Grammatical Interfaces in Korean Honorification: A Constraint-based Perspective

Jong-Bok Kim [*] [†]

Kyung Hee University

Jong-Bok Kim. 2015. Grammatical Interfaces in Korean Honorification: A Constraint-based Perspective. *Language and Information 19.1*, 19–36.   Honorific agreement is one of the main properties in languages like Korean, playing a pivotal role in appropriate communication. This makes the deep processing of honorific information crucial in various computational applications such as spoken language translation and generation. This paper shows that departing from previous literature, an adequate analysis of Korean honorification needs to involve a system that has access not only to morpho-syntax but to semantics and pragmatics as well. Along these lines, this paper offers a constraint-based HPSG analysis of Korean honorification in which the enriched lexical information tightly interacts with syntactic, semantic, and pragmatic levels for the proper honorific system.   (**Kyung Hee University**)

1. Basic Properties of Honorific Agreement

1.1 Subject Agreement

Honorification, one of the main features of spoken language in Korean, plays a key role in proper and successful verbal communication (see, among others, Chang 1996, Sohn 1999, and Choe 2004). The Korean honorific system basically requires that when the subject is in the honorific form (usually with the marker *-nim*), the predicate also be inflected with the honorific form *-(u)si* as illustrated in a1:

(1) a. sensayng-nim-i   wus-usi-ess-e
         teacher-HON-NOM smile-HON-PST-DECL
         'The teacher smiled.'

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b. #sensayng-nim-i   wus-ess-e
teacher-HON-NOM smile-PST-DECL
'The teacher smiled.'

Examples like a1 are most natural in the sense that the subject agrees with the matrix verb with respect to the honorific information. However, those like b1 are in disagreement between the two and may be used when the speaker does not honor the referent of the subject (marked by #).

Considering that agreement disconcord can be used in a limited context, one may assume honorific agreement in Korean is purely pragmatic. This pragmatic direction has led literature to assume that using the *-nim* and *-si* form of verbs is a matter of gradience and appropriateness rather than grammaticality (see, among others, Chang 1996, Pollard and Sag 1994, Lee 1998, Lee and Ramsey 2000, Choe 2004). However, one key property that has often been ignored is that the honorific agreement must be observed when the subject is non-human as illustrated by the examples in 2 (Sohn 1999, Kim et al. 2006):

(2) a. cha-ka   o-(*si)-ess-e
cha-NOM come-HON-PST-DECL
'The car came.'

b. kwukhoy-ka   ku pepan-ul simuy-ha-(*si)-ess-e
congress-NOM the bill-ACC review-do-HON-PST-DECL
'The congress reviewed the bill.'

If we rely only on pragmatic information, we would have difficulties understanding why unlike the disagreement data in b1, disagreement cases like 2 are hardly found in real language usages. That is, as given in the following table that summarizes the agreement patterns in the language, the grammar needs to rule out only the fourth disagreement pattern in which the honorific predicate combines with a nonhonorific subject.[1]

In addition, there are agreement-sensitive syntactic phenomena such as auxiliary verb constructions (see Choi 2010, Kim 2012):

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[1] As for the fourth disagreement pattern, there may be some exceptions when the subject NP is a lexically honored one or is coerced as an honored noun.

(i) a. taythonglyeng-i o-si-ess-e
president-NOM   come-HON-PST-DECL
'The president came.'

b. tongsayng-i   o-si-ess-e
younger.brother-NOM come-HON-PST-DECL
'My younger brother came.'

Nouns like *taythonglyeng* are lexically marked with the positive HON feature. As a reviewer points out, more complicated cases are like (ii) in which the subject noun is non-honored but the verb is honored. Such a case may be uttered when the speaker wants to emphasize the fact that the nonhonored subject (to the speaker) is in a socially-higher position compared to the addressee.

Patterns	Subject	Predicate	Usages
Agreement	[HON +]	[HON +]	OK
Agreement	[HON −]	[HON −]	OK
Disagreement	[HON +]	[HON −]	limited
Disagreement	[HON −]	[HON +]	hardly used

[Table 1] Usages of the Agreement Patterns

(3) a. sensayng-nim-i   nolay-lul pwulu-si-ci   anh-(usi)-ess-e
       teacher-HON-NOM song-ACC sing-HON-CONN not-HON-PST-DECL
       'The teacher did not sing a song.'

   b. sensayng-nim-i   ton-ul   mo-(*usi)-e   twu-si-ess-e
       teacher-HON-NOM money-ACC save-HON-CONN hold-HON-PST-DECL
       'The teacher saved money (for rainy days).'

   c. sensayng-nim-i   nolay-lul pwulu-si-na   po-(*si)-ta
       teacher-HON-NOM song-ACC sing-HON-CONN seem-HON-DECL
       'The teacher seems to sing a song.'

As seen from the examples, the subject is honored in each case, but there are differences in the appearance of the honorific suffix. In a3, the honorific marker is optional with the auxiliary *anh-* 'not'. In b3 the honorific marker can appear only on the auxiliary verb *twu-* 'hold' while in c3 the marker cannot occur on the auxiliary *po-* 'seem'. Such subtle differences can we hardly attribute to pragmatic factors. A more feasible analysis seems to be a hybrid analysis in which both syntactic and pragmatic information interact tightly in licensing honorific agreement.[2]

1.2 Addressee Agreement
Matters become more complicated when we consider the agreement triggered by different types of verbal endings. Korean has at least two different endings, depending on the honoring relationship between speaker and addressee (Chang 1996, Choe 2004):

(4) a. haksayng-i   ttena-ss-e/ttena-ss-eyo
       student-NOM leave-PST-DECL
       'The student left.'

   b. sensayng-nim-i   ttena-si-ess-e/ttena-si-ess-eyo
       teacher-HON-NOM leave-HON-PST-DECL
       'The teacher left.'

As shown by the examples, the verbal endings *-e* and *-(e)yo* are different with respect to addressee agreement. The 'respectful declarative' ending *-eyo* is used when the social status of the addressee is higher than that of the speaker. The

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[2] Many of the ideas here are further development from Kim et al. (2006).

data imply that not only the speaker but also the addressee plays a role in proper communication strategies with respect to the honorification system.

