The number feature of Hindi and Marathi

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Abstract

This paper compares and analyses the morphological systems of number of Hindi and Marathi, two Indo-Aryan languages. The analysis of Hindi is based on the data collected in classroom sessions. For Marathi, I have used myself as informant. It can be seen in appendix A. Further, I talk about the values of the number feature of these languages and account for all the types of manifestations those values show.

Contents

1   Hindi

Pluralisation in Hindi is largely morphological. It shows only one fully robust lexical semantic constraint. It does show some phonetic patterns, but largely they aren't robust. A detailed description follows.

1.1   Number as a category and its values

Hindi shows diverse morphological patterns with respect to the number of nouns. The number system is not an autonomous morphological category as its manifestations depend on the gender of the concerned nouns too. The number category has two values namely singular and plural.

1.2   Manifestation of number values

The number values can be seen on some classes of nouns, some classes of adjectives and all verbs in certain aspects. Most of the agreements show mixed information regarding the gender and the number of the concerned nouns.

In pronouns, number value is manifested in first and second person. Hindi pronouns show honorificity. Hindi honorificity has two values in first and third persons, but has three values in the second person. The plural forms of the lower level of honorificity are used as the singular forms of the next honorific level and hence the highest honorific levels in all the persons don't show the number contrast. First person non-honorific pronouns have distinct forms with respect to the number value, but with honorific forms the distinction vanishes. In the third person, non-honorific forms also don't show the distinction with number and hence it is absent in the honorific forms too. Interestingly in the second person, the lowest and the middle levels of honorificity show distinct forms with respect to number, but as noted earlier, in the highest level of honorificity, as all the forms are exhausted, the number distinction vanishes. Note that nothing of

Person	SG	PL	HON
1	'मैं' (/mɛ/)	'हम' (/həm/)	H1
1	'हम' (/həm/)	'हम' (/həm/)	H2
2	'तू' (/t̪u/)	'तुम' (/t̪um/)	H1
2	'तुम' (/t̪um/)	'आप' (/aːp/)	H2
2	'आप' (/aːp/)	'आप' (/aːp/)	H3
3	'वो' (/ʋo/)	'वो' (/ʋo/)	H1
3	'वो' (/ʋo/)	'वो' (/ʋo/)	H2

Table 1: Hindi pronouns

this is affected by the gender. Table 1 demonstrates this pattern. I have used H1, H2 and H3 respectively to mark the levels of honorificity in the increasing order.

1.3 Hindi singulars

Singular is the default value of number in Hindi. Mass nouns to which the semantics of number doesn't apply also typically show this default value. As number morphemes are used for marking honorificity; using singular for a person sometimes may sound rude, but sometimes maybe used to denote the proximity with the addressee as honorificity implies distance.

1.4 Hindi plurals

Plurals are used for honorificity. Plurals start after $1\frac{1}{2}$, i.e., till then adjectives, verbs and nouns show singular forms only. Honorificity denotes politeness, but also some distance, hence honorific forms are avoided for people close to the speaker.

1.5 Patterns and rules

In this section we will look at a list of rules which captures the patterns of the number feature of Hindi.

1.5.1 Masculine

- /ₙ X-a#/ $\longleftrightarrow$ /ₙ X-e#/

- /ₙ X-i#/ $\longleftrightarrow$ /ₙ X-i#/

- /ₙ X-C#/ $\longleftrightarrow$ /ₙ X-C#/

1.5.2 Feminine

- /ₙ X-i#/ $\longleftrightarrow$ /ₙ X-ijã#/

- /ₙ X–C#/ ⟷ /ₙ X–Cẽ#/

Looking at this list of patterns, we can conclude that Hindi masculine nouns have three phonologically governed classes and feminine nouns have two of them.

1.6 Agreement

In this section we will look at the different patterns of agreement in Hindi. The most significant places where agreement occurs for the number values are adjectives, verbs and the pronouns. They are demonstrated in the following data.

(1) a. तू चीज़ बड़ी है मस्त।

  țu   tʃiːz   bəɽ-i   hɛ   məsț
  2.SG (H1) thing.FSG big-AGR be.PRS.AGR nice

  You are a fab thing.

  b. टिप टिप बरसा पानी।

  țip   țip   bərs-a   pani
  Drop   drop   shower-PFV.AGR   water.M

  Water dripped slowly.

  c. तुमने कभी किसीसे प्यार किया?

