



3-1-2015

The Morphosyntax of Formality: A Typology and Inclusion in Feature Geometry

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1 Introduction

Formality is usually not considered a phi-feature on the level of person, number and gender. While there is recognition in the literature that formality is a part of some languages' verb paradigms, formality is often seen as marginal as a feature, non-distinctive or able to be explained by other features, or simply not a robust cross-linguistic phenomenon (Corbett 2006, 2012). This paper provides an informal survey of verbal paradigms that make use of formality, and their commonalities and typological universals. This typology is then used to inform a representation of formality in the morphosyntactic feature geometry as proposed by Harley and Ritter 2002a.

2 Formality in Subject-Verb Agreement

2.1 Types of Formality

There are three ways that verb paradigms make use of formality. First is the use of the plural as a formal singular, often called the "T-V Distinction" (after the French 2nd person pronouns *tu* and *vous*, the singular informal and plural/singular formal respectively). An example from Hindi, where the 2nd/3rd person plural is used as a formal singular:¹

- | | | |
|-----------------|------------|-----------------|
| (1) ve/*vah | gandhi-ji | h-ẽ/*ε |
| 3pl~H/*.3sg | Gandhi-HON | COP.3pl~H/*.3sg |
| "He is Gandhi." | | |

In (1), the pronoun and copula must agree; the use of a formal pronoun necessitates the formal marking on the copula and vice versa. A mismatch yields an ungrammatical result.

The second way that formality can enter agreement is the use of 3rd person as a formal 2nd person. This often arises from lexical substitution: languages will employ a phrase like "Your Honor" for formal address which requires 3rd person. If the phrase is dropped, 3rd person substitution for formal 2nd person can remain productively. This was the case in Italian, where 3rd person substitution is the result of a former phrase *Vostra Onore*:

- | | | |
|-----------------------|---------------------|------------|
| (2) Signore, (Lei) | è/*sei | stanco? |
| Sir 3sg.f~2sg.H | cop.3sg~2sg.H/*.2sg | tired.m.sg |
| "Are you tired, Sir?" | | |

There is also agreement in some languages between pronouns and verb markings for levels of formality that do not match the corresponding plural or 3rd person pronoun/markings. In some cases (such as Bengali), these morphemes may have been productive as some other feature in the past but no longer synchronically carry this information. Tamil has a distinct verb ending (and pronoun) for the 3rd singular male formal (Schiffman 2006, Annamalai and Asher 2002). This is distinct from the corresponding plural marking and as it is 3rd person already it is not eligible for a 3rd person substitution:

*I would like to thank Euna Cho, Shinya Hamano, Wataru Nakai, Ahmed Shamim, and Purnima Thakur for their native speaker judgments. In addition, I would like to thank Marcel den Dikken for his valuable input and encouragement.

¹I will be using the notation L/M/H for high/middle/low levels of formality. This is purely a shortcut and the actual featural content of formality will be discussed later in the paper. In paradigms that only contrast two levels of formality, M/H will be used.

- (3) μ iri murigā paḍi-k:ir-ār(i)/*-ā̃/*āṅ-ga(l)
 HON Murugan read-PRES-3sg.m.H/*-3sg.m.M/*-3-pl
 “Murugan (HON) reads.”

In examples (1-2), while a distinction in formality is present it is not distinctive as a feature, as the formality distinction in (1) can also be represented as a distinction in number, and similarly in (2) with person. This allows for a representation that excludes formality from the feature matrix altogether, instead allowing formality to be a pragmatic selection of another feature. However, morphemes such as Tamil’s 3sg.m.H portmanteau in (3) cannot be distinguished by any feature other than formality. It is because of cases like Tamil that formality must be considered a separate feature.

2.2 Behavior of Formality Within Verb Paradigms

As shown in (1,3) above, languages may employ some method of expressing formality not only within 2nd person but in 3rd person (and 1st person as well, to be discussed in later sections). In addition, languages are not limited to two levels of formality. For example, Bengali contrasts three levels of formality within 2nd person (Nasrin and van der Wurff 2009):

- (4) tui boi poṛ-iḷ/*pṛo/*pṛen
 2.L book read-PRES.2.L/*M/*H
 “You (L) read a book.”

