## A Hybrid Approach to Honorific Agreement: a Sprouted Valued Feature and an Unvalued Probing Feature

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### 1 Introduction

While agreement is one of the most central topics in morpho-syntactic research, there is a debate about where in the grammar agreement happens. A widely accepted view is that there is a probing in narrow syntax so that an agreeing head has a feature-checking/valuing relationship with the closest element that has the relevant feature (Chomsky 1995; Chomsky 2000; Chomsky 2001 a.o.). On the other hand, in Distributed Morphology, the idea that agreement is a result of dissociated morpheme insertion, or postsyntactic *node-sprouting* (Halle & Matushansky 2006; Kramer 2010; Norris 2012; Norris 2014; Baier 2015; Winchester 2019) has gained attention. The phenomena that have provided positive evidence for the agreement-at-PF view include the standard  $\phi$ -agreement as well as other kinds of agreement, such as honorific agreements in Korean and Japanese (Choi & Harley 2019; Oseki & Tagawa 2019; Yamada 2019b).

Much of the literature has taken an all-or-nothing view on this issue; either all the agreement phenomena are achieved by the operation in narrow syntax, or all the agreement phenomena are regulated postsyntactically (Bobaljik 2006; Landau 2016). We instead propose that node-sprouting *and* probing with feature valuation are both necessary in capturing the grammatical consistency of the human language. That is, the phenomenon called agreement is non-monolithic, but involves two different operations. As a case that clearly shows the point, we examine Japanese honorific constructions. We show that the feature [HON:+] on the same head is achieved via probing in narrow syntax in some cases but via node-sprouting in others.

## 2 Data

The constructions we will focus on in this paper are shown in (1).<sup>1</sup> First, (1a) is a non-honorific form, in which the predicate is composed of *syootai* 'invite/invitation' and a light verb *sur* 'do' (*si* is its allomorph). Second, (1b) is an example of object honorifics (OHs). The verb takes the prefix *o*- or *go*- and is followed by the light verb *sur*.<sup>2</sup> Finally, (1c) is a subject honorific form (SH), which marks the predicate with the same prefix *o*-/*go*-, and additionally, the light verb following the verb takes the suppletive honorific form *nasar*.

<sup>&</sup>lt;sup>1</sup> **Abbreviations.** ACC = accusative, ASP = aspect, C = complementizer, DAT = dative, DECL = declarative, HON = an honorific morphology, NEG = negation, NOM = nominative, PRS = present, PST = past, TOP = a topic marker

<sup>&</sup>lt;sup>2</sup> Allomorphy. The choice between *o*- and *go*- depends on the etymological class of the verb: if the verb is a native Japanese word, *o*- is used, while *go*- is used if it is a Sino-Japanese word.

(1)	a.	Taroo-wa Han	ako-o s	yootai si-ta.	Non Honorific fe	orm
		Taroo-TOP Han	ako-ACC i	nvite do-PST		
		Taroo invited H	lanako (wi	thout honorificity tow	ard anyone)'	
	b.	Taroo-wa sens	sei-o	<b>go</b> -syootai <b>si</b> -ta		ОН
		Taroo-TOP prof	essor-ACC	HON-invite do-PST		
		'The professor	invited Tar	roo (the professor is r	espected).'	
	c.	<u>sensei</u> -wa	Taroo-o	go-syootai nasat-ta		SH
		professor-TOP	Taroo-ACC	HON-invite do.HON-	PST	
		'The professor	invited Tar	coo (the professor is r	espected).'	

Previous studies have argued that the honorific markings on the predicates in Japanese are agreement, akin to  $\phi$ -agreement (Toribio 1990; Niinuma 2003; Boeckx & Niinuma 2004; Kishimoto 2012; Hasegawa 2017). First of all, the patterns in (1) are intuitively similar to what we observe with  $\phi$ -agreement, like (2): the information about DPs in certain structural positions decides the morphological markings on the predicates. In (2), the person-number information of the subject results in the -*s* marking of the predicate. In OH and SH constructions in (1b) and (1c), the information about the honorificity of objects and subjects respectively are reflected in the morphological marking on the predicate.

(2) The professor invite-*s* me.