  țum=ne   kəbʱi kis-i=se   pjaɾ   ki-j-a
  2.SG=ERG (H2)   ever   who-OBL=with   love.M   do-PFV-AGR

  Have you ever loved someone?

  d. हमने तुमको देखा।

  həm=ne   țum=ko   ḍekʰ-a
  1.SG=ERG (H2)   2.SG=DAT (H1)   see-PFV.DEFTG.DEFTN

  I (HON) saw you (mid-HON).

For adjectival and verbal agreement see 1a and 1b. Note that the adjectival agreement isn't robust (cf. /bəɽ-i/ and /məsț/ from 1a). For the selection of pronouns have a look at 1c. There is a syntactic constraint on verbs because of which they don't show agreement with cased DPs. Still they show the default gender (M) and the default number (SG). I have used DEFTN and DEFTG deliberately to distinguish between these two (cf. 1d).

1.7 Quantification

Hindi uses the same set of words for quantifying and counting as can be seen in the following data.

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(2) a. कितनी हसीं ज़िन्दगी है ये।

    kiʈn-i   həsĩ: zinḍəgi hɛ   je

    So-AGR beautiful-AGR life.FSG be.PRS.DEFTN DEM.PROX

    How beautiful is this life.

  b. कितने आदमी थे?

    kiʈn-e   aḍmi   ʈʰ-e

    How many-AGR person.MPL be.PST-AGR

    How many people were there?

When used with uncountable nouns like 'life', it refers to the quantity of it and can roughly be translated to *this/so much* as can be seen in 2b and when used with countable nouns it refers to their quantity and can roughly be translated to *these/how many*. The same happens with the following quantifiers of Hindi.

- [bəhuʈ] (a lot much/many)

- [ʈʰoɽ-a/i] (less/little)

- [kuʧʰ] (some)

One exception to these quantifiers is of /kəi/ which is only used with countable nouns.

2 Marathi

Like Hindi, pluralisation in Marathi too is morphological. Marathi also shows phonologically conditioned pluralisation, but not uniformly. Marathi's pluralisation is morphologically much more diverse. It is declensional, it is based on genders of nouns. Hence we will discuss the features of each gender.

2.1 Number as a category and its values

Like Hindi, Marathi also shows two values for number, i.e., singular and plural. The number feature is dependent on gender and declensions. Certain lexical peculiarities are also observed which will be discussed in the coming sections.

2.2 Manifestation of number values

Marathi has adjectival and verbal agreement which is sensitive to number. Being a fusional language, Marathi too (like Hindi) fuses gender and number information in one morpheme, but there are some special cases which will be presented further.

    Unlike Hindi, Marathi pronouns show number distinction in all the persons. Honorificity also is seen with the use of plural morphemes. Marathi honorificity

Person	SG	PL	HON
1	'मी' (/mi/)	'आम्ही' (/amʱi/)	H1
1	'आम्ही' (/amʱi/)	'आम्ही' (/amʱi/)	H2
2	'तू' (/ʈu/)	'तुम्ही' (/ʈumʱi/)	H1
2	'तुम्ही' (/ʈumʱi/)	'तुम्ही' (/ʈumʱi/)	H2
2	'आपण' (/apəɳ/)	'आपण' (/apəɳ/)	H3
3M	'तो' (/ʈo/)	'ते' (/ʈe/)	H1
3M	'ते' (/ʈe/)	'ते' (/ʈe/)	H2
3F	'ती' (/ʈi/)	'त्या' (/ʈja/)	H1
3F	'त्या' (/ʈja/)	'त्या' (/ʈja/)	H2
3N	'ते' (/ʈe/)	'ती' (/ʈi/)	H1

Table 2: Hindi pronouns

only has two values in first and third persons, but second person has three values. First person honorific is extremely rare. Second person honorifics are standard in formal conversations. Marathi honorifics though are patterned differently than Hindi. Table 2 explains the patterns.

Significantly, Marathi has number distinction only in H1 level. All the other levels are number-insensitive. Marathi shows gender distinction in third person pronouns. There is a gap that we see here. H2 for 3N isn't available. We will come back to this shortly in the coming sections.

2.3 Marathi singulars

Singular is the default value of number in Marathi too. Mass nouns to which the semantics of number doesn't apply also show this default value. In Marathi too, singulars are used to denote proximity with a person.

