

Khmer (Cambodian) belongs to the Mon-Khmer language family and is the official language of Cambodia where it is spoken by approximately 5 million people. It is also spoken in various dialects by another 400 thousand people in the provinces of Buriram, Surin, and Srisaket in northeastern Thailand and 450 thousand in the Mekong Delta of South Vietnam. Historically, word initial voiced and voiceless stops neutralized in Khmer, causing a register difference between normal and "breathy" vowels. Western dialects of Khmer maintain this register distinction, but it is not always clear what vocal quality is responsible for the register distinction as it varies from speaker to speaker. While Western dialects maintained the register distinctions, the other dialects of Khmer further evolved and the register distinction became a vowel quality distinction. Thus, the standard dialect(s) of Khmer exhibit between 25 and 28 distinct vowel / diphthong phonemes and the Northern dialect exhibits no less than 31.

The speaker here is a male from Phnom Penh.

#### Modern Standard Khmer Consonant Phonemes:

Stops:	p	t	c	k	ʔ
	p <sup>h</sup>	t <sup>h</sup>	c <sup>h</sup>	k <sup>h</sup>	
	b	d			
Fricatives:					h
Nasals:	m	n	ɲ	ŋ	
Liquids:		l			
Glides:	v		j	w	

Of the stops, only the unaspirated, unvoiced ones may occur word finally and all are unreleased. /k/ and /ʔ/ are not heavily contrasted and are neutralized in some environments and in some dialects. [b] and [d] are implosive, although this quality disappears in higher social registers of speech. In consonant clusters with sonorants the aspirated / unaspirated distinction is neutralized in favour of aspiration. When an aspirated stop is directly followed by a vowel, it may be more correct to transcribe it a two segments [kh], because in Khmer, it is possible to separate the two with an infix.

#### Consonants Encountered:

Stops:	p	t	c	k	ʔ
	p <sup>h</sup>	t <sup>h</sup>	c <sup>h</sup>	k <sup>h</sup>	
	b	d			
Nasals:	m	n	ɲ	ŋ	
Liquids:		l			
		r			
Glides:			j	w	

#### Modern Standard Khmer Vowel & Diphthong Phonemes:

There is very little agreement on exactly how many vowels / diphthongs there are in Khmer or what they are. Presented below are 3 systems, the first two with quality contrasts, the third describing a register contrast. [̃] denotes a short diphthong.

From Modern Spoken Cambodian by Franklin Huffman:

i(:)	í(:)	u(:)		iə̃	iẽ	uə̃ uə̃
e(:)	ə(:)	o(:)		ej eə̃	əĩ	ow oə̃
ɛ:		ɔ:				ə̃
	a(:)	ɑ(:)			aə̃ aə̃ aw	

From International Encyclopedia of Linguistics:

Battambang dialect (typical):

Long nuclei:	i:	u:	u:
	iẽ	uẽ	uõ
	eə̃	ə̃ə̃	oə̃
	aə̃	ə̃ə̃	aə̃
	a:		ɔ:
Short nuclei:	ɪ	ʏ	ʊ̃ ə̃ u
	ɛ̃	ə̃	ɔ̃
	a	ɔ̃	ə̃

Surin dialect (North):

Long nuclei:	iə̃ i:	uẽ u:	uə̃ u:
	ɪ:	ʏ:	ʊ:
	e:	ə̃:	o:
	ɛ:	ʌ:	ɔ:
	a:		ɔ:
Short nuclei:	iə̃ i	uẽ u	uə̃ u
	(ɪ)	(ʏ)	(ʊ) - non-contrastive
	e	ə̃	o
	ɛ	ʌ	ɔ
	a		ɔ

From Introduction to Cambodian by Judith Jacob:

First Register:	iə̃	u:ə̃ uə̃
		ʏ ʏj ʏ:
	e:	o(:)

	ɛ	ɔ(:)
	ae	ɑ(:) ɑw ɑu ɑə
Second Register:	ǎ ǎ: ǎ(:)	ù:ə ù(:) ùə ù(:) ùə
	è(:) èj	ÿ: ÿu
	è: èə	ò: òə

It seems that this speaker is of a dialect that maintains the register distinction and I believe it is this distinction that is transcribed as nasalization below. Please note that these transcriptions are quite broad.

### Three Way Stop Contrasts:

1.	[kɑʔ]	'to shampoo'
2.	[kʰuʔ]	'to choke'
3.	[kʰǎʔ]	'to polish'
4.	[kǎʔ]	'to cut'
5.	[kʰiən]	'flowered, cotton, material'
6.	[kiən]	'on the side'
7.	[ca:]	'to go'
8.	[cʰew]	'to stand'
9.	[caʔ]	'to divide'
10.	[cʰaʔ]	'to check'
11.	[tɔp]	'to support'
12.	[tʰɔp]	'to be suffocating'
13.	[dǎp]	'to cut with a chisel'
14.	[dʸŋ]	'to know'
15.	[tʸŋ]	'tight, tense'
18.	[tʰuŋ]	'bag'
19.	[dawi]	'to be like'
20.	[tawi]	'small'
21.	[tʰo:]	'jar'
22.	[bɔ:ŋ]	'elder sibling'
23.	[pɑ:ŋ]	'to wish, desire'
24.	[pʰɑ:ŋ]	'also, too'
25.	[baʔ]	'to break'
26.	[paʔ]	'part, section'
28.	[paʔ]	'to embroider'
29.	[baʔ]	'to be broken'
30.	[pʰǎ:ʔ]	'fine (penalty)'

