I

SOME CONTROL AGREEMENT PROBLEMS IN KOREAN: A GPSG ANALYSIS OF HONORIFIC EXPRESSIONS

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- 1.1. It is well known among Korean grammarians that the honorific particle attached after a verb stem cooccurs with an honorific subject:
- (1) harapuci-ka o-si-n-ta.

 Grandfather-SM come-HON-Present-Dec(larative sentence marker)

 (SM: Subject Marker, HON: Honorific Particle)

 'Grandfather is coming.'

The occurrence of the honorific particle -si depends on the honorific subject harapuci 'Grandfather.'

It is important to note, from the outset, that the honorific particle occurs only when the speaker chooses to look upon a particular individual as someone (or something) that deserves to be respected. If the speaker thinks otherwise, he is free from using the particle -si. In such a case, the non-honorific version of (1) is perfectly normal:

(2) harapuci-ka o-n-ta. 'Grandfather is coming.'

This sentence may be used either in case the speaker regards the grandfather in question as nonhonorific, or in case the speaker is noncommittal to the question of honorificity for some reason. On the other hand, one may use the honorific particle for anything whatsoever one chooses to believe to be honorific. For instance, a sentence like (3) may be uttered by those who happen

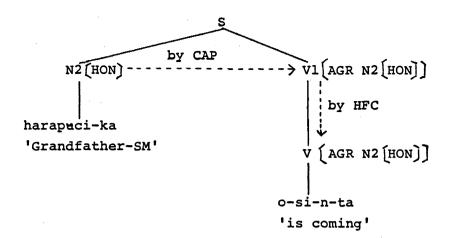
to believe that the rain is something that ought to be respected, while it may sound unnatural to those who do not have such a belief.

(3) pi-ka o-si-n-ta.
 rain come
'It is raining.'

But it is impossible to deny the honorificity of the subject noun as in a sentence like (1) or (3) once the honorific particle is used, nor is it possible to assert honorificity without using it as in a sentence like (2).

Clearly, the occurrence or nonoccurrence of the honorific particle reveals one's view about the world. Thus, on the one hand, it belongs to the realm of semantics and pragmatics of the Korean language, and on the other it is intricately interwoven with the syntax of the language. This paper attempts to investigate the syntactic-semantic interactions of honorific expressions, employing the Control Agreement Principle (CAP) propounded by the GPSG advocates (Cf. Gazdar and Pullum (1982), Gazdar, Klein, Pullum and Sag (1984), Pullum (1985).

1.2. The description of the honorific particle occurring in simple sentences like (1)-(3) is simple enough, and is accomodated nicely by the CAP under one assumption: there is a concord feature HONORIFIC assignable to a noun or to a verb. In each case of the three sentences above, the subject is a controller and the verb is its target in the sense of Gazdar et al (1984). Hence the concord feature of the controller agrees with that of the target by the CAP, as shown in the following tree:



The honorific feature of the head daughter V is transmitted from its mother Vl by the Head Feature Convention (HFC). (The HFC ensures that the head features of a mother be identical with those of the head daughter of the mother.)

- 2. Now consider complex sentences such as (4) and (5). We will see that the notion "subject" is not sufficient for the description of the honorific.
- (4) na-nin harapuci-eke yungu-ril paeu-si-ke ha-yuss-ta.

 I-TM Grandfather-DM English-OM learn-HON-COMP make-Past-Dec
 (TM: Topic Marker, DM: Dative Marker, OM: Object Marker)

 'I made Grandfather learn English.'
- (5) harapuci-ka na-eke yungu-ril paeu-si-kess-ta-ko

 me-DM English-OM learn-HON-Future-COMP
 yaksokha-si-uss-ta.