Further argument for agreement analysis comes from the observation that an OH can only target dative objects, but not accusative objects, in double object constructions with two human DPs (Harada 1976; Boeckx & Niinuma 2004; Niinuma 2003). For example, in (3), the OH marking is acceptable when the target of the honorificity is the dative-marked argument, namely *sensei* 'the professor.' However, *sensei* cannot trigger the OH marking when it is an accusative marked argument and there exists a dative marked argument. For example, in (3b) the reading in which the OH honorifies the professor does not exist. The sentence can only be interpreted as honorifying the dative marked argument *Taroo*, although this reading is pragmatically odd, given that *Taroo* is not in a higher status than the speaker.<sup>3</sup>

- (3) Intervention effect
  - a. Hanako-ga <u>sensei</u>-ni Taroo-o **go**-syookai **si**-ta *OH* Hanako-NOM prof-DAT Taroo-ACC HON-introduce do-PST 'Hanako introduced Taroo to the professor (the professor is respected)'

(1) kotira-ni <u>sensei</u>-o o-ture si-ta. here-DAT teacher-ACC HON-bring do-PST 'I brought professor to this place'

<sup>&</sup>lt;sup>3</sup> **Human feature.** This intervention effect is relativized to human DPs (Niinuma 2003): when the dative argument is an inanimate DP as in (1), an OH can be used to honorify the theme DP.

 b. Hanako-ga Taroo-ni <u>sensei</u>-o {syookai/#go-syookai} si-ta Hanako-NOM Taroo-DAT prof-ACC introduce/HON-introduce do-PST 'Hanako introduced the professor to Taroo' (Only interpretable iff Taroo is respected, which is pragmatically odd)

With the same predicate *syookai* 'introduce' but without the dative argument, OH can target the accusative DP.

(4) Hanako-wa (sono sinpozium-de) <u>sensei</u>-o go-syookai si-ta. OH
 Hanako-TOP (that simposium-at) prof-ACC HON-introduce do-PST
 'Hanako introduced Professor at the simposium (the professor is respected)'

As Boeckx & Niinuma (2004) and Niinuma (2003) argue, this is similar to an intervention effect, one of the characteristics of agreement (Chomsky 2000): if the indirect object exists between the head and the accusative object, the head cannot agree with the accusative object because of the intervening DP, which is the pattern often found in object  $\phi$ -agreement across languages (Baker 2008): see Niinuma (2003) for further evidence for the intervention effect in the DP domain.

Motivated by these similarities to  $\phi$ -agreement, both SHs and OHs are considered instances of "agreement" (Toribio 1990; Niinuma 2003; Boeckx & Niinuma 2004; Kishimoto 2012; Hasegawa 2017; Oseki & Tagawa 2019). Crucially, the previous studies that refer to both SHs and OHs (Toribio 1990; Niinuma 2003) treat SHs and OHs in a quite parallel way. Toribio (1990) argues that the SH and OH are both derived from the Spec-head agreement with the honorific DP. Niinuma (2003) argues that SH and OH markings are the result of probing from v and T for the honorificity-related feature in narrow syntax.<sup>4</sup> The downward probe from V finds the highest object and gets valued by it. Although these works differ in the assumption about the specific mechanisms of agreement (Spec-head agreement vs. long-distance agreement), they share the idea that SH and OH are both derived by the same mechanism located inside narrow syntax.

This line of unified analysis is intriguing, especially given that the SH and OH construction share the prefix o-/go-. At the same time, however, we need to be aware that there exist several peculiar differences between the two constructions. First, the prefix is optional in SHs but not in OHs, as shown by the contrast between (5a) and (5b).

### (5) Optionality

a.	<u>sensei</u> -wa Taroo-o syootai <b>nasat</b> -ta.	SH
	prof-TOP Taroo-ACC invite do.HON-PST	
	'The professor invited Taroo (the professor is respected).'	
b.	#Taroo-wa <u>sensei</u> -o syootai <b>si</b> -ta.	OH
	Taroo-TOP prof-ACC invite do-PST	
	'Taroo invited the professor (the professor is respected) (intended	1).'

<sup>&</sup>lt;sup>4</sup> **The label of the feature.** Niinuma (2003) notes that this feature should be a human feature, given that the honorific agreement can only target human DPs.

Second, we already saw that SHs additionally exhibit the honorific suppletion of the light verb. This honorific suppletion is not limited to a light verb, however. When AspP is present in an SH, the head Asp can optionally take the honorific form, as in (6a). The honorific morphology on an Asp head makes the honorific morphology on the light verb optional and vice versa, as shown in (6b). In contrast, such spreaded honorific marking is disallowed in OHs, as in (7).

- (6) Multiple exponents (SH)
  - a. <u>sensei</u>-wa (**go**-)katuyaku {si/**nasat**}-**teirassya**-ru. *SH* prof-TOP HON-work.successfully do/do.HON-ASP.HON-PRS 'The professor is working successfully (the professor is respected).'
  - b. <u>sensei</u>-wa (**go**-)katuyaku **nasat**-{tei/**teirassya**}-ru. *SH* prof-TOP HON-work.successfully do.HON-ASP/ASP.HON-PRS 'The professor is working successfully (the professor is respected).'
- (7) \*Multiple exponents (OH)

Taroo-wasensei-ogo-syootaisi-{tei/#teirassyat}-ta.OHTaroo-TOP prof-ACC HON-invite do-ASP/ASP.HON-PST

'Taroo was inviting the professor (the professor is respected).'

