

## SANDHI

(Numbers indicate chapter of introduction.)

### 1) EXTERNAL SANDHI (11, 13, 16)

Sanskrit words regularly change their pronunciation when they stand together with other words. Sanskrit spelling marks all these changes. This process is called external *sandhi*, and its general principles are quite simple:

- 1) The last sound of a word changes, depending on the first sound of the next word. Sometimes, that first sound also changes.
- 2) A consonant at the end of a word becomes more similar to the first sound of the next word.
- 3) A vowel at the end of a word interacts (and often merges) with a following vowel, but remains the same when a consonant follows.

Overview of external *sandhi* (fields before voiced initial sounds are shaded).

F I N A L   S O U N D											I N I T I A L   S O U N D   O F   F O L L O W I N G
k	ṭ	t	p	ñ	n	m	ḥ	āḥ	aḥ		
k	ṭ	t	p	ñ	n	m	ḥ	āḥ	aḥ	zero	
g	ḍ	d	b	ñ/ññ <sup>1</sup>	n/nn <sup>1</sup>	m	r	ā	a <sup>2</sup>	vowels	
k	ṭ	t	p	ñ	n	ṃ	ḥ	āḥ	aḥ	k/kh	
g	ḍ	d	b	ñ	n	ṃ	r	ā	o	g/gh	
k	ṭ	c	p	ñ	ṃś <sup>3</sup>	ṃ	ś	āś	aś	c/ch	
g	ḍ	j	b	ñ	ñ	ṃ	r	ā	o	j/jh	
k	ṭ	ṭ	p	ñ	ṃṣ <sup>3</sup>	ṃ	ṣ	āṣ	aṣ	ṭ/ṭh	
g	ḍ	ḍ	b	ñ	ṇ	ṃ	r	ā	o	ḍ/ḍh	
k	ṭ	t	p	ñ	ṃs <sup>3</sup>	ṃ	s	ās	as	t/th	
g	ḍ	d	b	ñ	n	ṃ	r	ā	o	d/dh	
k	ṭ	t	p	ñ	n	ṃ	ḥ	āḥ	aḥ	p/ph	
g	ḍ	d	b	ñ	n	ṃ	r	ā	o	b/bh	
ñ	ṇ	n	m	ñ	n	ṃ	r	ā	o	n/m	
g	ḍ	d	b	ñ	n	ṃ	r	ā	o	y/v	
g	ḍ	d	b	ñ	n	ṃ	ø <sup>6</sup>	ā	o	r	
g	ḍ	l	b	ñ	l̃ <sup>7</sup>	ṃ	r	ā	o	l	
k	ṭ	c (ch) <sup>4</sup>	p	ñ	ñ (ś/ch) <sup>4</sup>	ṃ	ḥ	āḥ	aḥ	ś	
k	ṭ	t	p	ñ	n	ṃ	ḥ	āḥ	aḥ	ṣ/s	
g (gh) <sup>4</sup>	ḍ (ḍh) <sup>4</sup>	d (dh) <sup>4</sup>	b (bh) <sup>4</sup>	ñ	n	ṃ	r	ā	o	h	

<sup>1</sup> When word-final *-n* (or more rarely, *-ñ*) is preceded by a short vowel and the next word begins with a vowel, the *-n/ñ* doubles: *smayan iva* → *smayann iva*. <sup>2</sup> Exception: *-aḥ + a-* → *-o ṣ-*: *naraḥ asti* → *naro ṣti* (नरो ऽस्ति). <sup>3</sup> Between a word-final *-n* and any initial sound that is formed using the tongue (*c-/ch-*, *ṭ-/ṭh-*, *t-/th-*), an *s*-sound is inserted. Before the palatal *c/ch*, the palatal *ś* is added; before the retroflex *ṭ/ṭh*, a retroflex *ṣ*, and before dental *t/th*, a dental *s*. Before the *s*-sound, the *n* turns into *anusvāra ṃ*: *kasmin cit* → *kasmiṃś cit*. <sup>4</sup> While *sandhi* primarily affects the word-final sounds, there are a few cases in which the initial sound of the next word is also affected: *agacchat hi* → *agacchad dhi*. The new forms of these word-initial sounds are given in brackets after the sandhied word-final consonants in the grid. <sup>5</sup> If a short vowel precedes, that vowel is lengthened. E.g. बुद्धिः रक्षति → बुद्धी रक्षति 'Wisdom protects.' <sup>6</sup> The sign used above the *l* is the *anunāsika*. Its *devanāgarī* representation is ँ, and it is pronounced like an *anusvāra*, yet it nasalises consonants, not vowels. (Pronounce it by pronouncing an *l* while at the same time producing the hum-like nasalised sound of the *anusvāra*.)

### Summary of external *visarga sandhi*

Final sound	Initial Sound		
	a) voiced	b) unvoiced, except c)	c) palatal, retroflex or dental stop
-ḥ	-r	-ḥ	(palatal) -ś, (retroflex) -ṣ, (dental) -s
-āḥ	-ā		-āś, -āṣ, -ās
-aḥ	-o, except before vowels: -a		-aś, -aṣ, -as
Exception 1: <i>-aḥ + a-</i> → <i>-o ṣ-</i>		Exception 2: <i>-iḥ/-uḥ + r-</i> → <i>-ī/-ū r-</i>	
Exception 3: Original final <i>-r</i> remains as <i>-r</i> in front of all initial voiced sounds except <i>r-</i> : e.g. <i>punaratra</i>			

### Overview of vowel *sandhi*

FINAL VOWELS								INITIAL VOWELS	
ā	ī	ū	ṛ	e	ai	o	au		
ā	ya	va	ra	e '	ā a	o '	āva		a
ā	yā	vā	rā	a ā	ā ā	a ā	āvā		ā
e	ī	vī	rī	a ī	ā ī	a ī	āvī		ī
o	yū	ū	rū	a ū	ā ū	a ū	āvū		ū
ar	yṛ	vṛ	ṛ	a ṛ	ā ṛ	a ṛ	āvṛ		ṛ
ai	ye	ve	re	a e	ā e	a e	āve		e
ai	yai	vai	rai	a ai	ā ai	a ai	āvai		ai
au	yo	vo	ro	a o	ā o	a o	āvo	o	
au	yau	vau	rau	a au	ā au	a au	āvau	au	

ā ī ū indicate that the short and long vowels (e.g. short *ā* and long *ā*) behave in the same way here. Shaded columns: complex vowels whose original second element is dropped before a following vowel.

**Note:** After final *-e* and *-o*, initial *a-* drops out. To avoid confusion, the former presence of the *a-* is marked in writing with the avagraha ṣ/an apostrophe ' in transliteration:

वने अस्ति *vane asti* → वने ऽस्ति *vane ṣti*.