2.4 Marathi plurals

Marathi Plurals do start after $1\frac{1}{2}$, but $2\frac{1}{2}$ also is singular. So entities with number 1, $1\frac{1}{2}$ and $2\frac{1}{2}$ show singular, but in between them comes number 2 which is plural and needless to say everything after $2\frac{1}{2}$ also is plural. Honorificity denotes distance and politeness.

2.5 Patterns and rules

The following is a list of gender-wise pattern that we observe in Marathi.

2.5.1 Masculine

Marathi only has one suppletive morpheme for the Masculine gender. Rest everywhere Marathi shows no change while pluralising. The pattern observed is

as follows:

$$/_{\text{N}}\,\texttt{X-a\#/} \longleftrightarrow /_{\text{N}}\,\texttt{X-e\#/}$$

2.5.2 Neuter

There are two phonological conditions in the neuter gender. Except these no formal change is observed. Importantly, neuter is the default gender of Marathi.

- $/_{\text{N}}\,\texttt{X-C\#/} \longleftrightarrow /_{\text{N}}\,\texttt{X-Ce\#/}$

- $/_{\text{N}}\,\texttt{X-u\#/} \longleftrightarrow /_{\text{N}}\,\texttt{X-ə\#/}$

In written Marathi, though, there is a different rule for words ending in /u/, i.e.:

$$/_{\text{N}}\,\texttt{X-u\#/} \longleftrightarrow /_{\text{N}}\,\texttt{X-e\#/}$$

Additionally, we have another rule in written Marathi, i.e.:

$$/_{\text{N}}\,\texttt{X-ə\#/} \longleftrightarrow /_{\text{N}}\,\texttt{X-e\#/}$$

2.5.3 Feminine

Feminine gender of Marathi has a lot of declensional variation. The words that end in /a/ and a set of nouns which are related to Sanskrit show zero change. The remaining conditions are as follows:

- $/_{\text{N}}\,\texttt{X-ə\#/} \longleftrightarrow /_{\text{N}}\,\texttt{X-i\#/}$ or $/_{\text{N}}\,\texttt{X-ə\#/} \longleftrightarrow /_{\text{N}}\,\texttt{X-a\#/}$

- $/_{\text{N}}\,\texttt{X-C\#/} \longleftrightarrow /_{\text{N}}\,\texttt{X-Ci\#/}$ or $/_{\text{N}}\,\texttt{X-C\#/} \longleftrightarrow /_{\text{N}}\,\texttt{X-Ca\#/}$

- $/_{\text{N}}\,\texttt{X-u\#/} \longleftrightarrow /_{\text{N}}\,\texttt{X-wa\#/}$

Some /u/-ending words don't follow the pattern given above. They show zero change.

2.6 Agreement

Now we see some examples where number-related agreement is seen in Marathi.

(3) a. सत्तर रुपये वारले!
     səʈːər   ɾupəj-e   waɾ-l-e
     Seventy rupee-MPL die-PFV-AGR

     Your seventy rupees died (can't be returned).

This example is presented to demonstrate verbal agreement in Marathi. Marathi has a unique pattern where the verb agrees with the number of both subject and object. This happens only in second person Hɪ. Have a look at the following examples.

(4) a. तू आंबा खाल्लास.

    ʈu   amba   kʰa-lː-a-s
    2SG$_i$ mango.MSG$_j$ eat-PFV-AGR$_i$-AGR$_j$

    You (SG) ate a mango.

  b. तू आंबे खाल्लेस.

    ʈu   amb-e   kʰa-lː-e-s
    2SG$_i$ mango.MPL$_j$ eat-PFV-AGR$_i$-AGR$_j$

    You (SG) ate mangoes.

  c. तुम्ही आंबा खाल्लात.

    ʈumʱi amba   kʰa-lː-a-ʈ
    2PL$_i$ mango.MSG$_j$ eat-PFV-AGR$_i$-AGR$_j$

    You (PL) ate a mango.

  d. तुम्ही आंबे खाल्लेत.

    ʈumʱi amb-e   kʰa-lː-e-ʈ
    2PL$_i$ mango.MPL$_j$ eat-PFV-AGR$_i$-AGR$_j$

    You (PL) ate mangoes..

2.7 Quantification

Marathi also uses a single morpheme, i.e., 'किती' (/kiʈi/) for quantifying and counting. It refers to the quantity when used with uncountable nouns and when used with countable nouns it refers to the number. This is very similar to Hindi. Some other such function words are as follows.

