Tiered honorification in Eastern Indo-Aryan: A [HON]-less proposal*

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Abstract Longstanding tradition in the literature uses a [HON] feature to analyze tiered honorification systems of Indo-Aryan. This work presents a stark opposition to that tradition, using Wang's (2023) framework based on a pragmatic calculus, which crucially does not make use of [HON]. I adapt such a framework to show how it can explain both the diachronic and synchronic properties of tiered systems.

Keywords: features, honorifics, Indo-Aryan, typology, repluralization

1 Introduction: honorification in Eastern Indo-Aryan

The pronominal systems of numerous Eastern Indo-Aryan languages feature distinct tiers of honorificity. Bangla, illustrated in Table 1, features three tiers in the 2nd person (NH-H-HH) and two tiers in the 3rd person (NH-H). Loosely, the NH tiers are used for intimates or for expressing contempt; H is a socially neutral tier used for acquaintances and equals; HH is used for those in socially respected positions like ministers, professors, or superiors. Plural pronouns are specialized for each tier: for example, the plural pronoun to-ra is specialized for the 2NH tui (-i is the nominative ending, tu- $\sim to$ - are allomorphs of the 2NH stem.)

Assamese and Magahi are isomorphic to Bangla, featuring three tiers in the 2nd person, two tiers in the 3rd person, and number-neutral verbal agreement; see Table 2. Bhojpuri and Maithili feature an additional, intermediate tier of honorificity in the 2nd person; I call this the MH tier. They feature four tiers in the 2nd person (NH-H-MH-HH), and two tiers in the 3rd person (NH-H); see Table 3.

Across these languages, verbal agreement does not track number, only honorificity. Furthermore, plural pronouns are formed via suffixation of some morpheme onto their singular counterparts: Bangla -ra; Assamese -vt or -lok; Magahi -nii or log; Bhojpuri -ni, -an, or log; Maithili -səb or lokein. I take this to be evidence of repluralization, elaborated in later sections.

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Bangla	SG	PL	
2NH	tui	to-ra	-iś
2H	tumi	tom-ra	-o/-e
2HH	apni	apna-ra	-en
3NH	śe	ta-ra	-ē
3H	tini	tã-ra	-en

 Table 1
 Bangla pronouns and agreement (David 2015)

Assamese	SG	PL		Magahi	SG	PL	
2NH	tve	tphpt	-A	2NH	tu	toh-nii	-en
2H	tumi	toma-lok	-a	2H	tu	toh-nii	-a
2HH	арипі	apona-lok	-e	2HH	apne	apne log	-thi(n)
3NH	xi, tai	xihõt	-e	3NH	и	okh-nii	-ai
3H	tɛõ, tekhet	teõ-lok	-en	3H	и	okh-nii	-thi(n)

Table 2 Assamese (Goswami & Tamuli 2003) and Magahi pronouns and agreement (Verma 2003)

Bhojpuri	SG	PL	
2NH	tē	tohni, tohan	-e
2H	tu	tu log	-a/-u
2MH	raua	rauni, raua log	-ĩ
2HH	apne kā	apne log, ap log	-ĩ
3NH	и	okni, hokini	-ẽ/-i
3H	uhã ka	uhã saban, u log	-ĩ
Maithili	SG	PL	
2NH	tō	tõ-səb	-e/-ē
2H	tō	tõ-səb	-əh
2MH	әhã	әhã-seb/-lokein	-i
2HH	әрпе	əpne-səb	-i
3NH	и, о	u səb, o səb	-0/-əik
3H	u	u səb	-əith

Table 3 Bhojpuri (Lohar 2020) and Maithili pronouns and agreement (Yadav 1996)

Since the differentiated tiers make for a highly complex pronominal system, it is a long-standing tradition in the literature to invoke an additional ϕ -feature [HON] in addition to person, number, and/or gender (e.g. Yadava 1999; Bhattacharya 2016; Alok 2020; Alam & Kumaran 2022). To illustrate an instance of such an analysis, Alok (2020) analyses the 3-tier system of Magahi with two syntactic features, [\pm hon] and [\pm high] as in (1).

(1) a. NH: [-high, -hon] b. H: [-high, +hon] c. HH: [+high, +hon]

While the $[\pm hon]$ feature seems to be motivated by the forms' use conditions, it is unclear what the $[\pm high]$ feature captures beyond this set of facts. A fourth combination, [+high, -hon], is contradictory and does not expone any tier; this leaves open the question of what feature combination Bhojpuri-like languages, with four tiers in the 2nd person, would require.

In this paper, I will propose an analysis without dedicated features for honorificity, even though at first glance, Indo-Aryan seems to be the poster child for an [HON] feature. I show that honorifics are recruited, not innovated, and derive honorificity from a pragmatic calculus, extending the typologically motivated framework of Wang (2023). I posit pragmatic maxims, termed Taboos, which are grammatical reflexes of negative politeness. These Taboos exert specific pressures on pronoun inventories; I will show the Taboo-compliant recruits to be plural, 3rd person, and 4th person. The honorificity effect is explained by the interaction of the Taboos with Maximize Presupposition! (Heim 2011), in all languages which make honorificity distinctions. It applies to languages like French which make a simple tu/vous distinction, and to Eastern Indo-Aryan which features tiers of honorificity.