## 2. Honorification in a Constraint-based Grammar

A closer look at the honorific phenomena of the language suggests that an adequate theory of honorification aiming for integration into a proper communication system requires not just complex pragmatic information but also morpho-syntactic information. This section develops an HPSG analysis which models the linguistic knowledge in terms of a well-defined type-feature structure system with proper constraints on each type (see Kim 2004a, Kim et al. 2006, Kim and Sells 2008b).

2.1 Lexical Information and Subject Agreement

The starting point of our analysis is to assume that a nominal with *-nim* and a verbal with *-(u)si* bear the head feature HON. This is supported by the contrast in the following:

(5) a. [[sensayng-**nim**-i manna-si-n] haksayng-i] ttena-(*si)-ess-e
teacher-HON-NOM meet-HON-MOD student-NOM leave-HON-PST-DECL
'The student that the teacher met left.'

b. [[haksayng-i manna-n] sensayng-**nim**-i] ttena-**si**-ess-e
student-NOM meet-MOD teacher-HON-NOM leave-HON-PST-DECL
'The teacher that the student met left.'

As seen in a5, the honorific noun *sensayng-nim* 'teacher-HON' in the nonhead position does not affect the matrix verb's honorific information. Meanwhile, b5 indicates that it is the honorific information of the head noun that agrees with that of the matrix verb. This is further represented by the following simplified tree structure:

(6)
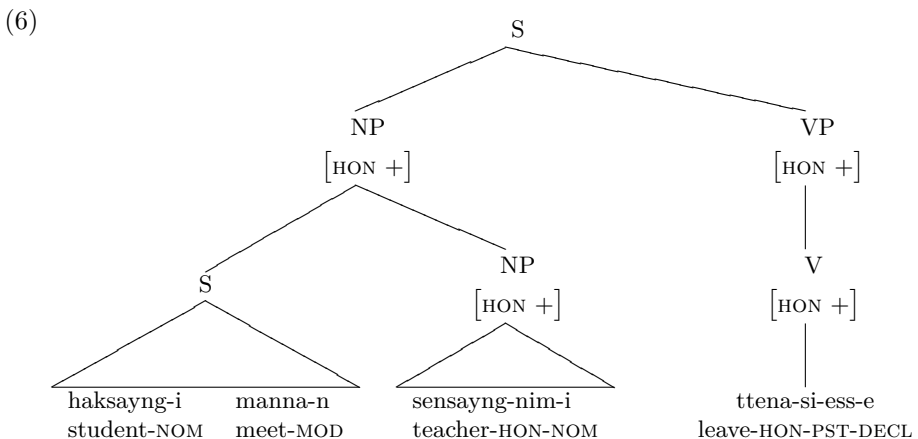
What we can observe here is that the honorific information of the subject comes from the head noun of the NP structure, indicating that the honorific information is a head feature.

With the attachment of the nominal marker *-nim* or the verbal suffix *-si*, each relevant expression thus adds the HON head information. For instance, the nominal lexeme *sensayng* 'teacher' can be realized as a nonhonorific word *sensayng* 'teacher' as in a7 or as a honorific word *sensayng-nim* with the attachment of *-nim* as in b7:[3]

(7) a.
$$
\begin{bmatrix}
\textit{n-nonhon} \\
\text{FORM } \langle \text{sensayng} \rangle \\
\text{SYN } | \text{HEAD} \begin{bmatrix} \text{POS } \textit{noun} \\ \text{HON } - \end{bmatrix} \\
\text{SEM} \begin{bmatrix} \text{INDEX } i \\ \text{RELS} \left\langle \begin{bmatrix} \text{PRED } \textit{teacher\_rel} \\ \text{INSTANCE } i \end{bmatrix} \right\rangle \end{bmatrix}
\end{bmatrix}
$$

b.
$$
\begin{bmatrix}
\textit{n-hon} \\
\text{FORM } \langle \text{sensayng-nim} \rangle \\
\text{SYN } | \text{HEAD} \begin{bmatrix} \text{POS } \textit{noun} \\ \text{HON } + \end{bmatrix} \\
\text{SEM} \begin{bmatrix} \text{INDEX } i \\ \text{RELS} \left\langle \begin{bmatrix} \text{PRED } \textit{teacher\_rel} \\ \text{INSTANCE } i \end{bmatrix} \right\rangle \end{bmatrix}
\end{bmatrix}
$$

As specified in the lexical information, the nonhonorific nominal without the honorific marker *-nim* bears the negative value for the HON feature, while the *n-hon* expression with the honorific marker in b7 carries the positive value for the head feature HON. There is no significant difference in the semantics.

The encoding of the honorific information in the verb expressions is slightly different. The verb lexeme with no honorific suffix is unspecified with the HON value, as seen from the following:

(8)
$$
\begin{bmatrix}
\textit{v-lxm} \\
\text{SYN } | \text{HEAD} \begin{bmatrix} \text{POS } \textit{verb} \\ \text{HON } \textit{boolean} \end{bmatrix} \\
\text{ARG-ST} \left\langle \text{NP} \begin{bmatrix} \text{INDEX } i \end{bmatrix}, \cdots \right\rangle
\end{bmatrix}
$$

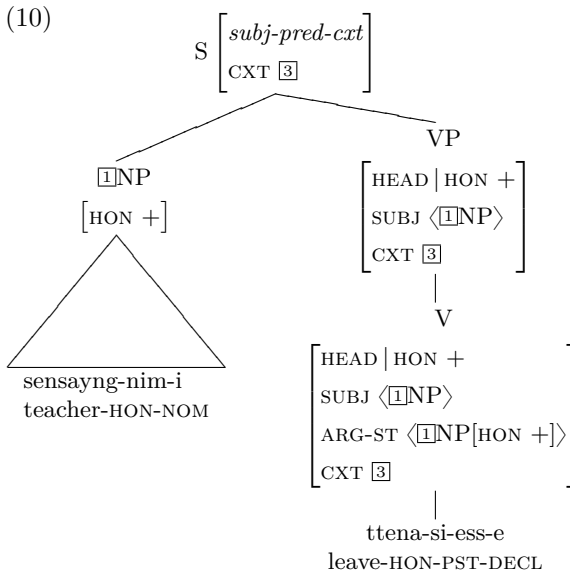When no honorific suffix is attached as illustrated by the verb *ttena-ss-e* 'leave-PST-DECL' in a9, the verb's HON feature will be specified as negative. However, the verb with the honorific suffix *-si* is specified to bear the positive HON value as given in b9:

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[3] In addition to *-nim*, the attachment of the suffix *kkeyse* as in *Kim senssayng-kkeyse* 'Kim teacher-HON' can also evoke the positive HON value.