While exhibiting these two empirical differences, the SHs and OHs both share the same honorific prefix *go*-. This fact is worth our attention, if we adopt the view that agreement is structurally conditioned: why do the subject and the object, which are in different positions, trigger an agreement marker in the same position?

The observations provided in this section suggest the ambivalent status of the SH and OH. On the one hand, the presence of the intervention effect serves as convincing data favoring the view that content-honorifics involve agreement. On the other hand, the straightforward explanation that treats those two phenomena on a par is not available, given (i) the difference in the morphological behaviors of the two constructions and (ii) the sharing of the same prefix o-/go-.

### 3 Proposal

To explain these puzzles, we propose that (i) the prefixes of these two honorific constructions result from different agreement mechanisms, but (ii) this difference is neutralized at Vocabulary Insertion. More specifically, we argue that the relevant honorific feature of the OH is provided in narrow syntax, whereas that of the SH is introduced by a post-syntactic morphological rule (i.e., node-sprouting).

#### 3.1 Subject-honorifics

In Distributed Morphology, agreement morphemes are conceived as a reflex of the postsyntactic process (Bobaljik 2006; Landau 2016; Choi & Harley 2019). When appropriate configurational requirements are satisfied, agreement is triggered post-syntactically (before Vocabulary Insertion and Linearization) by the insertion of a dissociated morpheme, as defined in (8):

(8) **Dissociated morpheme**: a morpheme will be called *dissociated* when the morphosyntactic position/features it instantiates are not features figuring in the syntactic computation, but are instead added in the Morphological component under particular structural conditions (Embick 1997: 8).

Following the recent literature about such dissociated morphemes (Kramer 2010; Norris 2012; Norris 2014; Baier 2015; Choi & Harley 2019; Oseki & Tagawa 2019; Winchester 2019; Yamada 2019b), we propose that the relevant honorific feature in the SH is introduced under certain conditions by the node-sprouting rule in (9). This rule states that an honorific feature postsyntactically adjoins the head of an arbitrary function projection XP, when it is c-commanded by a DP bearing [HON:+].<sup>5</sup>

(9) Hon-sprouting rule:  $[X^{\circ}] \rightarrow [X^{\circ} [HON:+] [X^{\circ}]] / [DP_{[HON:+]} ... [\_]]$ 

To understand this proposal, consider the sentence in (10). The structure in (11a) is what is obtained as a result of syntactic derivation: that is, what we get at the point of Spell Out. In (11a), n<sup>o</sup> is c-commanded by the subject DP equipped with the relevant honorific feature. This structural configuration triggers the application of the rule in (9), yielding the  $\sqrt{P}$  in (11b). Likewise, the v-node is also modified and gets an honorific feature, resulting in the new v in (11b); n.b., we assume that  $\sqrt{}$  can take arguments (Harley 2013, 2014).

(10) <u>sensei</u>-wa Taroo-o **go**-syootai **nasat**-ta. *SH* prof-TOP Taroo-ACC HON-invite do.HON-PST 'The professor invited Taroo (the professor is respected).



<sup>&</sup>lt;sup>5</sup> **Head movement.** Oseki & Tagawa (2019) assume that there exists a sequence of head movements from v to T before the node-sprouting, and the node-sprouting is triggered within the single head-complex, more precisely by the highest T. But, there are some cases where v and T do not form a single verbal complex in which the honorific morphology still exists. Consider the sentence in (1). First, the focus particle *-wa* intervenes the verb and the tense suffix. Second, the tense suffix *-ta* gets the *be*-support element *at*. Since it is difficult to maintain that *go-* and *nasar-* form a single verbal complex with T, we consider the subject DP — not T — triggers node-sprouting, as stated in (9), and the relevant locality domain for the node sprouting to be a phase.

(1) <u>sensei</u>-wa Taroo-o go-syootai nasat-te-**wa** irassyar-anak **at**-ta. teacher-TOP Taro-ACC HON-invite do.HON-te-FOC ASP.HON-NEG be-PST 'The teacher did not invite Taro (but he at least did something else).'

As a common assumption in Distributed Morphology, we assume that there is a mapping algorithm from a set of features at a terminal node to the corresponding phonological exponent. As for the prefix, we propose the following rule in (12a), guaranteeing that the terminal node  $n^o$  in (11b) gets realized as *go*-, not *nasar*.<sup>6</sup>

(12) a. [HON:+]  $\leftrightarrow$  go-/  $[\sqrt{}]$ . b. [HON:+]  $\leftrightarrow \emptyset$  (elsewhere)

Based on these morphological rules, we explain the peculiar properties of SHs as follows. First, the multiple honorific encodings as we saw in (6) are seen as a natural consequence of the rule in (9). While the structures in (11) only depict the derivation inside vP, the subject DP further moves up to the Spec of TP, as in (13).