For Eastern Indo-Aryan specifically, I show that the development of its honorific tiers proceeded precisely along the trajectory that the theory predicts. The pronouns of the least honorific tiers were recruited from feature values which comply with the Taboos the least; correspondingly, the pronouns of the most honorific tiers were recruited from feature values which comply with the Taboos the most. I show that a diachronic process, *repluralization*, expanded the inventory of recruits. It is to this expanded inventory that the posited interaction of the Taboos with *Maximize Presupposition!* applies as usual.

Diachronically and synchronically, no language-specific mechanism is needed to explain tiered honorification. Whether a language features articulated honorific tiers or not, the same core principles derive honorificity; tiered systems are in fact an unsurprising extension of the theory. In what follows, I use Bangla and Bhojpuri as illustrative cases; what I argue for them extend to all the languages illustrated above.

2 Background: A theory of honorification

2.1 Negative politeness and its grammatical manifestations

In Brown & Levinson's (1978) *Politeness: Some universals in language usage*, the authors outline the notion of *negative politeness*: respecting an interlocutor's "basic claim to territories, personal preserves, rights to non-distraction... to freedom of action and freedom from imposition". This puts a name to the common intuition that polite behaviors are centered on avoidance: avoiding eye contact, avoiding physical proximity, and avoiding speaking too directly. Polite speakers resort to hedging, circumlocution, or being vague.

Within the confines of a grammar that does not encode [HON], negative politeness is formalized as a form of avoidance, that of avoiding *direct reference*. A polite speaker complies with pragmatic maxims that enforce this in some way, maxims which I will call Taboos. These Taboos exert specific pressures on which grammatical forms can be re-used for politeness.

Avoiding direct reference can be accomplished in two ways. The first is to use forms which have wider denotations, rather than those with narrower denotations; in other words, to prefer presupposition-poor forms. I posit the Taboo on Person for this means (2), which is specialized to grammatical persons.

(2) Taboo on Person (ToP): In honorific contexts, use the person form that carries as few presuppositions as possible.

The second way to avoid direct reference is to use forms which have non-atomic denotations, rather than those with atomic denotations. The intuition is that this allows a polite speaker to avoid unique reference, as a plural set anonymizes the respected referent. I posit the Taboo on Atomicity for this means (3). This latter Taboo is not formulated in a way that refers to presuppositional strength.

(3) Taboo of Atomicity (ToA): In honorific contexts, use a form that refers to non-atomic entities.

Two Taboos? Readers at this point might ask: Why not just one Taboo for both person and number, that refers to presuppositional strength in general? This is Wang's (2023) Taboo of Directness: *In honorific contexts, use the form that carries as few presuppositions as possible*. However, targeting *any* presuppositional cline undergenerates with regard to the issue of associativity, and overgenerates with regard to gender. I will go over each of these in turn.

Associativity. Having a separate Taboo for number allows us to maintain a neutral stance on the presuppositions on pronominal number, which is under debate. On one hand, Sauerland (2008: 68) takes (4) to show that plural is presupposition-poor relative to the singular: the plural can be used for singular reference when a quantifier/indefinite introduces the referent.

- (4) a. Some student left their umbrella.
 - b. One student in the class got an F. I bet they are not happy about that.

He ascribes the singular to being "blocked" due to a pragmatic convention to avoid the gender-marked alternatives, *he/she*, allowing the presuppositionless plural to be used, giving rise to 'singular they'. However, it is equally plausible that gender marking is being blocked here instead. The reason that plural *they* is used may be that *they* is gender-neutral.

Sauerland, Andersen & Yatsushiro (2005) provide further experimental evidence for the presuppositionless of plural in 18 European languages; however, their experimental stimuli did not include pronominal plurals, only nominal plurals. The distinction is important because it is well known that pronominal plurals may be interpreted *associatively* (e.g. Daniel 2000, Moravcsik 2003), since their referents are high on the animacy scale. Associative interpretations are impossible for low- or no-animacy nominal plurals; there is no sense in which *cats* refers to a focal cat and its associates (be the associates cats or non-cats).

Plural pronouns, though, always refer to entities high on the animacy scale. *You all* can refer to 'you and your associates' (associative interpretation) or 'all of you' (additive interpretation). When addressing a plurality, an utterance like *I need silence from* you targets the additive interpretation: the request is only successful if all addressees become silent. In contrast, an utterance like *I need* you *to get me a coffee*, uttered to e.g. a group of assistants, shows the possibility of either interpretation. This request is considered successful if only a single cup of coffee was bought (associative interpretation), or if several cups of coffee were brought (additive interpretation).

Crucially, the associativity inference is thought to originate via presupposition, which unmakes the desired presuppositionlessness of 2PL forms. The denotation for the associative morpheme in (5) is adapted from Dayal (2014). Combining it via Functional Application with the denotation for 2nd person, we obtain the following denotation for associative 2PL in (6).

(5)
$$[ASSOC] = \lambda x_e \lambda X_{\langle e,t \rangle} : \forall z [z \le X \to z \sim_c x] \& x \le X . \bigoplus X$$
 where $\bigoplus X := \iota b [\forall a \in X [a \le b] \& \forall c \notin X [c \le b]]$

(6)
$$[2-ASSOC] = \lambda X_{\langle e,t\rangle} : \forall z [z \le X \to z \sim_c \text{ hearer}] \& \text{ hearer} \le X . \bigoplus X$$

If we accept that singular pronouns carry an atomicity presupposition, neither plural nor singular is presuppositionless. A general Taboo that refers to presuppositional strength would be unable to predict the recruitment of plurals for honorifics, which is in fact very widely attested.

