



शिखागोविश्वविद्यालये प्रारम्भिकसंस्कृतम्

FIRST-YEAR SANSKRIT

AT THE UNIVERSITY OF CHICAGO



अल्लटाचार्योऽद्वावितः पाठऋमः  *Designed by Andrew Ollett*



vyāñjanāḥ

CONSONANTS



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CONSONANTS

What is a consonant?

phonological definition:

→ any sound that cannot make
up a syllable on its own



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CONSONANTS

Three groups:

- 1) Occlusives (stops and nasals);
- 2) Approximants (semivowels);
- 3) Fricatives (sibilants).

Also *dependent consonants*.



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CONSONANTS

Occlusives:

The flow of air through the mouth is completely blocked.

(It may be let out through the nose, in the case of *nasal* consonants.)



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The **occlusives** are traditionally organized into five groups (*vargāḥ*) based on their place of articulation (*sthānam*).

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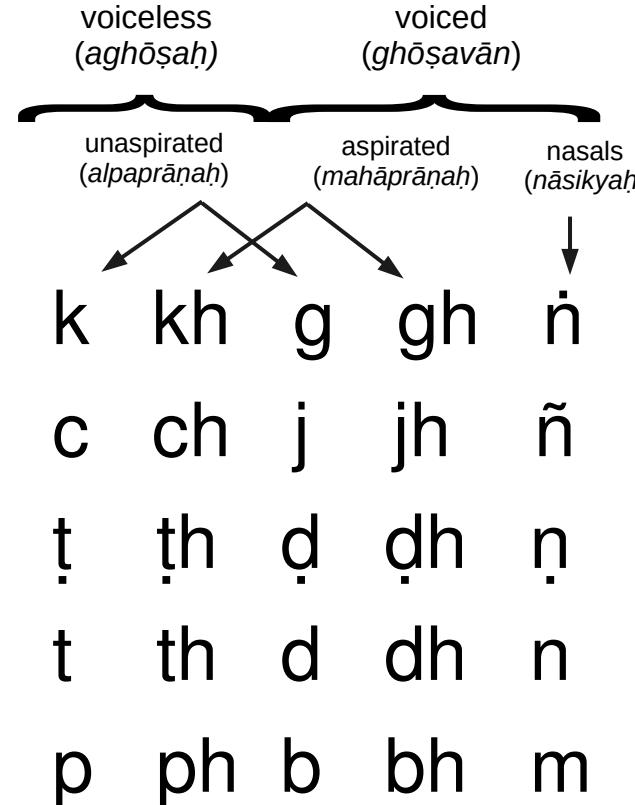
velar (*kaṇṭhyah*)

palatal (*tālavyah*)

retroflex (*mūrdhanyah*)

dental (*dantyah*)

labial (*oṣṭhyah*)





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CONSONANTS

Voice: the vibration of the vocal cords.

Contrast **push** and **bush**, or **tare** and **dare**.

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CONSONANTS

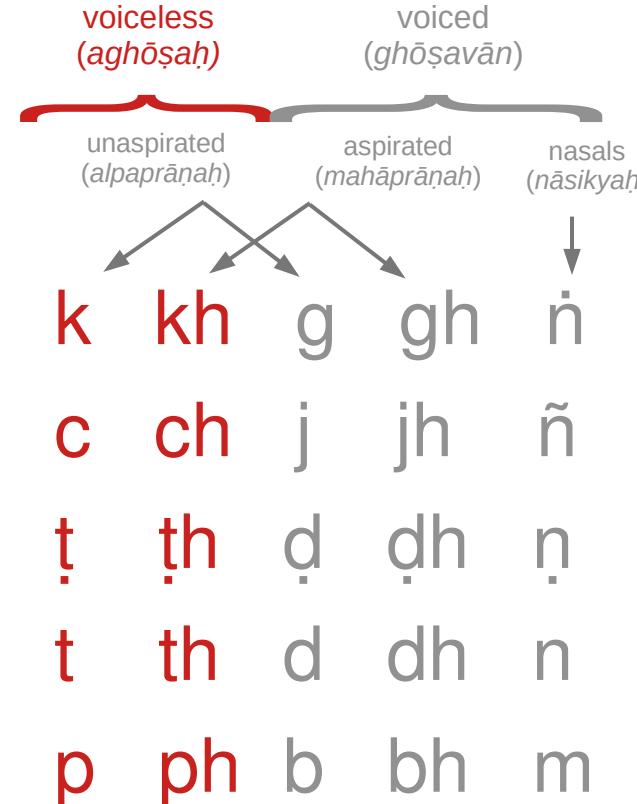
velar (*kan̤thyah*)

palatal (*tālavyah*)

retroflex (*mūrdhanyah*)

dental (*dantyah*)

labial (*oṣṭhyah*)



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CONSONANTS

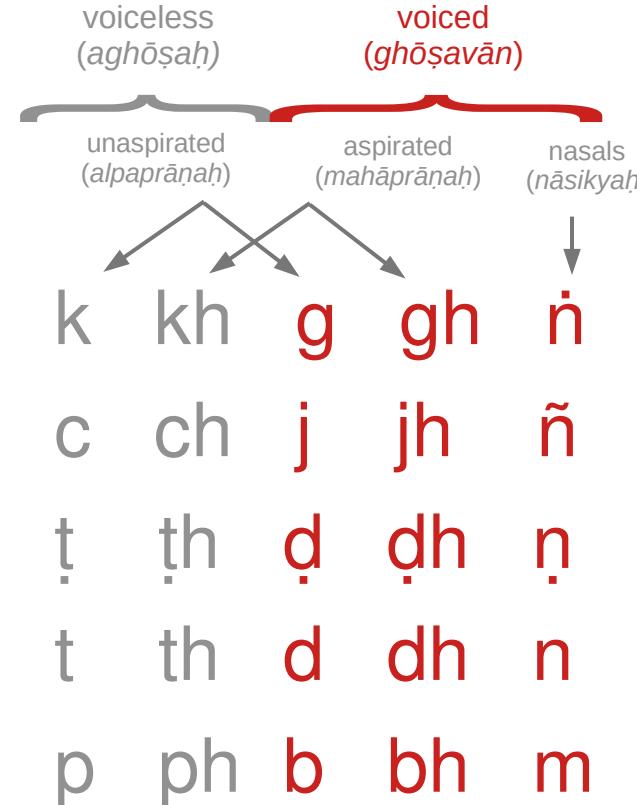
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dental (*dantyah*)

labial (*oṣṭhyah*)





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CONSONANTS

Aspiration: a burst of air accompanying the pronunciation of the sound.

Contrast **stop** and **top**.

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CONSONANTS

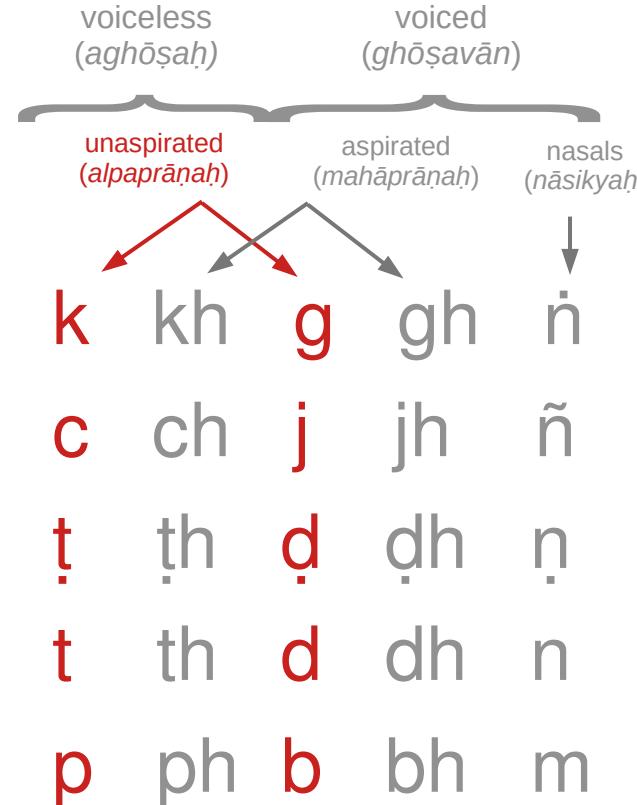
velar (*kan̤thyah*)

palatal (*tālavyah*)

retroflex (*mūrdhanyah*)

dental (*dantyah*)

labial (*oṣṭhyah*)



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CONSONANTS

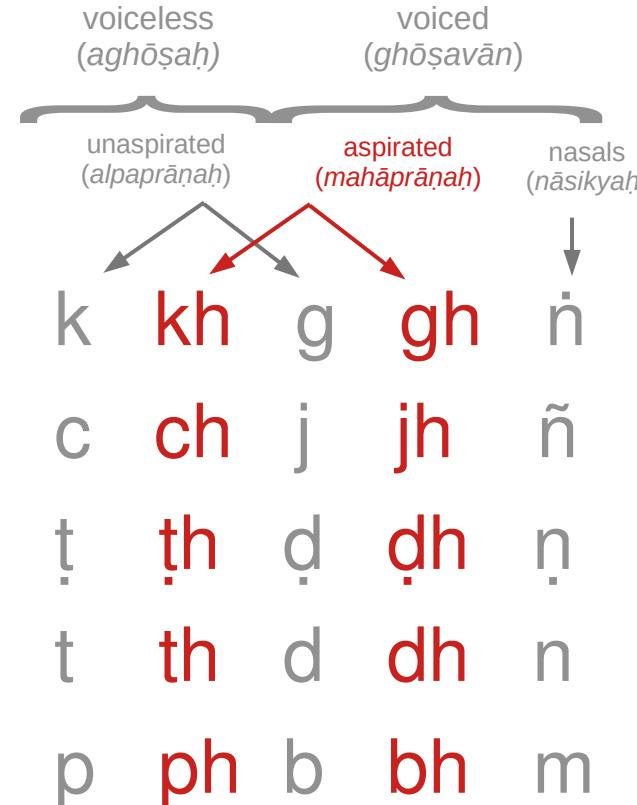
velar (*kan̤thyah*)

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retroflex (*mūrdhanyah*)

dental (*dantyah*)

labial (*oṣṭhyah*)





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CONSONANTS

Nasal: the sound is released through the nasal cavity rather than the oral cavity.

