent as in (2b), all words are in the sister relationship and can be freely scrambled.

2. However, a careful look at the whole structure of Korean reveals that this issue of presence or absence of VP is more complicated. We can find various independent evidence not only for a VP constituent but also against it, as we will see shortly. On the one hand, there are studies (Hale 1982, Saito 1985, Choe 1986, etc.) that claim that nonconfigurational languages have a VP constituent at

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least at a certain level. Hale proposes that both configurational and nonconfigurational languages have a VP constituent at the level of Lexical structure, whereas the latter lacks VP at Phonological structure. In contrast, Saito advances arguments for the position that nonconfigurational languages have VP at every level and that scrambling is the result of syntactic movement. In this paper, we will not deal with the differences between the two approaches. On the other hand, there are studies (Hinds 1974, Mohanan 1982 for Malayalam, etc.) that assume a flat constituent structure on the basis of the lack of any positive evidence for VP.

3. First, let us consider arguments for VP. As observed in (2a), positing the VP constituent results in distinguishing between subjects and non-subjects. Accordingly, any syntactic phenomenon referring to the subject and non-subject asymmetry constitutes an argument for VP. Saito's and Whitman's arguments that the distribution of PRO is restricted to subject position in Japanese seem equally applicable to Korean as shown in (3).

(3) a. ttena-to coh-ta.
   leave-even good-VE
   'It is good even if (PRO) leaves.'

b. ney-ka poa-to coh-ta.
   you-NOM see-even good-VE
   'It is good even if you see (it).

In (3), only unexpressed subjects may be interpreted as arbitrary reference, while unexpressed non-subjects have to be interpreted as coreferent to something mentioned in prior discourse. In other words, PRO may occur only in the subject position. Due to the nature of PRO which requires it to appear in an ungoverned position, we need VP which governs non-subject position but not subject position. The other strong argument refers to the binding condition C, stating that r-expressions must be free (Whitman 1986).

(4) Minsu-ui chinkwu-ka ku-lul tayli-ess-ta.
    GEN friend-NOM he-ACC hit-PAST-VE
    'Minsu's friend hit him.'

Only if we assume VP, can we account for (4). In (4), the pronoun does not c-command an r-expression since VP, a maximal projection, blocks c-commanding. Hence the r-expression is free. A flat structure lacking VP incorrectly predicts that (4) is ungrammatical since the pronominal object would c-command the r-expression.

4. Let us now consider some arguments against VP, most of which are based on negative evidence. According to Hinds (1974) and Whitman (1986), Korean or Japanese does not give any evidence for rules referring to a VP constituent, such as VP movement or VP deletion rules. In the case of VP deletion, Korean has a verbal construction which corresponds to "do so" pronominalization in English as in (5).

    TP school-to go-PAST-VE too thus do-PAST-VE
    'Suni went to school, and Minsu did so too.'

However, non-anaphoric direct objects may be freely retained in Korean, while English requires that the whole VP constituent including them should be replaced as in (6).

(6) Suni-nun TV-lul Youngmee-eykey cwu-ess-ta. Minsu-nun stereo-lul
    TP ACC Dat give-PAST-VE TP ACC
    kuletkey ha-yess-ta.
    thus do-PAST-VE
    '*Suni gave the TV to Youngmee, and Minsu did so the stereo.'
Case assignment phenomenon provides another piece of evidence against VP (Whitman 1986). According to Schwartz (1972), adverbs may not normally intervene between verb and direct object in English. In contrast, in Korean, adverbs and indirect objects may be placed between verb and direct object. In both cases, the direct object is clearly case marked. This phenomenon is accounted for most readily if we conclude that case assignment is not restricted by adjacency in Korean. The absence of an adjacency requirement for case assignment leads to the assumption that case in Korean is in general inherent. Then what does the absence of structural case show regarding the VP constituent? If we consider structural case to be assigned by V only when the NP is a daughter of VP in English, we do not have to posit the VP node for case assignment in Korean. If these observations are right, positing the VP node in Korean would unnecessarily complicate the grammar, obscuring possibly simpler analyses.

