THE SEMANTIC AND PRAGMATIC NATURE
OF HONORIFIC   AGREEMENT IN KOREAN

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1. Introduction

This paper explores the Korean honorific systems and describes how semantic and pragmatic factors interact with overall grammatical structures of the language.[1]
I will argue that honorific agreement can only be treated properly in a grammar which is equipped with means of connecting syntactic devices with things in extralinguistic context, and that a theoretical framework for such a grammar is available from Sag and Pollard's Head-Driven Phrase Structure Grammar (HPSG hereafter), especially their Information-based Theory of Agreement. (Pollard and Sag (1988))

2. Referential Parameters and Agreement

The fresh idea presented in Pollard and Sag's information-based theory of agreement, which is characterized by interfaces between syntax, semantics and pragmatics, is that agreement features like person, number, and gender "are not part of the syntactic categories, but rather belong to the internal structure of the referential parameters (nominal indices) that uses of linguistic expressions introduce." (Pollard and Sag (1988: 8))
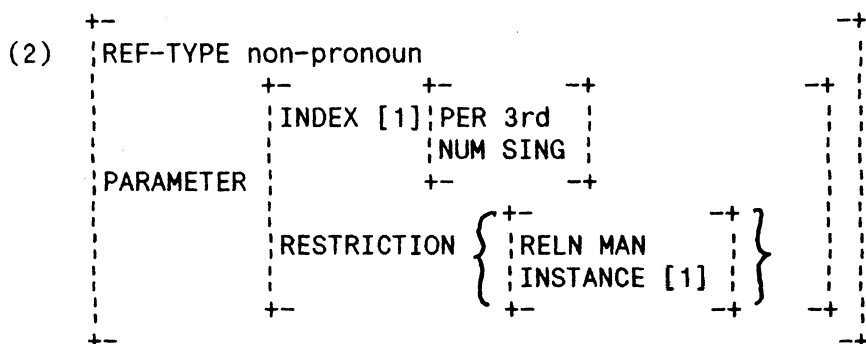Hence, for example, in the feature structure[2] for an English sentence like (1), on HPSG's information-based approach to subject-verb agreement with respect to person and number, the verb walks introduces a third person singular parameter for its subject and the nominal expression the man also introduces a third person singular parameter, and to describe the fact that the main verb agrees with the subject, it is required that (semantic) referential parameters for the two expressions in question be identical.

(1) The man walks.

The identity of the two parameters, which is guaranteed by a grammatical principle called the Subcategorization Principle in HPSG, makes the sentence well-formed both syntactica'lly and semantically. [3] (In grammatical situations where a head calls for complements, the Subcategorization Principle demands that information contained in the head's subcategorization requirements be identical to information in their complements that satisfy the requirements.)
What is new and interesting about referential parameters is that they can be understood as "abstract objects which function in discourse to keep track of the entities that are being talked about...." (Pollard and Sag (1988: 9)) Thus the notion of referential parameter is pragmatic as well as semantic in nature.

How can it be connected with syntactic mechanisms?   This can be
made possible by virtue of Pollard and Sag's original idea of
parameters (or indices): referential parameters have internal
structures.   In accordance with the theory of HPSG feature
structure, a referential parameter is an attribute and has as its
value a feature structure of type referential-object:
(The formal notation used in this paper is borrowed from
Pollard and Sag (To appear).)

```
        +-                                            -+
(2)     |REF-TYPE non-pronoun                          |
        |          +-          +-        -+      -+    |
        |          |INDEX [1]|PER 3rd   |       | |    |
        |          |         |NUM SING  |       | |    |
        |PARAMETER |          +-        -+      | |    |
        |          |                +-      -+ ]| |    |
        |          |RESTRICTION {|RELN MAN   | }| |    |
        |          |             |INSTANCE [1] |  | |    |
        |          +-             +-       -+ ]  -+ |    |
        +-                                            -+
```
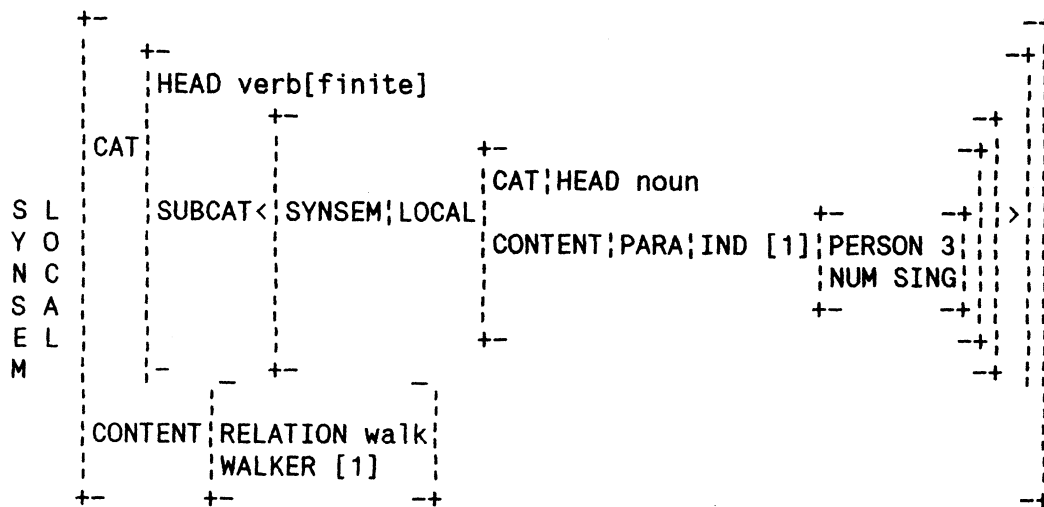
[REF-TYPE = Reference Type, PER = Person, NUM = Number,
SING = Singular, RELN = Relation]

The feature structure (2), a partial representation of the semantics
for the word man, represents a restricted parameter: a parameter
restricted to a one-place relation (or property) of being a man.
Note that the value of the INDEX attribute is just a feature
structure representing the information content "third person
singular" which will play a crucial role in subject-verb agreement.
What is important is that such an INDEX value may appear in various
levels of feature structures in either syntax or semantics
attributes, as a consequence of the operation called 'unification'
or 'structure sharing'. [4]   This mechanism makes it possible for
syntactic, semantic and pragmatic factors
to interact with one another across the three domains as well as
within each domain.