Gender. In languages with a masculine-feminine distinction, it is masculine that is presupposition-poor (Bobaljik & Zocca 2011). In (7), pointed brackets contain elided material; we see that ellipsis is only possible with a morphologically masculine antecedent like *waiter* but not with a morphologically masculine feminine antecedent like *waiterss*.

- (7) a. Fred is a waiter, and Anne is <a waiter> too.
 - b. #Anne is a waitress, and Fred is <a waitress> too.

A general Taboo would predict the recruitment of unmarked gender features for honorifics (e.g. recruiting masculine for female honorification). However, this phenomenon is unattested: no gender value is known to be recruited for honorification.

2.2 The representations of person and number, and how Taboos affect them

Having defended the separation of Taboos, I lay out my assumptions regarding the ontology of person and number since these are the domains relevant for pronouns.

Person. The ontology of grammatical person is represented in Figure 1. i denotes the (unique) speaker, u the (unique) addressee, and o those discourse participants which are not speakers nor addressees (3rd persons, 'others'). o' are those which are outside the discourse altogether—they are sometimes termed "4th persons" in the literature; I will adopt this term for them. These can be exponed by impersonals, indefinites, or person-neutral anaphors. (I remain agnostic whether "choruses" of i and u are possible, it does not matter to the calculus I propose later.)