5. As shown above, the debate concerning the presence of the VP node has not been resolved yet for adult grammar. The positive and negative evidence seems to be evenly divided. In this context, we propose one piece of positive evidence for VP in child grammar. In the next section, we will show why it is necessary to posit the VP node in child Korean by examining children’s systematic errors with the negative construction.

Korean has two negative constructions. One is what is often called "short form" or "pre-verbal" negation and the other is the "long-form" or "post-verbal" negation. The following sentences illustrate the differences.

(7) a. Suni-ka ka-ass ta.
   NOM go-past VE
   'Suni went.'

b. Suni-ka an ka-ass ta.
   NOM Neg go-past VE
   'Suni did not go.'

c. Suni-ka ka-ci anh-ass ta.
   NOM go-COMP NEG.verb-past VE
   'Suni did not go.'

Whether or not there are any semantic differences between the two types has been the source of some debate in the past (Cho 1975, Kuno 1980, Song 1982). Even though there seem to be speakers who draw a subtle distinction between the two, we will treat the two forms as synonymous except for a stylistic difference. The main syntactic difference between (7b) and (7c) is that the negative particle an precedes the verb ka ("to go") in (b) whereas in (c) a negative auxiliary verb is employed, preceded by an inflected form of the main verb. It is quite obvious that the post-verbal negation shown in (c) is more complex and is acquired much later by children. A longitudinal study by Choi and Zubin (1985) reveals that the preverbal form appears at around the age of 1;9 while the post-verbal form does not occur until about age 3;5.

What is interesting emerges in an elicitation study. When given sentences involving the post-verbal negation for repetition, three 2-year olds we have investigated invariably substitute the simpler pre-verbal counterparts for the post-verbal sentences. (8) is one such example.

(8) Adult: namu-e ollaka-ci anh-a
    tree-Loc climb-Com Neg-VE (post-verbal Negative)
    "(He) does not climb trees."

Child: namu-ui-e an ollak-a
    tree-Loc Neg climb-VE (pre-verbal negative)
    "(He) does not climb trees."

This substitution confirms the idea proposed by Slobin (1985) that "a separate rather than a bound morpheme" is preferred for clausal negation. Therefore, children acquiring English "
often move the negative operator outside of the verb complex or clause", as illustrated in such examples as *No do this* or *I no do this*. Even in languages where there is no separate negative particle such as Hungarian, Polish and Turkish, children often use a free morpheme instead of the correct bound inflected form. In Korean, where both constructions are possible, it is only natural that children should prefer the pre-verbal negation. In short, our 2 year olds are not yet ready to produce the post-verbal negation even for repetition even though all of them seem to extract the negative meaning out of the long form negative, thus confirming the widely accepted idea that comprehension precedes production in language acquisition.

What is directly relevant for our discussion in this paper is the preverbal negation in which the negative particle *an* or *mos* is placed immediately before the verb in adult grammar as shown in (7)

b. Our three youngest subjects manifest a strikingly different pattern in their spontaneous speech behavior in contrast to our older subject (3:10). Our four subjects are represented in (9). For each child, we collected one hour of speech in a natural setting, that is, recordings of conversations between the mother and child (sometimes with the investigator) in the home. Each session was tape-recorded and transcribed incorporating a written record made at the time of the recording in order to clarify the meaning of the interchange. Also we provided supplementary data by performing an experiment with each child involving the elicitation of negative constructions.

(9)  
H 2:4 MLU 1.58
J 2:2 MLU 2.23
M 2:6 MLU 3.65
S 3:10 MLU 5.53

The younger children, in contrast to our oldest subject, predominantly place the negative particle before the whole verb phrase rather than in the pre-verbal position as dictated by adult grammar. The relevant data are shown in (10).