     Then the feature structure for the verb walks is represented
below:

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(3)

PHONOLOGY walks

```
      +-                                                                    -+
      |      +-                                                           -+ |
      |      |HEAD verb[finite]                                           -+||
      |      |             +-                                          -+  |||
      |CAT|              |                  +-                      -+|  |||
      |      |             |                  |CAT|HEAD noun         -+|  |||
S  L  |      |             |                  |                +-       -+||>||
Y  O  |      |SUBCAT<|SYNSEM|LOCAL|           |CONTENT|PARA|IND [1]|PERSON 3|||  |||
N  C  |      |             |                  |                |NUM SING|||  |||
S  A  |      |             |                  |                +-       -+||  |||
E  L  |      |             |                  +-                         -+|  |||
M     |      |-     +-         _|                                         -+  ||
      |      |                   |                                            |
      |CONTENT|RELATION walk|                                                 |
      |              |WALKER [1]  |                                           |
      +-     +-              -+                                         -+
```

[SYNSEM = Syntax-Semantics, CAT = Category,
SUBCAT = Subcategorization, PARA = Parameter]

Due to referential parameters of this nature, HPSG's information-based analysis of agreement can deal with agreement phenomena of all kinds in a strictly monotonic non-derivational fashion. The information-based approach to subject-verb agreement presented by Pollard and Sag (1988) checks whether identity between two referential parameters introduced by a subject noun and its predicate verb is guaranteed or not. To put it more simply, it checks whether information about agreement features of one expression (e.g. a subject noun the man in (1)) is compatible with that about another (e.g. the predicate verb walks); it does not move agreement features from one place to another (like various traditional transformational approaches), nor does it cause agreement features to flow from one node to another (as in Generalized Phrase Structure Grammar). Call those approaches involving either movement of features or inheritance of features procedural approaches.

Given simple cases like sentence (1), the two approaches will lead to the same result and appear to make no difference in theoretical value. But when we come to interestingly complex cases, important differences between the two approaches emerge. In addition to computational advantages gained from the information-based approach, Pollard and Sag (1988) cites abundant empirical data from various languages clearly showing that a procedural approach would lead to massive redundancies or wrong predictions where an information-based approach leads to optimal solutions. Let me introduce some of them that I find particularly persuasive and relevant in the treatment of Korean Honorific agreement.

(4) a. Je suis heureux. 'I am happy (masc.).'
    b. Je suis heureuse. 'I am happy (fem. singular).'
    c. Tu es heureux. 'You are happy (masc.).'
    d. Tu es heureuse. 'You are happy (fem.).'

Predicative adjectives in French agree with their subjects in gender and number: one must say "Il est heureux." (He is happy (masc.).), not "*Il est heureuse." (He is happy (fem.).) One must say "Ils sont petis." (They (masc.) are happy (masc.pl.).) and "Elles sont petites." (They (fem.) are happy (fem.pl.).), but not "*Elles sont petis." (They (fem.) are happy (masc. pl.).) If the subject noun is masculine, then the complement adjective must be the masculine form, and if the subject noun is feminine, the complement adjective must also be the feminine form.

Now there is only one first person singular pronoun "Je" and only one second person singular pronoun "Tu". In this situation, adjectives agree with the natural genders of the speaker and the hearer as we see in (4). To account for this situation, a procedural approach to agreement would have to posit two different first person singular pronouns (one for masculine and another for feminine) and two different second person singular pronouns (one for masculine and another for feminine), so that gender information could be transferred from subjects to complement predicative adjectives. This would be the only way of having correct forms of adjectives depending on gender.

In contrast, an information-based approach does not require such pronoun proliferation. First and Second person singular pronouns are simply unspecified with respect to gender in syntax, and then semantically, it is required that they be compatible either with masculine or feminine adjective forms.

A similar observation can be made about number agreement in Onondaga, an Iroquian language.

(5) a. cihá kahnyá-ha?
       dog barking-singular
       'The dog is barking.'
    b. cihá knihnyá-ha?
       dog barking-dual
       'The dogs are barking.'
    c. cihá kotihnyá-ha?
       dog barking-plural
       'The dogs are barking.'

Note that there are three different forms for the verb 'barking' depending on number and that there is only one form for the noun 'dog.' Thus on a procedural approach, the subject noun must be specified with respect to number: it is either singular, dual, or plural, and then such information must be moved to the main verb so that each of the three different verb forms may be distinguished. But again, such unrealistic redundancy can be avoided on an information-based analysis where there is only one form for a noun which is unspecified for number, and an information-based analysis requires that information from the verb and information from the subject be compatible--unified, using the term from HPSG,

a Unification Grammar. (Cf. Note 4.)
      Of particular interest in connection with Korean honorific
agreement is the phenomenon called "reference transfer" originally
pointed out by Nunberg(1977).

(6) a. The hash browns at table nine are/*is getting cold.
    b. The hash browns at table nine is/*are getting angry.