(9) a.
$$
\begin{bmatrix}
\textit{v-nonhon} \\
\text{FORM } \langle \text{ttena-ss-e} \rangle \\
\text{SYN } | \text{ HEAD} \begin{bmatrix} \text{POS } \textit{verb} \\ \text{HON } - \end{bmatrix} \\
\text{ARG-ST } \left\langle \text{ NP } \begin{bmatrix} \text{HON } \textit{boolean} \end{bmatrix}, \cdots \right\rangle
\end{bmatrix}
$$

b.
$$
\begin{bmatrix}
\textit{v-hon} \\
\text{FORM } \langle \text{ttena-si-ess-e} \rangle \\
\text{SYN } | \text{ HEAD} \begin{bmatrix} \text{POS } \textit{verb} \\ \text{HON } + \end{bmatrix} \\
\text{ARG-ST } \left\langle \text{ NP} \begin{bmatrix} \text{HON } + \\ \text{INDEX } i \end{bmatrix}, \cdots \right\rangle \\
\text{CXT} \begin{bmatrix} \text{C-INDICES } | \text{ SPEAKER } p \\ \text{BACKGR } \left\langle \begin{bmatrix} \text{PRED } \textit{honoring\_rel} \\ \text{ARG1 } p \\ \text{ARG2 } i \end{bmatrix} \right\rangle \end{bmatrix}
\end{bmatrix}
$$

One important property to note is that the *v-nonhon* expression places no HON restriction on its first (subject) argument: the subject's HON value is underspecified. However, the *v-hon* with the *-(u)si* suffix adds the positive value of the head feature HON, and at the same time requires its subject to bear the same positive HON value. In addition, the *v-hon* also includes the contextual information that the speaker is honoring the subject referent as given in the CXT value.

Together these feature specifications on the verbal expressions, let us then consider a simple structure the grammar can generate:

(10)

$$
\text{S} \begin{bmatrix} \textit{subj-pred-cxt} \\ \text{CXT } \boxed{3} \end{bmatrix}
$$

VP

$$
\boxed{1}\text{NP} \begin{bmatrix} \text{HON } + \end{bmatrix}
$$

$$
\text{VP} \begin{bmatrix} \text{HEAD } | \text{ HON } + \\ \text{SUBJ } \langle \boxed{1}\text{NP} \rangle \\ \text{CXT } \boxed{3} \end{bmatrix}
$$

sensayng-nim-i
teacher-HON-NOM

V

$$
\begin{bmatrix} \text{HEAD } | \text{ HON } + \\ \text{SUBJ } \langle \boxed{1}\text{NP} \rangle \\ \text{ARG-ST } \langle \boxed{1}\text{NP[HON } +] \rangle \\ \text{CXT } \boxed{3} \end{bmatrix}
$$

ttena-si-ess-e
leave-HON-PST-DECL

The honorific verb *ttena-si-ess-e* requires its subject to be marked with the positive HON feature. This head feature information is passed up to the VP. The combination of the honorific VP with the honorific subject NP is well-formed, yielding a licit subject-predicate construction.[4] Note that the verb also includes the contextual information such that the speaker of this sentence honors the referent of the subject, which is also passed up to the final S node. Within this system, the honorific agreement between subject and verb is thus a reflection of combinatorial properties evoked from the subcategorization requirement.
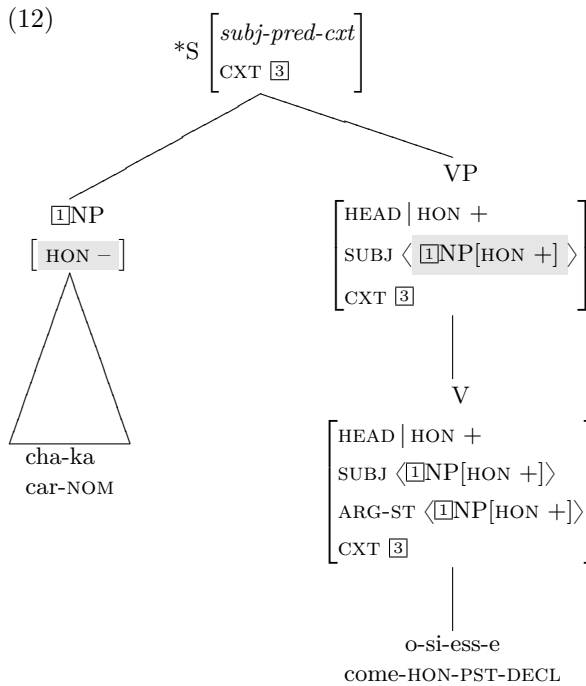
One of the key points in the present grammatical system is that the [HON +] verb selects a [HON +] subject while the [HON –] verb allows its subject to be underspecified with the HON value. That is, its subject can be either honorific or nonhonorific. This then correctly allows disagreeing examples like (1b), as represented in the following tree structure:

(11)

$$
\begin{array}{c}
\text{S} \begin{bmatrix} \textit{subj-pred-cxt} \\ \text{CXT } \boxed{3} \end{bmatrix}
\end{array}
$$

$$
\boxed{1}\text{NP} \begin{bmatrix} \text{HON } + \end{bmatrix}
$$

sensayng-nim-i
teacher-HON-NOM

$$
\text{VP} \begin{bmatrix} \text{HEAD} \,|\, \text{HON } - \\ \text{SUBJ } \langle \boxed{1} \rangle \\ \text{CXT } \boxed{3} \end{bmatrix}
$$

$$
\text{V} \begin{bmatrix} \text{HEAD} \,|\, \text{HON } - \\ \text{SUBJ } \langle \boxed{1} \rangle \\ \text{ARG-ST } \langle \boxed{1}\text{NP}[\text{HON } \textit{boolean}] \rangle \\ \text{CXT } \boxed{3} \end{bmatrix}
$$