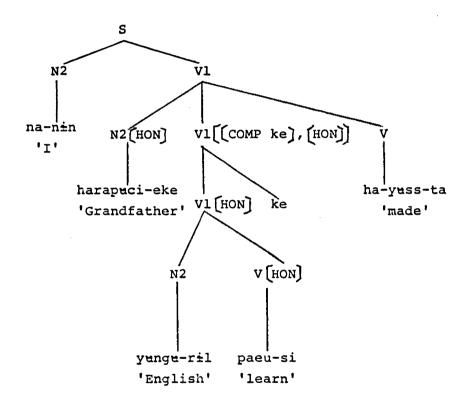
 promise-HON-Past-DEC
 'Grandfather promised me to learn English.'

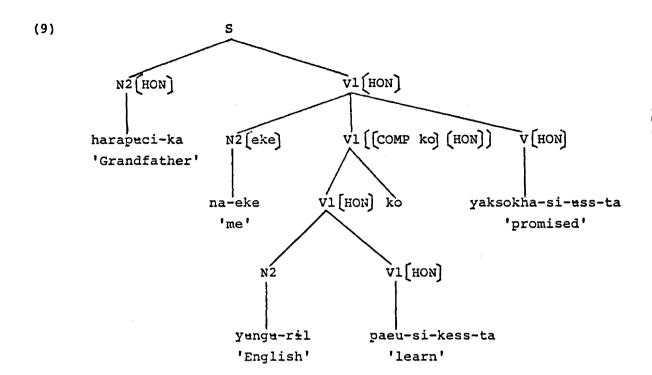
Assuming the following ID rules and translation rules, we will have the interpreted structures (8) and (9) for (4) and (5) respectively:

(6)
$$\langle V1 \longrightarrow N2[eke], V1[COMP ke], V; V'(V1')(N2') \rangle$$

(7)
$$\langle v1 \longrightarrow N2 [eke], V1 [COMP ko], V; V'(N2') (V1') >$$

(8)





In (8), the Dative NP <u>harapuci-eke</u> is the c-argument, and so it is the controller of the target VI COMP <u>ke</u>). Hence the CAP requires that the concord feature of the controller, i.e., (HON) agree with the honorific particle -si contained in the target.

The structure (9) exhibits a case in which the target has no controller in a local tree. The subject N2 harapuci-ka 'Grandfather' is the controller as usual (as in sentence (1)), which agrees with the V1 of the main sentence, which in turn agrees with the main verb yaksokhasiussta 'promised' by the HFC. Then in accordance with the semantic translation given in (7) (i.e., V'(N2')(V1')), V1(COMP ko is the target. But this target has no controller in the local tree, and therefore it must agree with its mother V1(HON) in control features.

The Control Agreement Principle as is given by Gazdar et al (1984) works quite well for the Korean sentences of the type we have observed so far.

3. There is a small class of verbs which require agreement between the verb and its complement, direct or indirect object. The honorific verb <u>tiri-ta</u> 'give' requires indirect object agreement. (The non-honorific counterpart is <u>cu-ta</u> 'give.')

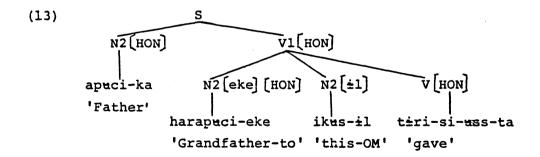
At first glance, what happens here is simply that the honorific verb may agree with its honorific indirect object. This is not quite correct, however. Consider further examples:

In all cases above, indirect objects are honorific, but that does not guarantee the occurrence of the honorific verb. The honorific verb <u>tiri-ta</u> occurs only in (12 c and d). In (11), where the indirect object is honorific, the honorific

verb cannot occur. The unacceptability of (ll c and d) comes from the fact that the indirect object apuci-eke 'Father', even though it is honorific by itself, is lower than the subject harapuci-ka 'Grandfather'. In 12 (c and d), the indirect object is higher than the subject, and therefore the honorific verb may occur. Thus it is clear that the honorific verb tiri-ta 'give' cooccurs with the honorific indirect object just in case it is more honorific than the subject.

This relative cooccurrence restriction cannot be handled by a subcategorization frame of any sort. It is incorrect to say that the honorific verb <u>tiri-ta</u> subcategorizes for an honorific indirect object, since the verb requires a subject which is lower in honorificity than the indirect object.