The subject noun phrase in (6b) refers to the person who ordered the
food, not the food. The referent of the noun expression has been
changed metaphorically from the food to the person. Under such
circumstances, the number of the noun is singular despite the
inherent plural morpheme and accordingly the singular verb form
agrees with it.
      Pollard and Sag (1988:10-14) provides many other similar
English data to show the same point as is shown by the metaphorical
reference transfers above (e.g., free relative constructions,
collective nouns, and singular plurals). The point is that
subject-verb agreement is determined by the meaning of each relevant
expression rather than by the inherent syntactic (or morphological)
form of the expression. We see that the subject noun the hash browns
in (6b) is re-interpreted as denoting a person rather than a dish
and therefore is interpreted as a singular noun, with which the
singular verb form agrees.
      All the data of this kind are readily accountable in an
information-based theory of agreement making use of referential
parameters since referential parameters, which have its own internal
structures, can be assigned to nouns regardless of their inherent
forms, and crucially, they can be shared by various attributes,
i.e., (referential) parameters for nouns or for subcategorization
requirements of verbs or adjectives appearing in various levels in
feature structures. Agreement depends on referential parameters
shared by agreement target and controllers, not by their inherent
formal markers. [5]
      This line of idea may be applied to Korean sentences like (7)
which have long puzzled Korean linguists, since an apparent
violation of a selectional restriction does not make them awkward.

(7) na-nun ccacangmyen i-ta.
    I-TM   Chinese noodle be-DECL
    'I am Chinese noodle' (meaning "I'd like Chinese noodle."
    when uttered in a Chinese restaurant.)

    [TM = Topic Marker, DECL = Declarative Sentence Ender]

The puzzling problem is: How can a person become a dish? However,
we can see that this question is put in a wrong way, when we
approach the problem from a different perspective, i.e., in terms of
referential parameters. The first person singular pronoun should
refer to the dish in question. Thus an information-based approach
will simply say that the value of the referential parameter for the
inherently first person pronoun has been re-assigned, i.e.,
transferred from first to third person and this re-assigned value is
unified with the third person value of the noun 'Chinese noodle'. In

this way, although semantic reinterpretation of a linguistic expression would pose a very difficult problem for a procedural analysis, it can receive a natural explanation on an information-based approach.

3.1 Subject-Verb Honorific Agreement

Now we turn to honorific agreement. First, it is important to realize that honorific agréement in Korean is not a grammatical agreement in its strict sense. (Cf. Note 1.) In this connection, I want to point out that former treatments of honorific agreement in the generative grammar framework, including my own analyses, were somewhat overstated. Observe the following sentences:

(8) a. kim sacang-i o-ass-ta.
       Kim President-SM come-PAST-DECL
    b. kim sacang-i o-si-ess-ta.
                     HON
    c. kim sacang-nim-i o-ass-ta.
            HON
    d. kim sacang-nim-i o-si-ess-ta.
       'President Kim has come.'

       [SM = Subject Marker, HON = Honorific Marker]

Here we have two kinds of honorific marker, nim for nouns and si for verbs. Neither nim nor si occurs in (8a), while both honorific markers occur in (8d). Hence verbs agree with subjects in terms of (non)honorificity in those two sentences, which illustrate typical instances of subject honorific agreement. The speaker of (8d) expresses his respect for the person denoted by the subject noun "President Kim," while the speaker of (8a) does not.

3.2 Inconsistent Honorific Agreement

Problems arise in (8b) and (8c). In (8b), only the verb honorific occurs and in (8c) only the noun honorific occurs. So the question is: Should such sentences be ruled out because of honorific agreement violations? My answer is that they should not. It would be an exaggeration to say that sentences like (8b) or (8c) are ungrammatical. It is only apparent that one might feel something wrong in those sentences. Putting aside the question of what is wrong for the moment, they are certainly Korean sentences. There is an obvious difference between cases in which sentences violate agreement rules in French, German, or English and Korean cases in which sentences like (8b) or (8c) violate honorific agreement conventions. For example, the following sentence fragments in French and German are all simply ungrammatical:

(9) a. Tu es ....
    b. *Vous es ....
    c. *Tu etes ....
    d. Vous etes ....

(10) a. Du bist ....
     b. *Sie bist ...
     c. *Du sind ....
     d. Sie sind ....

In these languages, honorific subject nouns and nonhonorific verb forms (and the other way around, too) cannot co-occur for grammatical reasons.

By contrast, the Korean sentences (8b) and (8c), which violate honorific agreement rules in the same way as the French and German counterparts do, are not ungrammatical in the sense that French (9b) and (9c) and German (10b) and (10c) are. In fact the Korean sentences may be used in a variety of circumstances. It might be the case that the speaker of (8b) considers the term kim sacang 'President Kim' as a sort of honorific term, honorific enough to ensure an honorific verb form. Or it might be that the speaker happens to take the verb form with si to be nonhonorific or something not sufficiently honorific that requires an honorific subject. Or it might also be the case that the speaker believes that using both the noun honorific and the verb honorific is flattering and that one is enough to express reasonable respect. Sentences like (8c) may also be used under certain similar circumstances. For example, for people who regard noun forms with nim as nonhonorific, (8c) is appropriate. Or the speaker of (8c) might habitually follow the use of nim as other people around him does, but he does not really respect the person denoted by the subject noun "President Kim."

The point is that honorific agreement is motivated by pragmatic factors, and therefore its violations do not result in ungrammatical sentences, unlike French or German where such violations bring about ungrammatical sentences. It seems that violations of honorific agreement can be exploited for certain pragmatic effects. In other words, inconsistent distribution of honorific signals should be understood as a way of expressing certain feelings or attitudes, not simply as violations of grammatical rules.

I think that an information-based theory of agreement can successfully deal with such flexible situations involving honorific agreement. As we saw above when we discussed agreement phenomena in other languages, referential parameters will play a crucial role in accounting for Korean honorific agreement. The description of the normal situations like (8a) and (8d) will be straightforward: it will be shown that the value of the referential parameter for the subject noun in each case is unified with the referential parameter appearing in the subcategorization requirement of the verb. Let us call situations like these instances of typical honorific agreement. While the honorific feature will be absent in the case of (8a), it will be present in the case of (8d), both in the feature structure for the noun "President Kim" and in the feature structure representing subcategorization requirement of the verb "came".