### Double Stops:

1.	[ʔat]	'not'
2.	[kǎʔ]	'cut'
3.	[kʰǎʔ]	'kind of frog'
4.	[cǎʔ]	'send off'

5.	[k <sup>h</sup> æ̃t̚]	‘polish’
6.	[k <sup>h</sup> cæ̃t̚]	‘seperated’
7.	[cāp]	‘get to the end’
8.	[k <sup>h</sup> um]	‘try hard’
9.	[k <sup>h</sup> cāp]	‘pack’
10.	[bən]	‘celebration’
11.	[kən]	‘movie’
12.	[kboːn]	‘raft’
13.	[dæːm]	‘running’ (colour)
14.	[kæːm]	‘passion’
15.	[kdæːm]	‘crab’
16.	[tij]	‘place’
17.	[k <sup>h</sup> æ̃ːŋ]	‘side’
18.	[k <sup>h</sup> tɪŋ]	‘wild buffalo’
19.	[tæ̃ːŋ]	‘represent’
20.	[baːn]	‘get’
21.	[tbaːŋ]	‘weave’
22.	[kol]	‘support’
23.	[t <sup>h</sup> ɑːt]	‘take out’
24.	[t <sup>h</sup> kol]	‘be still’
25.	[kæ̃n]	‘hold’
26.	[t <sup>h</sup> æ̃ː]	‘say’
27.	[t <sup>h</sup> kæ̃ŋt <sup>h</sup> kæ̃n]	‘civilized’
28.	[dɔŋ]	‘know’
29.	[pɔn]	‘be skillful’
30.	[pdɔŋ]	‘accuse’
31.	[dɔj]	‘ground’
32.	[pɔːj]	‘musical instrument’
33.	[pdɔːj]	‘husband’
34.	[kæ̃p]	‘dig’
35.	[p <sup>h</sup> æ̃t̚]	‘drift’
36.	[p <sup>h</sup> kæ̃p]	‘upside down’
37.	[bāl]	‘ball’
38.	[cah]	‘to be old’
39.	[cbah]	‘clear’
40.	[baːn]	‘obtain’
41.	[cæ̃ŋ]	‘be glaring’
42.	[cbæ̃ŋ]	‘fight’
43.	[kæ̃e]	‘correct’
44.	[c <sup>h</sup> kæ̃eʔ]	‘make a cut in’
45.	[c <sup>h</sup> kæ̃e]	‘dog’
46.	[ʔoː]	‘explanation’
47.	[c <sup>h</sup> aw]	‘raw’
48.	[c <sup>h</sup> ʔaw]	‘very red’
49.	[bɔːt]	‘suck’
50.	[dɑt]	‘stick’
51.	[dbɑt]	‘because’
52.	[cəŋ]	‘want to’
53.	[p <sup>h</sup> ɑŋ]	‘dust, powder’

54.	[p <sup>h</sup> caŋ]	'concentrate'
55.	[caʔ]	'peck'
56.	[p <sup>h</sup> aʔ]	'drink'
57.	[p <sup>h</sup> caʔ]	'kind of tree'
58.	[dodaŋ]	'arrive'
59.	[p <sup>h</sup> ul]	'result'
60.	[p <sup>h</sup> dul]	'provide'
61.	[dæ:n]	'trace'
62.	[p <sup>h</sup> æt]	'sprinkle'
63.	[p <sup>h</sup> dæm]	'remember'
64.	[pəte:h]	'country'
65.	[p <sup>h</sup> eh]	'ash'
66.	[p <sup>h</sup> tej]	'change'
67.	[ʔæʔ]	'unable to go'
68.	[p <sup>h</sup> æ:ʔ]	'fine (penalty)'
69.	[p <sup>h</sup> ʔæ:ʔ]	'cause'

Final [h]:

1.	[banto:ʔ]	'musical refrain'
2.	[banto:h]	'scold'
3.	[bantæ:]	'thorn'
4.	[banlæh]	'change of clothes'
5.	[kraʔ]	'poor'
6.	[krɪmkrah]	'dried hard'
7.	[kru:ə]	'family'
8.	[kruəh]	'event'
9.	[k <sup>h</sup> læ:]	'tiger'
10.	[k <sup>h</sup> læh]	'some'
11.	[coʔ]	'dog' (year)
12.	[cah]	'make hole in'
13.	[cu:ə]	'rude'
14.	[cu:əh]	'replace'
15.	[dæ:]	'slab of stone'
16.	[dæ:h]	'spread out'
17.	[mujnæ:]	'which one?'
18.	[næh]	'very'
19.	[to:ʔ]	'second'
20.	[toh]	'guilt'

References:

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