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CONSONANTS

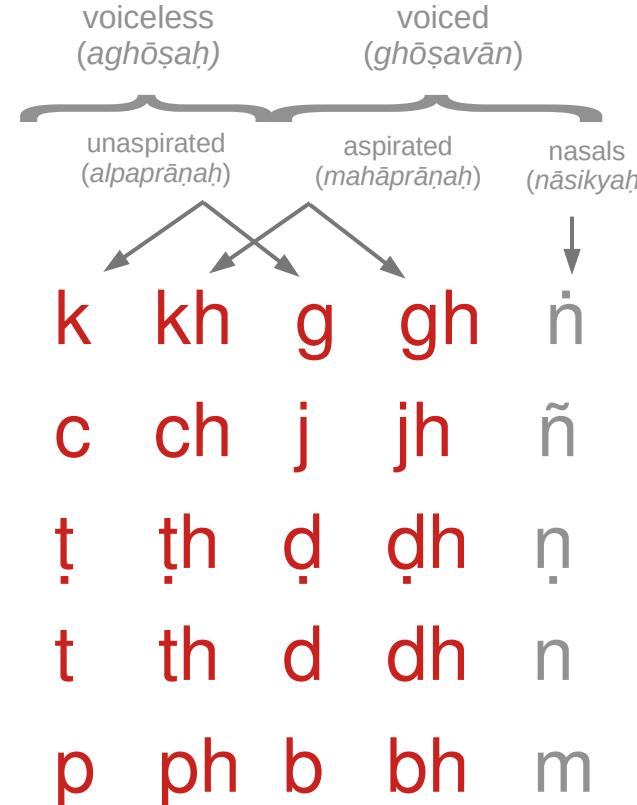
velar (*kan̤thyah*)

palatal (*tālavyah*)

retroflex (*mūrdhanyah*)

dental (*dantyah*)

labial (*oṣṭhyah*)



vyāñjanāḥ

CONSONANTS

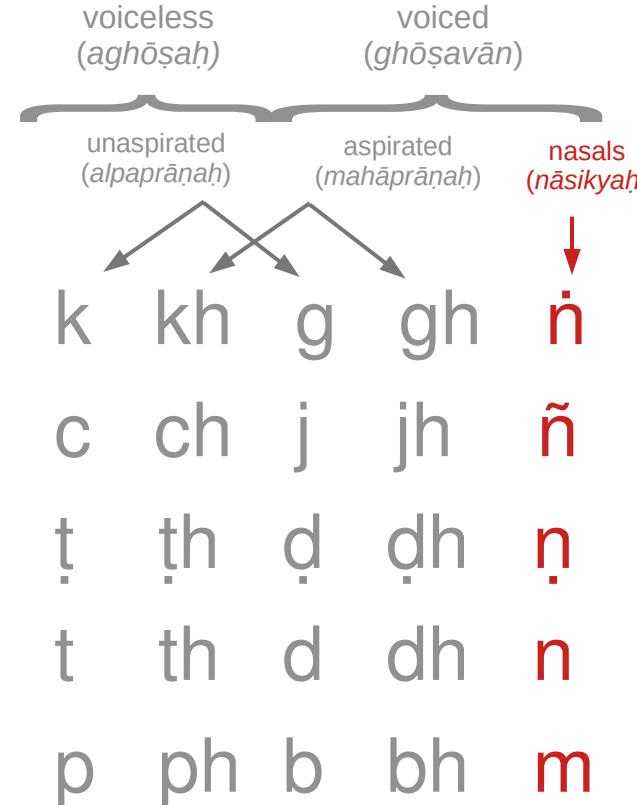
velar (*kan̤thyah*)

palatal (*tālavyah*)

retroflex (*mūrdhanyah*)

dental (*dantyah*)

labial (*oṣṭhyah*)





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CONSONANTS

Place of articulation: where in the mouth the flow of air is most restricted.

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CONSONANTS

velar (*kaṇṭhyah*)

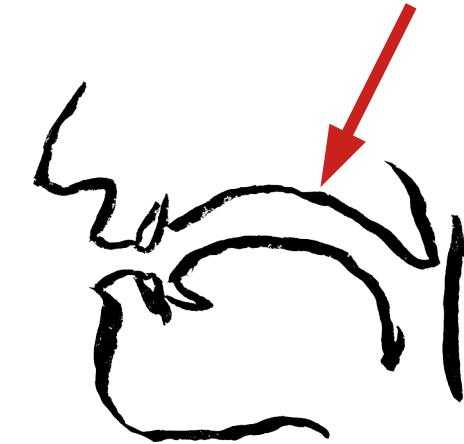
palatal (*tālavyah*)

retroflex (*mūrdhanyah*)

dental (*dantyah*)

labial (*oṣṭhyah*)

voiceless (aghōṣah)		voiced (ghōṣavān)		
unaspirated (alpaprāṇah)		aspirated (mahāprāṇah)		nasals (nāsikyah)
k	kh	g	gh	ṅ
c	ch	j	jh	ñ
t̪	ʈh	ɖ	ɖh	ɳ
t	th	d	dh	n
p	ph	b	bh	m



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CONSONANTS

velar (*kan̤thyah*)

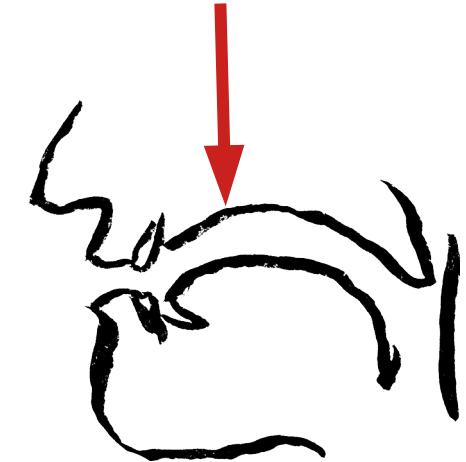
palatal (*tālavyah*)

retroflex (*mūrdhanyah*)

dental (*dantyah*)

labial (*oṣṭhyah*)

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k	kh	g	gh	ṅ
c	ch	j	jh	ñ
t̪	ʈh	ɖ	ɖh	ɳ
t	th	d	dh	n
p	ph	b	bh	m



vyāñjanāḥ

CONSONANTS

velar (*kan̤thyah*)

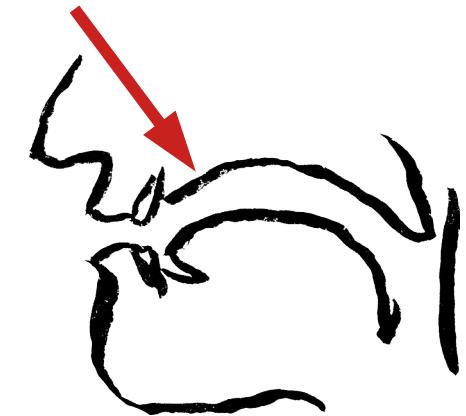
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retroflex (*mūrdhanyah*)

dental (*dantyah*)

labial (*oṣṭhyah*)