The CAP can handle this problem rather easily. Recall that the CAP is a feature instantiation principle. Its task is to control the distribution of agreement features once they ever appear on tree nodes, not to dictate the occurrence or non-occurrence of a certain category with a certain feature. Then what the CAP has to do about the verb-IO agreement phenomena will simply be this: if the feature HONORIFIC happens to be assigned to an indirect object for some pragmatic reason (for the reason concerning family hierarchy in the cases of (10-12)), then the CAP will set to work so that the indirect object and the honorific verb may agree with each other. For example, (12d) will have the following interpreted structure:



The indirect object <u>harapuci-eke</u>, on which [HON] has been instantiated, is the controller, and therefore it controls the honorific verb by the CAP, if it is assumed that V1 is assigned the semantic translation $V'(N2[\pm 1]')(N2[eke]')$. (Note that we need not be concerned about the question of how the honorific feature has been assigned to the indirect object here. Pragmatics will do that for us.) Furthermore, the subject <u>apuci</u> 'Father' has also been assigned [HON] and it agrees with the honorific particle $-\underline{si}$ by the interaction of the CAP and the HFC.

4. We now turn to double subject constructions, about which many controversies have been brought about. While seeking an adequate description of the honorific agreement phenomena involving double subject constructions, we will see that it lends support to one particular view of the constructions which I have argued for elsewhere: double subject constructions involve sentential predicates acting as functions applied to subject arguments. (Park (1982); Park (1983))

We will discuss the following type of sentences:

(14) a. harapuci-nin ton-i manh-isi-ta.

money much

'Grandfather has much money (or is rich).'

b. " him-i se-si-ta.

power strong

'Grandfather is strong.'

c. " pal-i nulp-isi-ta.

foot wide

'Grandfather has many connections.'

d. " kan-i kh±-si-ta.

liver big

'Grandfather is bold.'

e. harapuci-nin nun-i noph-isi-ta.

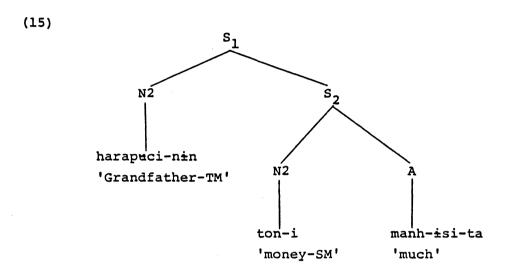
eye high

'Grandfather is highbrow.'

f. " ma±m-i nulp-±si-ta.
mind wide

'Grandfather is open-minded.' (or generous)

The view of the double subject constructions for which I have argued is illustrated as follows:



Thus N2 ton-i 'money-SM' and A manh-isi-ta 'much' constitute a complete sentence S2, which takes N2 harapuci-nin 'Grandfather-TM' as its subject to form the main sentence. Semantically, the embedded sentence acts as a functor and this functor takes the topic N2 harapuci-nin as its argument.

The question arises how a complete sentence plays the role of a functor or a predicate. There are several syntactic phenomena which seem to support the contention that S_2 acts like a predicative

adjective. I will cite two of them. First, the position of degree adjectives seems to indicate that S₂ has a property which ordinary adjectives have:

(16) harapeci-nin maeu ton-i manh-isi-ta.

very

'Grandfather is very rich.'

Normally, degree adverbs like <u>maeu</u> 'very' must occur directly before verbs which they modify:

(17) a. ??maeu harapuci-nin kunkangha-si-ta.
healthy

'Grandfather is very healthy.'

- b. harapuci-nin maeu kunkangha-si-ta.
- (18) a. ???maeu harapuci-nin nuku-eke-na incaha-si-ta.
 anyone gentle

'Grandfather is very gentle to anyone.'

- b. ??harapuci-nin maeu nuku-eke-na incaha-si-ta.
- c. harapuci-nin nuku-eke-na maeu incaha-si-ta.