These levels must be consistent in discourse, for example when switching between 2nd and 3rd person. For example, take the following exchange in Hindi:

- (5) a. riṣi-ji kahā h-ē̃
 Rishi-HON where COP-3.pl~H
 “Where is Rishi (H)?”
 b. riṣi-ji, āp/*tum keś-e h-ē̃/*-o
 Rishi-HON 2.H/*2.M how-m.pl~H COP-3pl~H/-2pl~M
 “Rishi (H), how are you?”

In (5a), a speaker refers to Rishi in 3rd person and uses the formal (H) copula. When Rishi becomes the addressee in (5b), the pronoun and markings on both ‘how’ and the copula must also be H and not M or L. This is not to say that this Rishi is inherently H (as individuals inherently have number or gender), but that the relation between the author and Rishi is such that the author consistently uses H. This will be discussed further in Section 4.3.

It is also impossible to employ the methods of marking formality outlined in Section 2.1 in a language or within a specific grammatical person in a language in which it is not licensed. For example, in French, the use of the plural as a formal form is licensed in 2nd person but not 3rd.

2.3 Typology

In order to investigate the behavior of formality within verb paradigms, I have done an informal survey of these paradigms. As a shortcut, I will be referring to the three types of formality in verb paradigms as *P* (plural as formal, as in (1)), *S* (3rd person substitution for 2nd person formal, as in (2)) and *M* (separate marking encoding a level of formality that is contrastive only for formality, as in (3)).

While the verb paradigms with *M*-style morphemes are of greatest interest in investigating how formality functions apart from other phi features, to not consider paradigms with *P* and *S*-style morphemes is impossible as virtually all paradigms with *M*-style morphemes also employ the other two methods of marking formality. For example, Tamil has a 3sg.m.H portmanteau that contrasts with 3sg.m.M and 3pl (as discussed in Section 2.1), but in 3rd person feminine and 2nd person, the plural is used as the formal (Annamalai and Asher 2002).

I have excluded from this typology cases where a language contrasts formality in the pronouns but not in the verb markings, or cases where a language contrasts formality in both pronouns and

verb markings but does not require agreement. In addition, there is the issue of languages with a formal 1st person. There are many cases of “royal we”: a formal 1st person pronoun that is only used by a few specific individuals and is not in distribution with another 1st person pronoun by those speakers. I have only considered one case of a 1st person formal pronoun, Lyélé (Niger-Congo), as it does not have such heavy restrictions on its use (Wiesemann 1986).

The results can be seen below:

1	2	3	Languages
<i>P</i>	<i>P</i>	<i>M</i>	Lyélé (Niger-Congo)
	<i>M</i>	<i>M</i>	Xerente (Macro-Jê)
	<i>M</i>	<i>P</i>	Amharic (Semitic)
	<i>P</i>	<i>M</i>	Tamil (Dravidian), Bench (Omotic)
	<i>P+S</i>	<i>P+S</i>	Nepali (Indo-Aryan)
	<i>M+S</i>	<i>M</i>	Bengali (Indo-Aryan)
	<i>P+S</i>	<i>P</i>	Hindi (Indo-Aryan)
	<i>P+S</i>		Basque, old German
	<i>S</i>		modern German, Italian, Hungarian
	<i>P</i>		French, Turkish

Table 1: Typology of methods of marking formality cross-referenced by person.

In Table 1, the columns 1/2/3 represent 1st/2nd/3rd person and below them are the methods employed within that grammatical person for formal pronouns/markings in the languages to the right. A ‘+’ indicates that the language has a third level of formality, the right-hand method in these cases marks the H level while the left-hand denotes the M level.

2.4 Universals

The data in Table 1 show certain trends that seem (tentatively) universal. The first is that the presence of some formality-marking method in 1st or 3rd person implies the presence of some licensed method in 2nd person. While this could have an external explanation, namely that showing respect to an addressee may be more important culturally than expressing this respect in 3rd person, this is not necessarily the case. For example, English used to contrast 2sg.M *thou* with 2pl-H *ye*, but has collapsed them into *you* as eventually the formal was used for all situations. If this process were to happen in 2nd person in a language that left behind a formality distinction in 3rd person, a language would exist that violates this universal. English even does carry over “singular *they*”, a singular use for the 3pl pronoun/verb marking, but does not currently use it productively to contrast a level of formality.