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k	kh	g	gh	ṅ
c	ch	j	jh	ñ
t̪	ʈh	ɖ	ɖh	ɳ
t	th	d	dh	n
p	ph	b	bh	m



vyāñjanāḥ

CONSONANTS

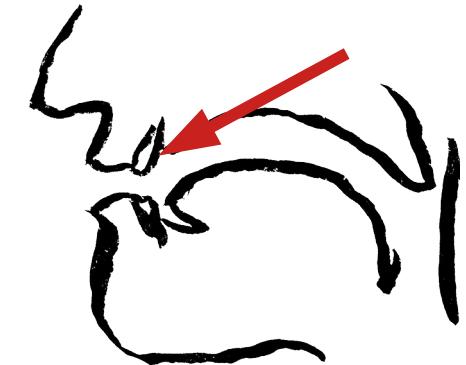
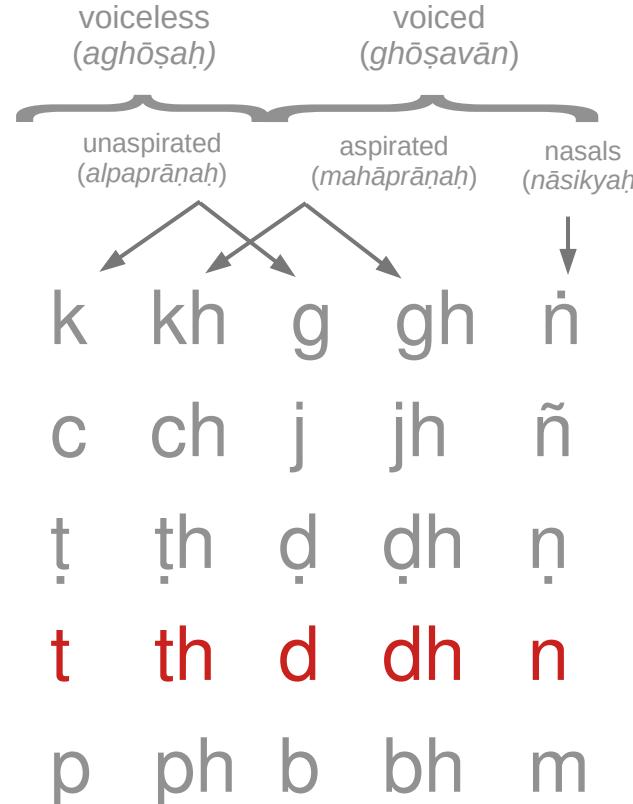
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retroflex (*mūrdhanyah*)

dental (*dantyah*)

labial (*oṣṭhyah*)



vyāñjanāḥ

CONSONANTS

velar (*kan̤thyah*)

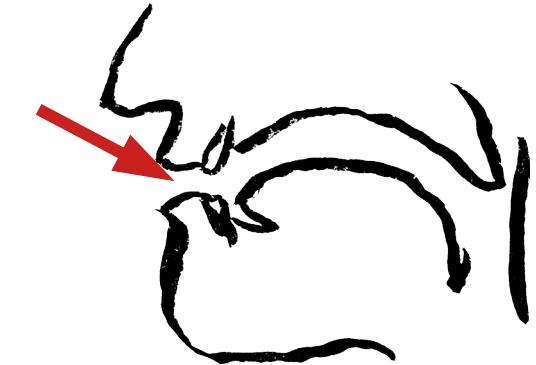
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retroflex (*mūrdhanyah*)

dental (*dantyah*)

labial (*oṣṭhyah*)

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k	kh	g	gh	ṅ
c	ch	j	jh	ñ
t̪	ʈh	ɖ	ɖh	ɳ
t	th	d	dh	n
p	ph	b	bh	m



vyāñjanāḥ

CONSONANTS

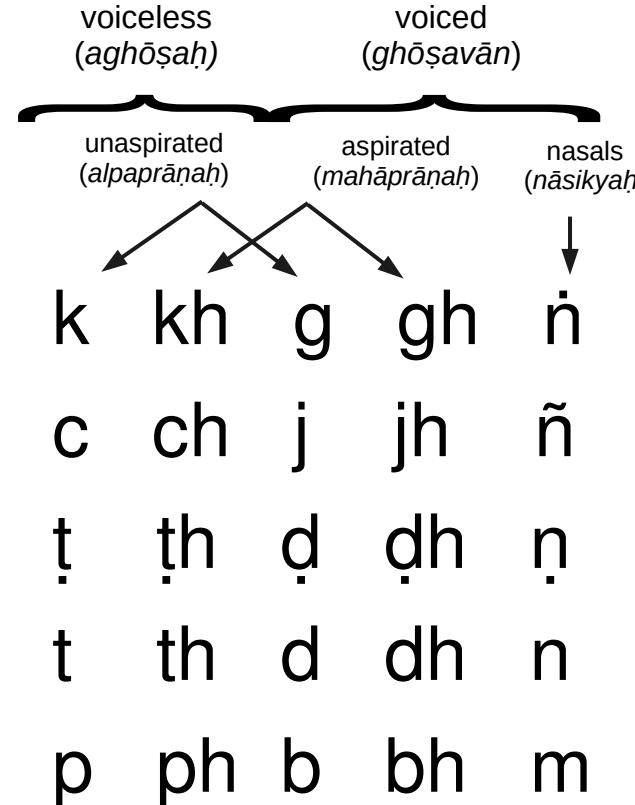
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palatal (*tālavyah*)

retroflex (*mūrdhanyah*)

dental (*dantyah*)

labial (*oṣṭhyah*)



vyāñjanāḥ

CONSONANTS

velar (*kan̤thyah*)

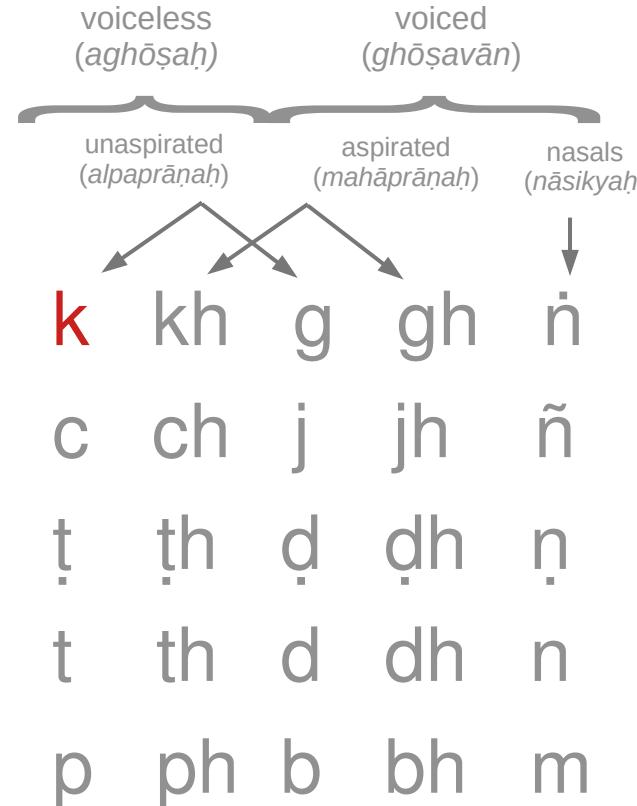
palatal (*tālavyah*)

retroflex (*mūrdhanyah*)

dental (*dantyah*)

labial (*oṣṭhyah*)

[k] as in *skate*



kākah

vyāñjanāḥ

CONSONANTS

velar (*kan̤thyah*)

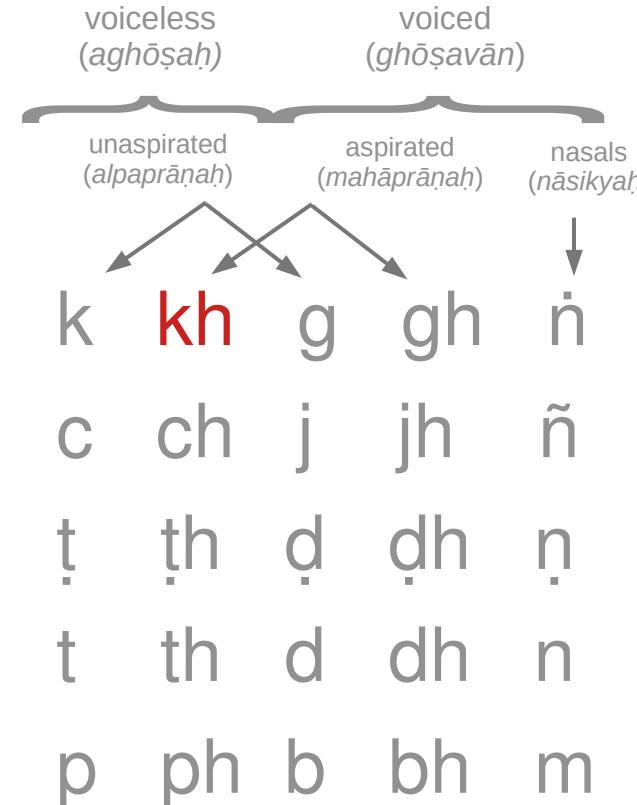
palatal (*tālavyah*)

retroflex (*mūrdhanyah*)

dental (*dantyah*)

labial (*oṣṭhyah*)

[k^h] as in cat



akhilah

vyāñjanāḥ

CONSONANTS

velar (*kan̤thyah*)

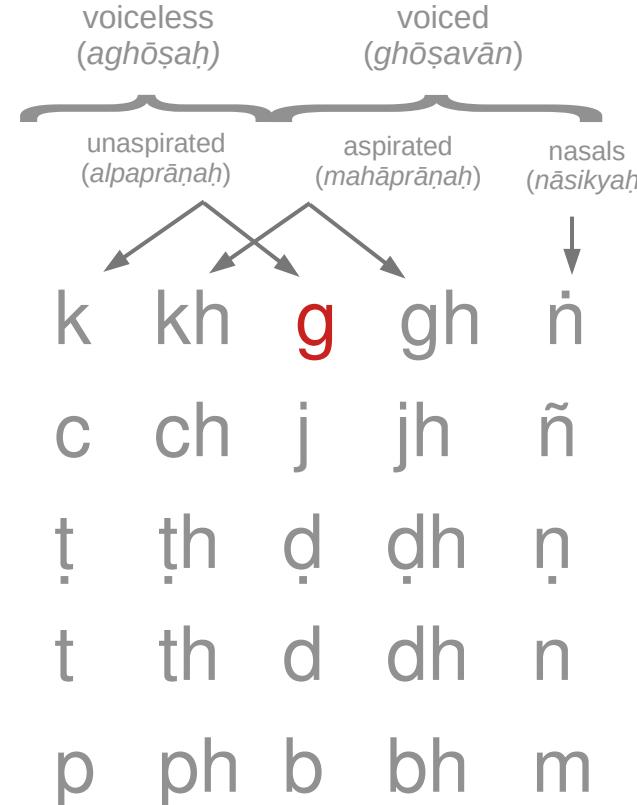
palatal (*tālavyah*)

retroflex (*mūrdhanyah*)

dental (*dantyah*)

labial (*oṣṭhyah*)