wus-ess-e
smile-PST-DECL
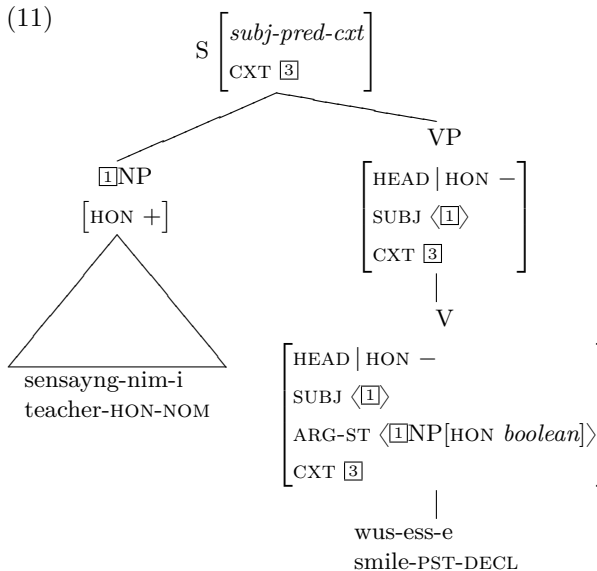
In this example, the nonhonorific verb *wus-ess-e* 'smile-PST-DECL' combines with the honorific subject *sensayng-nim-i* 'teacher-HON-NOM. This combination is possible since the nonhonorific verb does not place any HON restriction on its subject. Such an example is uttered when the speaker has no intention of honoring the referent of the subject, as encoded in the CXT information.

Yet, the grammar blocks agreement disconcord as in (2) where the honorific verb combines a nonhonorific subject, as illustrated by the following structure:

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[4] As given in Kim (2004a), we assume that the well-formed constructions in Korean include subject-predicate, head-complement, head-modifier, head-lex constructions, and so forth. Each of these roughly correspond to the X-bar schema.

(12)

$$*S \begin{bmatrix} \textit{subj-pred-cxt} \\ \text{CXT} \; \boxed{3} \end{bmatrix}$$

VP

$$\boxed{1}\text{NP} \quad \begin{bmatrix} \text{HON} - \end{bmatrix}$$

$$\begin{bmatrix} \text{HEAD} \,|\, \text{HON} \; + \\ \text{SUBJ} \; \langle \; \boxed{1}\text{NP}[\text{HON} \; +] \; \rangle \\ \text{CXT} \; \boxed{3} \end{bmatrix}$$

cha-ka
car-NOM

V

$$\begin{bmatrix} \text{HEAD} \,|\, \text{HON} \; + \\ \text{SUBJ} \; \langle \boxed{1}\text{NP}[\text{HON} \; +] \rangle \\ \text{ARG-ST} \; \langle \boxed{1}\text{NP}[\text{HON} \; +] \rangle \\ \text{CXT} \; \boxed{3} \end{bmatrix}$$

o-si-ess-e
come-HON-PST-DECL

The honorific verb requires its subject to be marked with the positive HON value which is passed up to the VP. When this VP combines with the subject, there is thus a feature unification failure. The requirement of the contextual information by the verb is also violated: the verb requires the subject to be honored by the speaker.
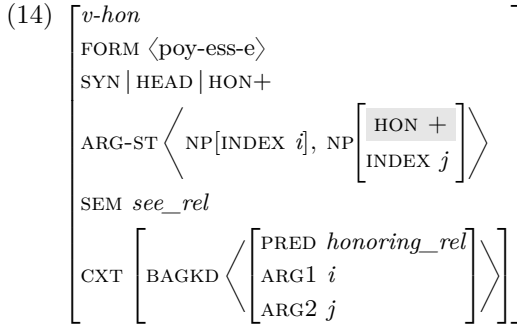
As we have sketched so far, there is agreement in honorification between the matrix verb and its subject, but the only unacceptable pattern is when the honorific verb combines with a non-honorific subject. This results from the tight interaction between morpho-syntactic and pragmatic information.

2.2 Object and Oblique Agreement

The examples we have seen so far are concerned with agreement of the matrix verb with its subject. In addition, there are some lexically suppletive forms like *poyp-ta* 'see.HON-DECL' and *mosi-ta* 'take.HON-DECL' which require their object to be in the honorific form:

(13) a. *Haha-ka Mimi-lul   poy-ess-e
          Haha-NOM Mimi-ACC see.HON-PST-DECL
          '(int.) Haha honorably saw Mimi.'

      b. Haha-ka   sensayng-nim-ul poy-ess-e
          Haha-NOM teacher-HON-ACC see.HON-PST-DECL
          'Haha honorably saw the teacher.'

Note that verbs like *poy-ess-e* evoke an honoring relation between the subject and object. A simple way to account for such a contrast is to specify that these suppletive verbs require the object to be [HON +] together with a pragmatic honoring relation. The following is thus the lexical information of a suppletive verb like *poy-ess-e* 'see.HON-PST-DECL'.

(14)
$$\begin{bmatrix} \textit{v-hon} \\ \text{FORM } \langle\text{poy-ess-e}\rangle \\ \text{SYN} \mid \text{HEAD} \mid \text{HON+} \\ \text{ARG-ST } \left\langle \text{NP}[\text{INDEX } i], \text{NP}\begin{bmatrix} \text{HON } + \\ \text{INDEX } j \end{bmatrix} \right\rangle \\ \text{SEM } \textit{see\_rel} \\ \text{CXT} \begin{bmatrix} \text{BAGKD} \left\langle \begin{bmatrix} \text{PRED } \textit{honoring\_rel} \\ \text{ARG1 } i \\ \text{ARG2 } j \end{bmatrix} \right\rangle \end{bmatrix} \end{bmatrix}$$

