Hindi

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The variety described here is Standard Hindi used in everyday casual speech by educated speakers in cities such as Varanasi, Lucknow, Delhi, etc. Although there are a few differences in pronunciation among speakers of these cities, the differences are minimal. The transcription is based on a recording of a female third generation speaker of Standard Hindi who grew up mostly in Uttar Pradesh before moving to Delhi. For a detailed analysis of Hindi segments see Dixit (1963) and Ohala (1983).

Consonants

	Bilabial	Labio-dental	Dental	Alveolar	Post-alveolar	Retroflex	Palatal	Velar	Glottal
Plosive	p b pʰ bˠ		t̪ d̪ t̪ʰ d̪ˠ			ʈ ɖ ʈʰ ɖˠ		k g kʰ gˠ	
Affricate					tʃ dʒ tʃʰ dʒˠ				
Nasal	m			n				ŋ	
Tap or Flap				ɾ		ɽ ɽˠ			
Fricative		f		s z	ʃ				h
Approximant		ʋ					j		
Lateral Approx.				l					

p	pal	'nature'		t̪	t̪al	'beat' (n.)		k	kal	'span of time'
b	bal	'hair.'		d̪	d̪al	'lentil'		g	gal	'cheek'
pʰ	pʰal	'knife blade'		t̪ʰ	t̪ʰal	'platter'		kʰ	kʰal	'skin' (n.)
bˠ	bˠal	'brow'		d̪ˠ	d̪ˠar	'knife edge'		gˠ	gˠan	'bundle'
m	mal	'goods'		n	nala	'drain' (n.)		ŋ	ʋaŋməj	'literature'
f	farsi	'Persian'		s	sal	'year'		h	hal	'condition'
ʋ	ʋala	'pertaining to'		z	zəmin	'ground'		j	jar	'buddy'
				ɾ	ɾal	(tree species)				
				l	lal	'red'				

tʃ	tʃal	'gait'		ʈ	ʈal	'postpone'
dʒ	dʒal	'net'		ɖ	ɖal	'branch'
tʃʰ	tʃʰal	'tree bark'		ʈʰ	ʈʰal	'lumber shop'
dʒˠ	dʒˠəl	'glimmer'		ɖˠ	ɖˠal	'shield'
ʃ	ʃal	(tree species)				
				ɽ	bəɽa	'big'
				ɽˠ	bəɽˠa	'increase' (imp.)

[f, z, ʃ] only occur in loans (from Perso-Arabic, English, or Sanskrit). They are, however, well established in Modern Standard Hindi. Some authors also include [ʈ] which occurs only in a few Sanskrit loans; in casual speech it is usually replaced by [n]. Sounds such as [x, ɣ, q], etc., do not occur in the variety of Hindi described here although they would be found in some varieties of Urdu, the form of the language used as the official language of Pakistan and by many Indian Muslims. [lʱ, rʱ, mʱ, nʱ] are considered clusters of a liquid or nasal and /h/ in the analysis adopted here.

Geminates

All consonants can also occur with distinctive length (i.e. as 'geminates') except the following: [bʱ, ɽ, ɽʱ, h]. Geminates occur only medially and are always preceded by the non-peripheral vowels [ɪ, ə, ʊ]. Although the orthography preserves a few geminates in final position, in all but the most formal speech they are pronounced as singletons. All the geminates occur monomorphemically except [ʃ:] which occurs only in a few Sanskrit loans where a morpheme boundary could be posited in between: [nɪʃ:il] 'without shame' < /nɪʃ + ʃil/. Geminates are longer than singletons by a ratio of about 2:1. Some illustrative examples of the geminate contrasts are given below.

t̪	pət̪ɑ	'address' (n.)	tʃ	bətʃɑ	'save'
t̪:	pət̪:ɑ	'leaf'	tʃ:	bətʃ:ɑ	'child'
t̪ʰ	kət̪ʰɑ	'narrative'	ʈ	pəʈɑ	'to make someone agree'
t̪ʰ:	kət̪ʰ:ɑ	'red powdered bark'	ʈ:	pəʈ:ɑ	'a fold' (in cloth)
ɖ	gəɖɑ	'mace' (weapon)	k	pəkɑ	'cook' (v.)
ɖ:	gəɖ:ɑ	'mattress'	k:	pək:ɑ	'firm'