[g] as in gate



vyāñjanāḥ

CONSONANTS

velar (*kan̤thyah*)

palatal (*tālavyah*)

retroflex (*mūrdhanyah*)

dental (*dantyah*)

labial (*oṣṭhyah*)

voiceless (aghōṣah)			voiced (ghōṣavān)	
unaspirated (alpaprāṇah)		aspirated (mahāprāṇah)	nasals (nāsikyah)	
k	kh	g	gh	ṅ
c	ch	j	jh	ñ
t̪	ʈh	ɖ	ɖh	ɳ
t	th	d	dh	n
p	ph	b	bh	m

[g^h]

ghōrah

vyāñjanāḥ

CONSONANTS

velar (*kan̤thyah*)

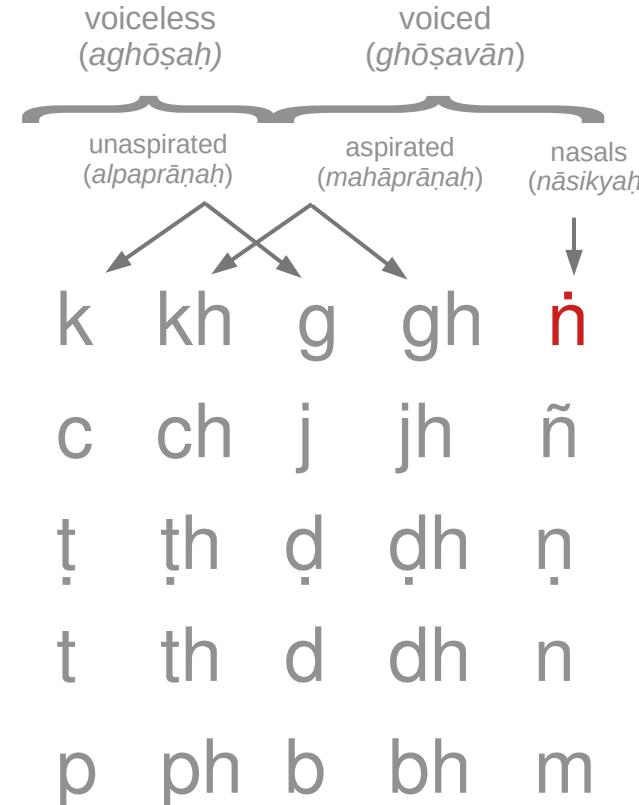
palatal (*tālavyah*)

retroflex (*mūrdhanyah*)

dental (*dantyah*)

labial (*oṣṭhyah*)

[ñ] as in sing



vyāñjanāḥ

CONSONANTS

velar (*kan̤thyah*)

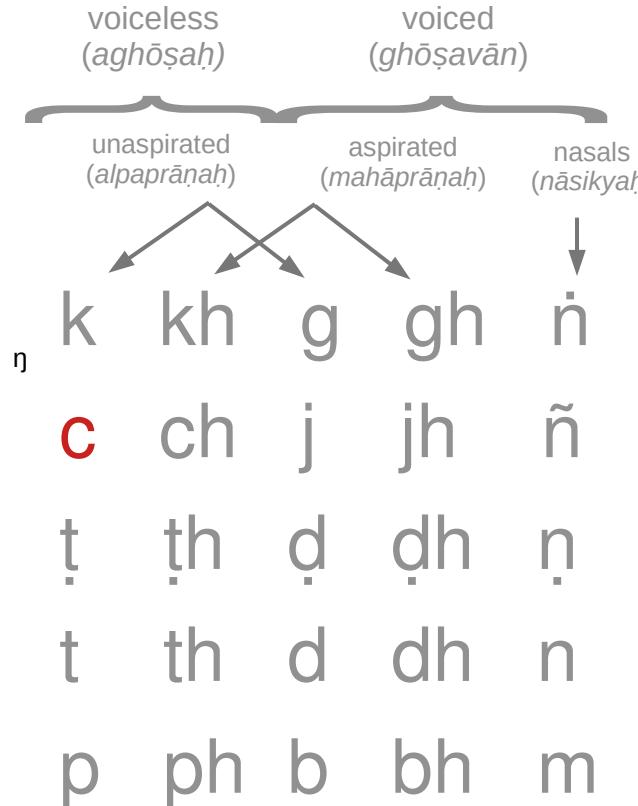
palatal (*tālavyah*)

retroflex (*mūrdhanyah*)

dental (*dantyah*)

labial (*oṣṭhyah*)

[tʃ] as in **check**



cāru

vyāñjanāḥ

CONSONANTS

velar (*kan̤thyah*)

palatal (*tālavyah*)

retroflex (*mūrdhanyah*)

dental (*dantyah*)

labial (*oṣṭhyah*)

voiceless (aghōṣah)		voiced (ghōṣavān)		
unaspirated (alpaprāṇah)		aspirated (mahāprāṇah)		nasals (nāsikyah)
k	kh	g	gh	ṅ
c	ch	j	jh	ñ
t̪	ʈh	ɖ	ɖh	ɳ
t	th	d	dh	n
p	ph	b	bh	m

[tʃ̪]

chāyā

vyāñjanāḥ

CONSONANTS

velar (*kan̤thyah*)

palatal (*tālavyah*)

retroflex (*mūrdhanyah*)

dental (*dantyah*)

labial (*oṣṭhyah*)

voiceless (aghōṣah)		voiced (ghōṣavān)		
unaspirated (alpaprāṇah)		aspirated (mahāprāṇah)		nasals (nāsikyah)
k	kh	g	gh	ṅ
c	ch	j	jh	ñ
ṭ	ṭh	ḍ	ḍh	ṇ
t	th	d	dh	n
p	ph	b	bh	m

[dʒ] as in judge

jīvah

vyāñjanāḥ

CONSONANTS

velar (*kan̤thyah*)

palatal (*tālavyah*)

retroflex (*mūrdhanyah*)

dental (*dantyah*)

labial (*oṣṭhyah*)

voiceless (aghōṣah)		voiced (ghōṣavān)		
unaspirated (alpaprāṇah)		aspirated (mahāprāṇah)		nasals (nāsikyah)
k	kh	g	gh	ṅ
c	ch	j	jh	ñ
ṭ	ṭh	ḍ	ḍh	ṇ
t	th	d	dh	n
p	ph	b	bh	m

[dʒʰ]

jharah

vyāñjanāḥ

CONSONANTS

velar (*kan̤thyah*)

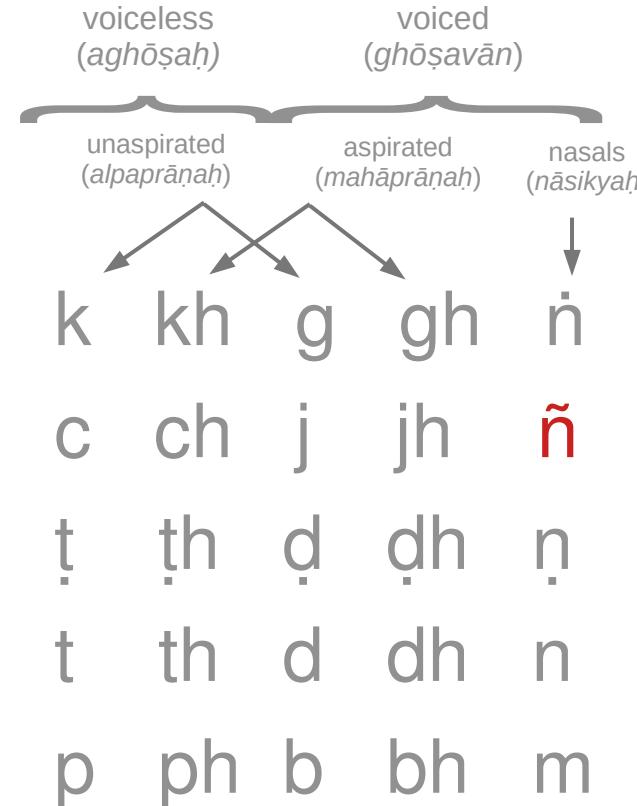
palatal (*tālavyah*)

retroflex (*mūrdhanyah*)

dental (*dantyah*)

labial (*oṣṭhyah*)

[n] as in cringe



cuñcuḥ

vyāñjanāḥ

CONSONANTS

velar (*kan̤thyah*)