Concerning (8b) and (8c), which we will call "inconsistent" honorific agreement, what I want to suggest is that the situation is similar to the situation involving reference transfers which we observed in English sentences (6) and Korean sentence (7). It is assumed that the referent of the inherently honorific kim sacang-mim

'President Kim' can be transferred from honorific to nonhonorific and that the referent of the inherently nonhonorific can be transferred from nonhonorific to honorific.

First, we will examine the relevant feature structures involving typical honorific agreement, taking the sentence (8d) as an example. The SYNSEM¦LOCAL value for the honorific noun <u>kim sacang-nim</u> 'President Kim (HONORIFIC)' may be represented as follows:

(11)
```
+-                                                                    -+
|CATEGORY| [HEAD noun],[SUBCAT < >]                                    |
|                                                                      |
|CONTENT|PARA|INDEX [1]                                                |
|         +-                                                  -+       |
|CONTEXT|C-INDICES|SPEAKER [2]                                 |       |
|       |         / +-              -+  +-              -+ \   |       |
|       |         { |RELN naming      |  |RELN honoring|  }  |       |
|       |  |BACKGR { |NAMED [1]        |  |HONORER [2]  |  }  |       |
|       |         { |NAME kim sacang nim| |HONORED [1]  |  }  |       |
|       |          \ +-              -+ > |POLARITY 1   |  /   |       |
+-      +-                               +-          -+ -+ -+ -+
```

[BACKGR = Background,   C-INDICES = Contextual Indices]

The CONTEXT attribute contains information on indexicality and pragmatic background knowledge presupposed by the particular speaker who uses particular linguistic expression. The former is represented by the attribute C(ONTEXTUAL)-INDICES and the latter by the attribute BACKGROUND. So the information represented by the CONTEXT value in the feature structure (11) is roughly this: whoever uses the expression <u>kim sacang nim</u> shows respect for the person denoted by that expression (and the person who is called <u>kim sacang nim</u> holds the naming relationship with the name).

Next, the SUBCATEGORIZATION feature for the honorific verb <u>o-si-(ta)'</u> come (HONORIFIC)' will look like this:

(12)
```
+-                                                              -+
|                    +-                              -+         |
|                    |CAT|HEAD [noun, nominative,...]  |         |
|                    |                                 |         |
|                    |CONTENT|PARA|INDEX [1]           |         |
|SUBCAT< |SYNSEM|LOC |       +-                   -+   | >|
|                    |CONTEXT|C-INDICES|SPEAKER [2]    |         |
|                    |       |         +-        -+    |         |
|                    |       |BACKGR   |RELN honoring| |         |
|                    |       |         |HONORER [2]  | |         |
|                    |       |         |HONORED [1]  | |         |
|                    |       |         |POLARITY 1   | |         |
|                    |       +-        +-        -+ -+ |         |
|                    +-                                            |
+-                                                              -+
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(This type of formal notion for subcategorization information may sometimes be abbreviated as [SUBCAT <NP[nom] hon>]. Cf. (13) below.)

The verb o-si-(-ta) calls for a noun (phrase) to get saturated, i.e. to become a complete sentence, which is a syntactic requirement, and further it is required semantically and pragmatically that the speaker show respect for the person denoted by the noun subcategorized for by the verb. The way of checking whether this honorific requirement is satisfied or not (in other words, whether the feature structures (12) and (11) are compatible with each other in such a way that they meet the Subcategorization Principle) is simply to see if there is a feature structure of type honorific in the CONTEXT¦BACKGROUND value in either structure and to check whether the polarity values are identical or not. If the polarity values match, the two feature structures may be unified. If not, they may not be unified. For the feature structure representing (8d), of course, the polarity values match positively and the verb o-si-ess-ta 'came' agrees with the subject noun kim sacang nim 'President Kim' with respect to honorificity.

In the case of (8a), the polarity values will match negatively and so the sentence is an instance of nonhonorific agreement. What will happen to the feature structures for (8b) and (8c)? As we discussed a few paragraphs earlier, as a result of honorific re-interpretation of the noun phrase in question, there occur reference transfers from its original values to the ones that can match the subcategorization requirement of the verb in question. Thus, despite the seemingly nonhonorific noun form kim sacang in (8b), its parameter has been transferred to honorific. By uttering (8b) in a real situation, in the speaker's presupposition, the referential parameter for the noun is anchored to a person for whom he shows respect. To put it more plainly, the speaker presupposes that he respects the person denoted by the subject noun (for whatever reason it may be). It follows that the feature structure for the sentence (8b) will be the same as the feature structure for (8d), a structure resulting from unifying (11) and (12).

Next, on this view, the sentence (8c) is taken to be nonhonorific, being similar to (8a). This can be accounted for if it is assumed that the parameter for the seemingly honorific noun kim sacang nim 'President Kim' has been transferred from honorific to nonhonorific so that it is bound to be anchored to a person to whom the speaker does not show particular respect. We can imagine a situation in which sentences like (8c) may be used: without really having any respect for the person denoted by the noun kim sacang nim, the speaker habitually picks up the honorific marker nim and puts it after kim sacang because almost everybody around him calls the person that way. In any event, sentences like (8c) should not be ruled out as unacceptable or ungrammatical, and (8c) can in fact be described in the same way as (8a), a normal instance of nonhonorification, is.

Here, we turn to a procedural approach to agreement and consider how it can deal with (8b) and (8c). The approach is, as we characterized it earlier, not only syntactic in nature, but would it have to have a way of transmitting agreement features from subject

nouns to predicate verbs. For this reason, inconsistent honorific agreement poses a serious problem for this approach. So in (8b), the subject noun kim sacang would have to be syntactically (or morphologically) specified as honorific so that it can agree with the honorific verb form. This means that we should be forced to posit two different forms on the syntactic level, one for honorific and another for nonhonorific, for exactly one and the same lexeme. In the case of (8c), the morphologically honorific noun kim sacang-nim would have to be specified as nonhonorific. So in cases like this, too, we would have to have two different forms for one lexeme. Massive redundancy would result from this practice. We already observed problems of this nature in a procedural analysis's attempts to account for agreement phenomena in French and Onondaga. An information-based approach does not have to posit different syntactic forms for identical ambivalent expressions which can be used to refer to different things on different occasions; it only seeks to re-interpret them as is required semantically or pragmatically. Hence no such problem of redundancy arises.

3.3 Dative Honorification

So far we have discussed typical (like (8a) or (8d)) and non-typical inconsistent (like (8b) or (8c)) honorific agreement phenomena involving the honorific verbal suffix si. I have shown that an information-based theory of agreement like the one proposed by Pollard and Sag (1988) can cope with non-typical cases as well as typical ones. This theory can be extended to other types of honorific agreement in Korean quite efficiently. We will examine dative honorification and speech levels briefly.
Consider the following data on dative honorification:

(13) a. na-nun kim sacang-eykey kukes-ul cu-ess-ta.
      I-TM   Kim President-DAT it-ACC   give-PAST-DECL

      'I gave it to President Kim.'
    b. na-nun kim sacang-nim-eykey kukes-ul turi-ess-ta.
      'I gave it to President Kim.'   give (HONORIFIC)

The nonhonorific verb cu-ess-ta agrees with the nonhonorific dative noun phrase kim sacang-eykey, and the honorific verb turi-ess-ta with the honorific dative kim sacang-nim-eykey. So this fact about dative honorification must be reflected in the subcategorization list for each verb in much the samy way as in subject-verb honorific agreement:

(14) a. cu(-ta)
      [SUBCAT <NP[acc], NP[dative] nonhon, NP[nominative]>]
    b. turi(-ta)
      [SUBCAT <NP[accusative], NP[dative]hon, NP[nom]>]
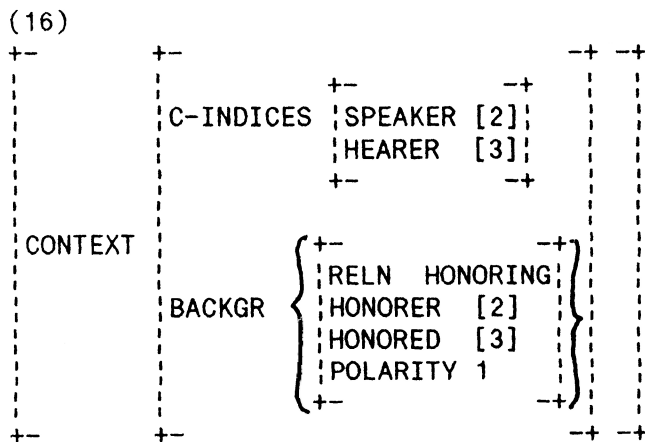
3.4 Speech Levels

It is one of the well-known features in Korean that sentences end with different sentence enders depending on sentence types and speech levels. Thus we have four types of sentence enders: declarative, interrogative, imperative, and propositive sentence enders, and each sentence type has different forms depending on speech levels. Speech levels are determined by contextual factors: who speaks to whom and what is the social relationship between the speaker and the addressee, in other words, which is higher in social hierarchy. (Social hierarchy is defined in various terms: age, family relationship, work place positions, and various other social classes.) In reality, there is an array of speech levels ranging from the highest to the lowest, but for an expository convenience, we will limit ourselves to only two levels in the present discussion: high and low speech level. High speech level sentence enders are used when the speaker is lower than the hearer and low speech level ones are used when the speaker is higher than (or equal to) the hearer. All the example sentences we considered above are low speech level declarative sentences, which end with the suffix -ta as in (15a).
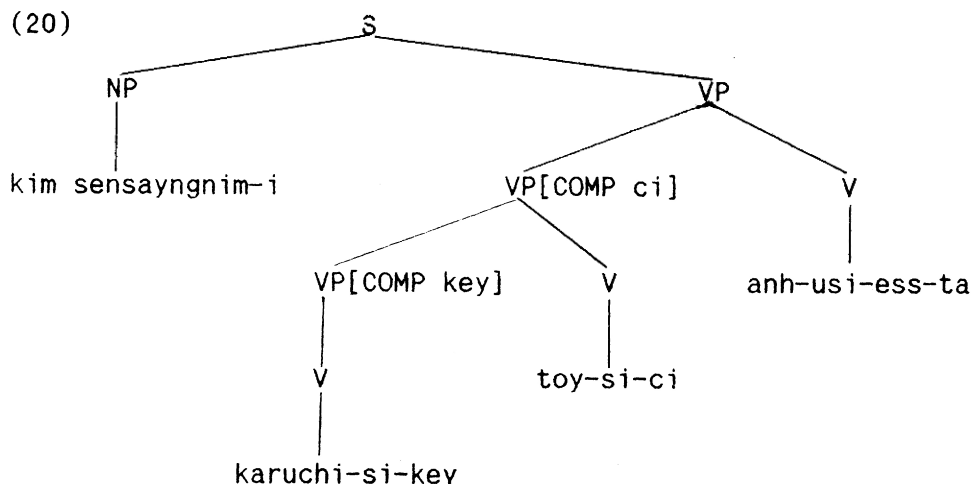
(15) a. kim sacang-i o-n-ta.
　　 b. kim sacang-i o-pni-ta.
　　　　 'President Kim is coming.'

Note that (15b) ends with the suffix pnita, which is a high speech level declarative sentence ender. The speaker of (15a) is higher in social hierarchy than the hearer, while the speaker of (15b) is lower than the hearer.

This type of contextual information can naturally be contained in CONTEXT attributes in the attribute value matrix (AVM) representation. I argue that speech level information is one of the BACKGROUND presuppositions shared by the speaker and the hearer of a given sentence. For example, the following infon must be included in the representations of verbs used with high speech level declarative sentence enders like pnita:

(16)
```
+-            +-                        -+ -+
|             |            +-       -+  |  |
|             |C-INDICES  |SPEAKER [2]|  |  |
|             |           |HEARER  [3]|  |  |
|             |            +-       -+  |  |
|             |                         |  |
|CONTEXT      |           ⎛+-        -+⎞ |  |
|             |           |⎜|RELN HONORING|⎟|  |
|             |BACKGR   ⎨ |HONORER [2]  |⎬|  |
|             |           |⎜|HONORED [3]  |⎟|  |
|             |           |⎜|POLARITY 1   |⎟|  |
|             |           ⎝+-        -+⎠ |  |
+-            +-                        -+ -+
```

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The only difference between this infon and that for a low speech
level declarative sentence ender appearing in (15a) will lie in the
value of CONTEXTUAL-INDICES: in the infon for the latter case, the
value of SPEAKER and that of HEARER would be [3] and [2],
respectively, so that the situation in which the hearer is lower
than the speaker could be accounted for.

3.5 Consistent and Inconsistent Agreement in Complex Verbs

Finally, before we conclude this paper, we will turn our
attention to multiple occurrences of the honorific marker si in a
sentnece:

(17) a. kim sacang nim-i o-si-ci anh-usi-ess-ta.
                        come-HON-COMP not-NON-PAST-DECL
         'President Kim did not come.'

     b. kim sacang nim-i o-si-key toy-si-ess-ta.
                        COMP become
        'It turned out that President Kim came.'

     c. kim sacang nim-i o-si-ko kyeysi-n-ta.
                        COMP be (HON)-PRESEST-DECL
        'President Kim is coming.'

     d. kim sacang nim-i ku os-ul ib-e/*ib-usi-e po-si-ess-ta.
                        the clothes-ACC wear-COMP try
        'President Kim tried (to wear) the clothes.'

        [COMP=Complementizer]

(18) kim sacang nim-i kwantayha-si-ko chincelha-si-ko
                      generous-HON-and kind-HON-and
     cengcikha-si-ta.
     honest

     'President Kim is generous and kind and honest.'

The sentences in (17) contain complement clauses and the honorific
marker si occurs both in complement verbs and in main verbs. In
(18), a coordinate construction, all the three conjuncts contain si.
In general, as many honorific markers may occur as there are verbs
or adjectives in a sentence. [6]   For instance, if we have two
complement clauses as in (19) below, we may have three occurrences
of si, two in the complement verbs and one in the main verb.

(19) Kim sensayngnim-i i ben   hakki-ey karuchi-si-key
     Kim teacher-NOM   this timeterm-in teach-HON-COMP

     toy-si-ci   anh-usi-ess-ta.
     become-HON-COMP not-HON-PAST-DECL

     'Mr. Kim did not (be)come to teach in this term.'

Assuming that auxiliary verbs <u>anh-ta</u> 'be not' and <u>toy-ta</u> 'become' are main verbs, the structure of (19) may be represented schematically as follows:

(20)