The sentences (17a) and (18 a-b), in which degree adverbs are one or two words away from the adjectives they modify, all sound awkward if not entirely unacceptable. In contrast, in (16), in which the adverb is also separated from the adjective, is perfectly normal. This contrast may be readily accounted for if we assume that ton-i manh-isi-ta (i.e. S_2 in (15)) is an adjective.

Secondly, coordinate structures seem to lead us to the same conclusion. Consider the following sentence:

(19) harapeci-nin kenkangha-ko ton-i manh-isi-ta.

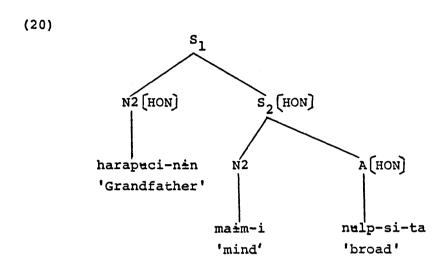
and

'Grandfather is healthy and rich.'

Following Gazdar et al (1984), we assume that two categories can be conjoined to become a predicate if there is an intersection of the head features of the two categories. This theory of coordination requires that conjoined categories need not be totally identical: it requires only partial identity. For instance, in a sentence like Kim is a sick man and suffering from fever., the conjunction of NP a sick man and VP suffering from fever is legitimate because the two categories share one common head feature PREDICATIVE: the intersection of the head features of the two categories is $\langle PRD + \rangle$. This is a sufficient condition for a category to be a complement (or a predicate) of the verb be in English. We may be able to treat (19) in a similar manner. Notice, however, that we can do this only if we assume that ton-i manh-isi-ta has the feature PREDICATIVE. Then both the AP kunkangha-ta 'healthy' and the sentence ton-i manh-isi-ta have the common feature PREDICATIVE, and therefore they may be conjoined.

Returning to the structure (15), if it is correct syntactically to take S_2 as adjective-like, we may safely assume that it belongs to the class of GENERALIZED PREDICATIVES in the sense of Gazdar et al (1984). They define generalized predicatives as elements of semantic type $\langle N2, N2 \rangle$ or $\langle N2, S \rangle$, functions from N2 type things to N2 type things or S interpretations. Saying that S_2 in (15) is a generalized predicative is tantamount to saying that it is a functor, since it takes N2 harapuci-nin and returns the whole sentence S_1 . This means that S_2 is the target and that N2 is the controller. Then the combination of the CAP

and the HFC works quite well for the description of the honorific agreement phenomena observed in (14). For example, (14f) will have the following interpreted structure:



N2[HON] <u>harapuci-nin</u> agrees with S_2 by the CAP, since the former is the controller and the latter the target, and S_2 [HON] agrees with A[HON] by the HFC.

So far so good. Now notice that A(HON) <u>nulp-isi-ta</u> 'wide' is also a generalized predicative. Hence it is a target, and N2 <u>maim-i</u> is its controller. By CAP, then, the two should agree with each other. But they do not; N2 <u>maim-i</u> 'mind' is not honorific, and we know that the honorific feature of the adjective agrees with its mother S_2 by the HFC. This is a case in which the HFC overrides the CAP. What accounts for this conflict?

One might speculate that if either one of the two subjects of a double subject construction is honorific it may agree with the honorific adjective and that the remaining subject, not being specified with respect to honorificity, does not affect honorific control agreement. But this is not the case, as is shown in the following type of sentences:

- (21) a. ???na-nin harapuci-ka coh-isi-ta.
 - 'I like Grandfather.'
 - b. Na-nin harapuci-ka coh-ta.
 - 'I like Grandfather.'
 - c. Harapuci-nin nae-ka coh-isi-ta.
 'Grandfather likes me.'