Now consider the boxed positions in (13a). In addition to  $\sqrt{}$  and v, T and Asp are also c-commanded by the honorific DP (after the DP is raised to the Spec of TP). The rule in (9) predicts that the structure is morphologically modified, as shown in (13b). Together with the following Vocabulary Insertion rules, we can explain why

(1)	<u>sensei</u> -wa	syookin-o	{(go-)kakutoku	nasat-ta	/ (*go-)getto	nasat-ta}.
	teacher-TOP	prize.money-ACC	HON-get	do.HON-PST	/ HON-get	do.HON-PST
	'The teacher	r got the prize mon	ey.'			

(2)	a.	[HON:+]	$\leftrightarrow$	go-/	$\left[\sqrt{-\sqrt{\left[\text{ORIGIN: SHINO\right]}}}\right]$
	b.	[HON:+]	$\leftrightarrow$	0-/	$\left[\sqrt{-\sqrt{\left[ORIGIN: YAMATO\right]}}\right]$
	с.	[HON:+]	$\leftrightarrow$	Ø	(elsewhere)

<sup>&</sup>lt;sup>6</sup> **Origin.** The prefix changes its pronunciation depending on the origin of the root. For foreign words, neither go- or o- is permitted. For example, the word *getto* is from the English *get*, which is incompatible with the suffix. In contrast, a synonymous word *kakutoku* (a word of Chinese origin) can take the prefix, as shown in (1). Reflecting this variation, one can improve the rule as in (2).

multiple SH markings are restricted to the positions between the subject and the verb, which is why they do not show up in higher positions (such as C).<sup>7</sup>

(14)	a. b.	$egin{array}{ccc} \mathbf{v} & \leftrightarrow & \mathbf{v} \ \mathbf{v} & \leftrightarrow & \mathbf{v} \end{array}$	<i>nasar-</i> / [v [HON:+]]. <i>si-</i> (elsewhere)
(15)	a. b.	$\begin{array}{rcl} Asp & \leftrightarrow \\ Asp & \leftrightarrow \end{array}$	- <i>teirassyar /</i> [Asp [HON:+]]. - <i>tei</i> (elsewhere)

Second, we consider the optionality of the prefix as a consequence of deletion rules, whose application is optional most likely due to reasons of economy. Some copies are deleted because the multiple spell-outs of the same feature are redundant, although grammatical.<sup>8</sup> For example, by deleting the honorific features except for the one at v, we gain the example shown in (16). Likewise, if the feature at Asp is the only honorific feature remaining, it results in the construction shown in (17). <sup>9</sup>

<sup>8</sup> **Deletion rules.** We leave the details of the underlying mechanism regulating the deletion process to future study. However, the comparison is noteworthy with constructions with multiple spell-outs and scattered deletions (cf. Nunes 1995; Nunes 2004; Fanselow & Cavar 2002; Landau 2006; van Urk 2018). Choi & Harley (2019) point out that, in Korean, the multiple exponence of the SH marker *-si* is optional as well. That is, either one of the boldfaced *-si* in (1a) can be dropped as long as the other remains. They further note that the suppletive main verb does not become optional even under the multiple exponence, as shown in (1b), and conclude that the deletion is conditioned by the phonologically redundant occurrence of *-si*, not the sprouted feature [HON:+] itself.

- (1) a. Halapeci-kkeyse ka-**si**-ci an(i) hay-si-ess-ta grandfather-NOM.hon go-HON-ci NEG do-HON-PST-DECL 'Grandfather didn't go.'
  - b. Halapeci-kkeyse cwumwusi-ci/\*ca-ci an(i) ha-si-ess-ta grandfather-NOM.HON sleep.HON-ci/sleep-ci NEG do-HON-PST-DECL 'Grandfather didn't sleep.'

The current paradigm suggests that at least there are cases where a redundant [HON:+] can be deleted even without phonological redundancy: [HON:+] is realized with different phonological forms at  $\sqrt{}$ , v, and Asp, but the optionality exists in the multiple exponence of [HON:+] across these places. We leave it as a question whether there is any unified explanation for Japanese data and Korean data, or if they are inherently different kinds of optionality.

9\*o... si-ta for the SH. It is not possible (at least prescriptively) in SHs, however, to omit the honorific marking on the light verb and the auxiliary and leave the honorific prefix alone. This suggests that there is some restriction on the deletion. There are several possible explanations for this restriction. First, at least some speakers allow such deletion in colloquial speech, suggesting that such deletion might in fact be possible. Second, it is also possible to argue that the deletion is grammatically possible, but it is blocked by the presence of an OH for reasons not attributed to structural operations: for example, by anti-homophony (Smolensky & Prince 1993; Ichimura 2006) or by the cooporation principle (*Be Simple (Avoid Confusing Expressions)*, the Maxim of Manner). Third, the prefix on the root differs from the light verb or the aspectual marker in terms of the phase it occurs in; the latter is accessible from the CP phase. This difference in phase might affect the optionality of the spell-out.

