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Honorification as Agree in Korean and beyond

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This paper provides an analysis of the Korean honorification system as agreement. Under the proposed analysis, subject honorification is triggered by an unvalued honorific feature right below T probing downwards to agree with the subject. Addressee honorification is triggered by another instance of the same feature, which probes upwards and agrees with the c-commanding addressee representation. I adopt the bidirectional agreement model (Arregi & Hanink 2021) that enables a unified analysis of both types of honorification. In the second half of the paper, I discuss a crosslinguistic variation among honorification languages. When the subject is 2nd person and thus co-referent with the addressee, Korean and Japanese express honorification of both subject and addressee while Magahi and Tamil actually disallow the co-occurrence – they only allow subject honorification. This crosslinguistic difference can be captured in a straightforward way under my analysis and two well-motivated assumptions: parametric variation in the position of the allocutive probe (Alok 2020; 2021), and an intuitive re-interpretation of Kinyalolo's Constraint (Kinyalolo 1991; Carstens 2005).

1 Introduction

Honorification is a grammatical system that encodes the relation between the speaker and other people in the form of the utterance. Researchers recognize up to six honorification levels of varying formality and deference in Korean (see Brown 2015 and references therein), but they can be classified into two groups: a level designated for people of equal or lower status in relation to the speaker, and a level corresponding to people of higher status than the speaker. I call the former level the *non-high* level, and the latter the *high* level. When a speaker uses non-high or high level honorification towards a person, I describe the person as being of non-high or high *status*. I demonstrate an example of Korean honorification in (1).

(1) a. Kamdok-**i** wuli-eykey selywu-lul ponay-ess-ta.
director-NOM us-DAT document-ACC send-PAST-DECL
'The director sent us the document.' (Director is of non-high status)

b. Kamdok-**kkeyse** wuli-eykey selywu-lul ponay-**si**-ess-ta.
director-NOM.HON us-DAT document-ACC send-HON$_s$-PAST-DECL
'The director sent us the document.' (Director is of high status)

(1) shows an example of argument honorification – more specifically, subject honorification. The two sentences are identical in truth-conditional meaning, but they are appropriate in different situations. Utterance of (1a) implies that the referent of the subject *kamdok* 'director' is of non-high status relative to the speaker, while (1b) is appropriately uttered when the director is of high status. Crucially, this difference is not reflected in the arbitrary choice of content words but in the form of the functional morphemes, which are boldfaced in the example. Specifically, (1b) contains a different form of the nominative case marker (*kkeyse* of (1b) versus *i* of (1a)) and the verbal suffix *si*.

The other type of honorification is addressee honorification.[1] (2b) shows the suffix *supni* which is missing in (2a). The two sentences again have the same truth conditions, but (2a) is appropriately uttered to an addressee of non-high status while (2b) is uttered to a high-status addressee.

(2) a. Mina-ka chayk-ul ilk-ess-ta.
Mina-NOM book-ACC read-PST-DECL
'Mina read the book' (Addressee is of non-high status)

b. Mina-ka chayk-ul ilk-ess-**supni**-ta.
Mina-NOM book-ACC read-PST-HON$_A$-DECL
'Mina read the book' (Addressee is of high status)

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[1] Previous researchers have called the dichotomy of argument honorification and addressee honorification by different names, including *content-oriented honorification – utterance-oriented honorification* (Portner et al. 2019a), and *propositional honorification – performative honorification* (Harada 1976).

The level of honorification is not determined by some rigid social hierarchy, but by the speaker's perceived relation between themselves and the other person. Portner et al. (2019a) argue that honorification contributes a performative speech act which establishes as part of the common ground the nature of the relation between the speaker and the involved person. In fact, a speaker may use different honorification strategies towards the same person in different situations. For example, the speaker might utter (1a) to boast their friendship with the director at a private setting but utter (1b) to show respect for the director in an official announcement. However, while the criteria determining the *level* of honorification are context-dependent, the form and distribution of the relevant linguistic expressions are restricted by the morphology and syntax.

This paper has two goals. First, it provides a comprehensive formal analysis of the syntax of Korean argument honorification (1) and addressee honorification (2). Significant contributions have been made in independently analyzing Korean argument honorification (Choe 2004; Koopman 2005; Kim & Sells 2007; Chung 2009; Choi & Harley 2019; Song et al. 2019) and addressee honorification (Portner et al. 2019a; b; Ceong & Saxon 2020), but there has not been a concrete syntactic analysis that encompasses both. This paper fills this gap by providing an analysis of both types of honorification as feature-driven syntactic operations. In doing so, I adopt the bidirectional agreement model (Arregi & Hanink 2021) and the Speaker Phrase/Addressee Phrase as representations of discourse participants in the syntax (Miyagawa 2012; 2017; 2022; Zu 2017).

The second goal of this paper is to explain a crosslinguistic variation in honorification systems. When the subject is high-status 2nd person, both subject honorification and addressee honorification are realized in Korean as shown in (3a). In contrast, Magahi only realizes subject honorification as shown in (3b).

(3) a. Tangsin-kkeyse   wus-usi-ess-supni-ta.
         you.HON-NOM.HON   laugh-HON_S-PST-HON_A-DECL
         'You laughed.'

     b. *Magahi* (Alok 2021: 271)[2]
         Apne   dauR-l-thi(n)-(*ain).
         you.HH   run-PRF-2.HON_{HHS}-(*HON_{HHA})
         'You (a professor) ran.'

The crosslinguistic variation can be derived from the analysis of this paper and two other well-motivated assumptions: parametric variation in the position of the allocutive probe (Alok 2020; 2021), and an intuitive re-interpretation of Kinyalolo's Constraint (Kinyalolo 1991; Carstens 2005).

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[2] The glosses are slightly altered in this example. See the first paragraph of Section 5 for an explanation.

The paper is structured as follows. Section 2 provides an overview of the Korean honorification system. Section 3 addresses the debate on whether Korean honorification should be analyzed as syntactic agreement. It discusses two phenomena that are repeatedly brought up as counterarguments to the agreement view, and explains why they are not genuine counterarguments. Section 4 presents my analysis of Korean honorification as agreement. Section 4.1 lays out the groundwork for the analysis by discussing three theoretical assumptions made in this paper. Section 4.2 presents the analysis. In Section 4.3 I show that the asymmetry in embeddability between argument and addressee honorification is straightforwardly explained under my analysis. The crosslinguistic variation is discussed in Section 5. I focus on comparing Magahi and Korean, but also mention in Section 5.3 how the Japanese and Tamil patterns can be accounted for. Section 6 concludes.

2 Overview of the Korean honorification system

2.1 Argument honorification

Argument honorification targets arguments of the sentence such as the subject and objects. An example of subject honorification was already seen in (1), repeated below as (4).

(4) a. Kamdok-**i**   wuli-eykey selywu-lul   ponay-ess-ta.
         director-NOM us-DAT   document-ACC send-PAST-DECL
         'The director sent us the document.' (Subject is of non-high status)

     b. Kamdok-**kkeyse**   wuli-eykey selywu-lul   ponay-**si**-ess-ta.
         director-NOM.HON us-DAT   document-ACC send-HON$_s$-PAST-DECL
         'The director sent us the document.' (Subject is of high status)

Indirect object honorification is demonstrated in (5). Again, the form of the case marker differs for the non-high and high levels: *eykey* for the former, and *kkey* for the latter.

(5) a. Mina-ka   kamdok-**eykey** selywu-lul   ponay-ess-ta.
         Mina-NOM director-DAT   document-ACC send-PST-DECL
         'Mina sent the document to the director.' (Indirect object is of non-high status)

     b. Mina-ka   kamdok-**kkey**   selwyu-lul   ponay-ess-ta.
         Mina-NOM director-DAT.HON document-ACC send-PST-DECL
         'Mina sent the document to the director.' (Indirect object is of high status)

Lastly, Korean does not have any productive means to express honorification of the direct object. While historical records of Middle and Pre-Modern Korean show evidence of productive object honorification (Sohn 2015), this is not preserved in contemporary Korean.

In sentences with a high-status subject like (4b), the verb bears the morpheme *(u)si* (glossed HON_s for "HONorification of Subject").[3] (6) demonstrates that its linear position is to the right of the progressive aspect marker *ko.iss* and to the left of the tense-marking *ess*.[4,5] Having *(u)si* appear anywhere else in the verbal spine leads to sharp ungrammaticality.

(6) Apeci-kkeyse   mwul-ul   kkulh-i-ko.iss-**usi**-ess-keyss-ta.
    father-NOM.HON water-ACC boil-CAUS-PROG-HON_s-PST-MOD-DECL
    'Father would have been boiling the water.'

Furthermore, *(u)si* appears to the right of negation (7a), the passive marker (7b), and the high applicative marker (7c) when these elements are present in the sentence. (See Oh & Zubizarreta 2010 on the high applicative status of benefactive *cwu*.)[6]

(7) a. Apeci-kkeyse   cip-ey   ka-ci   anh-usi-ess-ta.
         father-NOM.HON home-LOC go-NMLZ NEG-HON_s-PST-DECL
         'Father did not go home.'

     b. Apeci-kkeyse   cap-hi-si-ess-ta.
         father-NOM.HON capture-PASS-HON_s-PST-DECL
         'Father was caught.'

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[3] The underlying form of the suffix is considered *si*. However, when the suffix is preceded by a closed syllable, the vowel /ɨ/ (romanized here as *u*) is inserted to the left of *si*. Therefore, I use the notation *(u)si* in this paper to refer to the morpheme.

[4] The morphological complexity of *ko iss* makes it tempting to decompose it to the complementizer *ko* and the copula *iss*. However, Kim (2011) demonstrates that nothing can intervene between *ko* and *iss* when *ko iss* conveys a truly progressive meaning. Therefore, I consider it to have grammaticalized into an Asp head. It is possible to construct a sentence like (i) where an adverb intervenes between *ko* and *iss*, but this sentence has a different parse under which the sentence describes a resultant state after the event denoted in the *ko* clause. If one tries to insert an adverb between *ko* and *iss* in a sentence where *ko iss* can only be interpreted as progressive, the sentence is ungrammatical (ii).

(i) Uju-nun mwun-ul camku-ko ancenhakey iss-ess-ta.
     Uju-TOP door-ACC lock-KO   safely   ISS-PST-DECL
     'Uju existed/stayed safely with the door locked.'
     Not: 'Uju locked the door safely and existed/stayed in that state.' (Kim 2011: (her (15))

(ii) John-un   wuntongcang-ul talli-ko (*yelsimhi)   iss-ess-ta.
     John-TOP playground-ACC run-KO (*vigorously) ISS-PST-DECL
     Intended: 'John was vigorously running in the playground.' (Kim 2011: (her (16))

[5] The aspect *ko iss* can be optionally realized as *ko kye*, where *kye* is the suppletive subject honorific form of the copula *iss*. One possible explanation for this is an optional contextual allomorphy rule at the morphology which triggers the realization of progressive Aspect as *ko kye* in the context of *(u)si* on the right, just as the copula *iss* is realized as *kye* in the context of *(u)si*. (See Chung 2009 on honorific root suppletion in copulas.)

[6] I thank an anonymous reviewer for suggesting these diagnostics, and the fronted VoiceP diagnostic.

    c.   Apeci-kkeyse   Mina-eykey nolay-lul   pwulle-cwu-si-ess-ta.
          father-NOM.HON Mina-DAT   song-ACC sing-BEN-HON$_S$-PST-DECL
          'Father sang Mina a song.'

Taking into account the Mirror Principle (Baker 1985), this linear order suggests that the syntactic position of *(u)si* is between the Aspect and Tense heads.
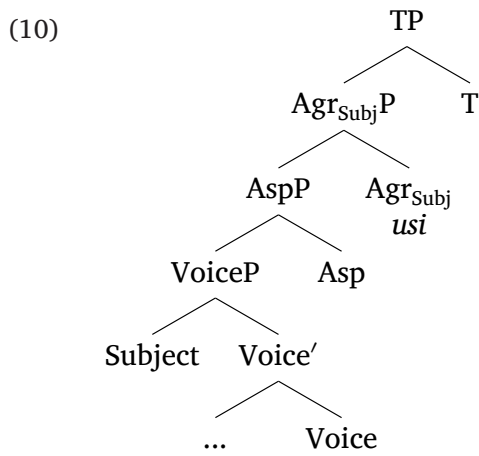
This is also supported by the fact that *(u)si* is unavailable inside fronted VoiceP. In predicate-fronting constructions, the subject raises to Spec, TP and the remnant predicate is nominalized before undergoing A-bar movement (Ahn 1991; Bae 2022). The main clause predicate can either undergo insertion of the light verb *ha* (*do*-support predicate fronting), or doubling of the fronted verb (verb-doubling predicate fronting). Bae (2022) argues that in the latter case, the size of the moved predicate is VoiceP. (I follow Kratzer 1996 in positing a VoiceP that introduces the external argument.) (8a) shows a non-fronted passive sentence with a non-high-status subject. In (8b), verb-doubling VoiceP fronting has occurred. The passive voice marker *hi* moves along with the predicate, which supports the view that the size of the moved predicate is VoiceP.

(8)   a.   Mina-ka   cap-hi-ess-ta.
           Mina-NOM capture-PASS-PST-DECL
           'Mina was caught.'

       b.   [Cap-hi-ki]-nun   Mina-ka   cap-hi-ess-ta.
           capture-PASS-NMLZ-TOP Mina-NOM capture-PASS-PAST-DECL
           'As for being caught, Mina did do that.'

Crucially, *(u)si* is unavailable inside the fronted VoiceP. Subject honorification is expressed on the main clause predicate instead.