While the hierarchy between 2nd person and 1st/3rd person is clear, the hierarchy between 1st and 3rd person is not. As I have allowed only one data point with a 1st person formal into the typology, it could be assumed from Table 1 that a contrast in formality in 1st person implies a contrast in 3rd person. However, such a conclusion would be premature. Additionally, if languages with a “royal *we*” are considered, a hierarchy between 1st and 3rd person would not hold up. In fact, as English has “royal *we*” but no productive 2nd person formality distinction, its inclusion in the typology would allow for no hierarchy between grammatical persons.

There may also be hierarchy between grammatical persons of the number of contrasted levels of formality within the grammatical person. A stronger version of the above universal (that a contrast in 1st/3rd person implies a contrast in 2nd person) could be that a *level* of formality in 1st/3rd person implies the presence of that level of formality in 2nd person. While the data in Table 1 support this, the best examples of three-level formality are in the Indo-Aryan language family and I am hesitant to make this conclusion without additional data.

Another possibility is a hierarchy between methods of expressing formality (*P/S/M*). While any combination of the methods is possible across grammatical persons, it seems that the cases of three-

level contrasts in formality all involve *S* as the method to mark the H level.² Pragmatically, this finding is sound. If *S*-type formality is founded on terms of address such as “Your Honor”, these terms may intuitively sound more formal than other methods of expressing formality. However, it is worth noting that my usage of the *S* designation implies that the morpheme in question is still *productive* as a 3rd-person pronoun/marking. Considering that *P/S*-style morphemes can fossilize into *M*-style morphemes that no longer have a productive alternation in number/person (for example, Hindi 2pl~M *tum/-o* is clearly cognate with Bengali 2.M *tumi/-o*), it is expected that Table 1 would have some cells under the 2nd person column reading “*P+M*” or “*M+M*.” However, if such languages exist, I have not yet encountered them.

3 Interaction between Formality and Other Phi-Features

All of the languages described so far have morphemes that encode information about both formality and other features. Examples of formality cross-cut with person are many, such as the Hindi *ve/-ẽ* morphemes in (1), which are specified for both 3rd person and H. Amharic (Semitic) is an example of a paradigm that utilizes both formality and number, for example the 2.H verb marking *-wo(t)* is distinct from the 2pl.M *-af.uh* (Appleyard 1995). The Tamil 3sg.m.H marking *-ãri* shown in (3) is specified for both formality and gender. Xerente (Macro-Jê) has an extensive verb paradigm where formality is cross-cut by case, for example the 3sg.H.DAT prefix *da-* is distinct from the 3sg.H.ABS circumfix *ta- -ñi*, the 3sg.M.DAT *ã-* and the 3pl.DAT *wa-* (Wiesemann 1986).

What’s more interesting, however, are cases where the presence of one feature seems to require the presence of another. For example, languages where gender plays a role in verb paradigms all inflect verbs for number as well. This finding informed the representation of gender features in the feature geometry: as they are dependent on number features, they are contained in a node beneath the number features in the hierarchy.

With this in mind, we shall turn our attention to the existence of systems where formality is present but not some other feature. A good place to start is the Bengali verb-marking paradigm (Nasrin and van der Wurff 2009):

	L	M	H
1		-i	
2	-iʃ	-o	-en
3		-e	

Table 2: Bengali present tense markers.

Bengali’s verb paradigm only contrasts for person and formality, not number, gender or case. Any of the five markings can be used in singular, or in the plural with the associative marker *-ra* on the pronoun. This leaves us with the following types of paradigms:

Feature	Formality with Feature	Formality without Feature
Person	Hindi	???
Number	Amharic	Bengali
Gender	Tamil	
Case	Xerente	

Table 3: Combinations of formality and other features in verb paradigms.

²It may be puzzling to see an *S* in Table 1’s 3rd person row for Nepali, as *S* denotes a 3rd person substitution. In this case, there is a morpheme *-huncha* used for both 2nd and 3rd person H. I am unsure of the history of these forms, but as *huncha* is also the imperfective copula, I suspect that there is some interference here from a lexical item, which is closer to the spirit of *S*. (As opposed to *M*, where some form carrying formality information is just another cell in the table, so to speak.) For more information about the Nepali verb paradigm, see Hutt and Subhedi 2003.