- [kʰup] (a lot much/many)
- [ʈʰoɽ-a/i/ə] (less/little)
- [kahi] (some)

3 Conclusion

Both Hindi and Marathi are fusional languages which have fused morphemes for showing number and gender. Number is a legitimate category in both the languages and it has two values in the former and three in the latter.

A Word list

This word-list is developed by Dr. Renuka Ozarkar, at the department of linguistics, university of Mumbai. I have collected and transcribed the singular and plural forms of these words in Hindi. As I am the second language speaker of Hindi, I have taken help from Spandan Pattnaik and his mother for some words.

English word	Singular	Plural
Animal	ʤanwəɾ	ʤanwəɾ
Cow	ɡaj	ɡajẽ
Dog	kut̪:a	kut̪:e
Donkey	ɡəd̪ʱa	ɡəd̪ʱe
Elephant	hat̪ʰi	hat̪ʰi
Goat	bəkɾi	bəkɾijã
Lion	ʃeɾ	ʃeɾ
Monkey	bənd̪əɾ	bənd̪əɾ
Mouse	ʧuha	ʧuhe
Snake	sãp	sãp
Claw	pənʤa	pənʤe
Horn	siŋ	siŋ
Tail	pũʧʰ	pũʧʰẽ
Bird	pənʧʰi	pənʧʰi
Crow	kə͡uʋa	kə͡uʋe
Peacock	moɾ	moɾ
Sparrow	ʧiɾija	ʧiɾijã
Feather	pəŋkʰ	pəŋkʰ
Fish	məʧʰli	məʧʰlijã
Ant	ʧĩt̪i	ʧĩt̪ijã
Butterfly	t̪it̪li	t̪it̪lijã
Bull	bɛl	bɛl
Wing	pəɾ	pəɾ
Mosquito	məʧ:ʰəɾ	məʧ:ʰəɾ
House-fly	mək:ʰi	mək:ʰijã
Worm	kiɾa	kiɾe
Louse	ʤu	ʤuẽ
Sheep	bʱeɽ	bʱeɽẽ
Pig	sũəɾ	sũəɾ
Egg	əɳɖa	əɳɖe
Flower	pʰu:l	pʰu:l
Fruit	pʰəl	pʰəl
Banana	kela	kele
Mango	a:m	a:m
Seed	bi:ʤ	bi:ʤ

English word	Singular	Plural
Leaf	pəʈːa	pəʈːe
Tree	peɽ	peɽ
Bark	ʧʰaːl	-
Root	ʤəɽ	ʤəɽẽ
Grass	gʱas	-
Belly	ʈonḓ	ʈonḓẽ
Back	piːʈʰ	piːʈʰ
Head	səɾ	səɾ
Ear	kaːn	kaːn
Eye	ãːkʰ	ãːkʰẽ
Nose	naːk	naːk
Mouth	mũː	mũː
Lip	hõʈʰ	hõʈʰ
Tongue	ʤibʱ	ʤiːbʱ
Tooth	ḓãːʈ	ḓãːʈ
Neck	gəɾḓən	gəɾḓən
Hair	baːl	baːl
Foot	ʈəlwa	ʈəlwẽ
Leg	pɛɾ	pɛɾ
Knee	gʱuʈna	gʱuʈne
Hand	haːʈʰ	haːʈʰ
Finger	uŋgli	uŋglijã
Thumb	əŋguːʈʰa	əŋguːʈʰẽ
Nails	nakʰun	nakʰun
Bone	həɖːi	həɖːijã
Blood	kʰun	kʰun
Liver	kələʤa	-
Skin	ʧəmɖi	ʧəmɖijã
Clothing	kəpɖa	kəpɖe
Bindi	binɖiː	binɖijã
Juda (hair-bun)	ʤuːɽa	ʤuːɽẽ
Plait	ʧoʈi	ʧoʈijã
Bangles	kəŋgən	kəŋgən
Necklace	haːɾ	haːɾ
Nose-pin	nəʈʰni	nəʈʰnijã
Earring	bali	balijã
Sari	saɽi	saɽijã
Shirt	kəmiz	kəmizẽ
Blouse	ʧoli	ʧolijã
Shawl	ʃɔl	ʃɔl
Spectacles	ɛnək	ɛnək
Comb	kəŋgʱiː	kəŋgʱijã