(9)   a.   [Cap-hi-ki]-nun   apeci-kkeyse   cap-hi-si-ess-ta.
           capture-PASS-NMLZ-TOP father-NOM.HON capture-PASS-HON$_S$-PST-DECL
           'As for being caught, Father did do that.'

       b.   *[Cap-hi-si-ki]-nun   apeci-kkeyse   cap-hi-ess-ta.
           capture-PASS-HON$_S$-NMLZ-TOP father-NOM.HON capture-PASS-PST-DECL

Given the linear position of *(u)si* in relation to other projections and its unavailability in fronted VoiceP, I conclude that the position of *(u)si* is between the heads Asp and T. For concreteness, I postulate the functional head Agr$_{Subj}$ which bears an unvalued honorific feature ([HON:__]). There is always an instance of Agr$_{Subj}$ between Asp and T, and *(u)si* is the realization of Agr$_{Subj}$ when its [HON:__] agrees with a high-status subject at Spec, VoiceP.

(10)

```
                        TP
                       /  \
                 Agr_SubjP   T
                  /    \
               AspP    Agr_Subj
               /  \      usi
           VoiceP  Asp
            /  \
      Subject  Voice′
               /  \
             ...   Voice
```

2.2 Addressee honorification

Addressee honorification refers to grammatical encoding of the relation between the speaker and the addressee. (See Portner et al. 2019a; b for an in-depth analysis of the semantics and pragmatics of Korean addressee honorification.) Like subject honorification, Korean addressee honorification is expressed through an inflectional morpheme *(su)pni,* glossed HON$_A$ (HONorification of Addressee).[7]

(11) a. Mina-ka   cip-ey   ka-ss-ta.
          Mina-NOM home-LOC go-PAST-DECL
          'Mina went home.' (Addressee is of non-high status)

     b. Mina-ka   cip-ey   ka-ss-**supni**-ta.
          Mina-NOM home-LOC go-PST-HON$_A$-DECL
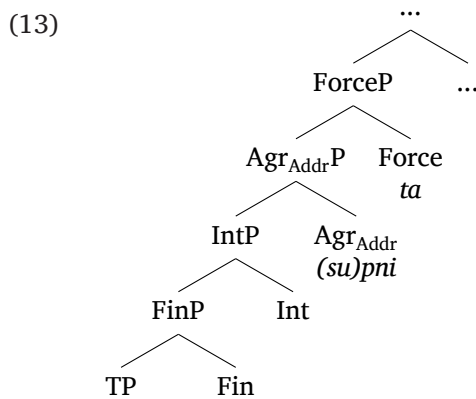   'Mina went home.' (Addressee is of high status)

(Su)pni is not the only addressee-honorific morpheme of Korean. *Eyo* and *(s)o* also reflect the speaker's deference towards the addressee, although the natures of the deferential attitudes are different. *(Su)pni* is used in formal situations, while *eyo* is more intimate and mostly used among family members and close colleagues. *(S)o,* which is declining in usage (Pak 2008), expresses respect towards an addressee of equal or slightly lower status. In this paper I focus on *(su)pni* as a representative example and leave a full-fledged analysis of *eyo* and *(s)o,* which show some morphosyntactic differences, for future research.

     The position of *(su)pni* is rigidly specified in the tree, as is the case for *(u)si*. It must appear to the left of the clause-type marker (declarative *ta* in (12)) and to the right of everything else.

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[7] The initial /su/ is present after closed syllables, but is dropped after open syllables.

(12) Apeci-kkeyse   cip-ey   ka-si-ess-keyss-**supni**-ta.
father-NOM.HON home-LOC go-HON$_S$-PST-MOD-HON$_A$-DECL
'Father would have gone home.'

I adopt the articulated clause periphery system of Rizzi (1997; 1999), where the clause-type marker is located at Force. (See Section 4.2.2 on Int, which is not included in Rizzi's 1997 system but introduced in his 1999 chapter.) Just as I proposed Agr$_{Subj}$ in Section 2.1, I propose the projection Agr$_{Addr}$ right below Force. Agr$_{Addr}$, just like Agr$_{Subj}$, bears an unvalued feature [HON:__]. *(Su)pni* is the morphological realization of Agr$_{Addr}$ when [HON:__] on Agr$_{Addr}$ agrees with a high-status addressee.

(13)

```
                        ...
                       /   \
                   ForceP   ...
                  /     \
            Agr_Addr P   Force
             /    \        ta
          IntP   Agr_Addr
          /  \    (su)pni
       FinP   Int
       /  \
      TP   Fin
```

3 In defense of Korean honorification as syntactic agreement

I analyze subject and addressee honorification as an instance of the operation Agree (Chomsky 2000; 2001), where an unvalued feature acts as a *probe* and searches for a *goal* feature to achieve valuation. In honorification systems, the probe is the unvalued honorific feature ([HON:__]) and the goal is an honorific feature valued either positive or negative ([HON: +/−]). Upon finding a goal, the probe copies the value of the goal and achieves valuation.[8,9]

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[8] A reviewer asks whether the honorific feature can be considered a type of ϕ-feature. As the reviewer suggests, the fact that languages such as Basque and Tamil use the same morphology for gender/number agreement and allocutive agreement suggests that allocutive agreement operates on ϕ-features. On a related note, Wang (2023) performs a typological study of languages that make use of ϕ-feature mismatches in expressing honorification. She derives the effects of honorification from the semantic markedness of certain ϕ-features and the interaction of pragmatic constraints – thereby avoiding postulation of a dedicated [HON] feature. My analysis is compatible with viewing [HON] a ϕ-feature, but I simply label it [HON] for expository reasons.

[9] Another reviewer asks whether [HON] could be a privative feature instead of a bivalent one. In Korean, high-level honorification triggers *additional* morphology on the verb that is lacking in non-high-level honorification. Therefore, the language is amenable to an analysis that contrasts the presence of the privative feature [HON] with its absence. I prefer the bivalent notation [HON: +/−] to keep it consistent with other languages such as Magahi that show separate, overt morphology for non-high-level honorification. But my analysis for the Korean system is compatible with viewing [HON] as a privative feature.

Before presenting the analysis in Section 4, I address the ongoing debate on whether Korean honorification should be viewed as syntactic agreement. I focus my discussion in this section to subject honorification, which the debate was mostly centered on. See Section 4.1.2 on addressee honorification as allocutive agreement.

The view of Korean honorification as agreement is not universally accepted, with researchers arguing for it (Koopman 2005; Chung 2009; Choi & Harley 2019) and against it (Choe 2004; Kim & Sells 2007; Song et al. 2019). Furthermore, within the honorification-as-agreement camp, Koopman (2005) and Chung (2009) view honorification as a syntactic operation (in the sense that [HON:__] on the verb is introduced in the syntax) while Choi & Harley (2019) consider it post-syntactic. This paper follows Koopman (2005) and Chung (2009) in viewing [HON:__] as being introduced in the syntax. In justifying this decision, I address two phenomena that are repeatedly brought up as arguments against this view and explain why they are not genuine counterarguments. The two phenomena are optionality in honorification, and multiple appearance of *(u)si*.

Choe (2004), Kim & Sells (2007), and Song et al. (2019) point to constructions like (14a-c) as counterexamples to the view that Korean subject honorification is agreement. (14a) is an example of honorification mismatch, where a commonly high-status subject such as *sensayngnim* 'teacher' appears with non-high-status syntax. In (14b), the high-status nominative case marker *kkeyse* is present without the verbal marker *(u)si*. (14c) shows the reverse situation, where *(u)si* is present without *kkeyse*. This kind of optionality, the authors say, is unexpected if subject honorification is indeed agreement.

(14)   a.   Sensayngnim-i   wus-ess-ta.
             teacher-NOM   laugh-PST-DECL
             'The teacher laughed.'

       b.   ?Sensayngnim-kkeyse   wus-ess-ta.
             teacher-NOM.HON   laugh-PST-DECL

       c.   Sensayngnim-i   wus-usi-ess-ta.
             teacher-NOM   laugh-HON$_s$-PST-DECL

However, these examples do not provide successful counterarguments against the agreement approach. First of all, the fact that *sensayngnim* can be of non-high status as in (14a) is not surprising under the honorification-as-agreement view because it does not follow from this view that the honorification level of an NP is determined lexically. As I have clarified in Section 1, the level of honorification reflects the speaker's perceived relation with other persons and is not pre-determined. Translated into agreement terms, whether an NP bears [HON: +] or [HON: –] depends on how the speaker perceives the relation between themselves and the referent of said NP.

(14b-c) may seem like a threat to the agreement view since they show one part of the agreement dependency without the other. However, recent views on agreement and morphology are more flexible than the one assumed by the aforementioned authors, and thus allow for optionality. Importantly, this flexibility is empirically motivated from crosslinguistically variant agreement patterns. Let us first consider the optional verbal agreement in (14b). It has been observed for Somali (Zwicky & Pullum 1983), Persian (Feizmohammadpour 2013), and Santiago Tz'utujil (Levin et al. 2020) that ϕ-agreement in these languages can occur optionally under certain conditions.

(15) a. *Persian* (Feizmohammadpour 2013: 35)
          bærge-ha xis   shod-{**ænd/Ø**}
          paper-PL   wet became-3PL/3SG
          'The papers became wet.'

      b. *Santiago Tz'utujil* (Levin et al. 2020: 330)[10]
          X-{**e/Ø**}-q-raq=pij   i-k'e'   etzb'al.
          COM-{3PL.B/Ø}-1PL.A-break=DIR PL-two   toy
          'We broke two toys.'

The source of optionality varies: Levin et al. (2020) argue that the base position of the agreement controller determines whether agreement occurs in Santiago Tz'utujil, while Feizmohammadpour (2013) demonstrates from experimental studies that syntactic/semantic properties of the subject such as its thematic role or individuality facilitate agreement mismatch in Persian. The optionality of *(u)si* in (14b) can be considered a similar example of optional agreement alongside these examples.

As for the optional presence of *kkeyse* in (14c), I suggest that it is a morphological optionality rather than a syntactic one. In Section 4.2.1, I attribute the allomorphy between nominative *i/ka* and *kkeyse* to a contextual allomorphy rule where the nominative case feature is realized as *kkeyse* only in the context of [HON: +] in its complement. I suggest that the subject in (14c) bears [HON: +], but the contextual allomorphy rule applies optionally. Other Korean nominal particles also display optional allomorphy. The dative case markers *hanthey~eykey* and the nominal conjunction connectors *kwa~ilang* are used interchangeably, with only a slight difference in formality (Sohn 2001).

(16) a. Mina-ka   Inho-{**eeykey/hanthey**} chayk-ul   cwu-ess-ta.
          Mina-NOM Inho-DAT   book-ACC give-PAST-DECL
          'Mina gave Inho the book.'

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[10] The glosses A and B in (15b) stand for the terms *Set A agreement* (ergative/possesor) and *Set B agreement* (absolutive) of the Mayanist convention.

    b.   Sacang-{**kwa/ilang**} cikwon-i   akswuha-yess-ta.
        CEO-and   employee-NOM shake.hands-PST-DECL
        'The CEO and the employee shook hands.'

The optionality of contextual allomorphy of [HON: +] may be explained alongside these variations. Hence the mismatches in (14b-c) can be captured by existing theories of agreement and morphology. I contend that the mere existence of such optionality does not constitute strong evidence against the agreement view.

Lastly, I address the multiple appearance of *(u)si* highlighted by Choi & Harley (2019) as evidence for a post-syntactic agreement view. In addition to its usual position to the right of negation in the main predicate, *(u)si* can optionally appear on the nominalized predicate of long form negation as in (17).

(17)   (Adapted from Choi & Harley 2019: 1333)
        Halapeci-kkeyse   ka-**si**-ci   anh-usi-ess-ta.
        grandfather-NOM.HON go-HON$_s$-NMLZ NEG-HON$_s$-PST-DECL
        'Grandfather didn't go.'

Assuming that agreement with a certain NP can only appear once in the clause, Choi and Harley argue that *(u)si* cannot result from syntactic agreement. They propose a node-sprouting analysis where an Hon node is inserted after spell-out to the right of a *v* c-commanded by an NP bearing [HON: +].[11] However, many languages with a well-established syntactic agreement system show multiple instances of agreement with the same NP in a clause. In (18a), we see Hindi-Urdu T and Asp both agreeing with the feminine object *imlii* 'tamarind'. (18b) shows Moose Cree Voice and Infl both agreeing with the 1st person object.

(18)   a.   *Hindi-Urdu* (Bhatt 2005: 768)
            Ram-ne   imlii   khaa-yii thii
            Ram.M-ERG tamarind.**F** eat-PFV.**F** be.PST.**F**.SG
            'Ram had eaten tamarind.'

    b.   *Moose Cree* (Oxford 2022: 4)
            wa:pam -i   -amiht
            see   -**1**OBJ -3:**1**PL
            'She sees us.EXCL.'

Earlier views of Agree strictly adhered to the Activity Condition (Chomsky 2001), which prohibits goals from undergoing multiple agreement. However, such rigidity is inadequate for capturing the patterns presented in (18). Instances of multiple agreement such as these, as well as long-distance agreement in Hindi, Kashmiri, and Tsez, motivate Bhatt (2005) to propose a weakened

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[11] They locate *(u)si* at *v*, but see Section 2.1 for my arguments suggesting that it is located between Asp and T.

version of the Activity Condition which prohibits inactive Goals from movement, but not from agreement.[12] Multiple agreement is also central in Hiraiwa's (2005) Probe Theory of Parallel Derivation, with which he explains the agreement patterns of Icelandic and the compound tense constructions of Swahili. In conclusion, the view that Korean subject honorification is syntactic agreement does not entail that there must be a one-to-one correspondence between probe and goal. Examples like (17) are fully compatible with a syntactic agreement analysis where multiple instances of Agr on different words enter an agreement relation with the subject.