Such lexical information can easily block examples like a13 where the object is [HON –]. This can be illustrated by the following structure:
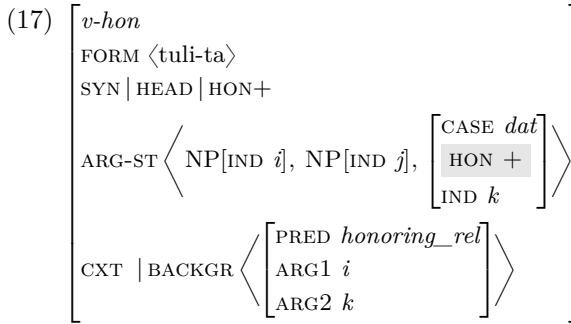
(15)
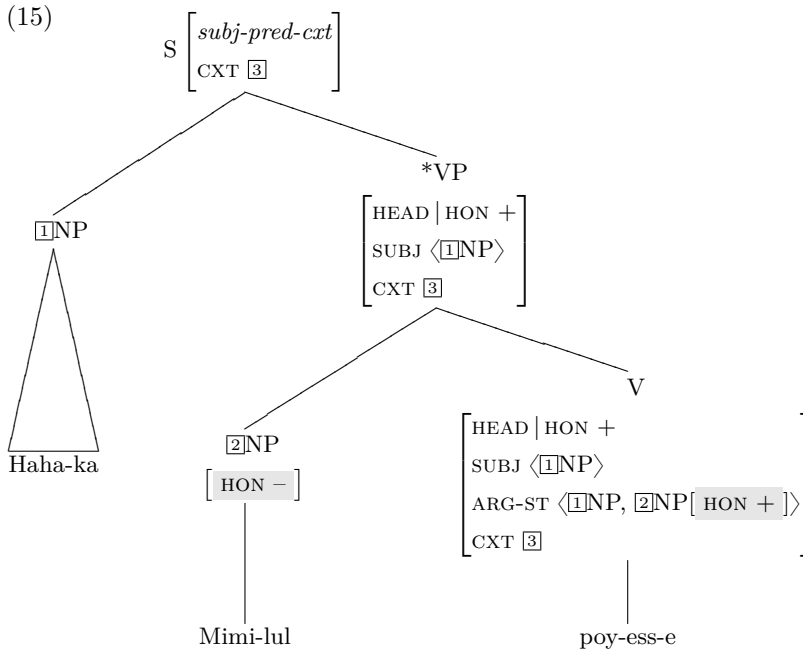
Slightly different from these lexically suppletive forms, verbs like *tuli-* 'give.HON' and *yeccup-* 'ask.HON' require their oblique argument to be in the HON form (non-honorific forms are *cwu-* 'give' and *mwut-* 'ask', respectively):

(16) a. Kim-i   sensayng-nim-eykey senmwul-ul tuly-ess-e
        Kim-NOM teacher-HON-DAT   present-ACC give.HON-PST -DECL
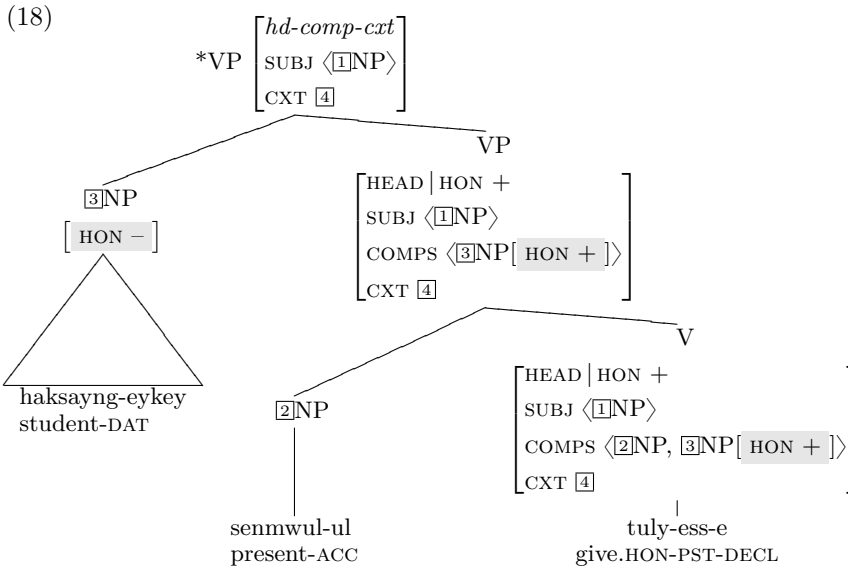   'Kim gave a present to the teacher.'

b. *Kim-i   haksayng-eykey senmwul-ul tuly-ess-e
   Kim-NOM student-DAT   present-ACC give.HON-PST-DECL
   'Kim honorably gave a present to the student.'

Just like the object agreement, this kind of agreement is lexically controlled: the verb is lexically specified with the information that its dative complement needs to be honorific:[5]

(17)
$$\begin{bmatrix} \textit{v-hon} \\ \text{FORM } \langle\text{tuli-ta}\rangle \\ \text{SYN}\,|\,\text{HEAD}\,|\,\text{HON+} \\ \text{ARG-ST } \left\langle \text{NP[IND } i], \text{NP[IND } j], \begin{bmatrix} \text{CASE } \textit{dat} \\ \text{HON } + \\ \text{IND } k \end{bmatrix} \right\rangle \\ \text{CXT }|\text{ BACKGR } \left\langle \begin{bmatrix} \text{PRED } \textit{honoring\_rel} \\ \text{ARG1 } i \\ \text{ARG2 } k \end{bmatrix} \right\rangle \end{bmatrix}$$

The lexical information tells us that the verb *tuli-ta* 'give.HON-DECL' selects three arguments while its dative argument needs to be a honorific one and the subject is honoring the referent of this dative argument.

Once again the present system rules out examples like b16 in which the dative argument *haksayng-eykey* 'student-DAT' is nonhonorific and the matrix verb is the suppletive verb *tuli-*:

(18)

The verb *tuly-ess-e* requires its dative argument to be honorific with the positive HON value. This makes it illicit to combine the honorific VP with the nonhonorific NP *haksayng-eykey* 'student-DAT'. However, the situation is different with the nonhonorific verb *cwu-* 'give':

(19) Kim-i   haksayng-eykey senmwul-ul cwu-ess-e
     Kim-NOM student-DAT   present-ACC give-PST-DECL
     'Kim gave a present to the student.'

The verb *cwu-ess-e* simply places no HON restriction on its dative argument, different from the synonymous word *tuli-* 'give.HON'.

2.3 Multiple Honorification

The honorific system we have sketched so far also can account for multiple honorific examples in which subject agreement occurs together with the object:

(20) ape-nim-i   sensayng-nim-ul poy-(si)-ess-e
     father-HON-NOM teacher-HON-ACC see.HON-HON-PST-DECL
     'The father saw the teacher.'