 $<sup>^{7}</sup>$  **T and Neg.** As for T and Neg, there is no morphological distinction in SHs. A possible explanation is that there is no Vocabulary Insertion Rule for these nodes, and in this paper, we take this to be the case. However, it is noteworthy that both T and Neg are the positions for addressee-honorific marking (AH) (Yamada 2019b). It may be the case that the interaction between the SH and AH somehow prevents the SH from figuring in these nodes.

(16) <u>sensei</u>-wa taroo-o syootai **nasat**-tei-ta. SH prof-TOP Taro-ACC invite do.HON-ASP-PST 'The professor invited Taroo (the professor is respected).'
 (17) <u>sensei</u>-wa taroo-o syootai si-**teirassyat**-ta. SH prof-TOP Taroo-ACC invite do-ASP.HON-PST

'The professor invited Taroo (the professor is respected).'

Third, as has been argued in previous studies, the node-sprouting rule is sensitive to particular syntactic domains. For example, Choi and Harley (2019) convincingly argue that the node-sprouting rule in the Korean honorific construction is phase-sensitive, and our data supports their proposal. Compare the sentences below.

(18) a. <u>sensei</u>-ga [watasi-ga syuusin **si**-ta-to] go-hatugen nasat-ta. prof-NOM I-NOM sleep do-PST-C HON-say do.HON-PST

'The professor said [that I went to bed] (the professor is respected).'

b. \* <u>sensei</u>-ga [watasi-ga syuusin **nasat**-ta-to] go-hatugen prof-NOM I-NOM sleep do.HON-PST-C HON-say nasat-ta.
do.HON-PST
'The professor said [that I went to bed] (the professor is respected)

These two sentences are exactly the same except that an additional honorific encoding appears in the embedded predicate in (18b). Although the embedded *nasar*- is c-commanded by the matrix subject DP, such a SH encoding is not permitted. The data is difficult to explain unless we assumes that the rule is applied in a certain

## 3.2 Object-honorifics

(intended).'

domain (in this case, the CP-phase).

Any adequate theory of object-honorifics must answer the question of why they show an intervention effect. A common treatment of a construction with an intervention effect is to propose a probe-goal relation assuming a hierarchical structure, as shown in (19a): it is explained that the probe agrees with the closest candidate, preventing its potential rival(s) from establishing a relation with the probe. This line of analysis has been applied to OHs, most notably by Niinuma (2003:47) and Boeckx & Niinuma (2004:463), who propose the structure in (19b).

(19) a.  $[_{?P} ?_{(probe)} [ DP_{IO(goal)} [ DP_{DO} ... ] ]$ b.  $[_{vP} v_{(probe)} [ DP_{IO(goal)} [ DP_{DO} ... ] ]$ 

We believe that their insight is essentially correct: OHs involve a probe-goal relation, unlike node-sprouting. However, the structure in (19b) encounters two empirical problems. First, if the feature on v gets its value from  $DP_{IO}$  in OHs, we would expect the phonological exponent for v to reflect the relevant honorific feature. However, in OHs, the light verb is always pronounced *sur/si* (the default non-honorific light verb form), in sharp contrast to SHs, where the light verb is

pronounced *nasar* reflecting the honorific morphology. Second, in OHs, *o-/go-* is obligatory, but the structure in (19b) provides no position for this prefix.

To overcome these problems, we propose that the prefix in an OH reflects the head of HonP, as shown in (20).

(20) 
$$[_{vP} v [_{HonP} Hon_{(probe)} [ DP_{IO(qoal)} [ DP_{DO} ... ] ] ]$$

First, the value of the honorific feature is unvalued. Being unvalued, it probes down the goal. It agrees with the first DP it encounters, yielding the intervention effect. For example, under the structure in (21a), the head of HonP enters an agreement relation with the direct object (iff it has a human feature). If the verb is a ditransitive predicate, it agrees with the indirect object (provided that it has a human feature), as in (21b). The probe gets valued as [HON:+] when the goal DP has [HON:+] feature, whereas it gets valued as [HON:-] when the goal DP has [HON:-].



Second, Hon involves morphological lowering. Just as the T-suffix lowers to v/V in English, the Hon-suffix lowers to  $\sqrt{}$ . We consider that the stranded affix (a PF-requirement) is the motivation for this lowering: it is a prefix and thus needs to be in a position affixable to another head. Consequently, (22b) — but not (22a) — is accepted.<sup>10</sup>