4 An agreement analysis of honorification

This section presents an analysis of Korean honorification as agreement. In Section 4.1 I lay the groundwork by introducing three theoretical assumptions: the bidirectional agreement model, representation of speaker and addressee in the syntax as SpkP/AddrP, and the Distributed Morphology framework. In Section 4.2, I provide my analysis of Korean argument and addressee honorification. Section 4.3 shows that argument honorification but not addressee honorification can appear in embedded clauses, and explains how this asymmetry can be captured under the proposed analysis.

4.1 Three theoretical assumptions

4.1.1 Bidirectional agreement

There are varying views about the directionality of agreement, with some researchers arguing for strictly downward probing (Chomsky 2000; 2001; Preminger 2013; Rudnev 2021), cyclic downward probing with reprojection of the probe (Béjar & Rezac 2009; Clem 2021), or upward probing (Zeijlstra 2012; Wurmbrand & Haddad 2014; Bjorkman & Zeijlstra 2019). This paper adopts a bidirectional agreement model proposed by Arregi & Hanink (2021).[13] In a bidirectional agreement model, the probe first searches down in its c-command domain. If it fails to find an appropriate goal, it probes upwards upon additional merge of other elements until it finds its goal.

Arregi and Hanink motivate bidirectional agreement from the complementizer agreement facts of Washo (Hokan/isolate). Complementizer agreement is especially interesting in the context of agreement directionality due to its crosslinguistic variation. Many Germanic languages show the embedded complementizer agreeing with the subordinate subject (van Koppen 2005),

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[12] The multiple agreement in Hindi (18a) is obligatory on both Asp and T. (I thank Yash Sinha for confirming the Hindi facts.) In Korean, the presence of *(u)si* on the nominalized predicate is optional. I do not comment here on what underlies this difference.

[13] Ikawa (2022) also adopts a bidirectional agreement model in explaining Japanese object honorification. As Ikawa herself points out, however, her specific agreement model cannot be applied to Korean since Korean honorification is not sensitive to inter-argument relations the way Japanese object honorification is. So, I provide an independent account based on Arregi and Hanink's bidirectional agreement model for Korean.

while in Lubukusu it agrees with the superordinate subject (Diercks 2013). In Washo, the embedded complementizer shows *switch-reference* marking: it is realized as the suffix *-š* when the superordinate and subordinate subjects denote different entities (*different subject* or *DS* marking), while it is phonetically null when the two subjects are co-referent (*same subject* or *SS* marking). (19a) and (19b) demonstrate the DS and SS pattern, respectively.[14]

(19)   *Washo*

      a.   (Arregi & Hanink 2021: 652)

            pro$_i$ [Adele$_j$ dímeʔ sú:biʔ-i-**š**-ge]   di-hámup'ayʔ-é:s-i

            pro$_i$ Adele$_j$ water 3/3.bring-IND-**DS**-NMLZ.ACC 1/3-forget-NEG-IND

            'I$_i$ remember that Adele$_j$ brought the water.'

      b.   (Hanink & Bochnak 2018: 67, cited from Arregi & Hanink 2021: 653)

            Adele$_i$ [*pro*$_i$ daláʔak ʔ-í:gi-yi-∅-ge]   hámup'ayʔ-é:s-i

            Adele$_i$ *pro*$_i$ mountain 3/3-see-IND-**SS**-NMLZ.ACC 3/3.forget-NEG-IND

            'Adele$_i$ remembers that she$_i$ saw the mountain.'

Given that the complementizer is sensitive both to the identity of a structurally higher subject and a structurally lower one, Arregi and Hanink adopt a bidirectional model of agreement conditioned as in (20).

(20)   *Conditions for Agree* (Arregi & Hanink 2021: 663)

        X enters an Agree relation with *Y* iff:

      a.   *X* bears a feature *F* with value *V* and *Y* bears a matching unvalued feature *F′*, and

      b.   *X* c-commands *Y* *or Y* c-commands *X*.

Upon merge, the unvalued *F′* searches downward into its c-command domain. If it fails to find an appropriate goal, or if it is specified for multiple agreement as is the case of the Washo complementizer, the probe searches upwards until it finds one.

    I adopt (20) in analyzing Korean honorification. In Section 4.2 I demonstrate that *(u)si* is realized in a position that c-commands the subject, while *(su)pni* is realized in a position that is c-commanded by the addressee representation. This means that in Korean, subject honorification involves downward probing, while addressee honorification involves upward probing. I provide a principled account for both types of honorification under the bidirectional agreement model.

4.1.2 Representation of Speaker and Addressee in the syntax

This paper joins a recent line of research that analyzes addressee honorification as a type of *allocutive agreement* (Oyharçabal 1993; Miyagawa 2012; 2017; 2022; Zu 2017; Alok & Baker 2018; Alok 2020; 2021; Ceong & Saxon 2020; McFadden 2020; McFadden & Sundaresan 2021).

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[14] The glosses 3/3 and 1/3 in (19) indicate portmanteaux prefixes of transitive verbs encoding the person of the subject and the object.

The term *allocutive agreement* refers to the verb or auxiliary agreeing with the addressee, as shown in the Basque example in (21).

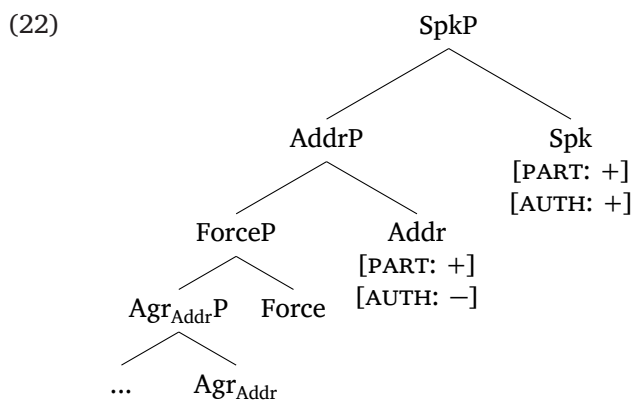(21)   *Basque* (Adapted from Oyharçabal 1993: 92–93)
       a. Pettek   lan egin dizü
           Peter.ERG worked   AUX.3E.ALLOC.VOUV
           'Peter worked.' (Vouvoiement – Uttered in a formal setting)

       b. Pettek   lan egin dik
           Peter.ERG worked   AUX.3E.ALLOC.M
           'Peter worked.' (Masc. tutoiement – Male addressee in familiar setting)

       c. Pettek   lan egin din
           Peter.ERG worked   AUX.3E.ALLOC.F
           'Peter worked.' (Fem. tutoiement – Female addressee in familiar setting)

       d. Pettek   lan egin du
           Peter.ERG worked   AUX.3E
           'Peter worked.' (Non-allocutive)

Addressee honorification can be seen as a type of allocutive agreement. In (21), the Basque auxiliary reflects the gender of the addressee and the formality of the utterance situation. Addressee honorification reflects the relation of the speaker and the addressee as perceived by the speaker.

A peculiarity of allocutive agreement is the absence of an overt goal. Linguists have had the intuition that allocutive agreement is agreement "with the addressee", but the addressee is not overtly pronounced (arguably barring vocative expressions). In providing a syntactic explanation, researchers have postulated functional projections that represent discourse participants. Speas & Tenny (2003) put forth a pioneering approach by drawing a parallel between the argument structure of the event denoted by *v*P and the argument structure of the speech event. They implement this intuition by postulating the saP (speech act phrase) which includes representations of the speaker and addressee.

Subsequent studies have recognized the advantage of postulating a speaker/addressee representation in the syntax. The position of the representation varies among researchers. Haegeman (2004); Haegeman & Hill (2013); Miyagawa (2012; 2017; 2022); Zu (2017); Portner et al. (2019a; b); Yamada (2019); Kaur (2020); McFadden (2020); McFadden & Sundaresan (2021) all posit some representation of context or speaker/addressee at the root of the clause. Haddican (2018) and Sigurðsson (2004) assume a representation lower down at the IP/FinP area in explaining Basque cliticization and Icelandic facts, respectively. Alok (2020; 2021) argues for both the FinP and the root to bear representations of discourse participants, and adopts such a structure in deriving the crosslinguistic variation in allocutive agreement with a focus on Magahi.

Korean shows addressee honorification only in the matrix clause. This makes the language amenable to positing a speaker/addressee representation at the root. For concreteness, I postulate a Speaker Phrase (SpkP) and Addressee Phrase (AddrP), borrowing from Miyagawa (2012; 2017; 2022) and Zu (2017) – although I view many of the other proposed structures compatible with theirs. Adopting the feature system put forth by Harley & Ritter (2002), the identities of the speaker and the addressee are represented using the PART(ICIPANT) and AUTH(OR) features.[15]

(22)

```
                          SpkP
                         /    \
                    AddrP      Spk
                   /    \      [PART: +]
              ForceP     Addr  [AUTH: +]
             /    \      [PART: +]
      Agr_Addr P   Force [AUTH: −]
        /    \
      ...    Agr_Addr
```
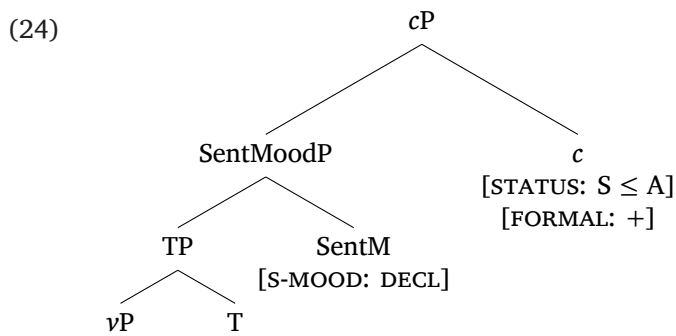
A special mention is due of Portner et al. (2019a), who also focus on analyzing Korean addressee honorification. The authors postulate two functional projections at the clause periphery: SentMoodP and cP (the c stands for *context*). SentMoodP is similar to ForceP: it encodes information about the clause type. It bears the S-MOOD feature that can be specified as DECL (declarative), INTERR (interrogative), etc. cP bears the feature STATUS, which encodes information about the speaker-addressee relation, and the feature FORMAL, which encodes the formality of the utterance. There are five possible values of the STATUS feature ($S \geq A$, $S > A$, $S = A$, $S < A$, and $S \leq A$, where S stands for Speaker and A for Addressee), and two possible values of the FORMAL feature ($+$ or $-$).

Crucially, they view the clause-final morphology of Korean as a single morpheme that realizes the combination of the STATUS, FORMAL, and S-MOOD features. In other words, the SentM and c heads are realized as one vocabulary item. (23) shows some examples of how the feature combinations are realized in their system, and (24) shows the structure of a sentence containing *supnita*. (Examples are cited from Portner et al. 2019a: 10–11.)

(23)   a.   [STATUS: $S \leq A$], [FORMAL: $+$], [S-MOOD: DECL] → *supnita* (formal)
     b.   [STATUS: $S \leq A$], [FORMAL: $-$], [S-MOOD: DECL] → *eyo* (polite)
     c.   [STATUS: $S \geq A$], [FORMAL: $-$], [S-MOOD: DECL] → *e* (intimate)

---

[15] In previous works, similar information is represented as a covert DP operator at Spec, cP (for Portner et al. 2019a) or Spec, AddrP/SpkP (for Miyagawa 2012; 2017; 2022) instead of the heads Addr and Spk as I have done in (22). My choice stems from an effort to minimize the amount of postulated structure, but my analysis does not hinge on this choice and is compatible with a DP operator representation.

(24)

```
                          cP
                    ┌──────┴──────┐
              SentMoodP            c
            ┌─────┴─────┐    [STATUS: S ≤ A]
           TP          SentM   [FORMAL: +]
        ┌───┴───┐  [S-MOOD: DECL]
       vP       T
```

Portner, Pak, and Zanuttini's analysis effectively captures the complex interaction of addressee honorification and clause type. Their analysis addresses the polite/intimate register *eyo* and *e*, which I set aside in this paper (see Section 2.2 for a brief discussion of *eyo*). They also straightforwardly explain why addressee honorification is unembeddable in Korean, by limiting the distribution of *c* to the matrix clause. My analysis presented in Section 4.2 shares some ideas with theirs, including a discourse-related representation limited to the root. However, I present two reasons below on why I diverge from their proposed structure.

First, treating *supnita* as one morpheme undermines its morphological transparency. As shown in **Table 1** and (25), *ta* and *kka* are independent clause-type morphemes that can stand alone without *(su)pni*. Treating *supnita* and *supnikka* as single morphemes on a par with *ta/kka* does not accurately reflect the independence of *ta* and *kka* nor the fact that *supni* is simply attached to these particles when the addressee is of high status.

	Non-high	**High**
Declarative	*ta*	*supnita*
Interrogative	*kka/nya*[16]	*supnikka*

Table 1: Korean high/non-high level declarative and interrogative sentential endings.

(25)   a.   Minswu-ka   pathi-ey   o-ass-ta.
       Minswu-NOM party-LOC come-PST-DECL
       'Minswu came to the party.' (Addressee is of non-high status)

       b.   Minswu-ka   pathi-ey   o-l-kka?
       Minswu-NOM parth-LOC come-MOD-Q
       'Will Minswu come to the party?' (Addressee is of non-high status)

Second, it is expected under (23) that *supnita* and *eyo* cannot co-occur in a sentence because they realize the same set of features at the same syntactic positions (SentM and *c*). They only

---

[16] *Nya* shows a wider distribution in questions directed towards non-high-status addressees, but *kka* is also used in the same register for modalized questions. See Kang & Yoon (2019).

differ in the value of the feature FORMAL. However, it is certainly possible to see both *supni* and *eyo* in a sentence.

(26) Onul nalssi-ka   coh-supni-ta-eyo.
      today weather-NOM good-HON$_A$-DECL-EYO
      'The weather is good today.'

According to An (2022: fn 19), sentences like (26) reflect an older stage of Korean where a speaker would use both *supni* and *eyo* to express extreme deference towards an addressee.[17] While the *supni-ta-eyo* construction sounds rather archaic to the contemporary speaker, it is still productively used in an often comical or sarcastic tone. (26) provides evidence that *supnita* and *eyo* are not of equal morphosyntactic status, contra what is suggested in (23).