```
                              S
          _____
         NP                                       VP
          |                              _____
  kim sensayngnim-i           VP[COMP ci]                 V
                              _____                  |
                         VP[COMP key]   V           anh-usi-ess-ta
                              |          |
                              V      toy-si-ci
                              |
                        karuchi-si-key
```

Agreement between the subject noun and the main verb is as usual, and the honorific markers in the complement verbs can be explained if the following assumptions are made: complement verbs agree with their controllers and the controllers are the same as the subjects of the matrix clauses.

So far so good. However, problems arise in cases where one or more honorific markers do not show up, thus resulting in inconsistent honorific agreement:

(21) a. ... karuchi-si-key toy-si-ci anh-usi-ess-ta. (=(20))
     b. ... karuchi-si-key toy-si-ci anh-ass-ta.
     c. ... karuchi-si-key toy-ci   anh-ass-ta.
     d. ... karuchi-key   toy-si-ci anh-ass-ta.
     e. ... karuchi-key   toy-ci   anh-usi-ess-ta.
     f. ... karuchi-key   toy-si-ci anh-usi-ess-ta.
     g. ... karuchi-si-key toy-ci   anh-usi-ess-ta.

Out of the three potential positions for the honorific marker <u>si</u>, three options are available: (i) all the three positions can actually be filled with it, (ii) only any two of the three can, or (iii) only any one of the three can. All the sentences resulted from this are acceptable in one way or another.

I offer two tentative approaches to this problem. First, it is possible to view the auxiliary verbs like <u>anh-ta</u> 'not' and <u>toy</u>' become' as verbs which take no subjects, not as control verbs as is shown in (20). Under this analysis, it is a natural consequence that the honorific marker cannot occur in such verbs because there are no objects to be respected as far as the actions denoted by the auxiliary verbs are concerned. In this way, the auxiliary verbs without the honorific marker in sentences (21 c, d, e, and g) can be accounted for. For example, the structure of (21c) can be reanalyzed as follows:
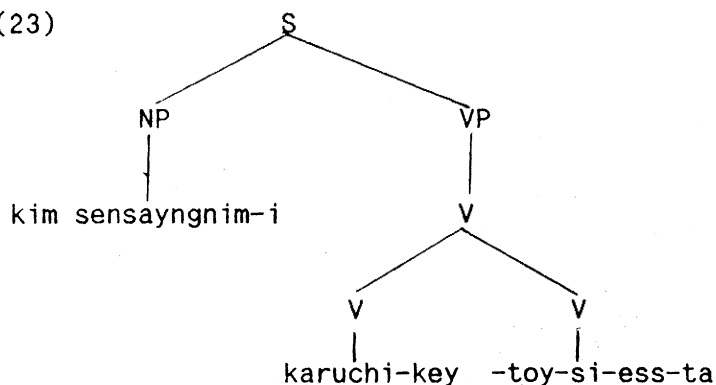
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(22)