The honorific suffix *-si* on the verb here requires the subject to be [HON +] whereas the suppletive verb also asks its object to be [HON +]. In such examples, the honorific marker in the verb can be optional or even the verb can be replaced by the nonsuppletive form *po-* 'see'. However, the grammar does not generate cases like the following:

(21) a. *Kim-i   sensayng-nim-ul poy-si-ess-e
        Kim-NOM teacher-HON-ACC see.HON-HON-PST-DECL
        'Kim saw the teacher.'

     b. *ape-nim-i   Kim-lul   poy-ess-e
        father-HON-NOM Kim-ACC see.HON-PST-DECL
        'The father saw Kim.'

a21 is ruled out since the HON form *-(u)si* requires the subject to be [HON +]. The situation in b21 is slightly different: this is ill-formed since the suppletive form *poyp-* selects a [HON +] object.

    Honorific agreement of the predicate with the oblique agreement can occur together with subject agreement, as illustrated in a22:

(22) a. eme-nim-i   sensayng-nim-eykey senmwul-ul tuli-si-ess-e
        mother-HON-NOM teacher-HON-DAT   present-ACC give.HON-HON-PST-DECL
        'Mother gave the teacher a present.'

     b. eme-nim-i   sensayng-nim-eykey senmwul-ul tuly-ess-e
        mother-HON-NOM teacher-HON-DAT   present-ACC give.HON-PST-DECL

     c. # eme-nim-i   sensayng-nim-eykey senmwul-ul cwu-ess-e
         mother-HON-NOM teacher-HON-DAT   present-ACC give-PST-DECL

The grammar will generate examples like b22 and c22. In b22, the honorific information comes from the suppletive lexical form *tuli-* 'give.HON', and c22 is possible in a context where the speaker does not honor the referent of the subject. The grammar allows this kind of disconcord since the nonhonorific verb *cwu-ess-e* 'give-PST-DECL' places no restriction on the subject. However, we would block examples like the following:

(23) *haksayng-i sensayng-nim-eykey senmwul-ul tuli-si-ess-e
        student-NOM teacher-HON-DAT   present-ACC give.HON-HON-PST-DECL
        'The student gave a present to the teacher.'

The example in 23 violates subject agreement: the honorific marked verb requires its subject to be honorific.

2.4 Agreement in Auxiliary Constructions

The present honorification system can offer us a streamlined way of accounting for the agreement in auxiliary verb constructions we noted earlier. Basically there are three types of auxiliaries with respect to agreement.

    Type I: In the construction with auxiliary verbs like *anh-* 'not', when the subject is in the honorific form, the honorific suffix *-si* can optionally appear either on the preceding main verb or on the auxiliary verb or on both:

(24) a. sensayng-nim-i   o-si-ci   anh-usi-ess-e
          teacher-HON-NOM come-HON-CONN not-HON-PST-DECL
          'The teacher did not come.'

        b. sensayng-nim-i   o-si-ci   anh-ass-e
          teacher-HON-NOM come-HON-CONN not-PST-DECL

        c. sensayng-nim-i   o-ci   anh-usi-ess-e
          teacher-HON-NOM come-CONN not-HON-PST-DECL

        d. #sensayng-nim-i o-ci   anh-ass-e
          teacher-HON-NOM come-CONN not-PST-DECL

    The agreement in Type I simply follows from the general assumption that this kind of auxiliary verbs acts like a raising verb whose subject is identical with that of the main verb, as represented in 25:[6]

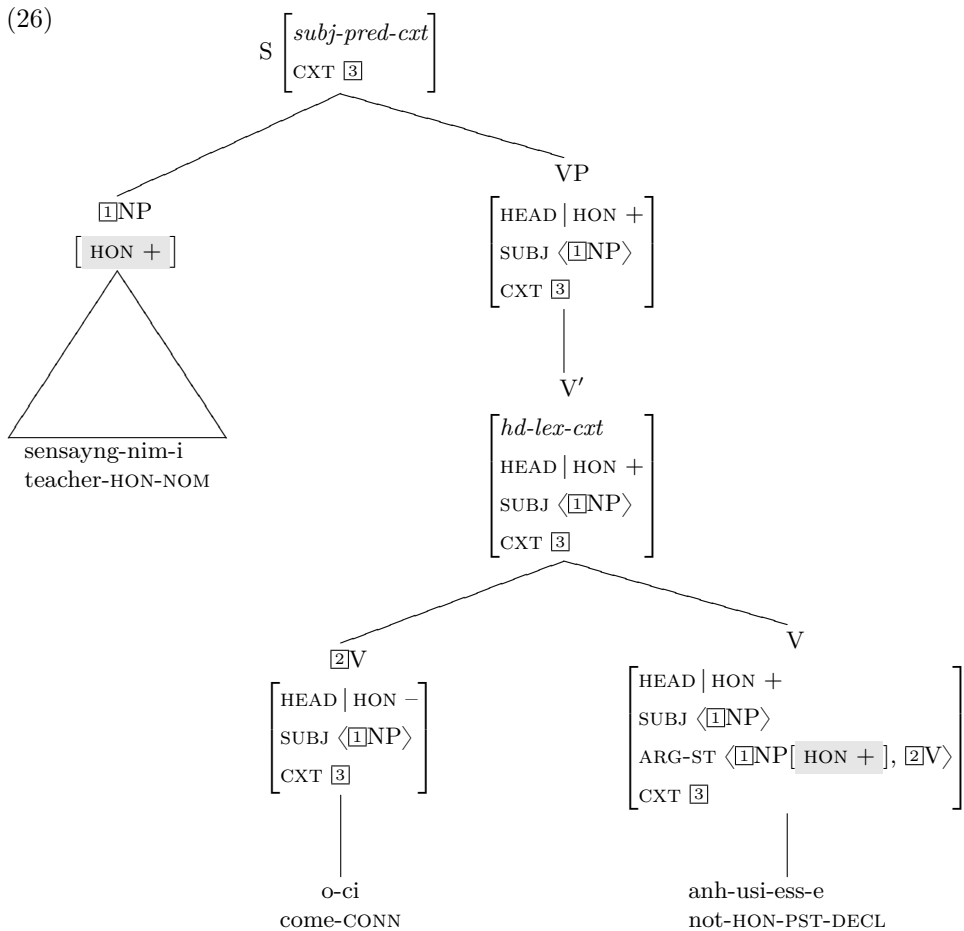[6] See Kim and Sells (2008a) for the key properties of raising verbs.