These two issues are straightforwardly addressed in my proposed structure in (22). There, *(su)pni* is realized at Agr$_{Addr}$ and the clause-type morphemes *ta/kka* at Force. Since they are realizations of two separate heads, and the presence of Force is not dependent on the presence of *(su)pni,* the syntactic and morphological independence of the two morphemes is captured in (22). As for (26), a good candidate for the position of *eyo* is the Addr head itself. This position mirrors the linear order of the elements *supni-ta-eyo*. It is also in line with Ceong and Saxon's (2020) proposal that *eyo* be linked to a higher structural position than *(su)pni.* In Section 4.2.2, I demonstrate an analysis of Korean addressee-honorific *(su)pni* as allocutive agreement based on the structure in (22).

4.1.3 The Distributed Morphology framework

Following Chung (2009), Choi & Harley (2019), Yamada (2019), Ikawa & Yamada (2021), and Ikawa (2022) among others, I adopt the Distributed Morphology framework (Halle & Marantz 1993; 1994) to explain the effect of honorification on the morphology of case markers and the verb. In other words, I assume that the syntax operates on formal features instead of lexical items. After spell-out to the interfaces, vocabulary items are inserted to the terminal nodes that bear the features. Insertion of vocabulary items is regulated by Vocabulary Insertion rules (VI rules), which map a set of features to a vocabulary item. In accounting for Korean honorification within the Distributed Morphology framework, the concept of *contextual allomorphy* is useful (Bobaljik 2000; Marantz 2013). When the realization of a feature set is subject to contextual allomorphy, the feature set can be mapped to different vocabulary items depending on the environment

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[17] As a reviewer points out, the fact that multiple instances of addressee honorification lead to extreme deference is somewhat surprising given that multiple appearance of *subject* honorification does not have this additive effect. (See Choi & Harley 2019 on (17) and related examples.) A potentially relevant difference between (17) and (26) is that (17) shows multiple instances of the *identical* morpheme *(u)si* while (26) contains *(su)pni* and *eyo*, two *different* addressee honorification morphemes of different formality levels. The markedness of using two different levels of formality in the same sentence may underlie the unusual pragmatics of *supni-ta-eyo*.

surrounding the node bearing the feature set. For example, the Korean nominative case marker shows honorification-dependent allomorphy: it is realized as *kkeyse* next to high-status NPs, and realized as *i* or *ka* otherwise (the choice between *i* and *ka* is phonological). This alternation can be straightforwardly captured by a contextual allomorphy rule such as (27) which maps the nominative feature [CASE: NOM] to *kkeyse* only in the context of a [HON: +] in the node to its immediate left. (Following Bittner & Hale (1996a; b) among others, I represent case-marked nominals as KPs where the functional head K selects for an NP or DP complement.)

(27)　　a.　*kkeyse* ↔ [CASE: NOM] / [HON: +] ___
　　　　b.　*i/ka* ↔ [CASE: NOM]

(28)
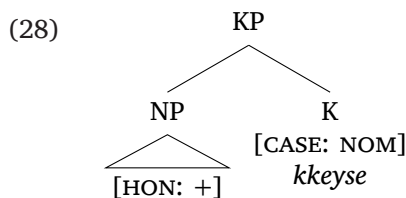
Under the Subset Principle, the VI rule with a more specific contextual condition applies when the contextual condition is met – this is (27a). Otherwise, the more general rule (27b) applies. (See Gribanova & Harizanov 2016 and Bonet & Harbour 2012 on the Subset Principle pertaining to contextual allomorphy.) Hence the feature [CASE: NOM] is realized as *kkeyse* only when the NP bears [HON: +]; otherwise it is realized as *i/ka*. Contextual allomorphy occurs not only with the nominative case marker but also with the dative case marker as well as verbal morphology. In sections 4.2.1 and 4.2.2, I make use of similar VI rules in capturing the morphology of Korean honorification in a straightforward way.

4.2 The proposal

4.2.1 Argument honorification

I propose that all NPs of Korean enter the derivation with a valued honorific feature. I emphasize here again that whether NPs bear [HON: –] or [HON: +] is not tied to the lexical entry of the NP but determined by the speaker. Based on the value of [HON] on the NP, its case marking is realized according to the VI rules in (29). The case features [CASE: NOM] and [CASE: DAT] are subject to contextual allomorphy when the adjacent NP bears [HON: +].

(29)　　a.　*kkeyse* ↔ [CASE: NOM] / [HON: +] ___
　　　　b.　*i/ka* ↔ [CASE: NOM]
　　　　c.　*kkey* ↔ [CASE: DAT] / [HON: +] ___
　　　　d.　*eykey* ↔ [CASE: DAT]

In addition to allomorphy in case marking, a high-status subject also triggers the presence of *(u) si*. I propose that Agr_{Subj} bears [HON:__] which searches in its c-command domain for a valued

HON feature. Since the external argument is at Spec, VoiceP, it is within the c-command domain of the probe. Hence the probe successfully finds the subject in its initial search and agrees with it. If the probe is valued as [HON: +], it is realized as *(u)si*.

(30)
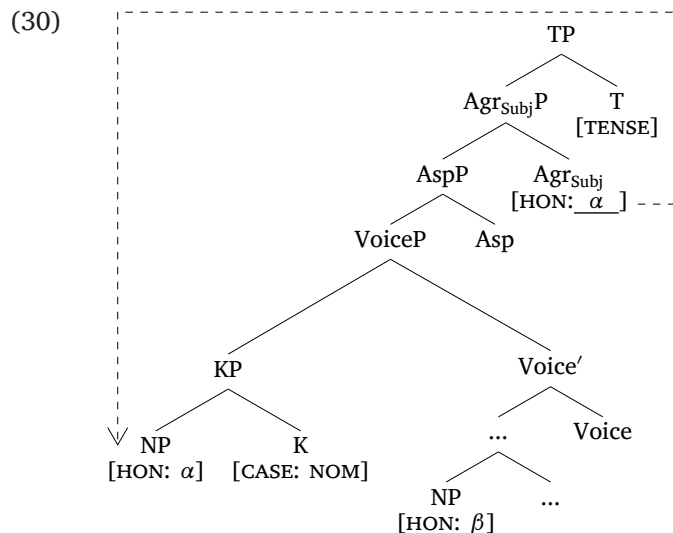
The VI rule (31) states that [HON: +] is realized as *(u)si* in the context of a TENSE feature in the node to its immediate right. The context guarantees that *(u)si* is only realized for subject honorification; the same [HON: +] involved in addressee honorification would not trigger insertion of *(u)si*, since it is not in the context of [TENSE]. Notice that no VI rule targets [HON: –] in Korean since non-high-level honorification does not trigger overt verbal morphology.
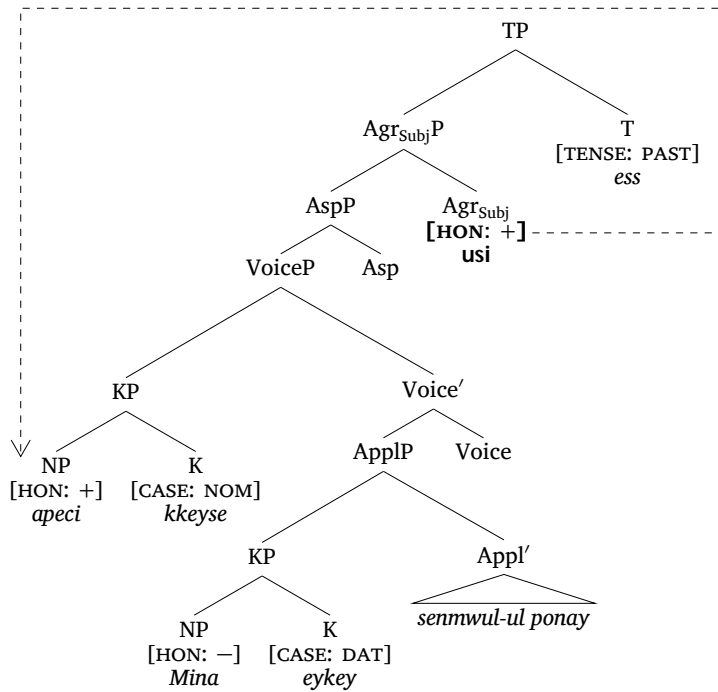
(31)   *(u)si* ↔ [HON: +] / __ [TENSE]

The proposed analysis explains why the presence/absence of *(u)si* tracks the status of the structurally highest argument. The probe is simply searching downwards and agreeing with the first argument that it finds. Hence the high-status subject *apeci-kkeyse* triggers realization of *(u)si* on Agr_{Subj} in (32a). In contrast, the high-status indirect object *apeci-kkey* in (32b) does not affect the valuation of the probe, which instead agrees with the non-high-status subject *Mina-ka*.

(32)   a.   Apeci-kkeyse   Mina-eykey   senmwul-ul   ponay-si-ess-ta.
                father-NOM.HON   Mina-DAT   gift-ACC   send-HON_S-PST-DECL
                'Father sent Mina a gift.'

        b.   Mina-ka   apeci-kkey   senmwul-ul   ponay-(*si)-ess-ta.
                Mina-NOM   father-DAT.HON   gift-ACC   send-*HON_S-PST-DECL
                'Mina sent Father a gift.'

The structures of (32a) and (32b) are visualized in (33) and (34) respectively. (I follow Pylkkänen (2008) in positing an Applicative Phrase (ApplP) in ditransitive constructions.)

(33)   High-status subject in (32a) triggers realization of *(u)si* on Agr_{Subj}

```
                                    TP
                         _____
                        /                        \
                  Agr_Subj P                       T
              _____               [TENSE: PAST]
             /                \                   ess
           AspP            Agr_Subj
        _____         [HON: +]
       /         \           usi
    VoiceP       Asp
   _____
  /          \
 KP         Voice′
 _____   _____
/       \ /          \
NP      K ApplP      Voice
[HON: +] [CASE: NOM]
apeci    kkeyse
                 KP          Appl′
              _____      _____
             /        \    / senmwul-ul ponay \
            NP         K   ‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾
         [HON: −]  [CASE: DAT]
           Mina      eykey
```

(34)   High-status indirect object in (32b) does not trigger realization of *(u)si* on Agr_{Subj}

```
                                    TP
                         _____
                        /                        \
                  Agr_Subj P                       T
              _____               [TENSE: PAST]
             /                \                   ess
           AspP            Agr_Subj
        _____         [HON: −]
       /         \
    VoiceP       Asp
   _____
  /          \
 KP         Voice′
 _____   _____
/       \ /          \
NP      K ApplP      Voice
[HON: −] [CASE: NOM]
Mina     ka
                 KP          Appl′
              _____      _____
             /        \    / senmwul-ul ponay \
            NP         K   ‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾‾
         [HON: +]  [CASE: DAT]
           apeci     kkey
```
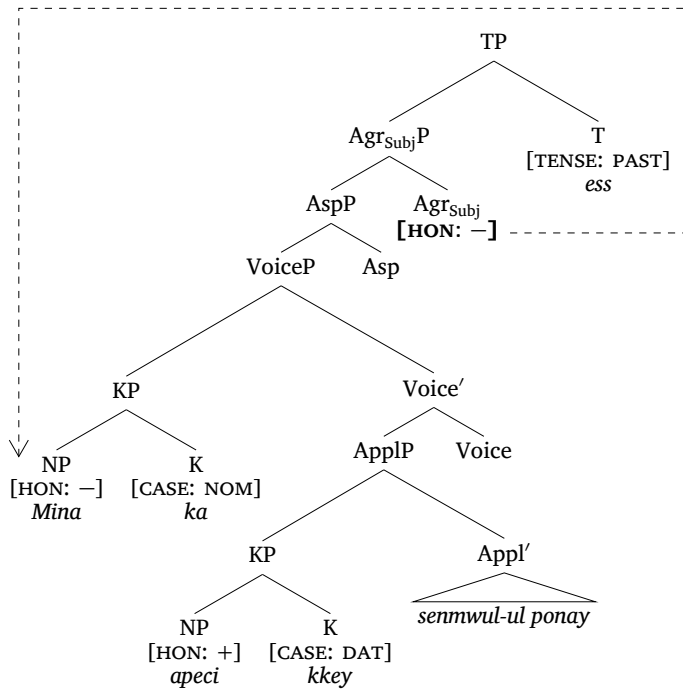
Furthermore, high-status passive and unaccusative subjects are expected to trigger realization of *(u)si* despite being internal arguments since they are the only available goal for the probe on Agr_{Subj}. This prediction is borne out: passive/unaccusative subjects trigger regular subject honorification as shown in (35–36).

(35)   Apeci-kkeyse   dochakha-si-ess-ta.
       father-NOM.HON   arrive-HON_s-PST-DECL
       'Father arrived.'

(36)   Apeci-kkeyse   cap-hi-si-ess-ta.
       father-NOM.HON   catch-PASS-HON_s-PST-DECL
       'Father was caught.'