The semantic denotations of each grammatical person is given in (8), where pronouns are identity functions on individuals, and their ϕ -features are modeled via presupposition (e.g. Cooper 1979). 1st and 2nd persons are the least presupposition-poor, since they uniquely refer to the speaker and hearer, which are necessarily discourse-salient. More presupposition-poor is 3rd person, since it may only refer to discourse-salient entities but who are not speaker or hearer. Most presupposition-poor is the 4th person, which does not refer to any entity in the discourse at all: not speaker, not hearer, and not 3rd person.

```
    uu

    i
    u

    u
    u

    u
    u

    o'
    o
    o

    o'
    o
    o
    o'

    o'
    o
    o
    o'
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Figure 1 Ontology of grammatical persons.

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(8) a. [i] = \lambda x_e : x is the speaker & x is discourse-salient . x b. [u] = \lambda x_e : x is the hearer & x is discourse-salient . x c. [o] = \lambda x_e : x is discourse-salient . x d. [o'] = \lambda x_e : x
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Recall that the Taboo on Person in (2) prefers presupposition-poor forms.

(2) Taboo on Person (ToP): In honorific contexts, use the person form that carries as few presuppositions as possible.

ToP exerts specific pressures on pronoun usage. It will never favor the use of 1st/2nd person forms, while it favors the use of 3rd and 4th person forms. This is borne out typologically with "higher person" honorifics. I illustrate with two languages here; readers are referred to Wang (2023: 1297) for a full list.

3rd person forms are used non-canonically for addressee honorification, a scenario which normally compels a speaker to use 2nd person forms in accordance with Maximize Presupposition!. A communicative speaker adhering to MP! will "choose the form with the strongest presupposition compatible with what is assumed in the discourse". A polite speaker, however, will adhere to the Taboo of Person and flout MP!, so that the presuppositionally-poorer 3rd person is recruited for addressee honorification. This is seen in languages like Central Alaskan Yupik, where 3rd person is recruited for honorific address (Miyaoka 2012: 876), shown in (9).

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(9) ner'-uq=am! (=nɨ̈ÿẋūqqam)
eat-IND.3SG=again
'You (HON) are eating again!'
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In this fashion, ToP and MP! interact, where the former pragmatic maxim outranks the latter in honorific contexts. I argue that this ranking is instrumental to deriving honorificity. Hence, ToP » MP! in CAY honorific contexts.

4th persons are also used non-canonically for addressee honorification, a sce-

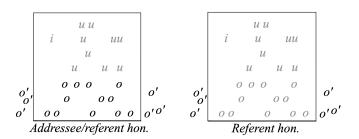


Figure 2 Available candidates after ToP applies

nario which normally compels a speaker to use 2nd person forms, *or* for referent honorification, a scenario which normally compels a speaker to use 3rd person forms. This is illustrated by Caddo (Arkansas, Caddoan). The impersonal *yi*- serves as both addressee honorific and referent honorific (adapted from Chafe 1990: 64-6), shown in (10). The same versatility is seen for the Mongolian reflexive *öör*- (Brosig 2018: 107-9) in (11).

- (10) Dikat-yi-'a-'nih-hah? (=dikadiinihah) what-IMPERS-AGENT-do-HAB 'What are {you (HON) / he/she (HON)} doing?'
- (11) Öör=öö zav-tai=yuu?

 REFL=REFL.POSS time-COMPL=Q

 '{Do you (HON) / Does s/he (HON)} have time?'

Again, ToP » MP! for languages like Caddo and Mongolian¹. Plurals are not recruited for honorification in these languages, so the Taboo on Atomicity is inactive.

Since 4th person is the weakest presuppositionally, we correctly predict its versatility for both addressee and referent honorification. Importantly, 1st or 2nd person forms, bearing the strongest presuppositions, are never recruited for either addressee or referent honorifics. This typological asymmetry in the recruitment of grammatical persons is correctly predicted. The application of ToP on the ontology of person is represented in Figure 2, with greyed pronominal candidates being those that it eliminates from being used in honorific contexts.

Number. Pronominal number is represented in Figure 3 as a power set lattice (Link 1983, Harbour 2016). Plural pronouns are formed on the basis of their

¹ Since 4th person is the most presuppositionless, it is a good question why the posited ranking of ToP » MP! does not force all of its host languages to *always* recruit the 4th person form, skipping recruitment of the 3rd person forms entirely. Perhaps this is due to a faithfulness effect, or to the morphological idiosyncrasies of individual languages, but this is left as an open issue.

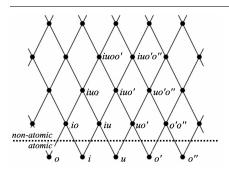


Figure 3 Representation of pronominal number

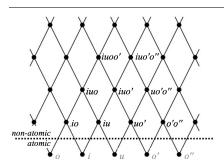


Figure 4 Available candidates after ToA applies

singular counterparts by adding o'; this accounts for their associative interpretations. Throughout this paper, I represent plural pronouns as associative. Although the option of additivity is also possible, I do not illustrate it here. Whether they are represented associatively or additively does not matter here; what matters is that plural pronouns are non-atomic.

The Taboo of Atomicity is repeated below from (3). Its effect on the lattice is represented in Figure 4. In contexts where it is active, it simply eliminates the atomic forms in the bottommost layer from being used.

(3) Taboo of Atomicity (ToA): In honorific contexts, use a form that refers to non-atomic entities.

I argue it is the driving force behind the widespread recruitment of plural forms for singular honorification; for a full list, see Wang (2023: 1295). Plurals are used non-canonically for singular honorification, which normally compels a speaker to use singular forms. The French example in (12) will be familiar, where *vous* can be used for plural address or honorific address. Languages like Wolaytta show that the recruitment of plural can apply for both singular address and singular reference