<sup>&</sup>lt;sup>10</sup> **Upward-agreement from the root.** One may wish to alternatively propose that the honorific feature is introduced directly in the root that upward-agrees with the object DPs, trying to dispense with HonP, which seems a language-specific functional projection. Certainly, the worry about a language-specific functional projection is a legitimate concern. But this alternative approach runs into empirical problems. First, if it probes upward from the root, the OH in a double-object construction must agree with the direct object, not the indirect object, contrary to the data in (3). To avoid this conflict, one might wish to hypothesize that the indirect object originates in a position lower than the direct object, and that the word order in (22b) results from scrambling. But such an assumption is in disagreement with the standard view in the previous literature (Hoji 1985). Second, as shown in (1), OH is known to be triggered by the possessor DP of an argument, as long as the entire argument DP is non-human (i.e., ignored from the honorific probe [see f.n. 3]) (Niinuma 2003). This is straightforwardly explained from the current downward probe view from the Hon head, given that the probe in Hon c-commands the possessor DP and the possessor DP is the closest possible target of the honorifics for the downward probe. However, the view that \_/ probes upward

- (22) a. \* Hanako-ga **go** <u>sensei</u>-ni Taroo-o syookai **si**-ta. \**OH* Hanako-NOM HON- prof-DAT Taroo-ACC introduce do-PST 'Hanako introduced Taroo to the professor (the professor is respected).'
  - b. Hanako-ga <u>sensei</u>-ni Taroo-o **go**-syookai **si**-ta. *OH* Hanako-NOM prof-DAT Taroo-ACC introduce do-PST 'Hanako introduced Taroo to the professor (the professor is respected).'

Third, the same Vocabulary Insertion Rule we used for the SH (= (12a)) is applied to this feature. After the lowering, the honorific feature now adjoins the root. When the Hon head is valued as [HON:+], the rule in (12a) is applied to yield the same phonological exponent as SHs. In other words, *go*- is used in both the SH and the OH, because the Vocabulary Insertion Rule feeds the neutralization. When the Hon head is valued as [HON:-], we simply assume that the feature is realized as phonologically null.

The properties of OHs are explained as follows. First and foremost, the intervention effect of OH, as we saw in (3), is accounted for as a natural consequence of agreement.<sup>11</sup>

Second, unlike SHs, honorific markings do not appear in heads except for the prefix. For example, if we replace the *si* in (22b) with *nasar* (i.e., its honorific suppletive form), the sentence cannot get the OH-reading, as shown in (23).

\* Hanako-ga sensei-ni Taroo-o go-syookai nasat-ta. \*OH
 Hanako-NOM prof-DAT Taroo-ACC HON-introduce do-PST
 'Hanako introduced Taroo to the professor (the professor is respected) (intended).'

Our explanation is very simple. Since this is just a canonical downward-probing followed by the phonological realization of the probing head, there is no spreading of the probe across multiple heads in the upward direction.

Finally, the lack of optionality demonstrated in (5b) is attributed to the lack of multiple honorific features. In the OH constructions, there is only one honorific feature present in the structure. If it is deleted at PF, the honorific meaning is not recoverable, whereas, in the SH, it can be read off provided that the feature is pronounced in other heads.

(1) watasi-wa [[sensei-no] siin-o] o-sirabe si-ta. OH
 I-TOP prof-GEN cause.of.death-ACC HON-examine do-PST
 'I examined the cause of death of the professor (with honorificity towards the professor).'

<sup>11</sup>**Restriction on node-sprouting.** As long as we assume the Hon-sprouting rule in (9), we have to make sure that its application is NOT triggered by objects: otherwise, the DO can trigger Honsprouting on  $\sqrt{}$  in ditransitive constructions as DO c-commands  $\sqrt{}$  within a phase. There are several possible solutions. One possibility is to relativize the sprouting rule either to nominative DPs, or to the highest DP in the domain. Another possibility is to limit the application of the rule only to CP phases. We will leave the decision among these choices to further empirical investigation.

cannot derive (1), given that the possessor *sensei* does not c-command  $\sqrt{}$ : XP has to c-command the probing head for the upward probing for XP is successful (Baker 2008).

# 4 Alternatives

As an alternative to our eclectic analysis, readers may wonder if we can uniformly use the node-sprouting analysis or the probing-analysis for the two honorific constructions. In this section, we show that the unification in either way is without problems.

# 4.1 Alternative 1: Node-sprouting only

First, let us consider whether we can dispense with HonP for the OH, and apply a similar node-sprouting rule as we assumed for the SH. Certainly, if we devise to provide an additional rule like (24), it may seem possible to explain OHs in much the same way as SHs. Under this approach, all the content-honorific constructions are treated alike and, for this simplicity, some may wish that this were the case.

(24) 
$$[\sqrt{P}] \rightarrow [[\text{HON:+}] [\sqrt{P}]]/[DP_{[\text{HON:+}]}...[]]$$
 (to be rejected)

However, this analysis has an empirical problem. Recall from Section 2 that OHs are sensitive to intervenors (= (3)). The rule in (24) predicts that (under the assumption that both indirect and direct objects are within the same phase) an honorific feature is introduced at the root in both (25a) and (25b). But as previously stated, no OH-marking is allowed in the configuration in (25b) (= (3b)).