Lastly, when a ditransitive construction is passivized, the probe on Agr_{Subj} agrees with whichever internal argument is promoted to subject position. (37) shows two ways of passivizing ditransitive (32b). When the high-status indirect object *apeci-kkeyse* is promoted to subject as in (37a), *(u)si* is present on the verb. In contrast, when a non-high status direct object like *senmwul-i* is promoted as in (37b), *(u)si* cannot appear. Again, the presence or absence of *(u)si* is determined by the status of the structurally highest argument.
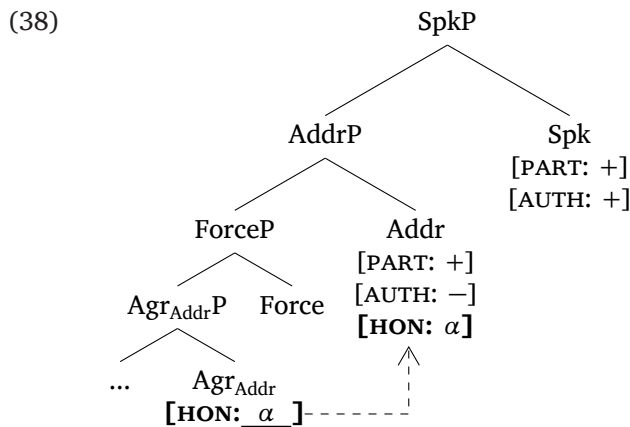
(37)   a.   Apeci-kkeyse   senmwul-i ponay-eci-si-ess-ta.
            father-NOM.HON   gift-NOM   send-PASS-HON_s-PST-DECL
            'Father was sent a gift.'

       b.   Senmwul-i apeci-kkey   ponay-eci-(*si)-ess-ta.
            gift-NOM   father-DAT.HON   send-PASS-(*HON_s)-PST-DECL
            'A gift was sent to father.'

4.2.2 Addressee honorification

In this section I propose an analysis of Korean addressee honorification as allocutive agreement. In doing so I join Ceong & Saxon (2020), who also call for a similar approach. This paper provides a more fully worked out syntactic agreement mechanism in line with their earlier proposal. The analysis builds on that of McFadden & Sundaresan (2021), who made the connection between allocutive agreement, flexible direction of agreement, and proposal of the IntP phase by Carstens (2016) – modulo two points of divergence. The first is the position of the probe. McFadden and Sundaresan locate the allocutive probe in Force, while I locate it in Agr_{Addr}. The second is the model of agreement assumed. McFadden and Sundaresan cite Béjar & Rezac (2009) and Clem (2021) in adopting the Cyclic Agree model, but the agreement mechanism they describe is more flexible than what is possible under Cyclic Agree. When a probe fails to find a goal in its c-command domain in McFadden and Sundaresan's system, the probe needs to search upwards across multiple projections. However, in the Cyclic Agree model, re-projection of a probe on a

head X is limited to projections within XP. As a result, there is a limit to how "high up" a probe can search. The agreement phenomena described in this paper and in McFadden and Sundaresan's work is better captured by a more flexible model of agreement such as bidirectional agreement (Arregi & Hanink 2021), introduced in Section 4.1.1. In this model, the probe actually searches upwards to agree with a goal c-commanding it from a separate projection. This eliminates the need for re-projection into multiple c-commanding projections, which would not be possible in a Cyclic Agree model without additional assumptions.

In Section 4.1.2 I introduced the SpkP and AddrP as representations of the speaker and addressee at the root of the clause. Putting together these projections and my proposal in Section 2.2 that *(su) pni* is located in the functional head Agr_{Addr}, I propose that Agr_{Addr} bears an [HON:__] that agrees with a valued honorific feature on Addr. This means that the probe on Agr_{Addr} agrees with a goal that c-commands it, as schematized in (38). (The PART and AUTH features on the Addr and Spk heads are omitted in subsequent trees for ease of presentation, unless they become relevant to the discussion.)

(38)

$$
\begin{array}{c}
\text{SpkP} \\
\nearrow \qquad \searrow \\
\text{AddrP} \qquad \text{Spk} \\
\qquad\qquad [\text{PART: +}] \\
\qquad\qquad [\text{AUTH: +}] \\
\end{array}
$$

ForceP   Addr
          [PART: +]
Agr_Addr P   Force   [AUTH: −]
          [HON: α]
...   Agr_Addr
      [HON: α]

There are two pieces that make this agreement pattern possible. The first is the bidirectional agreement model introduced in Section 4.1.1, under which upwards probing is possible. The second is the view of Carstens & Diercks (2013) and Carstens (2016) that there is a phase boundary between FinP and ForceP, rendering elements in FinP unavailable for agreement from a higher position. (See McFadden & Sundaresan (2021) for earlier discussion of this phase boundary in the context of allocutive agreement.) Their argument is motivated by the asymmetry between two kinds of embedded clauses in Bantu languages, where some show phasal properties while others don't. Lubukusu is an especially instructive language since it has both types of embedded clauses: ones headed by the complementizer *-li* (shown in (39)), and ones headed by *mbo* (shown in (40)). The embedded subject can undergo hyperraising out of an *mbo*-clause as in (40b), but a *li*-clause prohibits such hyperraising as shown in (39b).[18]

---

[18] The number glosses in (39–41) encode noun class agreement. Also, the glosses of *a-li* and *babaandu* are slightly altered for consistency, following the notation by Diercks (2010: 41 and 279ff).

(39) *Lubukusu* (Carstens & Diercks 2013: 110)

    a. Alfredi a-a-bolela   babaandu a-li   ba-kha-bile
       Alfred   1SA-PST-tell 2people   1-that 2SA-FUT-conquer
       'Alfred told the people that they will win.'

    b. *Mikaeli a-lolekhana a-li   a-si-kona
       Michael   1SA-seem   1-that 1SA-PERS-sleep
       Intended: 'Michael seems to be still sleeping.'

(40) *Lubukusu* (Carstens & Diercks 2013: 100)

    a. Ka-lolekhana (mbo) babaandu ba-kwa
       6SA-seem   (that)   2people   2SA.PST-fall
       'It seems that the people fell.'

    b. babaandu ba-lolekhana (mbo) ba-kwa
       2people   2SA-seem   (that)   2SA.PST-fall
       'The people seem like they fell./The people seem to have fallen.'

Furthermore, *-li* and *mbo* display different properties with regards to adjunct clauses headed by *sikila* 'because', which are considered ForceP. *Mbo* can appear inside a *sikila* clause, which suggests that *mbo* appears in a position lower than the one occupied by *sikila*. On the other hand, *-li* cannot appear inside a *sikila* clause.

(41) *Lubukusu* (Carstens & Diercks 2013: 111)

    Alfred a-likho   a-cha   sikila   mbo (*a-li)   a-likho   a-elekesia Sifuna
    Alfred 1SA-PROG 1SA-leave because that (*1-that) 1SA-PROG 1SA-escort Sifuna
    'Alfred is leaving because he is escorting Sifuna.'

In explaining (41), Carstens (2016) locates *-li* and *mbo* in different positions within the articulated clause periphery system of Rizzi (1997; 1999): *mbo* at Fin, and *-li* at Force. The version of articulated periphery adopted by Carstens also includes the Int(errogative) head between Fin and Force, posited by Rizzi (1999). He motivates Int from the fact that the Italian embedded polar question complementizer *se* allows a high topic such as *a Gianni* in (42) to either follow itself (42a) or precede itself (42b). Crucially, the declarative complementizer *che*, which is located at Force, must precede the high topic, as the contrast of (42c-d) shows.

(42) *Italian* (Rizzi 1999: 289)

    a. Non so **se**, a Gianni, avrebbero potuto dirgli la verità.
       'I don't know if to Gianni, they could have said the truth.'

    b. Non so, a Gianni, **se** avrebbero potuto dirgli la verità.
       'I don't know, to Gianni, if they could have said the truth.'

    c. Credo **che** a Gianni, avrebbero dovuto dirgli la verità.
       'I believe that to Gianni, they should have said the truth to him.'

    d. *Credo, a Gianni, **che** avrebbero dovuto dirgli la verità.

        Intended: 'I believe, to Gianni, that they should have said the truth to him.'

Int is a separate projection from Focus, too, since *se* can be followed by a separate focused phrase like QUESTO in (43).

(43)   *Italian* (Rizzi 1999: 289)

   Mi domando se QUESTO gli volessero dire (non qualcos'altro).

        'I wonder if THIS they wanted to say to him, not something else.'

Carstens captures the asymmetry in (39–41) by claiming that Int is a phase head.

(44)   Force (Top*) $\boxed{\text{Int}}_{\text{Phase Head}}$ (Top*) Foc (Top*) Fin TP

An embedded *-li*-clause projects up to ForceP, which includes IntP. Since Int is a phase head, its complement FinP is spelled out and the elements within FinP are unavailable for movement due to the Phase Impenetrability Condition (PIC; Chomsky 2000). Therefore, hyperraising out of a *-li*-clause is impossible as shown in (39b). On the other hand, an embedded *mbo*-clause projects only up to FinP. When a raising predicate directly selects an *mbo*-clause, it is in fact selecting a FinP which does not include a phase boundary in its periphery. Due to this truncated structure, hyperraising out of an *mbo*-clause is possible as shown in (40b). Schematized representations of the Lubukusu articulated clause periphery are provided in (45).
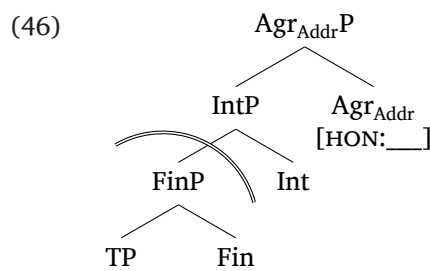
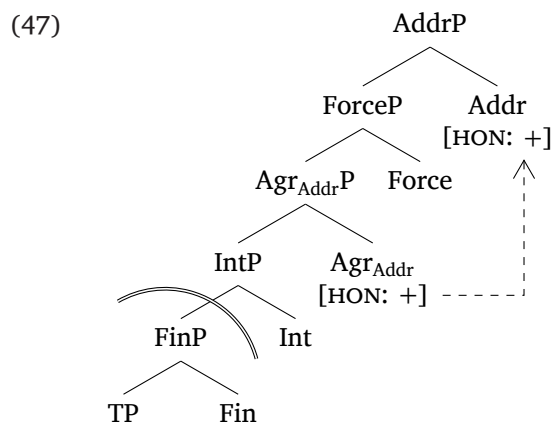(45)   a. *mbo*-clause is a FinP
        (No phase boundary)
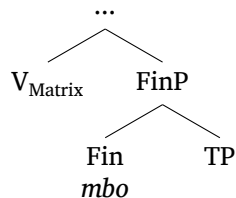
    b. *li*-clause is a ForceP
        (Includes phase boundary)
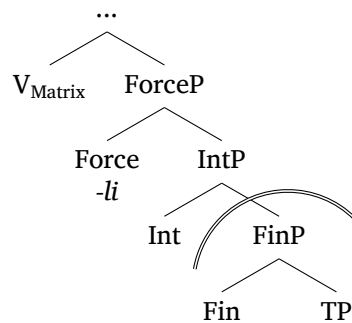
As McFadden & Sundaresan (2021) demonstrate, this phase boundary allows us to view allocutive agreement as upwards-probing agreement. The specific agreement mechanism is visualized with tree structures in (46–47). The tree in (46) shows a structure completed up to $Agr_{Addr}P$. Upon merge of Agr_{Addr}, which is right below Force and hence above IntP, the probe on Agr_{Addr} probes downwards but is unable to find a goal in its c-command domain due to the PIC. Therefore, it remains unvalued.

(46)

```
                Agr_Addr P
               /         \
           IntP          Agr_Addr
          /  \           [HON:___]
       FinP   Int
       /  \
      TP   Fin
```

Having failed to find a goal from its downward probe, [HON:__] searches upwards until it finds either [HON: +] or [HON: –]. It finds its goal upon merge of Addr and copies the goal's features, achieving valuation as shown in (47).[19]

(47)

```
                      AddrP
                     /     \
                 ForceP     Addr
                /     \     [HON: +]
        Agr_Addr P    Force    ↑
        /      \              |
    IntP       Agr_Addr       |
    /  \       [HON: +] ------'
 FinP   Int
 /  \
TP   Fin
```

---

[19] A reviewer asks whether an element at Spec, IntP or Spec, TopicP can be an intervening goal in the c-command domain of [HON:__], since it probes downwards *before* probing upwards. However, I consider this impossible in Korean. Since Int corresponds to polar question complementizers, Rizzi states that what can appear at Spec, IntP are adverbs such as *perché* 'why' or *come mai* 'how come'. These are not viable goals for agreement. As for Spec, TopicP, it is very unlikely that the highest TopicP is projected in Korean. Since Korean does not show multiple topicalization (Han 1998), it is never the case that all three topic positions are filled. Furthermore, topicalization is available inside Korean embedded polar questions. This suggests that the topic's landing site is lower than Int and thus unreachable for agreement from Agr_{Addr}.

(i) Mina-ka [Hani-nun Inho-ka   __ manna-ss-nunci] kwungkumhayha-yess-ta.
     Mina-NOM Hani-TOP Inho-NOM   meet-PST-if   wonder-PST-DECL
     'Mina wondered whether Hani, Inho met.'

In (31), I proposed a context-sensitive VI rule where [HON: +] is realized as *(u)si* in the context of [TENSE] in the adjacent node to its right. Here I present a similar account for the realization of *(su)pni*. Rule (48) states that *(su)pni* can be a realization of [HON: +] only in the context of a FORCE feature in the adjacent node to its right. (49) is a schematic demonstration of (48) being applied in a structure uttered to a high-status addressee.

(48)   *(su)pni* ↔ [HON: +] / __ [FORCE]

(49)
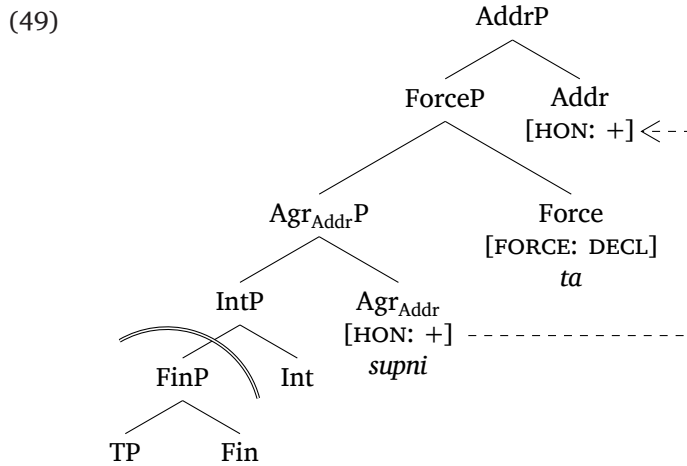
4.3 Argument vs. Addressee honorification: asymmetry in embeddability

One asymmetry between argument and addressee honorification of Korean is that only the former can appear in embedded clauses. In (50), we see honorification of the high-status subject *apeci* 'father' and the high-status indirect object *sensayngnim* 'teacher' appearing in embedded clauses. On the other hand, (51) shows that *(su)pni* cannot appear on the embedded verb regardless of whether the matrix verb bears *(su)pni*.