Table 3 is missing one permutation, a paradigm that marks verbs for formality but not for person. Is such a language possible? Such a system would look something like the register system in Japanese, where one set of verb endings is used for formal contexts and one for informal contexts. Japanese also has a large inventory of pronouns with various levels of formality. Interestingly, however, the verbal register system and pronouns do not form an agreement relation:

- (6) a. anata wa oyog-imasu
 2.H TOP swim-pres.H
 b. anata wa oyog-u
 2.H TOP swim-pres.L
 c. teme wa oyog-imasu
 2.L TOP swim-pres.H
 d. teme wa oyog-u
 2.L TOP swim-pres.L
 “You swim.”

In (6), all four permutations of the 2nd person pronouns of highest/lowest formality and the two registers of verb endings yield grammatical results.³ As no possible mismatch is ungrammatical, Japanese does not have subject-verb agreement for formality, in addition to lacking subject-verb agreement for person. A hypothetical language identical to Japanese but where (6b,c) were ungrammatical would prove that formality agreement is not dependent on person agreement. While the grammaticality of mismatches in Japanese does not prove a dependence of formality-marking on person-marking, I have yet to find a language where registers enter subject-verb agreement productively. The dependence of formality-marking on person-marking will be discussed further in Section 4.3.

4 Feature Geometry

4.1 Introduction to the Feature Geometry

Clements 1985 proposed a feature geometry for phonological features in order to represent the hierarchy between them as informed by universals in the sound patterns of the world’s languages. Features were grouped in bundles that often act together such as place features and laryngeal features, and some features are subordinate to others (for example, primary place features such as [CORONAL] are above the secondary place features dependent on them, such as [±ANTERIOR]). Harley and Ritter 2002a have introduced a similar feature geometry for phi-features:

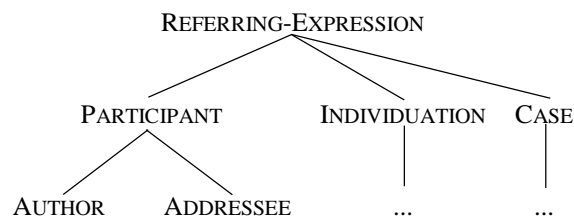


Figure 1: Morphosyntactic feature geometry.

Figure 1 shows the general structure of the feature geometry: the person features are separated into PARTICIPANT (1st or 2nd person), which dominates AUTHOR (1st person) and ADDRESSEE (2nd person).

³Native speakers of Japanese (both linguist and naïve) when presented with examples of the type (6b,c) remarked that the sentences were impolite. However rude the examples may be, they were interpreted correctly by native speakers and I was unable to elicit the kind of response that matches other phi-feature mismatches such as “*I eats.” On the other hand, Hindi and Bengali speakers felt as strongly about the formality mismatches as they did mismatches of other phi-features.

This arrangement is informed by phenomena of person features in the world’s languages, most notably that 3rd person behaves more like a lack of person features than its own feature (Nevins 2007). The INDIVIDUATION node (and the GENDER node subordinate to it) and the CASE node are also present, however as argued in Section 3, formality features are dependent on person, but not number, gender or case. Thus, whatever feature(s) govern formality are going to be bundled with the person features.

4.2 A Feature for Formality

It also must be determined what exactly the feature content governing formality would look like. To do so, let us look at the most extensive paradigms, Lyélé and Nepali:

	Lyélé	Nepali
1 – second level	X	
2 – second level	X	X
2 – third level		X
3 – second level	X	X
3 – third level		X

Table 4: Largest formality paradigms.

Any proposed features to govern formality must be able to account for all of the permutations in Table 4: the second level of formality in all three persons in Lyélé and the third level in Nepali 2nd/3rd persons.

It is worth exploring what these various levels of formality are used for. L pronouns/markings can be casual, intimate, rude, or a combination thereof depending on the language, and H can be used for either respect or keeping one’s distance. As there is no exact correspondence in the meaning of these levels between languages, features such as “INTIMACY” that invoke these qualities will not provide a universal way of describing formality as it is used in verb paradigms.

