Initial Project Report

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Introduction:

Language: Hindi

Spoken in: India(Major), Nepal, South Africa, and Singapore.

Writing System: Devanagari, Brahmi Script

Number of Speakers: 615 Million

Status: Official Language of many North Indian States and Central government.

(Source: Omniglot)

Method Section:

Source Link:

https://www.youtube.com/watch?v=0NSGpje3qso

This Link consists of a video of a Parliamentary Speech given at the end of the dissolution of the government of Shri Atal Bihari Bajpayee by another MP Lalu Prasad Yadav. He mocks his tenure, giving a funny speech. I chose this Speech due to the bit of the Bhojpuri accent he possesses, I will try to bring

it to notice using transcription. I was unable to get a valid Bhojpuri Source.
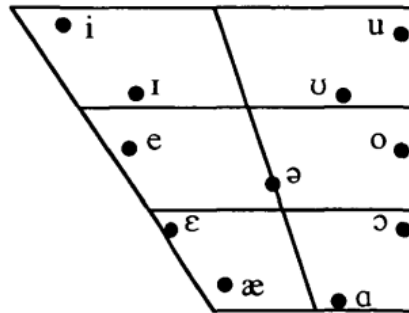
Phonetic Description:

Consonants

	Bilabial	Labio-dental	Dental	Alveolar	Post-alveolar	Retroflex	Palatal	Velar	Glottal
Plosive	p b pʰ bʱ		t̪ d̪ t̪ʰ d̪ʱ			ʈ ɖ ʈʰ ɖʱ		k g kʰ gʱ	
Affricate					tʃ dʒ tʃʰ dʒʱ				
Nasal	m			n				ŋ	
Tap or Flap				ɾ		ɽ ɽʱ			
Fricative		f		s z	ʃ				h
Approx-imant		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.)
bʱ	bʱal	'brow'	d̪ʱ	d̪ʱar	'knife edge'	gʱ	gʱan	'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'
dʒʱ	dʒʱəl	'glimmer'	ɖʱ	ɖʱal	'shield'
ʃ	ʃal	(tree species)			
			ɽ	bəɽa	'big'
			ɽʱ	bəɽʱa	'increase' (imp.)

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'
ī	sīk	'twig'	ɑ̃	sɑ̃s	'breath'	ū	bʱūk	'dog's bark'
ī	sītʃ	'be irrigated'				ū	kū̃ʋər	'prince'
ē	mē	'in'	ɔ̃	hɔ̃s	'laugh' (imper.)	õ	jõ	'in this manner'
ɛ̃	mɛ̃	(1 sg. pn.)				ɔ̃	bʱɔ̃	'eyebrow'

(Source: Cambridge Core)*

(*PDF must be downloaded before accessing tables)

Phonological description:

Syllabic Structure:

CVCVC... Structures are followed majorly. In general Consonant Clusters are not found.

But, There are words with 2,3-Consonant Clusters like स्त्री.

TABLE 5
Oral vowel phonemes in Hindi

	Front	Central	Back
Close	ɪ iː		ʊ uː
Close-mid	eː		oː
Open-mid	ɛː (æː)	ə	ɔː
Open		aː	

(Source: [Akshara-to-Sound Research Paper](#))

It contains both Open and Closed Syllable like कांटा and आयुष respectively.

Phonemes:

Mentioned in IPA charts prescribed above.

Allophones:

The sound "w" and "v" are allophones.

Ex: /mʌnəv/ , /mʌnəw/

Some More Details:

1. The vowels are generally more open and lower than the other others, due to accent.
2. All Vowels and Consonants are mentioned in the IPA chart with characteristics. {Phonemes}
3. /ɑ/ tends to be in variation with the rounded and more back /ɒ/

4. /o/ occurs in free variation with /u/. e.g. /du/ vs /do/ "two"
5. /ɑ/ at the end of a word is often not pronounced in spontaneous speech.
6. Nasalized lax vowels are absent.
7. But Nasalization of vowels can be observed.
8. Allophones seem to be absent.

(Above mentioned Characteristics are descriptions of the Bhojpuri dialect, which I assume might be seen in Speech.)

Writing System:

Devanagri is used as Writing System.

It consists of 33 Consonants and 3 majorly used diphthongs. Whereas It consists of 16 vowels.

Devanāgarī alphabet for Hindi
Vowels (स्वर) and vowel diacritics

अ	आ	इ	ई	उ	ऊ	ऋ	ए
a	ā	i	ī	u	ū	ṛ	e
[ʌ]	[a]	[i]	[i:]	[u]	[u:]	[ṛ]	[e]
क	का	कि	की	कु	कू	कृ	के
ka	kā	ki	kī	ku	kū	kṛ	ke
ऍ	ऐ	ओ	ऑ	औ	अं	अः	अँ
ê	ai	o	ô	au	aṅ	aḥ	ãṃ
[e]	[æ:]	[o]	[o]	[ɔ:]	[aŋ]	[əh]	[ã:]
कॅ	कै	को	कॉ	कौ	कं	कः	काँ
kê	kai	ko	kô	kau	kaṅ	kaḥ	kāṃ

Consonants (व्यंजन)

क	ख	ग	घ	ङ	च	छ	ज	झ	ञ
ka	kha	ga	gha	ṅa	ca	cha	ja	jha	ña
[kə]	[kʰə]	[gə]	[gʰə]	[ŋə]	[tʃə]	[tʃʰə]	[dʒə]	[dʒʰə]	[ɲə]

ट	ठ	ड	ढ	ण	त	थ	द	ध	न
ṭa	ṭha	ḍa	ḍha	ṇa	ta	tha	da	dha	na
[ʈə]	[ʈʰə]	[ɖə]	[ɖʰə]	[ɳə]	[tə]	[tʰə]	[də]	[dʰə]	[nə]

प	फ	ब	भ	म	य	र	ल	व
pa	pha	ba	bha	ma	ya	ra	la	va
[pə]	[pʰə]	[bə]	[bʰə]	[mə]	[jə]	[rə]	[lə]	[ʋə]

श	ष	स	ह
śa	ṣa	sa	ha
[ʃə]	[ʂə]	[sə]	[ɦə]

Additional consonants

क़	ख़	ग़	ज़	फ़	ड़	ढ़
qa	ḫa	ġa	za	fa	ṛa	ṛha
[qə]	[xə]	[ɣə]	[zə]	[fə]	[ɽə]	[ɽʰə]

Common conjunct consonants

क्ष	ज्ञ	त्क	द्व	द्य	द्द	त्त	ड्ड	द्भ
ksa	jña	ttka	dva	dya	dda	tta	ḍḍha	dbha

द्म	ह्म	ह्य	श्र	त्र	र्प	प्र	ट्र
dma	hma	hya	śra	tra	rpa	pra	ṭra

(Source: Omniglot)

References:

1.https://www.omniglot.com/writing/hindi.html

2.https://www.youtube.com/watch?v=0NSGpje3qso

3.https://www.cambridge.org/core/journals/journal-of-the-international-phonetic-

association/article/hindi/959264D9E0A6A48F16B0BD6A17DB678F

4.https://www.cse.iitk.ac.in/users/cs671/2015/resources/pandey-14_akshara-to-sound-rules-for-hindi.pdf