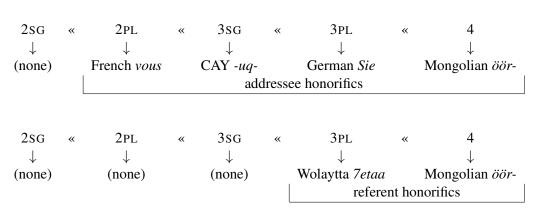


Figure 5 Recruitment asymmetries for honorifics

(Wakasa 2008: 1081) as in (13).

- (12) Avez vous le livre?
 have.PRES.2PL 2PL the book
 'Do {you all / you (HON)} have the book?'
- (13) a. **7inté** miiCC-**ideta**. b. hagéé **7etaa**-g-áá.

 2PL laugh-PF.**2PL** this **3PL**-NOMLZ-ABS

 'You (HON) laughed.' 'This is his (HON).'

Again, MP! is flouted in honorific contexts in order to obey the Taboo of Atomicity, so that the non-atomic plural is recruited for singular honorification. The relevant ranking for plural-recruiting systems is thus ToA » MP!. 3rd/4th persons are not recruited for honorification in these languages, so the Taboo of Person is inactive. (Readers might wonder about honorifics like German *Sie*, which recruits 3rd person plural for singular honorific address, thus recruiting both higher person and number. In this case, the ranking would be ToA, ToP » MP!.)

Figure 5 summarizes the empirical predictions this framework makes in the form of recruitment asymmetries: only the Taboo-compliant features are attested as honorifics. 2SG « 2PL « 3SG « 3PL « 4 is the total preference of both Taboos combined, where « denotes "less Taboo-compliant than". For honorific address, we correctly predict that 2SG forms are never recruited, while 2PL, 3SG, 3PL and 4 are fair game. For honorific reference, we correctly predict that 2SG, 2PL, 3SG forms are never recruited, while 3PL and 4 are fair game.

What derives honorificity, then, is a ranking of pragmatic maxims (the Taboo of Person, the Taboo on Atomicity, and Maximize Presupposition!). Their effects on the inventory will be elaborated by Section 3.2. Both Taboos are motivated

Bangla	SG	PL	
2NH	tui	to-ra	-iś
2H	tumi	tom-ra	-o/-e
2HH	apni	apna-ra	-en
3NH	śe	ta-ra	$-ar{e}$
3H	tini	tã-ra	-en

Table 4 Bangla pronouns and agreement (David 2015)

by large typologies of recruitment. They do not make use of *ad hoc* machinery, either. The ToP makes use of a semantic markedness cline for grammatical person as argued elsewhere by Sauerland (2008), while the Taboo on Atomicity makes use of the notion of (non-)atomicity, independently posited to account for the mass-count distinction, collective *vs.* distributive predicates, amongst many other phenomena.

2.3 The challenge

Eastern Indo-Aryan, then, presents a challenge for a [HON]-less theory of honorification. The systems considered so far merely make a binary distinction in honorificity (non-honorific *vs.* honorific), while Indo-Aryan makes ternary or quaternary distinctions, with verbal agreement specialized for honorific tier.

In what follows, I assimilate Eastern Indo-Aryan languages into the proposed typology and framework. Section 3.1 shows that, diachronically, Indo-Aryan shows precisely the same recruitment asymmetries shown in Figure 5. The recruitment histories of the current *singular* pronouns, then, is completely expected under a theory with Taboo-driven recruitment. Section 3.2 turns the focus to the *plural* pronouns. I show that repluralization took place, a process which augmented the inventory of forms that the pragmatic maxims act on. I show that the same pragmatic calculus derives honorificity in Indo-Aryan, with the caveat that this calculus acts on an enlarged inventory.

3 Extending a [HON]-less account to Indo-Aryan

3.1 Diachronic aspects: multiple recruitment

Consider again the Bangla pronouns and their corresponding agreement morphemes, repeated in Table 4. There are 3 tiers in the 2nd person (NH *tui/-iś*, H *tumi/-o/-e*, and HH *apni/-en*) and two tiers in the 3rd person (NH *śe/-ē* and H *tini/-en*).

In this section, we will focus first on singular pronouns. I show their grammaticalization paths accord precisely with the above framework: honorificity involves

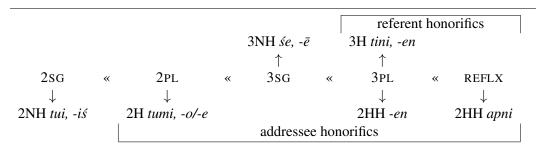


Figure 6 Diachrony of Bangla singular pronouns and agreement

recruitment, and recruitees are Taboo-compliant. Grammaticalization paths traced from Sanskrit via Middle Indo-Aryan (MIA) by Chatterji (1926) show this for both pronouns and agreement.

The NH forms were recruited from singulars. Sanskrit 2SG *tvam/*-asi, later MIA $*t\bar{u}m/*-asi$, developed into the current 2NH tier: $tui/-i\dot{s}$. The same pertains for 3rd person, where Sanskrit 3SG *sa(h)/*-ati is now 3NH: $\dot{se}/-\bar{e}$. Being non-honorific, the Taboos do not apply; speakers can use 2SG forms for singular address and 3SG for singular reference.

The H forms were recruited from plurals. Sanskrit 2PL (pronoun/agreement *yūyam/*-atha, later MIA *tum hē/*-atha), developed into the current 2H tier: tumi/-o/-e, while Sanskrit 3PL *tē/*-anti developed into the current 3H tier: tini/-en. Being used for honorific contexts, the Taboo of Atomicity applies here to block the use of singular forms, forcing the use of plural forms instead.

The HH tier is absent in Sanskrit and MIA, but developed from the reflexive. Sanskrit *atman 'self', later MIA *appane, developed into Bangla 2HH apni. The reflexive is contained within the umbrella of 4th person forms, being person- and number-neutral and hence impersonal. Being used for high-honorific contexts, the Taboo on Person applies here to block the use of 2nd person forms, forcing the use of impersonal/4th person forms instead. The 2HH pronoun also takes 3H verbal agreement -en, which originated from 3PL. This aptly combines two Taboocompliant values (plural, 3rd person) for the highest-politeness tier.

We are now able to recognize Bangla in a familiar light, illuminated in (14). NH tiers predictably did not involve recruitment, while H and HH tiers recruited predictably (plural, 3rd, reflexive). The caveat is that more than one Taboo-compliant feature value was recruited to form a more-than-binary honorificity distinction, within the same language. A familiar asymmetry in recruitment also pertains: singular or 2nd person forms are never recruited for honorific tiers, being recruited for the 2NH tier instead.