(10)  
a. hyengcuni an ca
   NEG sleep ('Hyengcun does not sleep.')

   na an ttaylye
   I NEG hit ('I do not hit (him).')

   nwun an poye (passive)
   eye NEG see-passive ('The eyes are not visible.')

   ike an thulecye (passive)
   this NEG turn-on-passive ('This cannot be turned on.')

   acvumma mos poye(passive)
   aunt NEG see-passive ('Aunt is not visible.')

   Rubin-un an nappun ayki-ya
   TOPIC NEG bad Baby-be ('Rubin is not a bad baby.')

b. na an pap mek-e
   I NEG rice eat-VE ('I do not eat rice.')
kkoch-i an molay pwulle
flower-NOM NEG song sing ('The flowers do not sing a song.')

Hoyeni-nun an son takk-ko siphkuna
TOPIC NEG hand wash want-to
('Hoyen does not want to wash hands.')

an mamma mantul-e
NEG meal make ('(I) do not make meals.')

an phikul coa-hay
NEG pickle like ('(I) do not like pickles.')

an chong.sswa-ss-e
NEG gun fire-PAST ('(I) did not fire the gun.')

an wuywu ssot-ass-e
NEG milk spill-PAST ('(I) did not spill milk.')

c. an cal hay
NEG well do ('(I) do not do well.')

an manhi kuly-ess-e
NEG many draw-PAST ('(I) did not draw many pictures.)

mos cal tha
NEG well ride ('(I) do not ride (a horse) well.')

an mak ule
NEG much cry ('(I) do not cry much.')

na an cal hay
I NEG well do ('I do not do well.')

d. an Gemco ka
NEG go ('(I) do not go to Gemco.')

an yekise hay
NEG here do ('(I) do not do (that) here.')

e. ne way an hay
you why NEG do ('Why don't you do (that)?')

(10a) represents a case where the negative an is placed between the subject and the verb as it should be in the adult grammar. We observe that children place an always after the subject, if there is one, both in an active or passive sentence. This suggests that the negative placement is sensitive to grammatical functions rather than to thematic roles. (10b) shows cases where the negative is placed before an object. (10c) and (d) demonstrate its placement in relation to verbal adverbials like manner and place adverbs. These examples show that the negative particle is placed after the subject, but always before the elements that are conventionally regarded as belonging to
the verb phrase.

6. At this point, several possible analyses can be advanced, one of which is to say that the negative particle is placed after the subject, rather than before the VP. The other possibility is to claim that what is relevant is not syntactic categories but some discourse notions such as topic and comment. These two alternative analyses can be rejected on the basis of the sentence shown in (10e). (10e) is an example that involves a sentential adverb "way" ("why"). We observe that the child places the negative particle after the sentential adverb if there is one. This immediately rejects an analysis that views grammatical functions as a relevant factor. Therefore, "after the subject, if there is one" cannot be the right solution. Also, any analysis that regards the topic/comment distinction as a solution and places the negative particle after the topic rather than after the subject will be disconfirmed. It incorrectly predicts that the negative particle should precede the adverb 'why', which is new information and cannot be the topic of the sentence. What we find in (10e) is that the negative morpheme is placed after the subject and after the sentential adverb.

Then we can conclude that an analysis based on phrase structure rules provides a simpler account. Now we can approach the question of the existence of the verb phrase in the child grammar.

If we assume a VP node, then a very simple rule, in (11) can account for the data.

(11) \[ S \rightarrow (NP) (S-Adv) \text{Neg} \text{VP} \]

All that the child needs to know with regard to the negative placement is one simple rule of placing it before the VP. Then it automatically follows from (11) that Neg always precedes any verbal argument but follows anything else in the sentence.

On the other hand, if we do not assume a VP node, we would have an arbitrary phrase structure rule like the following.