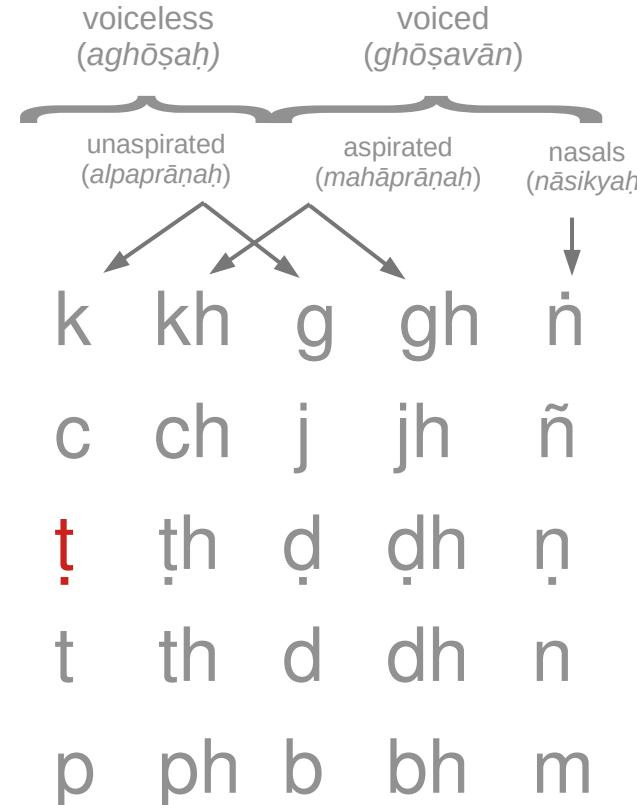
palatal (*tālavyah*)

retroflex (*mūrdhanyah*)

dental (*dantyah*)

labial (*oṣṭhyah*)

[t] as in hurt



tīkā

vyāñjanāḥ

CONSONANTS

velar (*kan̤thyah*)

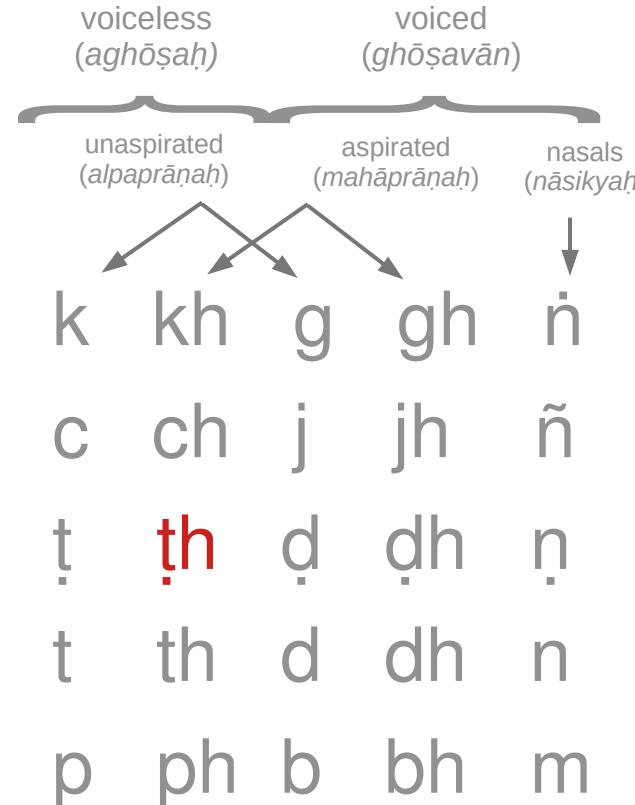
palatal (*tālavyah*)

retroflex (*mūrdhanyah*)

dental (*dantyah*)

labial (*oṣṭhyah*)

[t^h]



vyāñjanāḥ

CONSONANTS

velar (*kan̤thyah*)

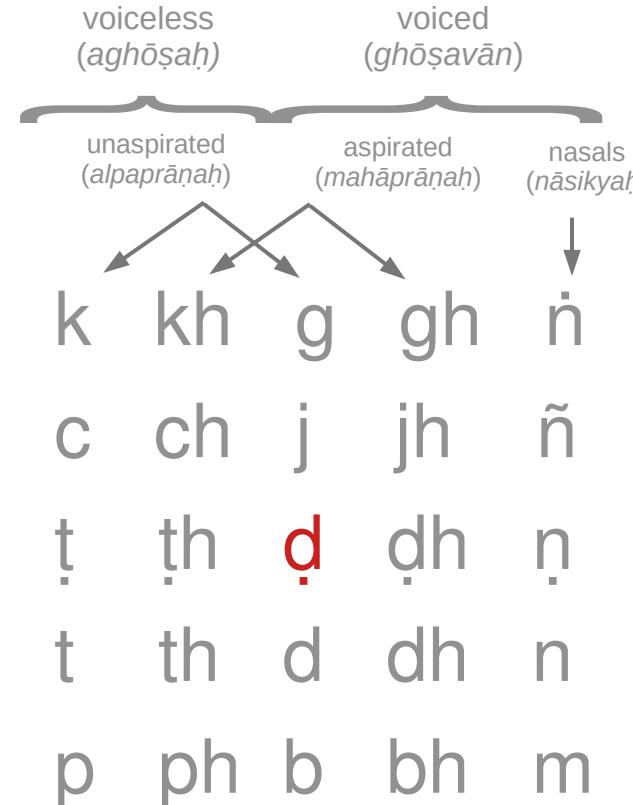
palatal (*tālavyah*)

retroflex (*mūrdhanyah*)

dental (*dantyah*)

labial (*oṣṭhyah*)

[d] as in yard



dambarah

vyāñjanāḥ

CONSONANTS

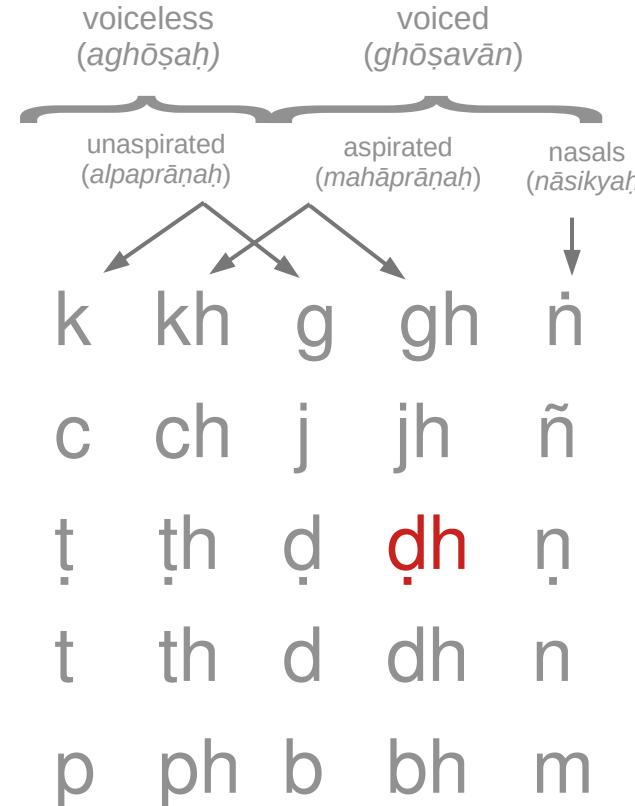
velar (*kan̤thyah*)

palatal (*tālavyah*)

retroflex (*mūrdhanyah*)

dental (*dantyah*)

labial (*oṣṭhyah*)



[d^h]

bādham

vyāñjanāḥ

CONSONANTS

velar (*kan̤thyah*)

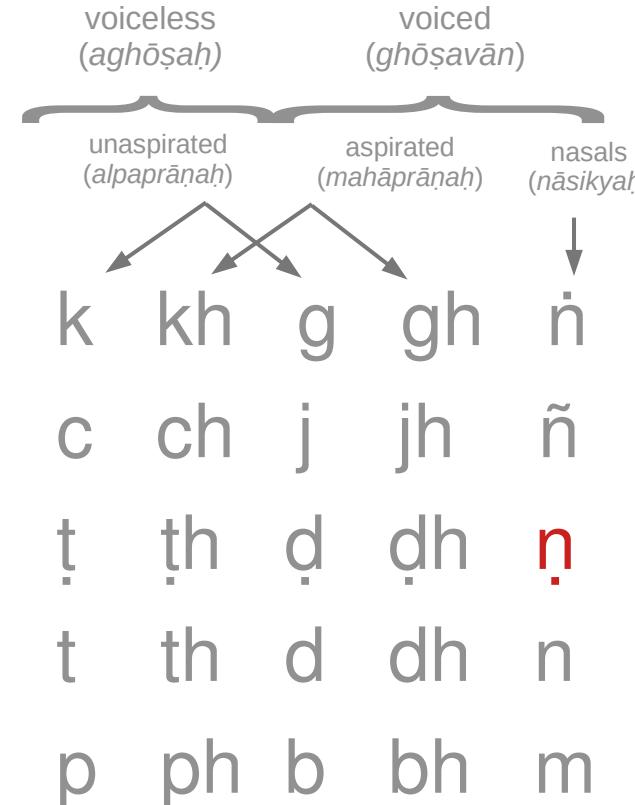
palatal (*tālavyah*)

retroflex (*mūrdhanyah*)

dental (*dantyah*)

labial (*oṣṭhyah*)