The resulting diachronic picture thus plugs precisely into the space of recruitment possibilities predicted. Furthermore, since some recruitees are more Taboo-

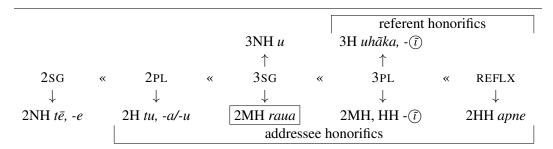


Figure 7 Diachrony of Bhojpuri singular pronouns and agreement

compliant than others (e.g. 4th person is more ToP-compliant than 2nd person), we in fact anticipate the presence of ranked tiers in a system which carries out multiple recruitments. The rank of a certain tier falls out automatically from the account, too: since 4th person is the most ToP-compliant recruitee, it is recruited for the high-honorific tier (2HH); since 2PL is less compliant, it is recruited for the honorific tier (2H). We see that ToP rather than ToA comes into effect for high-honorific contexts; this makes intuitive sense since ToP enjoins a speaker to avoid reference to the addressee altogether, while ToA enjoins a speaker to avoid unique/atomic reference to the addressee. ToP proffers more negative politeness than ToA, making ToP fitting for high-honorific contexts.

A new asymmetry also surfaces. The pool for addressee honorifics is larger than the pool for referent honorifics. Indeed, there are three tiers for address (2NH, 2H, 2HH) but only two tiers for reference (3NH, 3H). This is explained immediately: the recruitment pool for referent honorifics hits a "ceiling" sooner than the pool for addressee honorifics does. This is because 3rd person is a valid recruitee for honorific address, but 2nd person is not a valid recruitee for honorific reference. Since 3rd person is already a Taboo-compliant feature value, fewer recruitment possibilities are available to it. This is a robust asymmetry throughout Indo-Aryan and beyond: no language possesses more ϕ -featural means for referent honorification than for addressee honorification.

The framework is stretched to its limits (*albeit* anticipated limits) with Bhojpuri, a language featuring an intermediate-politeness tier in the 2nd person: 2MH *raua/-ī*. (Like Bangla, Bhojpuri also descended from Sanskrit through MIA and the same diachronies for its current 2NH, 2H, 2HH, 3NH, and 3H forms apply.) Its origins are murkier, but Chatterji (1926: 847-8) speculates that *raua* originates from a 3rd person nominal, '(a/the) royal'. In that case, the source of the current 2MH form would be a 3sg form. Slotting 2MH into the resulting diachrony, we find that it slots precisely in an intermediate position, fitting for the intermediate-politeness tier. This is shown in Figure 7, and the position of 2MH is boxed for easy identification.

This is the sense in which the framework is stretched to *anticipated* limits. There

Bangla	SG	PL
2NH	tui	to-ra
2H	tumi	tom-ra
2HH	apni	apna-ra
3NH	śe	ta-ra
3H	tini	tã-ra

 Table 5
 Bangla pronouns

are four possible Taboo-compliant recruitees for addressee honorification (2PL, 3SG, 3PL, 4), and we do not find languages which exceed four tiers. Bhojpuri, the language with the most known tiers, only has three honorific tiers in the 2nd person (2H-2MH-2HH). Bangla merely has two (2H-2HH).

Notice also that -ī serves as a multi-purpose agreement morpheme for 2MH, 2HH, and 3H (circled for easy identification in Figure 7). It originated from 3PL agreement. This also shows the framework being stretched to anticipated limits, since a core assumption is that honorific exponents are recruited, not innovated. Having recruited from Sanskrit 2PL agreement for the 2H tier, and 3PL agreement for the 3H tier, and having no agreement morpheme for a person-neutral reflexive, Bhojpuri was left with the most Taboo-compliant 3PL agreement morpheme for its 2MH and 2HH tiers.

To conclude, the development of Eastern Indo-Aryan honorification systems are wholly predicted by a framework using the proposed Taboos, without invoking a [HON] feature. Throughout the systems covered, a form's assigned tier tracks its degree of Taboo compliance, so that e.g. the most ToP-compliant forms are only recruited for the highest honorific tiers. The diachrony for Bangla also pertains for isomorphic languages like Assamese, Oriya, and Magahi, with a 2NH-2H-2HH-3NH-3H system. The diachrony for Bhojpuri also pertains for Maithili, with a 2NH-2HH-2HH-3NH-3H system.

The diachronic aspects are hence incorporated into the framework, but what about its synchronic aspects? To address the current representation of honorificity, let us turn our focus to plural pronouns.

3.2 Synchronic aspects: identical maxims apply to an enlarged inventory

Repluralization. At this point we examine the pronouns of Bangla again, laid out in Table 5. We immediately notice that plural pronouns are formed from their singular counterparts with the addition of *-ra*.

(14) and (15) show that -ra is the associative plural. It attaches to animate nouns

for an associative interpretation but this is not possible for inanimates, as expected for an associative plural morpheme. *-gulo* is the additive plural morpheme used for inanimates. It can be felicitous with animates, but only as a humorous shorthand to refer to a group of persons uniformly named Ram.

- (14) Ram-{gulo/ra}
 Ram-{PL/ASSOC}
 'The Rams (additive)' or 'Ram and co. (associative)'
- (15) ama-r boi-{gulo/*ra}
 1SG-GEN book-{PL/ASSOC}
 'my books' (additive only) (Shrayana Haldar, p.c.)

Naturally, the plural pronouns formed with -ra are associative also. To address or refer to a group of mixed social tiers, the tier associates to the most salient addressee. For instance, if one is asking their professor where she and her students would like to go for dinner, one would use 2HH.PL apnara. Plural pronouns are not additive: their use does not require all members of the group to be of the same social tier.

Thus, repluralization occurred: after the plural pronoun was recruited for singular honorification, new plural pronouns were innovated by suffixing -ra. Depluralization, or [HON]-ification, did not happen, so that the 2H stem tum- was—and is—plural. (Since the 3rd person forms are demonstratives, I shall focus on the 2nd persons here.) Repluralization left Bangla with two 2PL forms: tum-i and tom-ra. The former is singly plural, and the latter is doubly plural. Thus, repluralization enlarges the inventory of forms that the pragmatic maxims act on.