One possibility is giving the levels themselves features, such as [L], [H] and either [M] or \emptyset for M. However, there is another way of approaching the problem that may better explain the distribution of levels of formality in the world’s languages. Languages do not seem to have both a second level of formality in 1st person (including “royal *we*” cases) *and* a third level of formality in any person.⁴ This may be due to an overlap in meaning between 1H and 2/3L: a formality contrast is essentially a relationship between the author and either the addressee or third person subject. Both 1H and 2/3L convey that the speaker is of a higher status than the addressee or third person subject. From the perspective of this relationship, we can analyze the cases shown in Table 4 as follows:

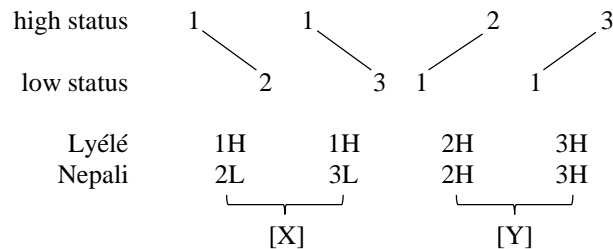


Figure 2: Relative analysis of formality.

⁴Hutt and Subhedi 2003 mention the use of 1pl *hami* as 1sg, however when bringing this up with Nepali speakers, they suggest that speakers who do this do not use both *hami* and the regular 1sg *ma* in complementary distribution but instead use *hami* in all situations. Instead of *hami* being a productive 1pl~H, this usage may instead be evidence of the Nepali verb paradigm losing its contrast in number (all M/H forms except 1st person are identical) as has been the case in Bengali, however further research is required before such a conclusion can be made.

As shown in Figure 2, the large paradigms in Table 4 can be boiled down to two feature specifications, [X] for situations where either the higher status of the speaker or the lower status of the addressee/third person subject is stressed (1H in Lyélél and 2/3L in Nepali) and [Y] for situations where either the lower status of the speaker or the higher status of the addressee/third person subject is stressed (2/3H in both Lyélél and Nepali). The M level can be represented as unspecified for [X] and [Y].

The feature specifications [X] and [Y] can now either become their own unary features (which cannot occur in unison) or opposing values of a binary feature. Harley and Ritter’s geometry contains only unary features, including pairs that cannot occur in unison (SUPERIOR and OBLIQUE under the CASE node), so such a representation would not be out of place. However, [X] and [Y] represent values on the same continuum, namely the relative status of 1st and 2nd/3rd person. Thus, I propose a single binary feature, [\pm STATUS], to govern formality. [+STATUS] will represent cases where 1st person has the higher status ([X]), while [-STATUS] represents cases where 1st person has the lower status ([Y]). The M level can be represented as unspecified for [\pm STATUS].

Interestingly, there are cases of syncretism for both values of [\pm STATUS]. [+STATUS] is expressed solely through 1H in Lyélél but through both 2L and 3L in Nepali. Syncretism of [-STATUS] is shown in the Indo-Aryan languages where the verb markings for 2H and 3H are identical, for example Hindi -*ê*, Bengali -*en* and Nepali -*nuhuncha*. In fact, as Bengali is pro-drop, a sentence may have the -*en* morpheme and refer ambiguously to 2nd/3rd person.

4.3 Position of [\pm STATUS]

It remains to be seen where in Harley and Ritter’s feature geometry [\pm STATUS] belongs. As formality-marking is dependent on person-marking, it makes sense to place [\pm STATUS] under a node that dominates the person features. However, PARTICIPANT is the highest person feature in the geometry and to place [\pm STATUS] underneath it would require that PARTICIPANT be invoked whenever feature-marking is present. This is clearly not the case as many languages have multiple levels of formality in 3rd person.

Because of this, a new node must be created that dominates both PARTICIPANT and [\pm STATUS]; I will name it DYNAMIC, as the person and formality features it dominates specify information regarding the dynamic between the author and the subject of the expression the features are specified to. The full feature geometry:

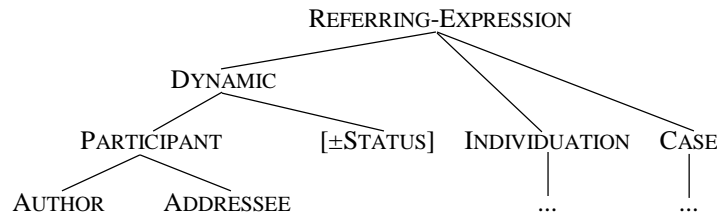


Figure 3: Feature geometry with [\pm STATUS].