(12) \[ S \rightarrow (NP)(S-Adv) \text{Neg} (NP)(PP)(Adv) V \]

Even if the phrase structure rule can be formulated as in (12), we find that it is not sufficient. It is necessary to stipulate that the first NP has to be the subject. The child has to know not only the linear order among the syntactic categories involved but also the grammatical function each category bears. In addition, no explanation can be given for why the child would place the Negative in that particular place, namely, after the subject and after the sentential adverb, as opposed to any other position in the sentence. Since there seems to be no constituent which comprises the subject and the sentential adverb but not the others, the negative could be placed in any position, which is very arbitrary and unrevealing.

Having argued for the VP constituent in child grammar, we would like to put forward some speculations as to why the child consistently places the preverbal negative marker before VP instead of any other possible slots in the sentence. For instance, why does the child not place the marker in the sentence initial position?

Slobin (1985) shows that cross-linguistically children indicate in their restructuring of parental languages that the scope of negation should be the proposition, as indicated by the verb or the clause as a whole, rather than any particular nonverbal lexical item within a clause. This universal tendency to put the negative in its logical scope in such a way to negate the whole proposition also seems to play a role in acquiring Korean.

Also relevant is the fact that in Korean "before the VP" is the unmarked place to put elements with sentential scope. Consider the following:

(13) a. na-nun ecey swikcey-lul cal ha-yess-ta.
   I-TP yesterday homework-ACC well do-PAST-VE
   'I did homework well yesterday.'
As shown in (13), a sentential adverb like *ecey ("yesterday") is placed before VP, while a verbal adverb like *cal ("well") is placed in the preverbal position in the unmarked case. As in (13b), verbal adverbs cannot be placed before VP. Even though (13c), where the sentential adverb is placed before the whole clause, is also grammatical, there is a subtle distinction between (13a) and (13c). (13c) is in most cases used to put some emphasis on the sentential adverb *ecey. Accordingly the sentence may imply some contrast such as yesterday, but not the other days. (13a), which we believe to be the unmarked order, does not denote such contrastive meaning. In sum, (13) clearly shows that sentential adverbs are placed before VP in the unmarked case. If this generalization is right, the negative particle *an, the scope of which is relevant to the proposition to the child, is naturally placed before a VP constituent until the child learns the right word order.

7. In the above discussion, we have argued that we need a VP constituent in order to capture the right generalization. Then the next question that arises is: how does this fact in child grammar bear on adult grammar? As shown in the first part of the paper, arguments for VP and those against VP in the adult grammar are almost evenly divided, so that the presence or the absence of VP cannot be easily established. In the midst of this controversy, can we use the fact that Child Korean has the VP constituent as an argument for the same constituent in the adult language? We think not. If extensive reorganization takes place in the course of language acquisition such that the initial analyses the child makes bear little resemblance to the adult knowledge (Schlesinger 1967, Bowerman 1974,1977, de Villiers et al., 1977), a fact about child language does not directly constitute evidence for adult language. However, we can safely assume that language acquisition is a process that is conservative, so that not any random revision is possible and that the potential for reorganization in the child's grammar is minimal, i.e. the child abandons the linguistic entities only when confronted with positive evidence against his initial hypotheses. If this hypothesis proves to be right, then this leads to an interesting prediction. If it turns out by independent evidence that there is no VP in the adult system, then claims can be made that syntactic categories such as VP are provided by Universal Grammar and that, depending on the kind of input language that the child receives, certain entities, though present in the child grammar, can be overridden as the child realizes those entities are not used in the adult system. Pinker's generalization (1984) that the child may very well restrict himself to a subset of the attested orders when a language has free constituent order sheds light on this. Korean children also use the SOV order most of the time: they hardly ever use OSV order, despite the occurrences of the SOV, OSV orders in parental speech. When they use only the SOV order, a VP constituent is consistent with the word order in their grammar, since the object is closer to the verb than the subject is on the configurational structure. However, as they acquire various word order possibilities and scope relations, they may realize that the concept of a VP constituent is no longer consistent with the word order facts of the adult language and thus abandons it.

REFERENCES


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