Now we go on to derive honorificity for singulars and plurals, for address and reference. For honorific contexts language-wide, we fix the ranking of pragmatic maxims so that a Taboo always outranks MP!.

H tiers. Recall that the H tiers, originating from the plural, are derived from the ranking where the Taboo of Atomicity applies and outranks MP!. When ToA » MP!, addressing a singular is only possible with a 2PL form, and addressing a plural is only possible with a 2PL form.

Let us start from the case where the conversation assumes *atomic address in a honorific context*. Figure 8 illustrates the process of candidate evaluation. The ranking is ToA » MP!. Since ToA is highest-ranking, it applies first. ToA eliminates forms which refer to atomic entities. Second, MP! eliminates forms which refer to non-2nd persons. Lastly, out of *tumi* and *tomra*, MP! eliminates the form which is least atomic (*tomra*, since it is doubly plural). This leaves *tumi* as the winning candidate for atomic address in a honorific context.

Now consider the case where the conversation assumes *non-atomic address*

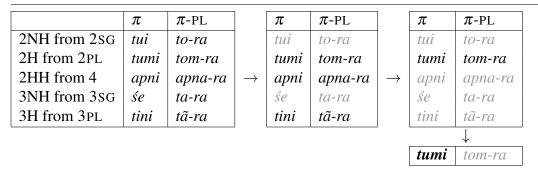


Figure 8 Atomic address in a honorific context.

	π	π-PL		π	π-PL		π	π-PL
2NH from 2sG	tui	to-ra		tui	to-ra		tui	to-ra
2H from 2PL	tumi	tom-ra		tumi	tom-ra		tumi	tom-ra
2HH from 4	apni	apna-ra	\rightarrow	apni	apna-ra	\rightarrow	apni	apna-ra
3NH from 3sG	śe	ta-ra		śe	ta-ra		śe	ta-ra
3H from 3PL	tini	tã-ra		tini	tã-ra		tini	tã-ra
			,			,		<u></u>
							tumi	tom-ra

Figure 9 Non-atomic address in a honorific context.

in a honorific context, with the same ranking. Figure 9 illustrates. As before, the highest-ranking ToA applies first, and eliminates forms which refer to atomic entities. Again, MP! eliminates forms which refer to non-2nd persons. Lastly, out of *tumi* and *tomra*, MP! now eliminates the form which is *most* atomic (*tumi*, since it is singly plural). This leaves *tomra* as the winning candidate for non-atomic address in a honorific context. Importantly, even though MP! is outranked, it still has effects on the pragmatic calculus in "fixing" the plurality.

It may be helpful to compare Bangla with French. French has a honorific plural *vous*, but did not undergo repluralization. Figure 10 illustrates for when what is assumed in the conversation is *atomic address in a honorific context*. As before, ToA » MP!. ToA eliminates forms which refer to atomic entities, and MP! eliminates forms which refer to non-2nd persons. At this point, only *vous* remains in the competition. As a last step, MP! *would have* eliminated forms which are non-atomic, but this is vacuous, since *vous* is already non-atomic. *vous* is the winning candidate.

vous is also the winning candidate when what is assumed in the conversation is non-atomic address in a honorific context. The elimination calculus proceeds identically. However, at the last step, what MP! would have eliminated differs. It

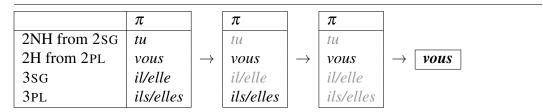


Figure 10 A comparison to French.

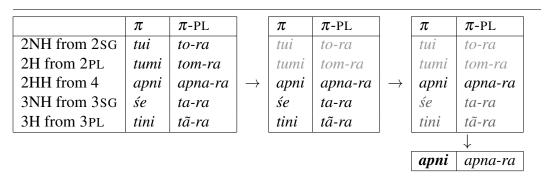


Figure 11 Atomic address in a high-honorific context.

would have eliminated forms which are atomic. This does not happen, as it would result in ineffability, since there is only one candidate left. *vous* is again the winning candidate. In a non-repluralized language like French, then, we see a "ceiling" effect: the forms used for singular honorification and plural honorification are the same, owing to an unenriched inventory.

HH tier. The HH tier, originating from the 4th person, is derived from the ranking where the Taboo on Person applies and outranks MP!. Recall that, when ToP » MP!, address is only possible with a 3rd or 4th person form.

Consider the case where the conversation assumes atomic address in a high-honorific context, so that the ranking is ToP » MP!. Figure 11 illustrates. Since ToP is highest-ranking, it applies first. ToP eliminates forms which carry the strongest person presuppositions, the 2nd person forms. Then, MP! eliminates forms which refer to non-2nd persons, since what is assumed in the conversation is address, not reference. Lastly, out of apni and apnara, MP! eliminates the form which is least atomic, apnara. This leaves apni as the winning candidate. (When what is assumed is non-atomic address in a high-honorific context, the elimination process is identical except that at the last step, MP! eliminates the form which is most atomic, apni. This leaves apnara as the winning candidate.)

For honorific contexts, ToA » MP!. For high-honorific contexts, the Taboo

that applies is ToP instead, so that ToP » MP!. This differential application of the two Taboos for honorific and high-honorific contexts in Eastern Indo-Aryan is more principled than, for example, Alok's (2020) [±high] feature for Magahi. As discussed above, ToP enjoins a speaker to avoid reference to the addressee altogether, while ToA enjoins a speaker to avoid unique reference to the addressee. ToP's prohibition is stronger, so it is ToP that is active in high-honorific contexts, not ToA.

4 Conclusion

In this paper, I have shown that the tiered honorification systems of Eastern Indo-Aryan is compatible with a [HON]-less analysis. Diachronically, the posited Taboos in fact predict the existence of tiers, since multiple recruitments can be carried out. Strikingly, which tier a form develops into is directly linked to its degree of Taboo compliance. Synchronically, the ranking of the Taboos relative to another pragmatic maxim, Maximize Presupposition!, derives honorificity effects. Such rankings are needed to derive honorificity in any language; the only additional stipulation needed to derive tiered honorificity is that the inventory of forms was augmented via repluralization. Thus, even the finer gradations of tiered honorification systems can be captured without ad hoc features. The posited Taboos draw on independently posited concepts, presuppositional clines for grammatical person and (non-)atomicity. They also draw from the common intuition that avoidance behaviors are the core of polite behavior, formalized elsewhere as negative politeness.

