### Vietnamese consonants, IPA

	Bilabial		Labio- dental		Denti- alveolar		Retroflex		Palatal		Velar		Glottal	
Plosive	р	б			ţ	ď	t		С		k		?	
Aspirated plosive					<u>t</u> h						k٢			
Affricate							[t͡ş]		[t͡ɕ]					
Fricative			f	v	S	Z	Ş	[z]		[ʑ], [j]	х	۷	h	
Nasal		m				n				ŋ		ŋ		
Тар						[٢]								
Lateral tap						[]								
Trill						r								
Approximant		w				I				j				

- Where symbols appear in pairs, the one to the right represents a voiced consonant.
- Where symbols appear singly, they are placed to the left within their column if they represent a voiceless consonant, and to the right if they represent voiced.
- Symbols enclosed in brackets represent non-phonemic consonants.
- Blacked-out cells indicate phones judged to be impossible.

- Note that /b/ and /d/ are implosive phones.
- The approximant row includes one lateral approximant: /l/.
- Three of the non-phonemic sounds are allophones of the "R" phoneme /r/: the alveolar and lateral taps; and the voiced retroflex fricative.
- Two of the non-phonemic sounds are allophones of /z/: the voiced alveolo-palatal and palatal fricatives [z] and [j], both shown in the palatal column.



### Vietnamese consonants, Vietnamese alphabet

	Bilabial		Labio- dental		Denti- alveolar		Retroflex		Palatal		Velar		Glottal	
Plosive	p	b			t	đ	tr		ch		с		ø	
Aspirated plosive					th						kh			
Affricate							(tr)		(ch)					
Fricative			ph	v	x	d	s	(r)		(d,d)	(kh)	gh	h	
Nasal		m				n				nh		ng		
Тар						(r)								
Lateral tap						(r)								
Trill						r								
Approximant		u				I				gi				

• Symbols enclosed in parentheses represent non-phonemic consonants.



## Vietnamese vowels, IPA



- Where symbols appear in pairs, the one to the right represents a rounded vowel.
- In some analyses, [e] and [a:] are allophones of /a/, but Emerich (2012) observes minimal pairs based on them. Even so, she finds that duration is a significant cue that speakers use to distinguish them.
- Of the symbols appearing singly, the back vowel [u] is rounded; front and central vowels are unrounded.
- In addition to the three centering diphthongs /iə/, /iə/, and /uə/, there are 15 diphthongs ending with
  [i] or [u], not shown here, in addition to a number of triphthongs.



# Vietnamese vowels, Vietnamese alphabet





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