(50)   a.   Mina-ka   [apeci-kkeyse   wus-usi-ess-ta   ko]   malha-yess-ta.
               Mina-NOM father-NOM.HON laugh-HON$_s$-PST-DECL COMP say-PST-DECL
               'Mina said that father laughed.' (Father is of high status)

        b.   Mina-ka   [chinkwu-ka sensayngnim-kkey iyakiha-yess-ta ko]   malha-yess-ta.
               Mina-NOM friend-NOM   teacher-DAT.HON   talk-PST-DECL   COMP say-PST-DECL
               'Mina said that a friend talked to the teacher.' (Teacher is of high status)

(51)   *Mina-ka   [chinkwu-ka wus-ess-supni-ta   ko]   malha-yess-(supni)-ta.
          Mina-NOM friend-NOM   laugh-PST-HON$_A$-DECL COMP say-PST-(HON$_A$)-DECL
          Intended: 'Mina said that a friend laughed.'

I argue that the asymmetry between (50) and (51) arises because [HON:__] on embedded Agr$_{Addr}$ cannot undergo agreement with Addr. Upon failing to be valued, the feature is given the default,

unmarked value, which I consider to be [HON: –]. This is because non-human/inanimate NPs show the same case and verbal morphology as non-high-status human NPs.[20] It is difficult to imagine a speaker bearing any honorific relation with referents of NPs such as *ancen* 'safety', *pawi* 'rock', or *koyangi* 'cat'. The case marking on these NPs, as well as the (lack of) verbal morphology, parallels that of non-high-level honorification in (52c).

(52)   a.   Ancen-i   kacang   cwungyoha-Ø-ta.
          safety-NOM   most   important-PRS-DECL
          'Safety is the most important.'

       b.   Pawi-ka   koyangi-eykey   cwu-eci-ess-ta.
          rock-NOM   cat-DAT   give-PASS-PST-DECL
          'A rock was given to the cat.'

       c.   Mina-ka   Inho-eykey   iyakiha-yess-ta.
          Mina-NOM   Inho-DAT   talk-PST-DECL
          'Mina talked to Inho.'

Therefore, I consider the default value for honorific features to be negative ([HON: –]).

   Let us return to the lack of embedded *(su)pni*. According to the VI rule (48), *(su)pni* is only realized when the probe on Agr_{Addr} is valued as [HON: +]. Since the probe fails to be valued, it defaults to [HON: –] and is not morphologically realized. Why, then, does [HON:__] on embedded Agr_{Addr} fail to agree? This is because for Korean, SpkP and AddrP only appear in the matrix clause and not in the embedded clause.[21] Upon encountering the Int phase boundary and failing to find a goal in its c-command domain, [HON:__] on embedded Agr_{Addr} probes upwards. In the matrix clause, it would have found a goal on Addr and agreed with it, achieving valuation. However, in an embedded clause, the probe fails to find a goal that c-commands it before running into a higher phase boundary at the complementizer *ko*.[22,23] (See Ahn & Cho 2008 for evidence from linearization facts that embedded *ko*-clauses are phases.) Hence, Korean allocutive agreement is

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[20] See Bejar (2003) on arguments from agreement patterns of Georgian for postulating a default value in case of failure to agree, and Preminger (2014) on why an effective model of the grammar should not treat a probe's "failure" to agree as a fatal crash of the derivation.

[21] See also Portner et al. (2019a), who derive the unembeddability of *(su)pni* by limiting their *c*P to the root.

[22] A comparison is in order between Korean and Washo, the language that motivates Arregi and Hanink's (2021) bidirectional agreement model. Korean embedded Agr_{Addr} is located *between* two phase edges (the Int phase and the *ko* phase). It is unable to agree with any argument of the superordinate clause since it cannot search beyond this phase boundary. In contrast, the embedded C in Washo agrees with *both* the subordinate and superordinate subject thanks to it being the phase edge itself (Arregi & Hanink 2021: 663). This derives the different behaviors of the two languages.

[23] This additional phase boundary is absent in McFadden & Sundaresan's (2021) analysis of complementizer agreement facts. For them, a ϕ-probe on Force is able to search upwards into the superordinate clause. This is how they derive upward complementizer agreement in Lubukusu. Since Korean does not show upward complementizer agreement of any kind, I believe that my additional postulation regarding Korean is compatible with their system.

a *main clause phenomenon* (Haegeman 2004; Haegeman & Hill 2013) in the strictest sense since it does not appear in any embedded environments.

However, in many languages the distribution of allocutive agreement is wider than it is in Korean. I conclude this section with a discussion of this crosslinguistic variation, which also serves as a segue into Section 5. In Japanese (Miyagawa 2012; 2017; 2022; Yamada 2019) and Tamil (McFadden 2020; McFadden & Sundaresan 2021), allocutive agreement is mostly limited to the matrix clause but also available in a small set of embedded environments. Miyagawa points out that the distribution of Japanese allocutive agreement overlaps with that of Emonds' (1976) *root transformations*: the highest S (the main clause), an S immediately dominated by the highest S (e.g., a *because*-clause), and reported discourse (complement clauses of bridge verbs). McFadden & Sundaresan (2021) observe that Tamil allocutive agreement shows a similar distribution.

In Magahi, allocutive agreement appears in an even wider range of embedded environments (Alok & Baker 2018; Alok 2020; 2021). Alok captures this distribution by positing two layers of speaker and addressee representation across all languages: one at FinP, another at the root. The crosslinguistic difference in embeddability is derived from parametric variation in which representation bears an allocutive probe. For Magahi, it's Fin; for Japanese and Korean, he says, the probe is at the root. I remain agnostic as to whether there exists in Korean a covert speaker and addressee representation in the FinP domain, since it is difficult to find evidence either way if we expect no agreement to occur there due to absence of a probe. But my analysis is certainly compatible with Alok's proposed structure.

5 Crosslinguistic variation in the 2nd person

In this section, I focus on a specific point of crosslinguistic variation that highlights the interaction of subject and addressee honorification. When the subject of a sentence is 1st or 3rd person, subject honorification and addressee honorification target different individuals. But when the subject is 2nd person, honorification of that subject and the addressee are not independent of each other. If the 2nd person subject is of high status, the addressee must also be of high status since they are co-referent. Hence, we expect the sentence to show both subject and addressee honorification. This expectation is met for Korean and Japanese, as demonstrated in (53–54) with the honorific expressions boldfaced. (For better readability, I continue using my glosses for honorific expressions in Japanese and Magahi. I gloss the subject-honorific morphemes HON_S and addressee-honorific morphemes HON_A, with subscripts for honorification levels when necessary. I follow the authors' original notations for all other glosses.)

(53)   *Korean*
        Tangsin-**kkeyse**   wus-**usi**-ess-**supni**-ta.
        you.HON-NOM.HON   laugh-HON_S-PST-HON_A-DECL
        'You laughed.'

(54) *Japanese* (Yamada 2019: 114)

Anata-wa   soo yat-te itumo   muri-o   **ossyai-mas**-u.
you.HON-TOP   so   do-CV always impossible.thing-ACC say.HON$_S$-HON$_A$-PRS
'You are always asking difficult favors (of us) like this (= by doing so)'.

Interestingly, this expectation is not met in all languages. Magahi and Tamil disallow co-occurrence of 2nd person subject and addressee honorification within the same sentence. Instead, the sentence only shows subject honorification. (Subject ϕ-agreement for Tamil.) In (55) we see that the presence of Magahi *au/o/ain* leads to ungrammaticality when the subject is 2nd person. Similarly, Tamil *ŋgæ* (glossed ALLOC) cannot appear in (56) to express allocutive agreement.

(55) *Magahi* (Alok 2021: 271)

a. Tu   dauR-l-eN-(*au)
    you.NH   run-PRF-2.HON$_{NHS}$-(*HON$_{NHA}$)
    'You (a friend) ran.'

b. Tu   dauR-l-a-(*o).
    you.H   run-PRF-2.HON$_{HS}$-(*HON$_{HA}$)
    'You (Grandfather) ran.'

c. Apne   dauR-l-thi(n)-(*ain).
    you.HH   run-PRF-2.HON$_{HHS}$-(*HON$_{HHA}$)
    'You (a professor) ran.'

(56) *Tamil* (McFadden 2020: 404)

a. *eppaɖi   iru-kk-iiŋgæ-ŋgæ?
    how   be-PRS-2PL-ALLOC
    'How are you?'

b. *niiŋgæ rombaa smart-aa   iru-kk-iiŋgæ-ŋgæ.
    you.PL very   smart-PRED be-PRS-2PL-ALLOC
    'You're very smart.'

The main contribution of this section is to explain the difference between (53–54) on the one hand and (55–56) on the other, with a focus on comparing Korean and Magahi. It is by no means a complete overview of addressee honorification systems; see Antonov (2015), Yamada (2019), Alok & Haddican (2022), Wang (2023) among others for discussion of a wider range of languages. My aim here is to provide an analysis of a specific point of variation about the second person. By studying how subject and addressee honorification interact when they target the same person, we can better understand the morphosyntactic restrictions that influence their distribution and hopefully widen our scope of understanding to the languages not covered here.

The remainder of the section is structured as follows. Section 5.1 provides a brief overview of the honorification system of Magahi, and introduces Alok's (2020; 2021) analysis of Magahi addressee honorification as allocutive agreement probing from Fin. Section 5.2 demonstrates how the different behaviors regarding the 2nd person can be derived from my analysis, Alok's proposal of an allocutive probe on Magahi FinP, and an intuitive re-framing of Kinyalolo's Constraint. Section 5.3 briefly discusses Japanese and Tamil, and how the patterns in these languages can be explained under my analysis.

5.1 Brief overview of Magahi honorification

Magahi is an Indo-Aryan language with subject and addressee honorification as part of its grammar (Alok & Baker 2018; Alok 2020; 2021). It has three different levels of honorification: non-honorific (peers and inferiors; glossed as subscript NH), honorific (parents and senior family members; glossed as subscript H), and high-honorific (teacher, father-in-law; glossed as subscript HH). (57) presents an example of subject honorification.

(57)   *Magahi* (Alok 2020: 46)

    a.   U   dauR-l-ai

          he.NH run-PRF-HON$_{\text{NHS}}$

          'He ran.' (Subject is non-honorific to the speaker)

    b.   U   dauR-la-thi(n).

          he.H   run-PRF-HON$_{\text{HS}}$

          'He ran.' (Subject is honorific to the speaker)

    c.   U   dauR-la-thi(n).

          he.HH run-PRF-HON$_{\text{HHS}}$

          'He ran.' (Subject is high-honorific to the speaker)

In (58b-d) we see examples of addressee honorification being expressed on the verb. Alok states that it is optional: (58a) without allocutive agreement is also a grammatical sentence.
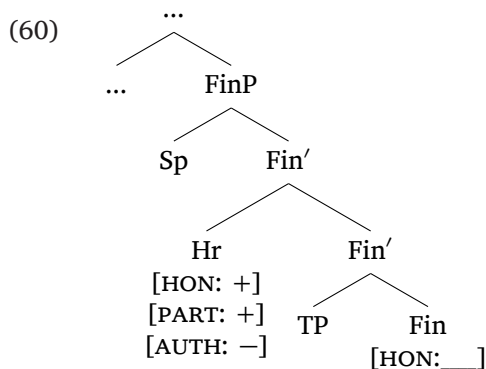
(58)   *Magahi* (Alok 2020: 9)

    a.   Ham jaait   h-i

          I   go.PROG be-1

          'I am going.'

    b.   Ham jaait   h-i-au

          I   go.PROG be-1-HON$_{\text{NHS.NHA}}$

          'I am going.' (said to a friend)

    c.   Ham jaait   h-i-o

          I   go.PROG be-1-HON$_{\text{NHS.HA}}$

          'I am going.' (said to father)

d. Ham jaait   h-i-ain
I   go.PROG be-1-HON_{NHS.HHA}
'I am going.' (said to a teacher)

Interestingly, addressee honorification is only available in finite clauses. Neither the verb *jaayel* of the infinitival clause (59a) nor the gerund *dhekhe-se* of (59b) can bear the addressee-honorific morpheme *au*.

(59) *Magahi* (Alok 2020: 99)
a. Santeeaa   jaayel-(*au) chah-l-i-au.
Santee.FM go.INF   wanted-3-HON_{NHS.NHA}
'Santee wants to go.' (said to a friend)

b. Ham okaraa   dhekhe-(*au)-se bachl-i-au.
I   him.DAT seeing-INS   avoided-1-3-HON_{NHS.NHA}
'I avoided seeing him.' (said to a friend)

As mentioned in Section 4.3, Alok posits two layers of speaker and addressee representation in the syntax: one at FinP, and the other at the root. The link between finiteness and addressee honorification motivates Alok to view Magahi addressee honorification as allocutive agreement probing from Fin, as represented in (60) (adapted from Alok 2021: 266; representation of the 2nd person as PART(ICIPANT) and AUTH(OR) features is my modification). Assuming a specifier-head agreement relation, he proposes that the [HON:__] on Fin agrees with the addressee representation at Spec, FinP.