English word	Singular	Plural
Mirror	aina	aine
House	gʱəɾ	gʱəɾ
Door	d̪əɾvaza	d̪əɾvaze
Window	kʰiɽki	kʰiɽkijã
Wall	d̪iːʋaɾ	d̪iːʋaɾẽ
Roof	tʃʰət̪	tʃʰət̪ẽ
Village	gã:ʋ	gã:ʋ
Person	ʋjəkt̪i	ʋjəkt̪i
Child	bətʃ:a	bətʃ:e
Man	puɾuʂ	puɾuʂ
Woman	məhila	məhilaẽ
Husband	pət̪i	pət̪i
Wife	pət̪ni	pət̪nijã
Brother	bʱai	bʱai
Brother's wife	bʱabʱi	bʱabʱijã
Sister	behen	behenẽ
Sister's husband	dʑiːdʑa	dʑiːdʑe
Mother	mã	mãẽ
Father	ba:p	ba:p
Grandfather [Paternal]	d̪ad̪a	d̪ad̪e
Grandmother [Paternal]	d̪ad̪i:	d̪ad̪ijã
Grandmother [Maternal]	nana	nane
Grandfather [Maternal]	nani	nanijã
Enemy	d̪uʃmən	d̪uʃmən
Friend (M / F)	d̪ost̪	d̪ost̪
Meat / flesh	mans	mans
Salt	nəmək	-
Roti	ɾot̪i	ɾot̪ijã
Milk	d̪u:d̪ʱ	d̪u:d̪ʱ
Oil	t̪el	-
Onion	pjaz	pjaz
Potato	alu:	alu:
Rice (raw)	tʃawəl	-
Sugar	ʃək:əɾ	-
Tea	tʃaj	-
Turmeric	həld̪i	-
Chilli	miɾtʃ	miɾtʃẽ
Wheat	gehũ	gehũ
Honey	ʃehed̪	ʃehed̪
Spoon	tʃəm:ətʃ	tʃəm:ətʃ
Belan (rolling pin)	belən	belən

Continued on the next page.

English word	Singular	Plural
Chaklaa (rolling board)	ʧəkla	ʧəkle
KaRhaaii	kəɽʱai	kəɽʱaijã
Tawaa	ʈəwa	ʈəwe
Spear	bʱala	bʱale
Fire	aːg	-
Ashes	ɾakʰ	ɾakʰ
Cloud	baːɖəl	baːɖəl
Dust	d̪ʱuːl	-
Earth (as in land)	miʈːi	-
Fog	kohɾa	-
Ice	bəɾəf	-
Moon	ʧãn̪d̪	ʧãn̪d̪
Sun	suːɾəʤ	suːɾəʤ
Star	ʈaɾa	ʈaɾe
Mountain	pəɾbəʈ	pəɾbəʈ
Rain	baɾiʃ	baɾiʃẽ
River	nəd̪iː	nəd̪ijã
Road	səɽək	səɽkẽ
Sand	ɾeʈ	-
Sea	səmən̪d̪ər	səmən̪d̪ər
Sky	aːkaːʃ	-
Snow	him	-
Stone	pət̪ːʰər	pət̪ːʰər
Water	pani	pani
Wind	həʋa	həʋaẽ
Woods	ləkɖi	ləkɖijã
Forest	ʤəŋgəl	ʤəŋgəl
Air	həʋa	həʋaẽ
Draught	əkaːl	əkaːl
Flood	baːɽʱ	baːɽʱ
Pond	ʈalaːb	ʈalaːb
Lake	səɾoʋər	səɾoʋər

End of the table.

Abbreviations

1	First person 2, 3, 5		**DEFTN**	Default number 3, 4
2	Second person 2, 3, 5, 7		**DEM**	Demonstrative 4
3	Third person 2, 5		**ERG**	Ergative 3
AGR	Agreement 3, 4, 7		**F**	Feminine 3–5
DAT	Dative 3		**HON**	Honorific 2, 3, 5
DEFTG	Default gender 3, 4		**M**	Masculine 3–5, 7

N	Neuter 5	**PROX**	Proximal 4
OBL	Oblique 3	**PRS**	Present 3, 4
PFV	Perfective 3, 7	**PST**	Past 4
PL	Plural 2, 4, 5, 7	**SG**	Singular 2–5, 7