```
                          VP
                        /    \
              VP[COMP ci]      V
              /      \         |
      S[COMP key]     V      anh-ass-ta
          |           |
  kim sensayngnim-i  toy-ci
  karuchi-si-key
```
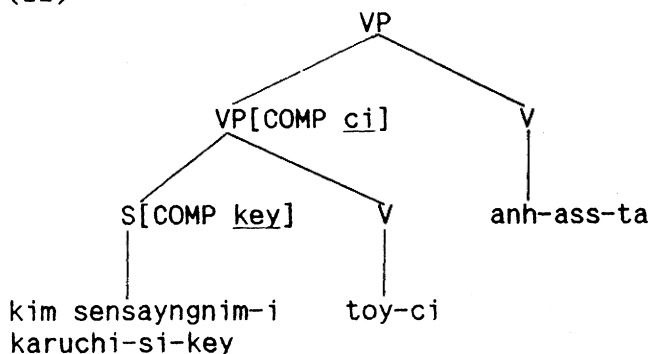
The honorific verb karuchi-si-key 'teaches' agrees with the honorific subject kim sensayngnim-i 'Mr. Kim' and the two nonhonorific verbs occur simply because there are no honorific subjects for them to agree with.

    Next, how can we describe sentences like (21d) or (21f) where the main verb (karuchi-ta 'teach') is nonhonorific and the auxiliary (toy-si-ta 'become' or anh-usi-ta 'not') is honorific? There must be an honorific subject for the auxiliary verb to agree with, on the one hand and on the other hand, whatever the subject may be, it should not be the subject of the nonhonorific main verb. For this reason, the analysis of the sort shown in (22) does not work since subjects are not available there. The type of analysis shown in (20), where all the verbs are forced to agree with the honorific subject, explicit or implicit, does not work, either. Thus I suggest a third approach in which the notion of reanalysis is employed. What I suggest is that the combination of a nonhonorific verb and an honorific auxiliary verb is reanalyzed as one verb (i.e. a kind of compound), presumably at the level of morphology. [7] Then this verb is assumed to take only one honorific marker rather than two, because it has now become one verb, and to agree with the honorific subject. This is shown in (23).

(23)