The success of this implementation evinces the potential of further developing a similar-spirited research agenda, situated at the crossroads of typology, social meaning, and feature theory. This agenda would be driven by two broad claims. First, grammar is modularly represented, so that social meaning is not part of the core grammar; instead, social meaning is derived, or emergent, from other core components. Another claim is that the feature inventory is highly economical: learners conservatively postulate the minimal amount of features and make maximal use of them (e.g. Hale 1986, Biberauer 2018). As a result, features can be re-used for extra-grammatical functions.

References

Alam, Samir & Elango Kumaran. 2022. Focus and multiple agreement in Maithili. In Akshay Aitha, Steven Castro & Brianna Wilson (eds.), *Chicago Linguistic Society (CLS)*, vol. 57, University of Chicago.

Alok, Deepak. 2020. Speaker and addressee in natural language: Honorificity, indexicality and their interaction in Magahi: Rutgers PhD dissertation.

- Bhattacharya, Tanmoy. 2016. Inner/outer politeness in central Māgadhan Prākrit languages: Agree as labeling. *Linguistic Analysis* 40(3-4). 297–338.
- Biberauer, Theresa. 2018. Pro-drop and emergent parameter hierarchies. In Federica Cognola & Jan Casalicchio (eds.), *Null Subjects in Generative Grammar: A Synchronic and Diachronic Perspective*, 94–140. Oxford University Press. https://doi.org/10.1093/oso/9780198815853.003.0005.
- Bobaljik, Jonathan David & Cynthia Levart Zocca. 2011. Gender markedness: The anatomy of a counter-example. *Morphology* 21. 141–166. https://doi.org/10. 1007/s11525-010-9156-3.
- Brosig, Benjamin. 2018. Pronouns and other terms of address in Khalkha Mongolian. In *Philology of the Grasslands*, 101–111. Brill. https://doi.org/10.1163/9789004351981_007.
- Brown, Penelope & Stephen C Levinson. 1978. *Politeness: Some Universals in Language Usage*. Cambridge University Press. https://doi.org/10.1017/cbo9780511813085.
- Chafe, Wallace. 1990. Uses of the defocusing pronominal prefixes in Caddo. *Anthropological Linguistics* 57–68.
- Chatterji, Suniti Kumar. 1926. *The origin and development of the Bengali language*, vol. 2. Calcutta University Press. https://doi.org/10.4324/9781003481188.
- Cooper, Robin. 1979. The interpretation of pronouns. In F Heny & H Schnelle (eds.), *The Third Groningen Round Table, Syntax and Semantics*, vol. 10, 61–92. New York: Academic Press. https://doi.org/10.1163/9789004373082_004.
- Daniel, Michael. 2000. *Tipologija associativnoj mnozhestvennosti*. [The typology of associative plurals]: Moscow University PhD dissertation.
- David, Anne Boyle. 2015. *Descriptive grammar of Bangla*. Walter de Gruyter. https://doi.org/10.1515/9781614512295.
- Dayal, Veneeta. 2014. Bangla plural classifiers. *Language and Linguistics* 15(1). 47–87. https://doi.org/10.1177/1606822x13506151.
- Goswami, Golok Chandra & Jyotiprakash Tamuli. 2003. Asamiya (Assamese). In George Cardona & Jain Dhanesh (eds.), *The Indo-Aryan languages*, chap. 10, 429–484. Routledge. https://doi.org/10.4324/9780203945315-19.
- Hale, Kenneth. 1986. Notes on world view and semantic categories: Some Warlpiri examples. In Peter Muysken & Henk van Riemsdijk (eds.), *Features and projections*, chap. 8, 233–254. Dordrecht: Foris. https://doi.org/10.1515/9783110871661-009.
- Harbour, Daniel. 2016. *Impossible Persons*, vol. 74. MIT Press. https://doi.org/10.7551/mitpress/9780262034739.001.0001.
- Heim, Irene. 2011. Definiteness and indefiniteness. In Claudia Maienborn, Klaus von Heusinger & Paul Portner (eds.), *Semantics: An International Handbook of Natural Language Meaning*, chap. 2. de Gruyter Mouton. https://doi.org/10.

1515/9783110589443-002.

- Link, Godehard. 1983. The logical analysis of plurals and mass terms: A lattice-theoretical approach. In *Formal semantics: The essential readings*, vol. 127, 147. Blackwell Oxford. https://doi.org/10.1002/9780470758335.ch4.
- Lohar, Gopal Thakur. 2020. *A Grammar of Bhojpuri*: Tribhuvan University PhD dissertation.
- Miyaoka, Osahito. 2012. A Grammar of Central Alaskan Yupik (CAY), vol. 58. Walter de Gruyter. https://doi.org/10.1515/9783110278576.
- Moravcsik, Edith A. 2003. A semantic analysis of associative plurals. *Studies in Language* 27(3). 469–503. https://doi.org/10.1075/sl.27.3.02mor.
- Sauerland, Uli. 2008. On the semantic markedness of ϕ -features. In Daniel Harbour, David Adger & Susana Béjar (eds.), *Phi theory: Phi-features across modules and interfaces*, 57–82. Oxford University Press. https://doi.org/10.1093/oso/9780199213764.003.0003.
- Sauerland, Uli, J. Andersen & K. Yatsushiro. 2005. The plural is semantically unmarked. In S. Kepser & M. Reis (eds.), *Linguistic evidence*, 413–434. Berlin: Mouton de Gruyter. https://doi.org/10.1515/9783110197549.413.
- Verma, Sheela. 2003. Magahi. In George Cardona & Jain Dhanesh (eds.), *The Indo-Aryan languages*, chap. 13, 547–565. Routledge. https://doi.org/10.4324/9780203945315-22.
- Wakasa, Motomichi. 2008. *A descriptive study of the modern Wolaytta language*: University of Tokyo PhD dissertation.
- Wang, Ruoan. 2023. Honorifics without [HON]. *Nat Lang Linguist Theory* 41. 1287–1347. https://doi.org/10.1007/s11049-022-09563-0.
- Yadav, Ramawatar. 1996. *A Reference Grammar of Maithili*. Berlin: Mouton de Gruyter. https://doi.org/10.1515/9783110811698.
- Yadava, Yogendra P. 1999. The complexity of Maithili verb agreement. In K.P. Mohanan Rajendra Singh, Probal Dasgupta (ed.), *The Yearbook of South Asian Linguistics*, vol. 1999, 139–152. Berlin, New York: De Gruyter Mouton. https://doi.org/10.1515/9783110245240.139.

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