[n] as in varnish



maṇih

vyāñjanāḥ

CONSONANTS

velar (*kan̤thyah*)

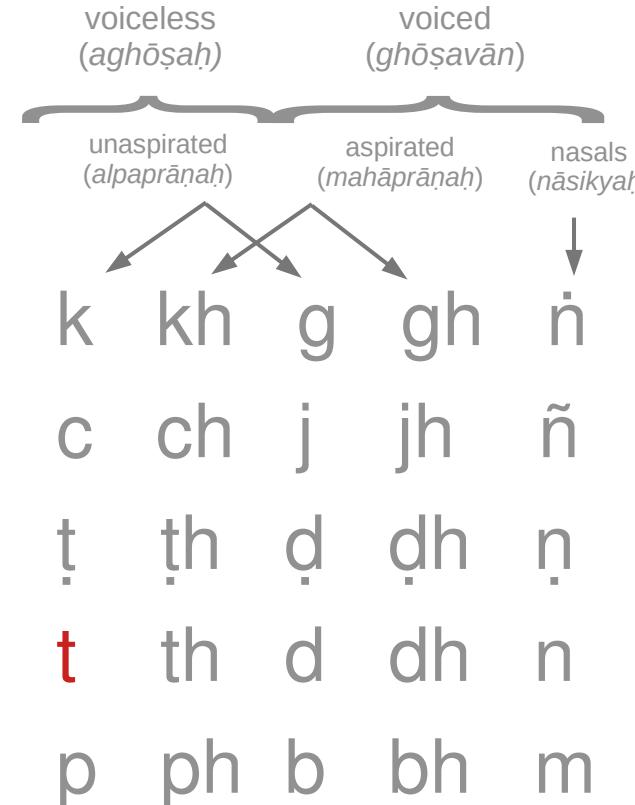
palatal (*tālavyah*)

retroflex (*mūrdhanyah*)

dental (*dantyah*)

labial (*oṣṭhyah*)

[t] as in stop



tātah

vyāñjanāḥ

CONSONANTS

velar (*kan̤thyah*)

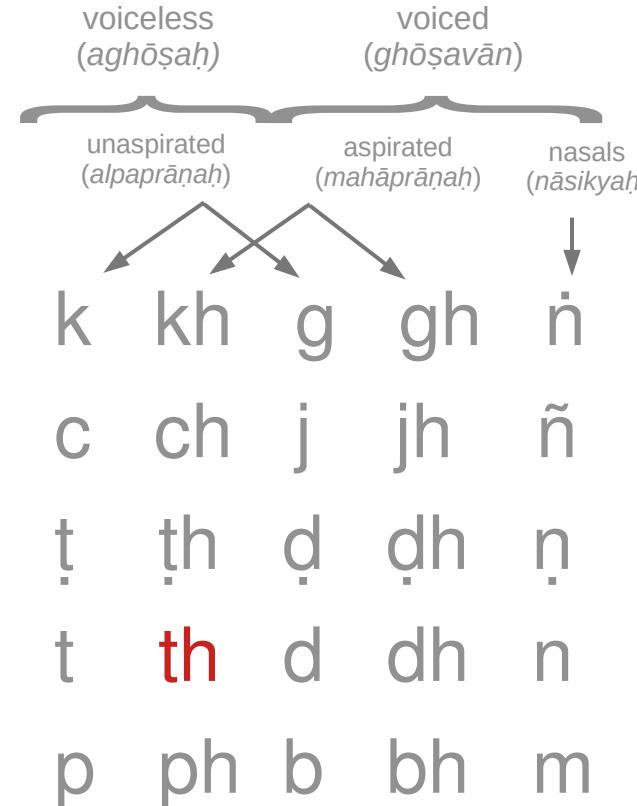
palatal (*tālavyah*)

retroflex (*mūrdhanyah*)

dental (*dantyah*)

labial (*oṣṭhyah*)

[t^h] as in top



sthitah

vyāñjanāḥ

CONSONANTS

velar (*kan̤thyah*)

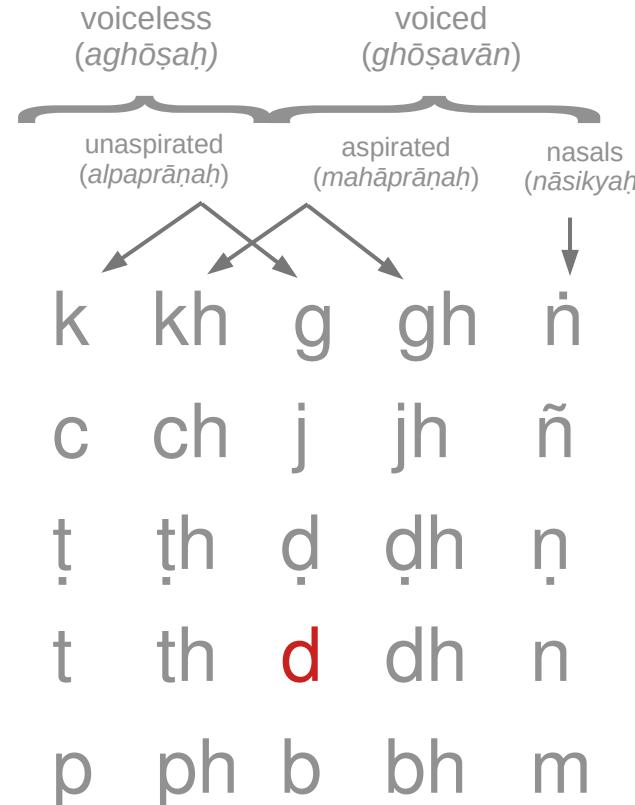
palatal (*tālavyah*)

retroflex (*mūrdhanyah*)

dental (*dantyah*)

labial (*oṣṭhyah*)

[d] as in dog



dēvah

vyāñjanāḥ

CONSONANTS

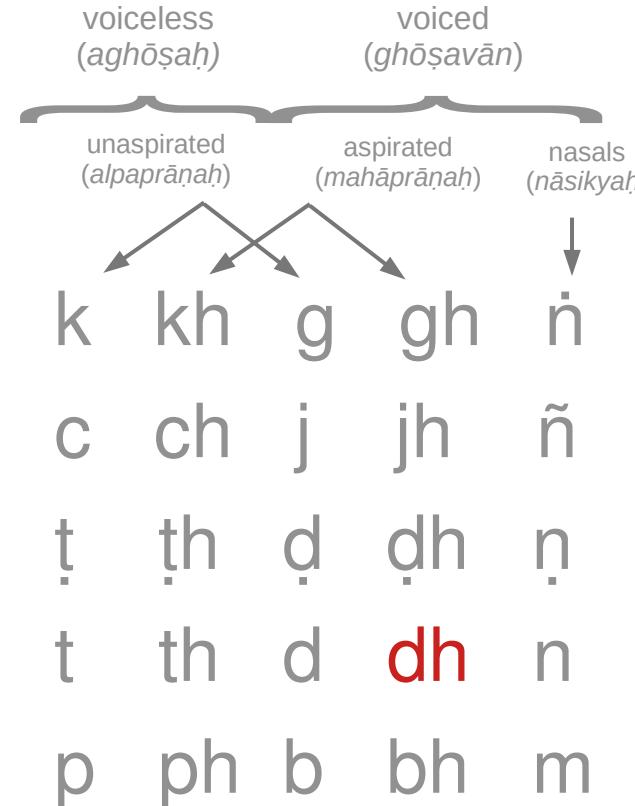
velar (*kan̤thyah*)

palatal (*tālavyah*)

retroflex (*mūrdhanyah*)

dental (*dantyah*)

labial (*oṣṭhyah*)



[d^h]

dhanam

vyāñjanāḥ

CONSONANTS

velar (*kan̤thyah*)

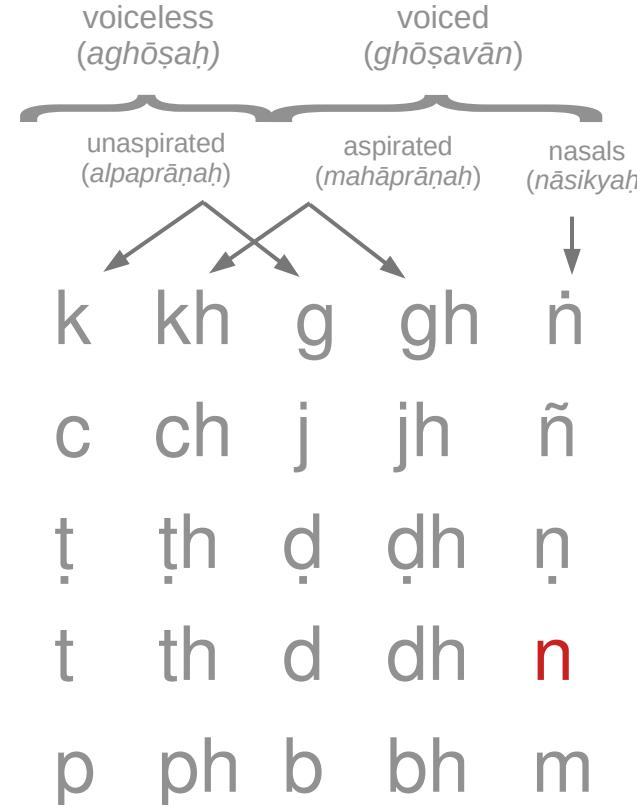
palatal (*tālavyah*)

retroflex (*mūrdhanyah*)

dental (*dantyah*)

labial (*oṣṭhyah*)