There are two interesting consequences of such a representation. The first is that a new node DYNAMIC dominating PARTICIPANT and [\pm STATUS] would be available for use by 3rd person, this disrupts the representation of 3rd person as unspecified for all person features as proposed by Harley and Ritter 2002b and Nevins 2007. However, as DYNAMIC is not proposed to match any particular information conveyed by morphemes, merely as a node under REFERRING-EXPRESSION that dominates both person and formality features, there is yet no evidence to suggest that DYNAMIC is a person feature at all.

The other peculiarity is that such a representation in effect separates phi-features into two groups. The features under DYNAMIC, as noted above, refer to the dynamic between the author and the subject of the expression. Thus, both the person and formality features under the DYNAMIC node make use of deixis: person features are not intrinsic to individuals, as an expression such as *John*

does not have an intrinsic person feature but is assigned a person feature after calculating the relationship between John and the speaker. [\pm STATUS] as proposed involves a similar calculation: John does not have one level of formality that he carries around like a trophy, but is addressed with a level of formality that has been calculated as a result of the relationship between the speaker and John. In fact, a non-relative approach where a feature like [H] governs both 1H and 2/3H would make precisely this false implication (that one carries formality around as a trophy). On the other side of the geometry, all of the features under INDIVIDUATION are properties that do not require any deictic calculation: Melissa and Jane are two women regardless of who is speaking.

In addition, the reference to deixis shared by person and formality features may shed light on the dependence of formality-marking on person-marking. If formality-marking requires a calculation that compares the status of 1st and 2nd/3rd person, such a calculation is not meaningful if grammatical person itself has not been calculated.

Strangely, while positioning [\pm STATUS] as the sister of PARTICIPANT captures the dependence of formality-marking on person-marking, it does not capture some of the typological universals discussed in Section 2.4. For example, the hierarchy between formality contrasts in 2nd person versus those in 1st/3rd person is not captured in the representation presented here. A representation that does capture this universal would involve multiple features under DYNAMIC that govern formality within specific grammatical persons. However, such a representation would capture neither the semantic overlap between 1H and 2/3L nor the cases of syncretism in Indo-Aryan discussed in Section 4.2. The hierarchy of methods of expressing formality and the affinity of formality to specific person/number features are also unable to be represented, although this may be a general issue with feature geometries. For example, Clements' phonological feature geometry has no way to represent which combinations of features do not occur (Mielke 2004:49).

5 Formality Outside of Subject-Verb Agreement

So far, we have used evidence from subject-verb agreement for the existence of formality as its own phi-feature separate from the other canonical phi-features. However, that does not exclude other morphemes from being specified for these features. For example, the honorific *-ji* in Hindi:

- | | | | |
|--------|----------|-------------------|----------|
| (7) a. | riṣi-ji | nac-t-e | h-ẽ |
| | Rishi-JI | dance-PRES-m.pl/H | COP-sg/H |
| b. | *riṣi-ji | nac-t-a | h-ε |
| | Rishi-JI | dance-PRES-m.pl/M | COP-sg/M |
| c. | %riṣi | nac-t-e | h-ẽ |
| | Rishi | dance-PRES-m.pl/H | COP-sg/H |
| d. | riṣi | nac-t-a | h-ε |
| | Rishi | dance-PRES-m.pl/M | COP-sg/M |
- “Rishi dances.”

Surprisingly, speakers reported (7b) as fully ungrammatical, as the *-ji* honorific mismatched with the M level of formality on the verb. The opposing mismatch, (7c), where the H level verb was used without *-ji* was not consistently rated as ungrammatical. As the *-ji* is not required in the presence of a formal verb, it is not a noun declension. However, the *-ji* morpheme must be specified for [\pm STATUS] in order to allow the mismatch in (7b).

In contrast, Japanese also has a system of honorifics, but a mismatch between these honorifics and the verb register system shown in (6) is not ungrammatical:

- | | | | |
|--------|-------------|-----|----------------|
| (8) a. | hitomi | wa | ne-masu/ru |
| | Hitomi | TOP | sleep-PRES.H/L |
| b. | hitomi-sama | wa | ne-masu/ru |
| | Hitomi-HON | TOP | sleep-PRES.H/L |
| c. | hitomi-chan | wa | ne-masu/ru |
| | Hitomi-DIM | TOP | sleep-PRES.H/L |
- “Hitomi sleeps.”