```
                    S
                  /   \
               NP      VP
               |       |
    kim sensayngnim-i  V
                      /  \
                     V    V
                     |    |
            karuchi-key  -toy-si-ess-ta
```

    On this approach, it is assumed that the axiliary verbs like toy-ta 'become' and anh-ta 'not' are ambiguous syntactically and lexically, either interpreted as ordinary auxiliary verbs occurring with subjects, explicit or implicit, as in (20) or interpreted as subjectless verbs as in (22). It seems uncertain whether there is also semantic ambiguity matching syntactic ambiguity. The question

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is left open. It seems hard to deny that there is something artificial in this syntactic approach.

My second alternative is discourse-based. It is admitted that all the sentences in (21) have basically the same syntactic structure (20). Then it is assumed that occurrences of the honorific marker are left entirely optional in syntax, and so for example, one, two, or three honorific markers may occur in any possible positions for the honorific markers in (21) and all the sentences resulting from such operations are equally well-formed syntactically. The question of how many honorific markers actually occur is taken to be a matter of discourse. The rule for this is simple enough: the more honorific markers, the more respect for the person denoted by the subject noun of a sentence is expressed.

I leave it an open question which of those alternative solutions has to be chosen. I have no convincing evidence which leads us to support either one of the two, rejecting the other. It may turn out true after all that we need both a syntactic and a discourse-based approach in order to establish an optimal theory of honorific agreement.

4. Concluding Remarks

I believe I can highlight two things out of what we have discussed in this paper: one thing about data on Korean honorific agreement and another about linguistic theory. First, as far as data are concerned, I have indicated that what I call inconsistent honorific agreement is a commonplace, rather than an exceptional, phenomenon. It is certainly misleading to label ungrammatical or unacceptable sentences or utterances containing instances of inconsistent honorific agreement. I have tried to answer the question of why such inconsistent agreement is brought about, from both a syntactic and a pragmatic perspective.

Secondly, I think I have shown that many of the problems concerning honorific agreement are beyond the scope of sentence grammar. It has been abundantly clear that honorific agreement cannot be handled solely within the boundary of syntax. Honorificity is crucially linked to the speaker's knowledge about the world in which he lives: the speaker's attitude toward particular objects being talked about and the speaker's social relationship with his hearer. Honorific agreement can be dealt with adequately only in a truly integrated theory of language accommodating interfaces among syntax, semantics and pragmatics in a flexible manner. The present paper is an effort to show that an information-based theory of agreement couched in HPSG is a sound and solid starting ground on which we seek to establish such a truly integrated theory, particularly by virtue of its precisely defined formal devices connecting syntactic structures and pragmatic factors like referential parameters.

NOTES

1. According to Ikeya (1985), there have been opposing views on honorific agreement among Japanese linguists: while the traditional grammarians consider it "to be quite outside the domain of grammar," the new generative grammarians "consider the phenomenon as purely grammatical." My previous position (Park 1985) and of course Ikeya's position belonged in the latter. However, my present position is in a kind of middle ground in the sense that I pursue the problem from a pragmatic perspective as well as from syntactic-semantic perspectives. This should be understood as a step forward for a better theory of honorific agreement, not merely as eclectic.

2. In HPSG, all kinds of linguistic units, be it syntactic categories, words, phrases, semantic notions, phonological units, or what not, are represented by features. Theses are called feature structures. A feature structure is a set of features specifications. A feature specification is made of a feature or attribute and its value, and is represented as what is called "attribute value matrix (=AVM). (See (1), for example.) An attribute may have as its value an attribute value matrix, and therefore AVMs are recursive. By virtue of this recursive property of AVMs, they can represent highly complex structures. (See Pollard and Sag (1987).)

3. Subcategorization Principle is one of the five well-formedness principles in HPSG: Head Feature Principle, Binding Inheritance Principle, Adjunct Principle, and Semantics Principle. It is akin to Categorial Grammar's cancellation operation in building up trees: Subcategorization requirements of a mother are obtained by eliminating from subcategorization requirements of its head daughter what have been supplied as complements to satisfy the requirements of the head daughter.

4. The notion of unification is of central importance in HPSG. Suppose A and B are features structures and they happen to describe one and the same thing in a different way, i.e., each feature structure represents a partial characterization of the thing. Then we can combine A and B to obtain a new feature structure C which contains all the information of A and B, but nothing else. We call C the unification of A and B. Under these circumstances, it is always the case that one or more features in have identical values, or they share the same value. The sharing of the value is indicated by multiple occurrences of numerical tags like [1], [2], [3], etc. Grammars which employ unification as core operations are recently called "unification-based grammars" or simply "unification grammars". Besides HPSG, other well-known instances of unification grammar includes LFG, GPSG, Categorial Grammar, and several computer-oriented grammars like PATR II and Definite Clause Grammar. See Pollard and Sag (1988), Chapter 2 and Shieber (1986).

5. Pollard and Sag (1988) warn us against a purely semantic theory of agreement. Cf. "The ship lurched, and then she righted herself/it righted itself/*she righted itself/it righted herself." Not only semantic, but also syntactic factors must be taken into consideration.

6. The only exception in this regard is (16d), where the honorific marker cannot occur in the complement verb (i.e., *ib-usi-e). The reason for this is, however, purely morphological: the complementizer -e does not allow suffixes of any kind to come before it. For example, tense markers cannot occur with -e: *ib-ess-e po-ass-ta. Therefore, the exception has nothing to do with honorification.

7. We might appeal to a type of word formation rules proposed by Kim (1988), by which an adjective him-seyta 'be strong' is derived lexically from a clause him-i sey-ta 'power is strong.' However, this is only my tentative suggestion.

REFERENCES

Barwise, J. and J. Perry (1983). Situations and Attitudes, Cambridge, Mass.: MIT Press

Gazdar, Gerald, Ewan Klein, Geoffrey Pullum, and Ivan Sag (1985). Generalized Phrase Structure Grammar, Cambridge: Blackwell.

Ikeya, Akira (1985). "Japanese Honorific Systems in Generalized Phrase Structure Grammar Framework." Ik-Hwan Lee (ed.), Seoul Papers in Formal Grammar Theory-- Proceedings of the Third Korean-Japanese Joint Workshop (December, 1983).

Kim, Taehyung (1988). "An Analysis of Korean Compound Words." Eung-Jin Baek (ed.), Papers from the Sixth International Conference on Korean Linguistics, International Circle of Korean Linguistics and Department of East Asian Studies, University of Toronto.

Kim, Yong-Bum (1989). "A GPSG Approach to Korean Honorifics." Susumu Kuno et al. (eds.), Harvard Studies in Korean Linguistics II.

Lee, Kiyong, Byung-Soo Park and Hong-Bin Im (1989). "Construction of a Lexicon-driven Grammar Model and Its Application to English-Korean Machine Translation." Systems Engineering Research Institute, Korea Institute of Science and Technology.

Nunberg, G. (1977). The Pragmatics of Reference. Ph.D. Dissertation, CUNY Graduate Center.

Park, Byung-Soo (1985). "Some Control Agreement Problems in
    Korean: A GPSG Analysis of Honorific Expressions."
    Susumu Kubo (ed.), <u>Proceedings of '84 Matsuyama Workshop on</u>
    <u>Formal Grammar</u>. The Logico-Linguistic Society of Japan, Tokyo
    University of Science.

--------------- (1988). "Sentential Predicates in Generalized
    Phrase Structure Grammar: An Analysis of Korean Double
    Subject Constructions." Korean Linguistics, Vol. 5,
    International Circle of Korean Linguistics.

--------------- (1988). "How to Handle Korean VERBAL Suffixes:
    A Unification Grammar Approach." Eung-Jin Baek (ed.),
    <u>Papers from the Sixth International Conference on Korean</u>
    <u>Linguistics,</u> International Circle of Korean Linguistics and
    Department of East Asian Studies, University of Toronto.

Pollard, Carl and Ivan A. Sag (1987). <u>Information-Based Syntax</u>
    <u>and Semantics, Volume 1: Fundamentals</u>, Center for the Study
    of Language and Information, Stanford University.

----------------------------- (1988). "An Information-Based
    Theory of Agreement." Center for the Study of Language and
    Information Report No. CSLI-88-132.

----------------------------- (To appear). <u>Information-Based</u>
    <u>Syntax and Semantics, Volume: Topics in Binding and Control.</u>

Pullum, Geoffrey K. (1985). "Logic, Syntax, and Grammatical
    Agreement." Susumu Kubo (ed.), <u>Proceedings of '84 Matsuyama</u>
    <u>Workshop on Formal Grammar,</u> The Logico-Linguistic Society of
    Japan, Tokyo University of Science.

Sag, Ivan A. and Carl Pollard (1989). "An Integrated Theory of
    Complement Control." Paper presented for the Kyung Hee
    International Conference on Linguistic Studies, at the
    Kwangneung Campus of Kyung Hee University, Seoul, Korea.

Shieber, Stuart M. (1986). <u>An Introduction to Unification-Based</u>
    <u>Approaches to Grammar.</u> Center for the Study of Language and
    Information Lecture Notes No. 4, Stanford University.