(60)

```
              ...
            /     \
        ...         FinP
                   /    \
                 Sp      Fin′
                        /    \
                      Hr      Fin′
                  [HON: +]   /    \
                  [PART: +] TP     Fin
                  [AUTH: −]       [HON:___]
```

Another argument in support of adopting (60) for Magahi is the portmanteau realization of subject and addressee honorification. This is not surprising if we follow Alok in locating Magahi addressee honorification at Fin and subject honorification at T. The full paradigm of portmanteau realizations is shown in **Table 2**. Portmanteaux target features that are sufficiently local to each other (Woolford 2016; Ostrove 2018). While there is a debate on whether the correct locality restriction is structural adjacency (subconstituency) or linear adjacency (see

Ostrove 2018 and references therein), the heads T and Fin are local enough to meet either requirement.

Subject	Addressee		
	NH	**H**	**HH**
NH	*-au*	*-o*	*-ain*
H	*-thu(n)*	*-thu(n)*	*-thi(n)*
HH	*-thu(n)*	*-thu(n)*	*-thi(n)*

Table 2: Portmanteau realization of Magahi honorification (Alok 2020: 93).

Lastly, the availability of embedded allocutive agreement also adds weight to Alok's view. In Section 4.3, I demonstrated that Korean does not allow allocutive agreement in embedded clauses. This was attributed to SpkP and AddrP being exclusively present at the root, which in turn makes embedded Agr_{Addr} not being local enough to an Addr that can value its probe. Compare this situation with Magahi. (61) shows that the clauses embedded under verbs of speech, knowledge, and even non-bridge verbs like *chilal* 'shout' can all bear the addressee honorific morpheme *au* on the verb *gel* 'run away'.

(61) *Magahi* (Alok 2020: 97–98)
Santeeaa   {kahl/jaanl/chilal}-au   ki   Banteeaa   bhag
Santee.FM {said/knew/shouted}-3-HON_{NHS.NHA} COMP Bantee.FM escape
ge-l-au.
went-3-HON_{NHS.NHA}
'Santee said/knew/shouted that Bantee ran away.' (Said to a friend)

Magahi even allows addressee honorification inside island environments such as adjunct clauses (62a) and relative clauses (62b).

(62) *Magahi* (Alok 2020: 98–99)
    a. Santeeaa   ail-au   [jab Banteeaa   chal ge-l-**au**].
        Santee.FM came-3-HON_{NHS.NHA} when Bantee.FM walk went-3-HON_{NHS.NHA}
        'Santee came when Bantee left.' (Said to a friend)
    b. Laikwaa [je uhaaN khaRaa h-**au**]   hamar bhaai
        boy.FM   REL there stand   be-3-HON_{NHS.NHA} my   brother
        h-au.
        be-3-HON_{NHS.NHA}
        'The boy who is standing there is my brother.' (Said to a friend)

These examples suggest that allocutive agreement in this language is associated with an easily embeddable position such as FinP, which is projected right above TP and present in all finite clauses.

5.2 Magahi vs. Korean: Subject and addressee honorification

As demonstrated in the beginning of Section 5, Korean (53) realizes both subject and addressee honorification in sentences with a 2nd person high-status subject while Magahi (55) only realizes subject honorification. My analysis of this crosslinguistic variation builds on three pieces, listed below.

(63) a. The functional head Int, which is above Fin and below Force and Agr_{Addr}, is a phase head. (Carstens & Diercks 2013; Carstens 2016).
      b. In some languages the allocutive probe is at Fin, while in others it is higher in the clause (Alok 2020; 2021).
      c. Kinyalolo's Constraint (Kinyalolo 1991) applies as a constraint at phasal spell-out.

Motivation for the first two pieces are already presented in the paper. (63a) has played a crucial role in my analysis of addressee honorification in Section 4.2.2. In Section 5.1 we have just seen Alok's arguments for (63b). (63c) is a novel amendment that I make to Alok and Baker's (2018) application of Kinyalolo's Constraint in explaining the ban on 2nd person co-occurrence in Magahi.

Kinyalolo's Constraint is a morphological economy constraint against a verbal projection realizing agreement with an argument multiple times. Kinyalolo originally proposed this constraint to explain agreement restrictions in Kilega. In Kilega declarative sentences, T agrees with the subject. In subject *wh*-questions, the subject moves to Spec, CP and C agrees with the *wh*-operator. In this case, subject agreement on T is suppressed as shown in (64).

(64) *Kilega* (Carstens 2005: 252)
      Nází   ú-(*á)-ku-kít-ag-a   búbo?
      1.who   1.CA-(1.SA)-PROG-do-HAB-FV   14.that
      'Who (usually) does that?

This observation is what led to Kinyalolo's Constraint, a version of which I present below.[24]

---

[24] In Kilega, agreement on the lower head (T) is suppressed, while in Magahi, it is agreement on the higher head (Fin) that is suppressed. Alok and Baker acknowledge this difference in formulating (65), but remain agnostic as to what determines which head is suppressed. I follow them in having the constraint be underspecified in this aspect. If the decision is consistent within a language, perhaps we can attribute it to parametric variation. Verifying this approach involves a more careful crosslinguistic observation of agreement paradigms, which I leave for future research.

(65) *Kinyalolo's Constraint* (Kinyalolo 1991; cited from Alok & Baker 2018: 20)
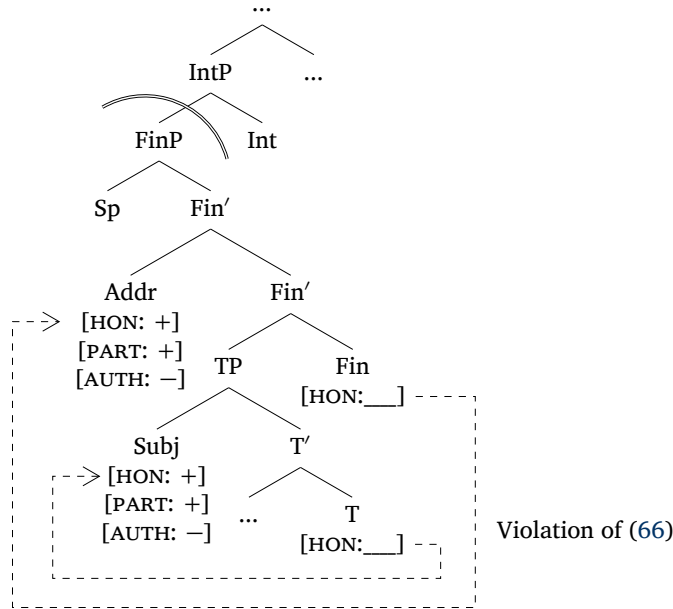   In a word (phonologically defined), AGR on one head is silent if and only if its features
      are predictable from AGR on another head.

(65) explains the co-occurrence restrictions in Magahi. Subject agreement appears on T and addressee-honorific allocutive agreement appears on Fin. But since Fin and T are agreeing with the same 2nd person, this constitutes a violation of (65).

However, Korean becomes problematic in the face of this constraint. When the subject and addressee co-refer, Korean realizes both agreement relations. At this juncture, I take insight from Tyler & Kastner (2021) to provide an account that covers both languages. They point out that since (65) makes reference to both a *phonologically defined word* and *AGR,* the generalization as a filter on derived structures can only apply at the syntax-prosody interface. I suggest that (65) applies as a filter at spell-out to evaluate the well-formedness of the structure in the spell-out domain.

(66) *A phase-based application of Kinyalolo's Constraint:*
      In a word (phonologically defined), AGR on one head is silent if and only if its features
      are predictable from AGR on another head **in the same spell-out domain**.

(66) rules out structures where two heads in the same word agree with the same 2nd person *within the same spell-out domain*.[25] However, if subject honorification and addressee honorification are realized at heads in different spell-out domains, both can be realized despite being part of the same word.

I first explain how (66) rules out the co-occurrence in Magahi. (67) is a schematic tree representation of a Magahi sentence *ungrammatically* showing simultaneous 2nd person subject honorification and addressee honorification. Following (63a), Int is a phase head and its complement FinP is a spell-out domain. T and Fin are both within this spell-out domain. Therefore, the two heads both agreeing with the 2nd person violates (66).
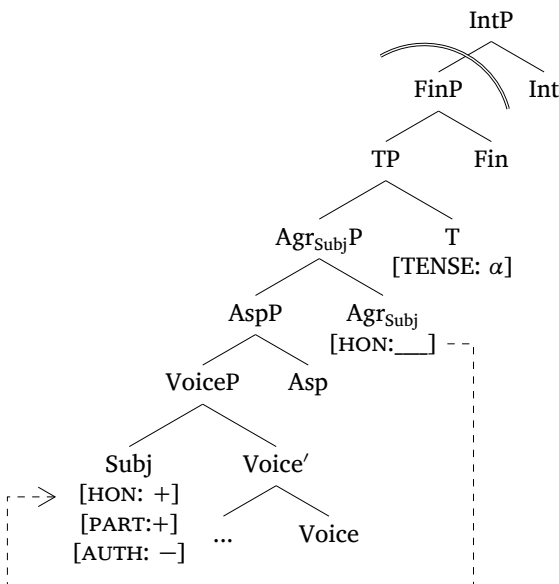
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[25] The reader may wonder whether examples of multiple agree (17–18) from Section 3 are problematic in the face of Kinyalolo's Constraint. As for Hindi-Urdu (18a) and Korean long form negation (17), Kinyalolo's Constraint does not rule them out because the multiple agreements do not appear on the same prosodic word. In (18a), agreement with the object appears on the main verb and the auxiliary, which are clearly two different words. The same can be said for (17). Korean long form negation is understood as the main verb being nominalized under suffixation by *ci* and being selected by the main verb *anh*, making it difficult to see *ci* and *anh* as part of the same verbal projection (Sohn 2001; Sells 2015). As for Moose Cree (18b), the ϕ-feature specification is not identical on T and C. T agrees with the object, while C agrees with the object *in addition to* the subject. Since the feature valuation on C is not predictable from that on T, (18b) is not problematic under Kinyalolo's Generalization either.

(67)   Magahi: T and Fin both agreeing with 2nd person violates (66)

...
 IntP   ...
FinP   Int
Sp   Fin′
Addr   Fin′
[HON: +]
[PART: +]
[AUTH: −]   TP   Fin
                          [HON:___]
Subj   T′
[HON: +]
[PART: +]
[AUTH: −]   ...   T
                     [HON:___]   Violation of (66)

On the other hand, Korean subject and addressee honorification are realized on Agr$_{Subj}$ and Agr$_{Addr}$ respectively, which are heads in different spell-out domains. Let us first examine a Korean sentence at the derivational step where the complement of Int is spelled out as in (68).

(68)   Korean: Derivation up to Int

IntP
FinP   Int
TP   Fin
Agr$_{Subj}$P   T
                 [TENSE: α]
AspP   Agr$_{Subj}$
         [HON:___]
VoiceP   Asp
Subj   Voice′
[HON: +]
[PART:+]
[AUTH: −]   ...   Voice

The unvalued probe on Agr_{Subj} agrees with the subject at Spec, VoiceP. Since neither Agr_{Addr} nor Addr has merged yet, agreement with the addressee is absent from the structure. (66) applies as a well-formedness constraint at this point, but it cannot rule out (68) since there is only one instance of agreeing with the 2nd person within the current spell-out domain. The derivation continues, with Agr_{Addr} and Addr merging into the structure.

(69) Korean: Derivation up to the root
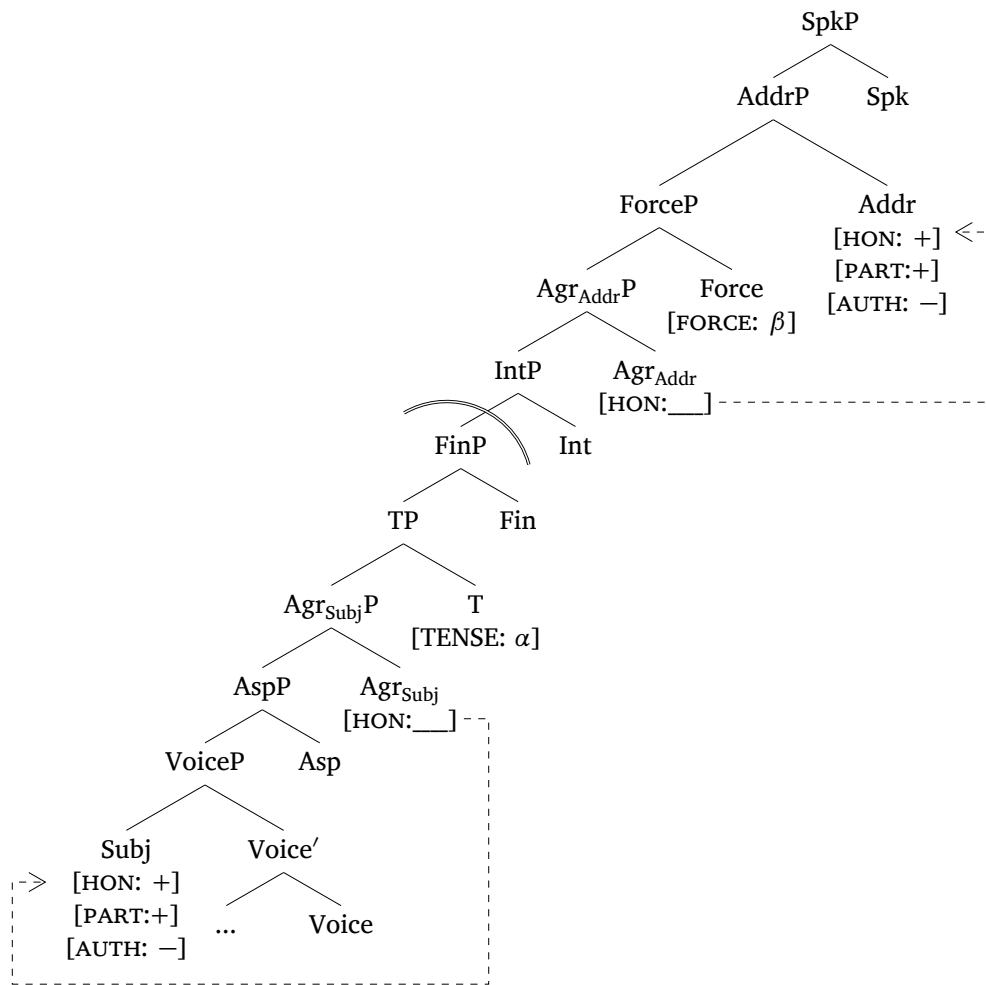
When the structure is completed up to the root and spelled out to the interfaces, there is another evaluation of whether the current spell-out domain violates (66). In the domain currently under evaluation, the only instance of agreement with the 2nd person is *(su)pni*. Therefore, it is again determined that there is no violation of (66) and the structure is deemed grammatical.