As shown in (8), the presence of honorifics, whether formal or diminutive, do not interfere with the grammaticality of either verb register, much like the pronouns in (6). This is in stark contrast to the rejection of (7b) by Hindi speakers.

Despite the lack of formality-based agreement relations in Japanese as shown in (6) and (8), the pronouns in (6) and honorifics in (8) are selected by Japanese speakers for use in situations that warrant certain levels of formality. The grammatical “mismatches” in these examples are definitely dispreferred even if not fully ungrammatical. In this situation, the selection of morphemes for formality is pragmatic and not constrained by the syntax. A discrepancy between the phi-features specified to a morpheme and the properties of the object it refers to is not unheard of: English *grapes* is grammatically plural while the grammatically singular Italian *uva* refers to the same object(s).

6 Conclusion

Formality may enter agreement relations (or may not, as in the case of Japanese), in any grammatical person at up to three distinct levels.⁵ Formality in verbal paradigms seems to follow certain universals, as there is hierarchy between the grammatical persons in which there is a formality distinction, as well as between the number of levels of formality contrasted and the methods utilized to express this contrast.

An analysis of formality that calculates the relative status of the author and the addressee/third person subject allows for even the largest formality paradigms to be collapsed into a single feature [\pm STATUS]. As formality-marking is dependent on person-marking, but is available in 3rd person (which is expressed as the lack of person features), a new node DYNAMIC must be created to dominate both [\pm STATUS] and the person features. The presence of this node has implications for the compatibility of previous representations of 3rd person with an incorporation of formality features.

References

- Appleyard, David. 1995. *Colloquial Amharic*. New York: Routledge.
- Annamalai, E., and R. E. Asher. 2002. *Colloquial Tamil*. New York: Routledge.
- Clements, George N. 1985. The geometry of phonological features. In *Phonology Yearbook 2*:225–252.
- Corbett, Greville G. 2006. *Agreement*. Cambridge: Cambridge University Press.
- Corbett, Greville G. 2012. *Features*. Cambridge: Cambridge University Press.
- Harley, Heidi, and Elizabeth Ritter. 2002a. A feature-geometric analysis of person and number. *Language* 78.3:482–526.
- Harley, Heidi, and Elizabeth Ritter. 2002b. Structuring the Bundle: A Universal Morphosyntactic Feature Geometry. In *Pronouns: Features and Representations*, ed. H. Simon and H. Weise, 23–39. Amsterdam: John Benjamin.
- Hutt, Michael, and Abhi Subhedi. 2003. *Teach Yourself Nepali*. New York: McGraw-Hill.
- Mielke, Jeff. 2004. The emergence of distinctive features. Doctoral dissertation, The Ohio State University.
- Nasrin, Mithun B., and W.A.M. van der Wurff. 2009. *Colloquial Bengali*. New York: Routledge.
- Nevins, Andrew. 2007. The representation of third person and its consequences for person-case effects. *Natural Language and Linguistic Theory* 25:273–313.
- Preminger, Omer. 2014. *Agreement and its failures*. Linguistic Inquiry Monographs series, No. 68. Cambridge, Mass.: MIT Press.
- Schiffman, Harold F. 2006. *A Reference Grammar of Spoken Tamil*. Cambridge: Cambridge University Press.
- Stump, Gregory, and Ramawater Yadav. 1988. Maithili verb agreement and the control agreement principle. In *CLS 24: Papers from the 24th Annual Regional Meeting of the Chicago Linguistic Society: Part II: Parasession on Agreement in Grammatical Theory*, eds. D. Brentari, G. N. Lawson and L. A. MacLeod, 304–321.
- Wiesemann, Ursula. 1986. *Pronominal Systems*. Tübingen.

⁵Stump and Yadav 1988 discuss the levels of formality in Maithili (Indo-Aryan) and court the idea of a fourth level (L/M/H/XH). However, as no more than three exist within a grammatical person, such a distinction may be purely pragmatic. As discussed in Section 4.2, while the selection of level of formality may involve pragmatic factors such as intimacy, these are irrelevant to the phi-features present in the syntax.

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