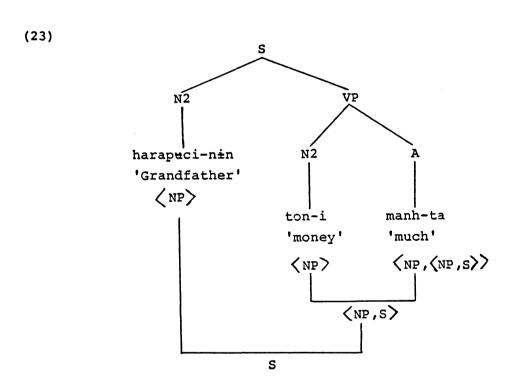
Obviously, there is only one controller in a double subject construction, and that is the first subject. The second subject plays no role in honorific control agreement.

Intuitively, the second subject seems to be integrated with the adjective to form a composite adjective. This is arguably a process of word-formation of some sort. Returning to (14a), for instance, we can say that the second subject ton-i 'money' and the adjective manh-ta 'much' are put together to constitute a new adjective ton-i manh-ta meaning simply "rich" in addition to its literal sense "Money is much." Similarly, in (14e), the second subject nun-i 'eye' and the adjective noph-ta 'high' are combined to form a composite adjective and it means something like "highbrow" with no literal sense in this case. Once having been combined in such a manner, they always, as a unit, express a certain property or attribute of the first subject. So the meaning of (14e) might be paraphrased roughly as "Grandfather has the property of being highbrow." To capture this intuition, I would venture to propose the following rule for such constructions:

(22)
$$\langle s \longrightarrow N2, AP; \lambda \mathcal{D}(N2'-AP' (\mathcal{D})) \rangle$$

This rule says that the second subject is indeed a subject syntactically and constitute a sentence by taking the adjective as its predicate, but semantically it is merely part of the function denoting a property, for instance "being rich" in (14a) and "being highbrow" in (14e). Being merely part of a composite adjective, the second subject ceases to be an argument functionally, and hence it cannot be a controller. Therefore, there is no agreement between the second subject and the adjective.

Alternatively, one might assign the adjective under consideration a semantic type $\langle NP, \langle NP, S \rangle \rangle$, which ordinary transitive verbs would have. Then the analysis tree of (14a) would look like this:



This structure is essentially what Kuno (1973) would assign to

sentences containing "transitive adjectives." The noun phrase ton-i is no longer a subject and so it is not a controller, and therefore there is no agreement between it and the adjective. However, the structure (23) seems to me to be counterintuitive, and furthermore, I can't go along with Kuno on his claim that the Japanese case marker -ga (=the Japanese counterpart of -i/ka as in ton-i 'money-SM' in (14a)) is an object marker rather than a subject marker. The structure shown in (23) cannot account for the fact that the phrase ton-i manh-ta 'money is much' is a full sentence on its own. So I reject this alternative. Nevertheless, I mention it here because it seems to have some merit in describing the facts about honorificity in double subject constructions.

5. Equipped with the feature instantiation principles, CAP and HFC, I have shown so far that we are able to successfully describe the facts about honorific agreement in Korean within the GPSG framework. We have seen that one needs not appeal to any transformation mechanisms to deal with complex sentences. We have also seen from the analyses of the honorific agreement phenomena that syntax and semantics interact with each other while each has its own domain strictly defined. The description of the Korean honorific particle given in this paper lends support to the GPSG claim that its Control Agreement Principle is universal.

Notes

- The CAP crucially depends on the notion of control.

 "...a category C is controlled by another category C' in a constituent C₀ (i.e., C is the target and C' the controller) if one of the following situations obtains at a semantic level: either C is a functor that applies to C' to yield a C₀, or else there is a control mediator C' which combines with C and C' in that order to yield a C₀." (Gazdar et al (1984), 5.3.) Based on the notion of control, the CAP may be given as follows: "if a potential agreement target C in a local tree has a controller C', then the value of the CONTROL freature of C must be equal to C'; otherwise, if C is a predicative category with no controller, then the value of the CONTROL feature of C must be equal to the value of the CONTROL feature of its mother, C₀." For more details and formal statements of the CAP, see Chapter 5 of Gazdar et al (1984).
- 2) For further discussion of this view of Kuno's and arguments against it, see my paper, Park (1983).

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