[n] as in **nine**



nāgah

vyāñjanāḥ

CONSONANTS

velar (*kan̤thyah*)

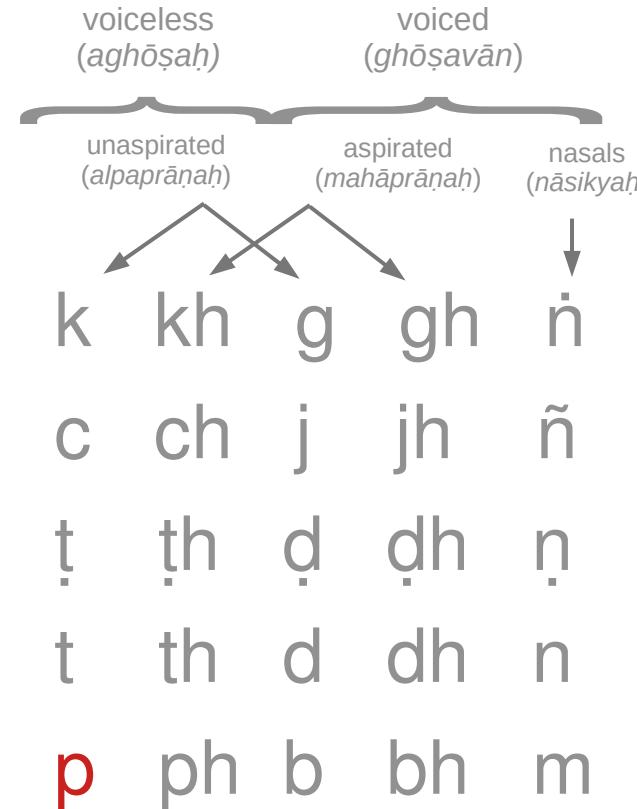
palatal (*tālavyah*)

retroflex (*mūrdhanyah*)

dental (*dantyah*)

labial (*oṣṭhyah*)

[p] as in *sput*



vyāñjanāḥ

CONSONANTS

velar (*kan̤thyah*)

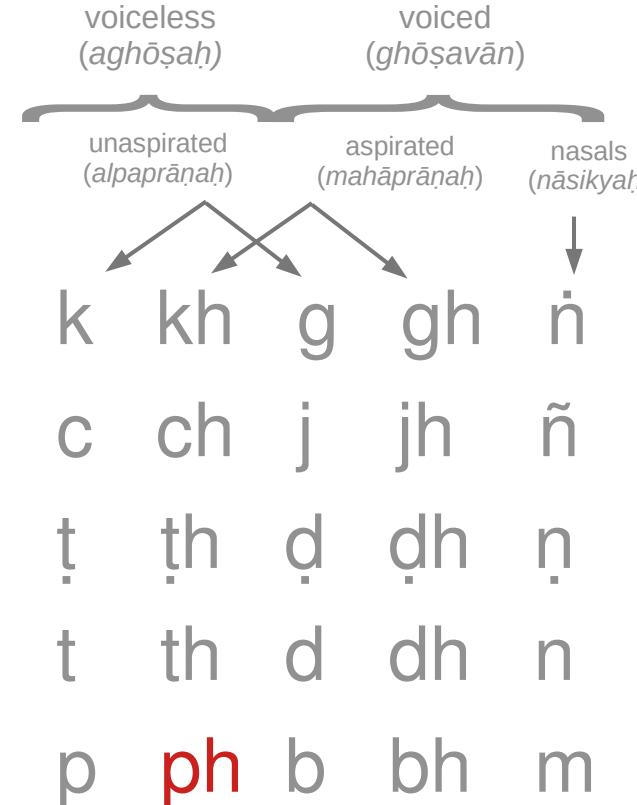
palatal (*tālavyah*)

retroflex (*mūrdhanyah*)

dental (*dantyah*)

labial (*oṣṭhyah*)

[p^h] as in pit



vyāñjanāḥ

CONSONANTS

velar (*kan̤thyah*)

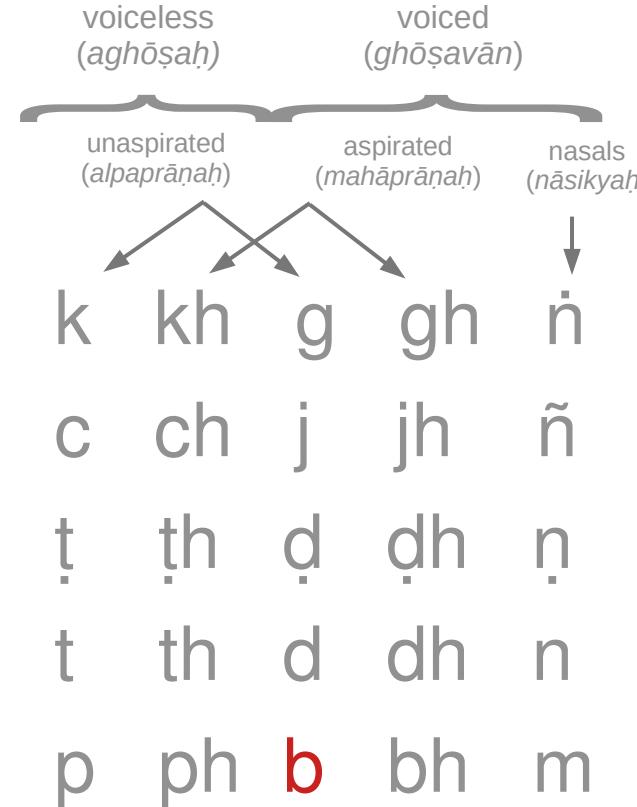
palatal (*tālavyah*)

retroflex (*mūrdhanyah*)

dental (*dantyah*)

labial (*oṣṭhyah*)

[b] as in **bit**



balam

vyāñjanāḥ

CONSONANTS

velar (*kan̤thyah*)

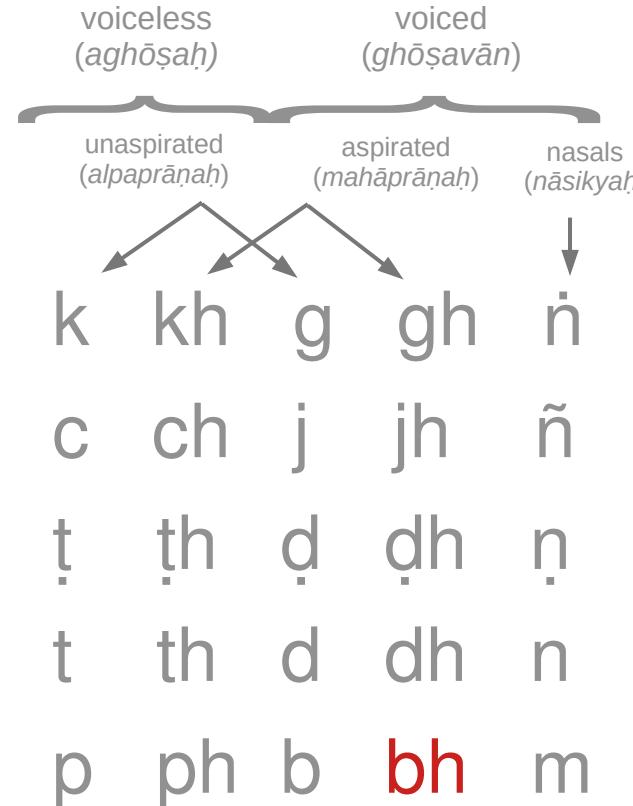
palatal (*tālavyah*)

retroflex (*mūrdhanyah*)

dental (*dantyah*)

labial (*oṣṭhyah*)

[*b^h*]



bhārah

vyāñjanāḥ

CONSONANTS

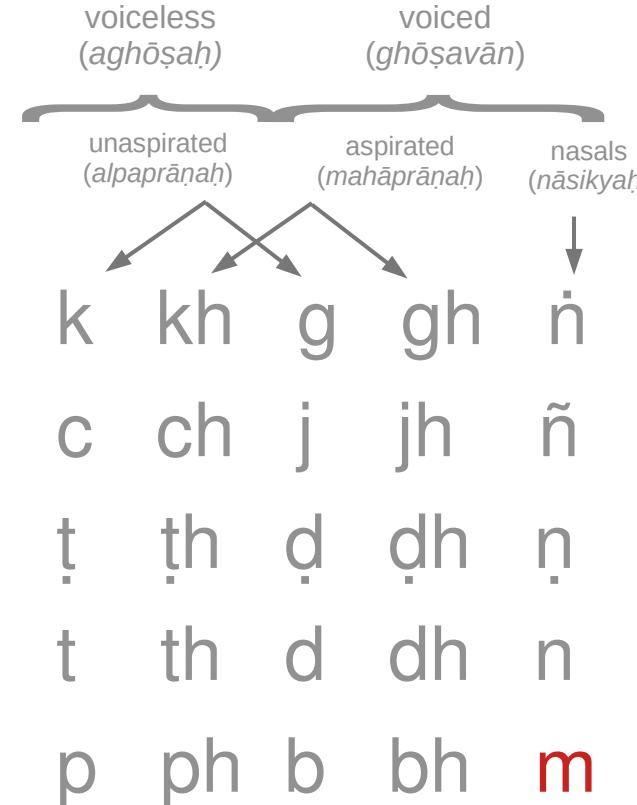
velar (*kan̤thyah*)

palatal (*tālavyah*)

retroflex (*mūrdhanyah*)

dental (*dantyah*)

labial (*oṣṭhyah*)



[m] as in mine

marma



vyāñjanāḥ

CONSONANTS

Approximants: Their sonority is midway between that of vowels and occlusives.