Vowels

There are eleven oral vowels in Hindi, as shown on the vowel chart. The vowel [æ] only occurs in English loans. All of these vowels except [æ] also have distinctively nasal counterparts. The sequences [əi] and [əu] also occur but are not listed separately because they are analyzed as vowel clusters and not as diphthongs.
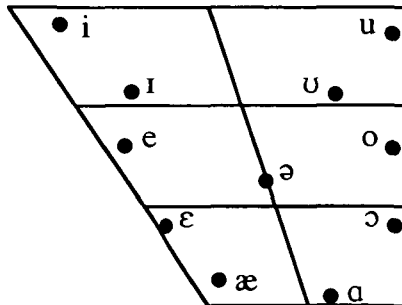
i	mil	'mile'				u	kul	'shore'
ɪ	mɪl	'meet'				ʊ	kʊl	'lineage'
e	mel	'harmony'	ə	məl	'rub' (imper.)	o	bol	'speak'
ɛ	mɛl	'dirt'				ɔ	kɔl	(a name)
æ	bæʈ	'cricket bat'	ɑ	mɑl	'goods'			

i	sikʰ	'lesson'	ɑ	sɑs	'mother-in-law'	u	bꞪukʰ	'hunger'
ĩ	sĩk	'twig'	ɑ̃	sɑ̃s	'breath'	ū	bꞪūk	'dog's bark'
ĩ	sĩtʃ	'be irrigated'				ū̃	kū̃ʋər	'prince'
ẽ	mẽ	'in'	ɔ̃	hɔ̃s	'laugh' (imper.)	õ	jõ	'in this manner'
ɛ̃	mɛ̃	(1 sg. pn.)				ɔ̃	bꞪɔ̃	'eyebrow'

Stress

Stress is not distinctive in Hindi. It is also controversial as to whether there is even phonetic word stress, other than for emphatic contrast. For details, see Ohala (1991).

Conventions

The velar nasal by and large only occurs before homorganic consonants except in a few Sanskrit loans such as the word for 'literature' cited above. Palatal and retroflex nasals also occur followed by homorganic consonants and have been included in the list of phonemes by some authors. [ʋ] is in free variation with [v] (and can also be pronounced as [w]). [ɾ] can vary with [r]. The geminate [ɾ] is always an alveolar trill [r]. Stops in final position are not released.

Vowels are nasalized before nasal consonants. The schwa is often pronounced with the same value as the vowel in the English word *cut*, i.e. as a vowel traditionally transcribed as [ʌ]. However, the vowel is central and not back, and thus a more appropriate IPA symbolization would be [ɐ]. As in many other languages, vowel length varies as a function of the voicing of the following consonant with vowels being longer before voiced ones, at least for stops (Ohala and Ohala 1992).

Transcription of recorded passage

This translation of the North Wind and the Sun is a modified version of that presented in the 1949 version of the *The Principles of the International Phonetic Association*.

ʊʈːəri həʋɑ ɔr surədʒ ɪs bɑʈ pər dʒꞪəgəɾ rəhe t̪ʰe ki həm d̪onõ mẽ zjɑd̪ɑ bəlʋɑn kɔn hɛ. ɪʈne mẽ gərəm tʃogɑ pɛhne ek mʊsɑfɪr ʊd̪Ɦər ɑ nɪklɑ. həʋɑ ɔr surədʒ d̪onõ ɪs bɑʈ pər rɑzi ho gəje ki d̪onõ mẽ se dʒo pɛhle mʊsɑfɪr kɑ tʃogɑ ʊʈərʋɑ degɑ ʋəhi zjɑd̪ɑ bəlʋɑn səmdʒꞪɑ dʒɑjegɑ. ɪs pər ʊʈːəri həʋɑ əpnɑ purɑ zor ləgɑkər tʃəlne ləgi lekɪn ʋo dʒɛse dʒɛse əpnɑ zor bəɽhɑt̪i gəji ʋɛse ʋɛse mʊsɑfɪr əpne bəd̪ən pər tʃoge ko ɔr bꞪi zjɑd̪ɑ kəs kər ləpeʈʈɑ

gəja. ənʈ mẽ həʋa ne əpni koʃɪʃ bənɖ kər ɖi. pʰɪr surədʒ ʈezi ke saʈʰ nɪklɑ ɔr musafɪr ne ʈurənʈ əpnɑ tʃogɑ uʈar ɖɪjɑ. ɪs lɪje həʋa ko mɑnna pəɽa ki ʊn ɖonõ mẽ surədʒ hi zjɑɖa bəlʋɑn hɛ.

Orthographic version

उत्तरी हवा और सूरज इस बात पर झगड़ रहे थे कि हम दोनों में ज़्यादा बलवान कौन है। इतने में गरम चोगा पहने एक मुसाफ़िर उधर आ निकला। हवा और सूरज दोनों इस बात पर राज़ी हो गये कि दोनों में से जो पहले मुसाफ़िर का चोगा उतरवा देगा वही ज़्यादा बलवान समझा जायेगा। इस पर उत्तरी हवा अपना पूरा ज़ोर लगाकर चलने लगी लेकिन वह जैसे जैसे अपना ज़ोर बढ़ाती गई वैसे वैसे मुसाफ़िर अपने बदन पर चोगे को और भी कस करं लपेटता गया। अन्त में हवा ने अपनी कोशिश बन्द कर दी। फिर सूरज तेज़ी के साथ निकला और मुसाफ़िर ने तुरन्त अपना चोगा उतार दिया। इस लिये हवा को मानना पड़ा कि उन दोनों में सूरज ही ज़्यादा बलवान है

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