(25) a.
$$
\begin{bmatrix}
aux\text{-}v \\
\text{FORM } \langle \text{anh-ass-e} \rangle \\
\text{SYN} \mid \text{HEAD} \mid \text{AUX } + \\
\text{SUBJ } \langle\, \boxed{1}\text{NP}\, \rangle \\
\text{COMPS } \left\langle \left[\text{SUBJ } \langle\, \boxed{1}\, \rangle \right] \right\rangle
\end{bmatrix}
$$

b.
$$
\begin{bmatrix}
aux\text{-}v \\
\text{FORM } \langle \text{anh-usi-ess-e} \rangle \\
\text{SYN} \mid \text{HEAD} \begin{bmatrix} \text{AUX } + \\ \text{HON } + \end{bmatrix} \\
\text{SUBJ } \langle\, \boxed{1}\text{NP[HON }+] \, \rangle \\
\text{COMPS } \left\langle \left[\text{SUBJ } \langle\, \boxed{1}\text{NP}\, \rangle \right] \right\rangle
\end{bmatrix}
$$

The difference of these two lexical expressions is the presence of the honorific suffix *-si*. Both the nonhonorific or honorific negative auxiliary verbs here select a subject and a lexical complement whose subject is identical with the auxiliary's subject. In the example in a24, both the auxiliary and the main verb are marked with the honorific suffix, requiring the matrix subject to be honorific too. In b24, the auxiliary is non-honorific and thus does not place any restriction on the subject's HON value. This is why there is no feature conflict in the feature unification even if the honorific main verb requires its subject to bear the positive HON value. Consider the structure of c24:[7]

The honorific negative auxiliary *anh-usi-ess-e* combines with the nonhonorific main verb *o-ci*, forming a verb complex predicate (see Kim 2004b). Note that the subject of these two is structure-sharing (identical). Since the former requires its subject to be honorific, the latter's subject also needs to be honorific even if its subject is not specified with the HON value. This way we license the morphosyntactic mismatch between the main verb with the subject in the negative auxiliary construction.

---

[7] As suggested by Kim (2004a), the combination of an auxiliary verb and its preceding main verb forms a complex predicate, licensing a head-lex construction. See Kim (2004a) for details.

(26)

$$S \begin{bmatrix} \textit{subj-pred-cxt} \\ \text{CXT } \boxed{3} \end{bmatrix}$$

VP $\begin{bmatrix} \text{HEAD} \,|\, \text{HON } + \\ \text{SUBJ } \langle \boxed{1}\text{NP} \rangle \\ \text{CXT } \boxed{3} \end{bmatrix}$

$\boxed{1}$NP $\begin{bmatrix} \text{HON } + \end{bmatrix}$

sensayng-nim-i
teacher-HON-NOM

V′ $\begin{bmatrix} \textit{hd-lex-cxt} \\ \text{HEAD} \,|\, \text{HON } + \\ \text{SUBJ } \langle \boxed{1}\text{NP} \rangle \\ \text{CXT } \boxed{3} \end{bmatrix}$

$\boxed{2}$V $\begin{bmatrix} \text{HEAD} \,|\, \text{HON } - \\ \text{SUBJ } \langle \boxed{1}\text{NP} \rangle \\ \text{CXT } \boxed{3} \end{bmatrix}$

V $\begin{bmatrix} \text{HEAD} \,|\, \text{HON } + \\ \text{SUBJ } \langle \boxed{1}\text{NP} \rangle \\ \text{ARG-ST } \langle \boxed{1}\text{NP}[\, \text{HON } + \,], \boxed{2}\text{V} \rangle \\ \text{CXT } \boxed{3} \end{bmatrix}$

o-ci
come-CONN

anh-usi-ess-e
not-HON-PST-DECL

Type II: When the head auxiliary verb is something like *po-* 'try', *twu-* 'hold', and *ci-* 'become', subject honorification occurs only on the auxiliary verb. That is, the preceding main verb cannot have the honorific suffix *-si*:

(27) a. *sensayng-nim-i   Mimi-lul   cap-usi-e   twu-si-ess-e
       teacher-HON-NOM Mimi-ACC catch-HON-CONN leave-HON-PST-DECL
       'The teacher hold Mimi for future.'

   b. sensayng-nim-i   Mimi-lul   cap-a   twu-si-ess-e
       teacher-HON-NOM Mimi-ACC catch-CONN leave-HON-PST-DECL

   c. *sensayng-nim-i   Mimi-lul   cap-usi-e   twu-ess-e
       teacher-HON-NOM Mimi-ACC catch-HON-CONN leave-PST-DECL

   d. sensayng-nim-i   Mimi-lul   cap-a   twu-ess-e
       teacher-HON-NOM Mimi-ACC catch-CONN leave-PST-DECL

The absence of the HON feature on the main verb for the Type II is due to the language's morphological constraints. Such an auxiliary verb forms a verbal complex together with a main verb that bears the CONN suffix *-a/e*. This suffix morphologically requires its verb stem to have no honorific *-(u)si* (Kim and Yang 2004). This morphological constraint can be attested by the fact that the suppletive honorific form with no productively-formed *-si* marking can occur in the Type II construction:

(28) a. sensayng-nim-i   sakwa-lul tusi-e   po-si-ess-e.
          teacher-HON-NOM apple-ACC eat.HON-CONN try-HON-PST-DECL
          'The teacher tried to eat the apple.'

      b. sensayng-nim-i   chayk-ul ilk-(*usi)-e   po-si-ess-e.
          teacher-HON-NOM book-ACC read-HON-CONN try-HON-PST-DECL
          'The teacher tried to read the book.'

Within the grammar we developed where each specific verb stem has its own type constraint, the stem value of the CONN suffix *-a/e* must be a verb lexeme with no suffix *-si*.