They are called “intermediate” (*antaḥsthāḥ*) in Sanskrit.



vyāñjanāḥ

CONSONANTS

y

r

l

v



vyāñjanāḥ

CONSONANTS

[j] as in yet

yayātiḥ

palatal (*tālavyah*)

y (i/ɪ)

retroflex (*mūrdhanyah*)

r

dental (*dantyah*)

l

labial (*oṣṭhyah*)

v



vyāñjanāḥ

CONSONANTS

[j] as in red

palatal (*tālavyah*)

y

retroflex (*mūrdhanyah*)

r (ṛ/ṝ)

dental (*dantyah*)

l

labial (*oṣṭhyah*)

v

rāmaḥ



vyāñjanāḥ

CONSONANTS

[l] as in let

lalitam

palatal (*tālavyah*)

y

retroflex (*mūrdhanyah*)

r

dental (*dantyah*)

| (l)
o

labial (*oṣṭhyah*)

v



vyāñjanāḥ

CONSONANTS

[v] as in **vote**

~ [w] as in **wish**
~ [β]

vārah

palatal (*tālavyah*)

y

retroflex (*mūrdhanyah*)

r

dental (*dantyah*)

l

labial (*oṣṭhyah*)

V (u/ū)



vyāñjanāḥ

CONSONANTS

Fricatives: Air is passed through a relatively narrow passage in the articulatory organs, resulting in a turbulent airflow.



vyāñjanāḥ

CONSONANTS

Sibilants

ś
ṣ.
ṣ



vyāñjanāḥ

CONSONANTS

[ʃ] as in ship

Sibilants

palatal (*tālavyah*)

Ś

retroflex (*mūrdhanyah*)

ṣ

dental (*dantyah*)

s

śarah



vyāñjanāḥ

CONSONANTS

[s] as in 是

Sibilants

palatal (*tālavyah*)

Ś

retroflex (*mūrdhanyah*)

Ṣ

dental (*dantyah*)

S

kaṣah



vyāñjanāḥ

CONSONANTS

[s] as in *sip*

Sibilants

palatal (*tālavyah*)

Ś

retroflex (*mūrdhanyah*)

ṣ

dental (*dantyah*)

ſ

sārah



vyāñjanāḥ

CONSONANTS

Sibilants

velar (*kanthyah*)

X

palatal (*tālavyah*)

Ś

retroflex (*mūrdhanyah*)

ṣ

dental (*dantyah*)

s

labial (*oṣṭhyah*)

f



vyāñjanāḥ

CONSONANTS

[h] as in hat

Pseudo-fricative

h

harah



vyāñjanāḥ

CONSONANTS

Dependent sounds: In *phonological* terms, these are sounds with certain features neutralized (e.g., place of articulation) because of their position *at the end of a syllable*.



vyāñjanāḥ

CONSONANTS

Dependent sounds: Once we get to the Dēvanāgarī script, you will see that they are “dependent” because they cannot constitute a syllable (and hence a letter) on their own, but need to be appended to another syllable.



vyāñjanāḥ

CONSONANTS

Visargāḥ (ḥ)

The *visargāḥ* (“emission”) is a voiceless puff of air (phonetically [h]). It is often pronounced with a slight echo of the preceding vowel:

|| rāmaḥ

agniḥ



vyāñjanāḥ

CONSONANTS

Visargah (ḥ)

When followed by another sound, the visargah is sometimes pronounced as a voiceless fricative corresponding to the following place of articulation:

rāmaḥ khādati

rāmaḥ pibati



vyāñjanāḥ

CONSONANTS

Anusvāraḥ (ṁ)

(1) A nasalization of a vowel (before fricatives and approximants):

saṁhāraḥ

saṁskṛtam

saṁśayah



vyāñjanāḥ

CONSONANTS

Anusvāraḥ (ṁ)

(1) A nasalization of a vowel (before fricatives and approximants):

saṁyōgaḥ

saṁrambhaḥ

saṁvṛttah



vyāñjanāḥ

CONSONANTS

Anusvāraḥ (ṁ)

(2) An alternative way of writing the class nasal
before occlusives:

saṁkaṭah = sañkaṭah

saṁcayah = sañcayah

saṁtuṣṭah = santuṣṭah

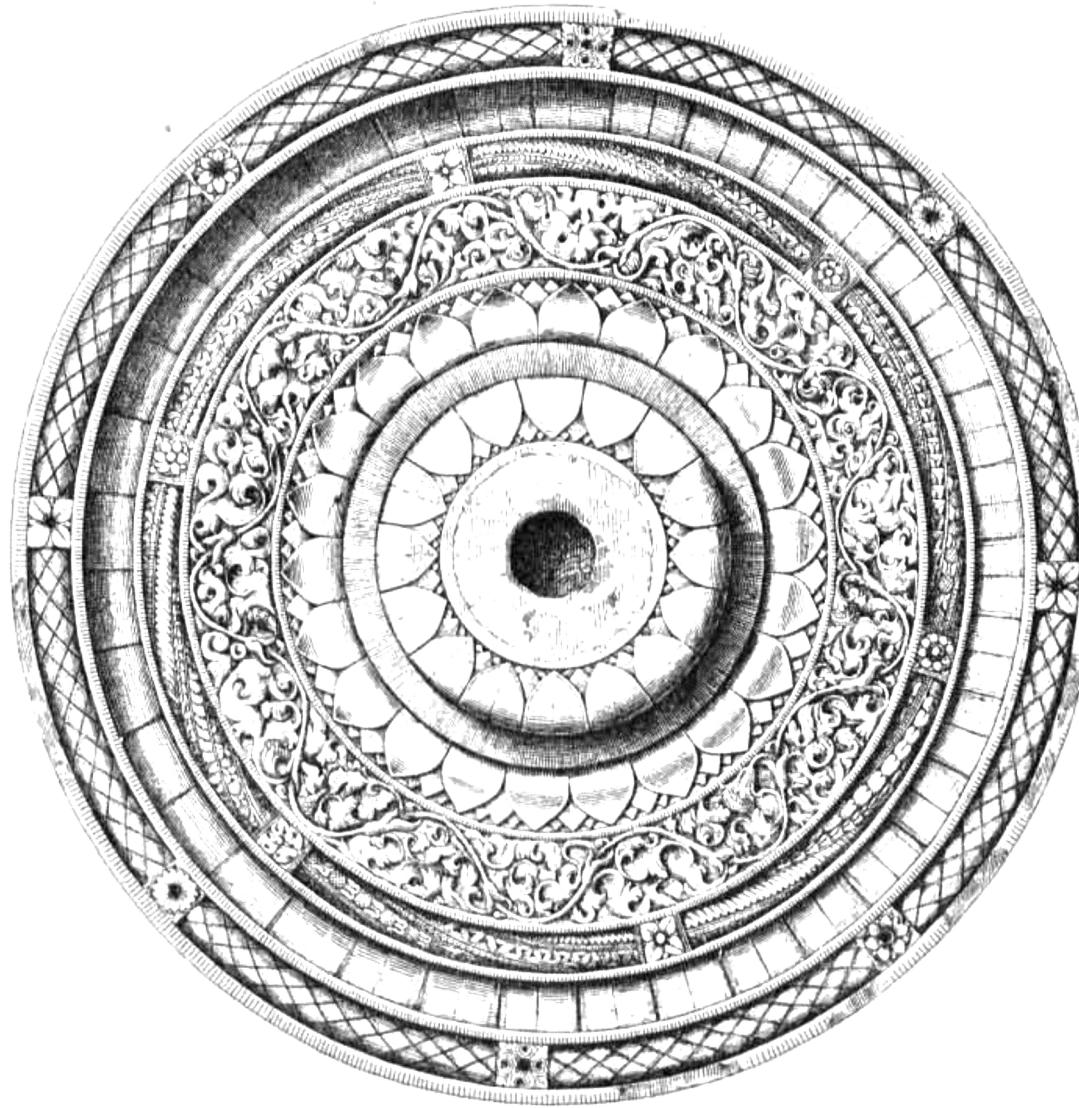
saṁbhṛtah = sambhṛtah



vyāñjanāḥ

CONSONANTS

		ha	ya	va	ra	T		
					la	N		
	ña	ma	ńa	ṇa	na	M		
				jha	bha	Ñ		
			gha	ḍha	dha	S		
		ja	ba	ga	ḍa	Ś		
kha	pha	cha	ṭha	tha	ca	ṭa	ta	V
					ka	pa	Y	
				śa	ṣa	sa	R	
					ha	L		



॥ बृद्धि ॥
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