5.3 Japanese and Tamil

I briefly introduce the honorification system of Japanese and Tamil in light of the 2nd person co-occurrence constraint, and discuss how their honorification pattern can be accounted for under the analysis of the paper.

5.3.1 Japanese

Japanese subject honorification involves a much wider range of constructions than Korean or Magahi (Harada 1976; Yamada 2019). Depending on the context and the specific utterance, it may involve verbal suppletion, the suffix *rare*, or the *o-NOUN-ni nar-* construction which consists of the prefix *o/go-*, the dative particle *ni* and the light verb *nar* 'become'. I direct the reader to Harada (1976) and Yamada (2019) for a detailed introduction of the Japanese subject honorification system, and focus here on verbal suppletion. Yamada shows that verbal suppletion can co-occur with addressee honorification as in example (54), repeated below as (70). The verb root *ossyar-* is the suppletive form of the root *iw-* 'say'.

(70)   *Japanese* (Yamada 2019: 114)
         Anata-wa   soo yat-te itumo muri-o   **ossyai-mas**-u.
         you.HON-TOP so   do-CV always impossible.thing-ACC say.HON_S-HON_A-PRS
         'You are always asking difficult favors (of us) like this (= by doing so)'.

(71) demonstrates another example of verb suppletion. The use of the suppletive form reflects the speaker's respect towards the subject *sensei*.

(71)   *Japanese* (Yamada 2019: 53)
         a. Sensei-ga   koohii-o   nom-u.
             teacher-NOM coffee-ACC drink-PRS
             'The teacher drinks coffee.'

         b. Sensei-ga   koohii-o   **mesiagar**-u.
             teacher-NOM coffee-ACC drink.HON_S-PRS
             'The teacher drinks coffee.'

Addressee honorification is expressed by the presence of the suffix *mas* attaching to verbs, or the copula *des*.

(72)   *Japanese*
         a. (Yamada 2019: 116)
             Kare-ga   hasiri-**mas**-u.
             he-NOM   run-HON_A-PRS
             'He will run.'

b. (Adapted from Miyagawa 2022: 64)
Hanako-wa   sensei-**des**-u.
Hanako-TOP   teacher-COP.HON$_A$-PRS
'Hanako is a teacher.'

The "low" pronunciation site of *mas* has been a puzzle for Japanese linguists. Despite expressing information pertaining to the entire utterance, Japanese *mas* appears lower than Neg and T.

(73)   *Japanese* (Adapted from Miyagawa 2022: 39)
Hanako-wa   piza-o   tabe-mas-en.
Hanako-TOP   pizza-ACC   eat-HON$_A$-NEG
'Hanako will not eat pizza.'

This leads Miyagawa (2012; 2017; 2022) to view it as originating from T but LF-raising to C. This movement is triggered by the need for *mas* to undergo agreement with the addressee at AddrP. On the other hand, Yamada (2019) argues for a node-sprouting analysis of *mas* at Neg: *mas* is inserted to the left of Neg when it is c-commanded by an honorific addressee represented at the periphery of the clause.

This syntactically low realization of *mas* may seem problematic for my analysis, given the co-occurrence of 2nd person subject and addressee honorification in (70). However, the issue can be resolved if we follow Chomsky (2000; 2001) and especially Takahashi (2010) and Sakamoto (2016) among others in assuming that *v*P/VoiceP is a phase in Japanese. Yamada (2019) classifies Japanese subject honorification into three tiers: the TIER OF ARGUMENT STRUCTURE, the TIER OF HIGH-APPLICATIVE EXPRESSIONS, and the TIER OF EXPRESSIONS OF *v*P-periphery. Verb suppletion is classified as the TIER OF ARGUMENT STRUCTURE, the structurally lowest tier linked to the *v*P area. If the suppletive subject honorification strategy shown in (70) is low enough to be below the *v*P/VoiceP phase boundary, while *mas* is realized at Neg or T, we expect both to be able to appear in a sentence since they belong to different spell-out domains.

5.3.2 Tamil

Tamil is another language with an honorification system. First, it shows distinct verb agreement morphology for singular 3rd person towards whom the speaker expresses a polite relationship (the "3rd person polite" form in **Table 3**). Second, the morpheme *ŋgœ*, which marks plurality in the 2nd and 3rd persons (feminine/masculine/polite), is also used to reflect properties of the addressee. Specifically, it appears when the addressee is multiple persons or when an addressee is high-status. Table 3 presents the Tamil subject agreement paradigm, expressed on the verb *ooɖŭ* 'run'.[26]

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[26] McFadden clarifies that the morpheme *r* that appears in 1st, 2nd, and 3rd persons feminine/masculine/polite marks the present tense.

	Singular	Plural
1	ooɖŭ-r-een	ooɖŭ-r-oom
2	ooɖŭ-r-æ	ooɖŭ-r-iiŋæ
3F	ooɖŭ-r-aa	ooɖŭ-r-aaŋæ
3M	ooɖŭ-r-aan	ooɖŭ-r-aaŋæ
3POLITE	ooɖŭ-r-aarŭ	ooɖŭ-r-aaŋæ
3NEUTER	ooɖŭ-dŭ	ooɖŭ-dŭ
IMP	ooɖŭ	ooɖŭ-ŋæ

Table 3: Tamil subject agreement (McFadden 2020: 399).

McFadden (2020) views the addressee-related *ŋɶ* as the morphological realization of allocutive agreement. (74) shows examples of the allocutive use of *ŋɶ*. We know that it is not a plural subject agreement marker, since the subjects are singular in these sentences.

(74) *Tamil* (McFadden 2020: 391, 402)
    a. Naan dʒaangiri vaang-in-een-ŋæ.
        I Jangri buy-PST-1SG.SUBJ-ALLOC
        'I bought Jangri.'

    b. Venkaʈ varæ-læ-ŋæ
        Venkat come-NEG-ALLOC
        'Venkat didn't come.'

Tamil is an interesting language in the context of the 2nd person honorification interaction. As shown in (56) repeated below as (75), 2nd person subject agreement cannot co-occur with allocutive agreement.

(75) *Tamil* (McFadden 2020: 404)
    a. *eppaɖi iru-kk-iiŋæ-ŋæ?
       how be-PRS-2PL-ALLOC
       'How are you?'

    b. *niiŋæ rombaa smart-aa iru-kk-iiŋæ-ŋæ.
       you.PL very smart-PRED be-PRS-2PL-ALLOC
       'You're very smart.'

In this respect Tamil behaves similarly to Magahi. However, Tamil allocutive agreement is not as readily embeddable as in Magahi. It can appear in certain embedded contexts like (76), but McFadden & Sundaresan (2021) point out that embedded allocutivity is available only in a limited set of environments, similar to what Miyagawa (2012; 2017; 2022) describes for Japanese.[27]

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[27] I am only discussing the "lower" instance of Tamil *ŋɶ*. McFadden (2020) reports that in some Tamil questions, *ŋɶ* can appear to the right of the question particle as in (i), which would likely be a position higher than Force.

(76) *Tamil* (McFadden 2020: 405)

Maya [avæ pooʈʈ-læ   dʒejkkæ-poo-r-aa-ŋgæ-nnŭ]   so-nn-aa.
Maya she contest-LOC win-go-PRS-3SG.F-ALLOC-COMP say-PST-3SG.F
'Maya said that she would win the contest.'

This nuanced nature of Tamil allocutive agreement leads to different views on the position of the allocutive probe in Tamil. Depending on where one locates the probe, a different explanation is warranted for the 2nd person co-occurrence restriction. I merely sketch the two possible explanations here and leave a full-fledged analysis of Tamil to future research. Alok (2020; 2021) and Alok & Haddican (2022) locate the allocutive probe at Fin, in a parallel to Magahi. This approach allows for extending Alok's account of the Magahi 2nd person co-occurrence restriction to Tamil. However, since Tamil *ŋgæ* is not as freely embeddable as Magahi allocutive agreement, more needs to be said about its licensing condition in embedded clauses. One possibility is to have Tamil AddrP be licensed only under complementizers of the appropriate featural specifications (*e.g.,* an [+Addr] feature), as Alok & Haddican (2022) suggest for Japanese.[28]

For McFadden & Sundaresan (2021), it is Force that bears the probe in Tamil. The probe fails to find a goal beyond the IntP phase boundary and instead agrees with AddrP above it, which is only present in matrix and root-like embedded environments. The limited embeddability is explained more easily, if we follow them in viewing Tamil allocutive agreement as a main clause phenomenon that involves the AddrP instead of FinP. But adopting their analysis warrants some additional assumptions or amendments in explaining the ungrammaticality of (75). A potential explanation is to follow McFadden (2020) and view the 2nd person co-occurrence restriction as

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(i) Naan dʒej-čč-een-aa-ŋgæ?
I   win-PST-1SG.SUBJ-Q-ALLOC
'Did I win?' (McFadden 2020: 409)

Tamil also allows double appearance of ŋgæ – one to the left and one to the right of the question particle.

(ii) ongaḷ-ukkŭ coffee veṇum-ŋgæḷ-aa-ŋgæ?
you.PL-DAT coffee want-ALLOC-Q-ALLOC
'Would you like coffee?' (McFadden 2020: 410)

McFadden locates the lower ŋgæ at an Allocutive head (AllAgr) similar to my Agr$_{Addr}$ and suggests that the higher *ŋgæ* may be a realization of the SA head itself. Alok (2021) similarly suggests that the lower and higher instances of *ŋgæ* each correspond to the FinP and SAP layer of discourse participant representation that he proposes, where both layers bear an agreement-triggering probe.

[28] Alok and Haddican derive from four points of parametric variation the position and licensing conditions of allocutive agreement markers in nine languages including the four considered here (Tamil, Magahi, Japanese, and Korean). They actually group Tamil with Magahi: allocutive agreement is fully embeddable, and the allocutive probe is always at Fin without additional licensing conditions. However, given the report by McFadden and Sundaresan (2021) that Tamil *ŋgæ* only appears in a limited set of "root-like" embedded environments, a more accurate analysis of Tamil allocutive agreement would be to treat it on a par with that of Japanese.

an instance of a generalized Obligatory Contour Principle (OCP) constraint (Mohanan 1994). McFadden suggests that the restriction may not be a deep syntactic constraint against two *structurally* adjacent heads agreeing with the same features but a surface-level constraint against multiple string-adjacent realizations of a linguistic expression. This is an attractive alternative explanation for Tamil, since the 2nd person plural subject agreement already includes the string *ŋgæ* as shown in Table 3.

6 Conclusion

This paper has provided an analysis of the morphosyntax of Korean honorification that unifies argument honorification and addressee honorification. In providing the analysis, I adopted the bidirectional agreement model (Arregi & Hanink 2021) and Carstens' (2016; see also Carstens & Diercks 2013) assumption of a phase boundary between FinP and ForceP. Furthermore, I demonstrated how a peculiar crosslinguistic variation can be derived with my analysis. When the subject is 2nd person and hence co-referent with the addressee, languages behave in two different ways. Korean and Japanese express both subject honorification and addressee honorification in the same sentence. Magahi and Tamil, on the other hand, suppress addressee honorification; only subject honorification (or subject ϕ-agreement, in the case of Tamil) is morphologically realized. Alok & Baker (2018) adopt Kinyalolo's Constraint (Kinyalolo 1991) in explaining the ban on co-occurrence, but Korean and Japanese become problematic in the face of this account as it currently stands. I suggested viewing Kinyalolo's Constraint as a well-formedness constraint that applies as a filter at spell-out. This minimally amended interpretation of Kinyalolo's Constraint enables an account that is compatible with both types of languages.

Abbreviations

The Leipzig Glossing Rules were followed wherever applicable. A: Set A agreement, ACC: accusative, AGR: agreement, ALLOC: allocutive, AUX: auxiliary, B: Set B agreement, BEN: benefactive, CA: complementizer agreement, CAUS: causative, COM: completive aspect, COMP: complementizer, COP: copula, CV: converb affix, DAT: dative, DECL: declarative, DIR: directional marker, DS: different subject, E: Basque ergative agreement, ERG: ergative, EXCL: exclusive, F: feminine, FM: Magahi familiarity marker, FUT: future, FV: final vowel of Bantu verbs, H: honorific (level of honorification in Magahi), HAB: habitual, HH: high-honorific (level of honorification in Magahi), HON: honorific, HONA: addressee honorification, HONS: subject honorification, IND: independent mood, INF: infinitive, INS: instrumental, LOC: locative, M: masculine, MOD: modal, NEG: negation, NH: non-honorific (level of honorification in Magahi), NMLZ: nominalizer, NOM: nominative, OBJ: object, PASS: passive, PFV: perfective, PL: plural, PRED: predicative, PRS: present, PERF: perfect, PROG: progressive, PST: past, Q: question particle, REL: relative, SA: subject agreement, SG: singular, SS: same subject, TOP: topic

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Competing interests

The author has no competing interests to declare.

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