Type III: Unlike Type II, auxiliary verbs like *po-* 'seem' and *kath-* 'seem' cannot have the honorific suffix *-si* even if the subject is in the honorific form:

(29) a. *sensayng-nim-i   chayk-ul ilk-na   po-si-ta
          teacher-HON-NOM book-ACC read-COMP seem-HON-DECL
          'The teacher seems to read a book.'

      b. sensayng-nim-i   chayk-ul ilk-usi-na   po-ta
          teacher-HON-NOM book-ACC read-HON-CONN seem-DECL

      c. #sensayng-nim-i   chayk-ul ilk-na   po-ta
          teacher-HON-NOM book-ACC read-CONN seem-DECL

      d. *sensayng-nim-i   chayk-ul ilk-usi-na   po-si-ta
          teacher-HON-NOM book-ACC read-HON-CONN seem-HON-DECL

As for the Type III, the grammar needs to rely on semantics. The auxiliary verbs like *po-* 'seem' and *kath-* 'seem' select a proposition as their semantic argument (Sells 1998):

(30)
$$
\begin{bmatrix}
\text{FORM } \langle \text{po-} \rangle \\
\text{SYN } | \text{ HEAD } \begin{bmatrix} \text{AUX } + \\ \text{HON } - \end{bmatrix} \\
\text{ARG-ST } \langle \text{S}[\text{INDEX } e2] \rangle \\
\text{SEM } \begin{bmatrix} \text{INDEX } e1 \\ \text{RELS } \left\langle \begin{bmatrix} \text{PRED } seem\_rel \\ \text{ARG0 } e1 \\ \text{ARG1 } e2 \end{bmatrix} \right\rangle \end{bmatrix}
\end{bmatrix}
$$

The auxiliary lexeme *po-* 'seem' is lexically specified to be nonhonorific ([HON –]). This simply blocks the attachment of the honorific suffix to it.[8] This in turn means that only b29 and c29 are licensed. This lexical blockage comes from the fact that the honoring relation applies not to a proposition but to a human individual: it is such a semantic property that places a restriction on the HON value of the auxiliary verb. This implies that we cannot honor a proposition, and this makes it unnecessary to have an honorific suffix on this type of auxiliary.
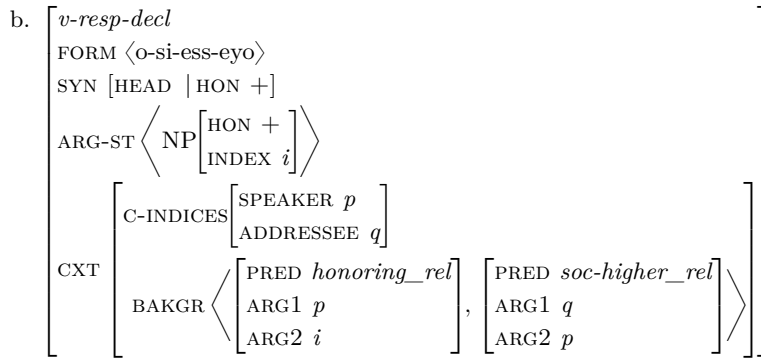
2.5 Addressee Agreement

As noted earlier, the language also employs addressee agreement, indicated by a 'respectful declarative' marking like *-(e)yo*, whose data we repeat here:

(31) a. haksayng-i   ttena-ss-e/*ttena-ss-eyo
          student-NOM leave-PST-DECL
          'The student left.'

      b. sensayng-nim-i   ttena-si-ess-e/ttena-si-ess-eyo
          teacher-HON-NOM leave-HON-PST-DECL
          'The teacher left.'

As discussed earlier, the verbal endings *-e* and *-(e)yo* encode the information that the social status of the addressee is higher than that of the speaker. This means that the attachment of such a mood marking adds an honoring relationship between addressee and speaker. Our grammar, in which the inflected verbal element is built from a basic verbal lexeme within a type hierarchy system, systematically allows the addition of such an honoring relationship in the lexical information. Compare between the lexical information of an honorific verb with the plain declarative mood marker and that of an honorific verb with the respectful declarative mood marker:

(32) a.
$$
\begin{bmatrix}
\textit{v-plain-decl} \\
\text{FORM } \langle \text{o-si-ess-e} \rangle \\
\text{SYN } | \text{HEAD } | \text{HON } + \\
\text{ARG-ST } \left\langle \text{NP} \begin{bmatrix} \text{HON } + \\ \text{INDEX } i \end{bmatrix} \right\rangle \\
\text{CXT} \begin{bmatrix} \text{C-INDEXES} \begin{bmatrix} \text{SPEAKER } p \\ \text{ADDRESSEE } q \end{bmatrix} \\ \text{BAKGR} \left\langle \begin{bmatrix} \text{PRED } \textit{honoring\_rel} \\ \text{ARG1 } p \\ \text{ARG2 } i \end{bmatrix}, \begin{bmatrix} \text{PRED } \textit{soc-higher\_rel} \\ \text{ARG1 } p \\ \text{ARG2 } q \end{bmatrix} \right\rangle \end{bmatrix}
\end{bmatrix}
$$

---

[8] As a reviewer points out, this may be too hard a constraint. Depending on dialects or registers, this strong constraint may not be activated to allow the attachment of *-si* to the auxiliary verb.

b.
$$
\begin{bmatrix}
\textit{v-resp-decl} \\
\text{FORM } \langle \text{o-si-ess-eyo} \rangle \\
\text{SYN } [\text{HEAD } | \text{ HON } +] \\
\text{ARG-ST } \left\langle \text{NP} \begin{bmatrix} \text{HON } + \\ \text{INDEX } i \end{bmatrix} \right\rangle \\
\text{CXT } \begin{bmatrix}
\text{C-INDICES} \begin{bmatrix} \text{SPEAKER } p \\ \text{ADDRESSEE } q \end{bmatrix} \\
\text{BAKGR } \left\langle \begin{bmatrix} \text{PRED } \textit{honoring\_rel} \\ \text{ARG1 } p \\ \text{ARG2 } i \end{bmatrix}, \begin{bmatrix} \text{PRED } \textit{soc-higher\_rel} \\ \text{ARG1 } q \\ \text{ARG2 } p \end{bmatrix} \right\rangle
\end{bmatrix}
\end{bmatrix}
$$

The contextual information of the plain verb in a32 indicates that the speaker (p) honors the referent of the subject (i) and the speaker is in a socially-higher position than the addressee (q). Meanwhile, the contextual information in b32 tells us that unlike a32, the addressee (q) is in a socially-higher position than the speaker (p). The present analysis, allowing tight interactions between morphosyntactic and contextual information, can also direct us to a systematic way of accounting for addressee agreement in the language.

3. Conclusion

Honorification, one of the most salient features of the language, involves various grammatical levels of information: morphology, syntax, semantics, and pragmatics. It is thus necessary for a parser to have not shallow but deep processing of the honorific information so that the language user can check the given sentence to be felicitous.

The grammatical architecture we adopt is a typed feature structure grammar, couched upon HPSG, that allows us to handle morpho-syntactic, semantic, and also pragmatic information involved in Korean honorification system. This enables us to develop a hybrid agreement in Korean which is both morphosyntactic and pragmatic.

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