(25) a.  $\left[_{\text{TP}} \text{ DP}_{\text{subj}} \left[_{\text{AspP}} \left[_{vP} \frac{\text{DP}_{\text{subj}}}{\text{DP}_{\text{subj}}} \left[ \text{ DP}_{\text{IO} [HON:+]} \left[ \text{ DP}_{\text{DO} \sqrt{\phantom{x}}} \right] \right] v\right] \text{ Asp} \right] \text{T} ] e.g., (3a)$ b.  $\left[_{\text{TP}} \text{ DP}_{\text{subj}} \left[_{\text{AspP}} \left[_{vP} \frac{\text{DP}_{\text{subj}}}{\text{DP}_{\text{subj}}} \left[ \text{ DP}_{\text{IO} [HON:+]} \sqrt{\phantom{x}} \right] \right] v\right] \text{ Asp} \right] \text{T} ] e.g., (3b)$ 

To overcome this problem, one might try to formulate the node-sprouting rule as triggered by the highest DP in the locality domain (cf. Bobaljik, 2008). However, given that the subject can trigger the insertion of the [HON:+] feature at the prefix position, we have to assume that the subject (trace) is in the relevant locality domain, and the highest object is never the highest DP.

Those who strongly wish to uniformly analyze OHs and SHs might further propose to ignore the subject trace in vP phase and assume that  $\sqrt{}$  head-moves to a higher phase in SH constructions, not in OH constructions. Hereby, one can adopt the idea that the node sprouting is always triggered by the highest DP in the phase (Spec TP for the SH, the highest object for the OH) and account for the intervention effect. However, if so, one has to assume an arbitrary head movement of  $\sqrt{}$  to T, which seems undesirable in that it has to stipulate two kinds of  $\sqrt{}$ , the one that head-moves to T and the one that does not.

# 4.2 Alternative 2: HonP only

Second, it is worthwhile to consider if we can assume an HonP for SHs, dispensing with the rule in (9). Maintaining the assumption that the prefix *o-/go-* is the realization of the Hon head, it would be reasonable to assume that Hon resides in the same position, given that the SH construction involves the same prefix. Thus, the question is this: given the structure in (26), can the value of the honorific feature in HON be given by the subject DP?

(26)  $\left[ _{\text{TP}} \text{DP}_{\text{subj}} \left[ _{\text{AspP}} \left[ _{vP} \frac{\text{DP}_{\text{subj}}}{\text{DP}_{\text{subj}}} \left[ _{\text{HonP}} \text{HON}_{\left[\text{HON}:\_\right]} \left[ DP_{\text{DO}} \sqrt{} \right] \right] v \right] \text{Asp} \right] \text{T} \right]$ 

To give an affirmative answer to this question, some might propose an upward agreement: the Hon head probes upward for SHs, but downward for OHs. This means that this analysis ends up with two distinct Hon heads for SH and OH, failing to capture the shared morphology between the two constructions.

Even if we concede that an upward agreement is used for SHs, it remains unclear why Asp and v also optionally encode the honorific marking in the SH, but not in the OH. To explain morphological effects in such intervening heads, one wishes to motivate Hon-spreading by stipulating that the probe for SH agreement starts out in the same position as HonP in the OH, and Hon head-moves to T by rolling up the intervening heads only in the SH (v and Asp). But the motivation of this head movement is unclear. The typical motivation for head-movement is a stranded affix: T needs a verbal element to attach. If a verbal element is what T needs, it is v, not Hon, that is moved to T, thus leaving Hon in situ, in which case there is no reason for v to carry the honorific feature. Even if we loosen the assumption that Hon moves to T, it is not clear why the same head movement does not happen in the OH. For these reasons, we conclude that it is quite difficult to motivate HonP with an unvalued honorific feature for SHs.

In sum, although we admit that a unified model, if any, could give us a parsimonious model for honorific constructions, neither the node-sprouting-only analysis nor the HonP-only approach is applied to the data without problems. As articulated in Section 3, we rather advocate an independent mechanism for the two constructions, and their apparent similarity (i.e., the use of the prefix *o-/go-*) is attributed to the neutralization due to the Vocabulary Insertion rule.

#### 5 Conclusion and theoretical implications

Looking back the history of Japanese content-honorifics, we immediately realize that the provided analyses reflected the most developed theoretical treatment of each time. In the 1970s, introducing the complexities of the Japanese honorification system, Harada (1976) approached the phenomenon by articulating the transformation rules. In the 1980s and 1990s, with the advent of GB syntax, researchers modeled honorifics as spec-head agreement, in analogy with the well-studied phifeature based agreement (Toribio 1990). In the 2000s, this syntactic approach was further developed by Niinuma (2003) and Boeckx & Niinuma (2004), who brought our attention to many important data points, such as the intervention effect as seen in (3). In the 2010s, honorifics were approached from a slightly different theoretical vantage point: morphology. A body of literature discussed honorifics within the framework of Distributed Morphology (Thompson 2011; Choi & Harley 2019; Oseki & Tagawa 2019; Kim 2019; Yamada 2019b).

Inheriting insights and analyses from these precursors, the present study has developed a hybrid view in which syntax and morphology both play pivotal roles. We have shown that Japanese OHs and SHs utilize different agreement mechanisms to derive their morphology: the OH uses downward probing in narrow syntax, while the SH uses node sprouting at PF. The results of these different operations are morphologically neutralized by the same vocabulary insertion rule targeting the [HON:+] feature. There are some questions left for future studies. First, the etymological profile of the verb is worth examining. A verb of Chinese origin is always accompanied by a light verb even in the non-honorific form. But a verb of native Japanese origin must not be used with a light verb. For example, compare the sentences in (27); *hoomon* and *tazune* are synonymous verbs, but the former is a verb of Chinese origin, while the latter is a verb of native Japanese origin.

(27)	a.	sensei-wa Taroo-o {hoomon si-ta/*hoomon-ta}.					
		prof-TOP Taro-ACC visit do-PST/visit-PST					
		'The professor visited Taro.' (a verb of Chinese origin)					
	b. <u>sensei</u> -wa Taroo-o {* <b>sirabe si</b> -ta/ <b>sirabe</b> -ta}.						
		prof-TOP Taro-ACC visit do-PST/visit-PST					
		'The professor visited Taro.' (a verb of native Japanese origin)					

This difference, however, gets neutralized in the honorific constructions. The sentences in (28) and (29) show that a light verb is obligatory irrespective of the origin of the verb in honorific constructions. In this paper, we have dealt mainly with a verb of Chinese origin for purposes of simplicity, but for the future study, we believe that it is necessary and insightful to examine why the use of light verb is enabled and forced in honorific uses for native Japanese roots.

(28)	a.	<u>sensei</u> -wa Taroo-o { <b>go-hoomon nasat</b> -ta/* <b>go-hoomon</b> -ta}.	SH
		prof-TOP Taro-ACC HON-visit do.HON-PST/HON-visit-PST	
		'The professor visited Taro.' (the professor is respected)	
	b.	<u>sensei</u> -wa Taroo-o { <b>o-tazune nasat</b> -ta/* <b>o-tazune</b> -ta}.	SH
		prof-TOP Taro-ACC HON-visit do.HON-PST/HON-visit-PST	
		'The professor visited Taro.' (the professor is respected)	
(29)	a.	Taroo-wa <u>sensei</u> -o { <b>go-hoomon si</b> -ta/* <b>go-hoomon</b> -ta}.	OH
		Taro-TOP prof-ACC HON-visit do-PST/HON-visit-PST	
		'Taro visited the professor.' (the professor is respected)	
	b.	Taroo-wa <u>sensei</u> -o { <b>o-tazune si</b> -ta/* <b>o-tazune</b> -ta}.	OH
		Taro-TOP prof-ACC HON-visit do-PST/HON-visit-PST	
		'Taro visited the professor.' (the professor is respected)	

Another remaining question regarding SH is that, in addition to *o-/go-...nasar*, there are several other competing SH-constructions present in contemporary Japanese (Yamada 2019a). For example, in place of (1c), one can alternatively use the following constructions:

- (30) Other subject-honorific constructions
  - a. <u>sensei</u>-wa Taroo-o **go**-syootai-**ni nat**-ta. *SH* professor-TOP Taroo-ACC HON-invite-ni become-PST 'The professor invited Taroo (the professor is respected).'

b. <u>sensei</u>-wa Taroo-o syootai s-**are**-ta. *SH* professor-TOP Taroo-ACC invite do-HON-PST 'The professor invited Taroo (the professor is respected).'

On the one hand, these constructions support our node-sprouting approach to SH; our theory predicts that another SH marking can be present in Asp, and this prediction is borne out as shown below:

(31) a. <u>sensei</u>-wa Taroo-o go-syootai-ni nat-teirassyat-ta. SH professor-TOP Taroo-ACC HON-invite-ni become-ASP.HON-PST 'The professor was inviting Taroo (the professor is respected).'
b. <u>sensei</u>-wa Taroo-o syootai s-are-teirassyat-ta. SH professor-TOP Taroo-ACC invite do-HON-ASP.HON-PST

'The professor was inviting Taroo (the professor is respected).'

On the other hand, these constructions may be a challenge — not only to our theory but also to any analysis that treats honorifics as a type of agreement. In the well-studied agreement system, no variation is observed in the predicate form: when one says 'I,' 'was' must always be used in what is deemed standard English, not 'were' (but see the variation in other English varieties (Nevins & Parrott 2010; Adger & Smith 2010). It is, thus, of great importance to ask why a variation is permitted in the Japanese SH-system, the answer of which would help us better understand the nature of SHs and agreement in general.

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