

ILLUSTRATIONS OF THE IPA

Czech

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Czech belongs to the western group of Slavonic languages and is spoken as a mother tongue mainly in the Czech Republic. In its two provinces of Bohemia and Moravia it is spoken by about 10 million people. There are also some relatively large Czech-speaking communities in North America and smaller, isolated ones in neighbouring European countries. The closest related languages are Slovak and Polish.

A continuous tradition of Czech writing begins in the late 13th century. A recognisably near-modern spoken language and written standard had evolved by the 16th century. The spoken language continued to develop after the establishment of a relatively stable written standard. Thus when the written form underwent a modernising revival from the late 18th century, the result was a noticeable divergence between written and spoken usage. This state has persisted to the present day.

The transcription of the sample text is based on the speech of a native speaker from Prague speaking standard Czech.

Consonants

	BILABIAL	LABIO-DENTAL	ALVEOLAR	POST-ALVEOLAR	PALATAL	VELAR	GLOTTAL
PLOSIVE	p b		t d		c ɟ	k g	
NASAL	m		n		ɲ		
FRICATIVE		f v	s z	ʃ ʒ		x	ɦ
AFFRICATE			ts	tʃ			
TRILL			r ʀ				
APPROXIMANT					j		
LATERAL APPROXIMANT			l				

All the plosives occur in voiced/voiceless pairs and are normally not aspirated. The glottal stop, while not phonemic, is typically used before vowels at the beginning of words or between vowels within the word after a prefix. Apart from the glottal and velar fricatives, all the fricatives occur in voiced/voiceless pairs. The glottal fricative is always voiced. The velar fricative is normally voiceless although its voiced counterpart [ɣ] may occur allophonically. For more detail about the interaction between the glottal and velar

fricatives with respect to assimilation, see Assimilation below. Two affricate phonemes occur, a voiceless alveolar $/t͡s/$ and a voiceless post-alveolar $/t͡ʃ/$. They both have an allophonic voiced counterpart arising from voicing assimilation (see below).

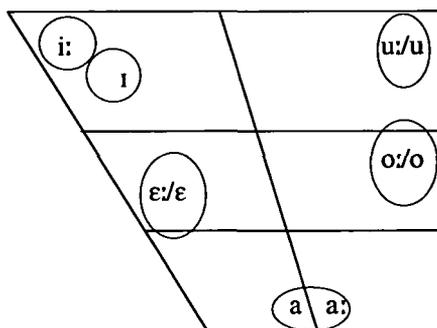
There are two trills, $/r/$, as in *ruka* $/ruka/$ 'hand', and $/r̥/$, as in *řeka* $/r̥eka/$ 'river'. The first one is an alveolar apical trill with 1-3 periods of vibration. It is immune from voicing assimilation and occurs voiced in all positions in the word. In case of $/r̥/$, the place of articulation is normally similar to that for $/r/$. Although it may be produced with the blade of the tongue, the main differentiating characteristic from $/r/$ is the number of vibrations, which may be 1-2 greater than in $/r/$, and their lesser amplitude than for the vibrations in $/r/$. Also, the constriction is narrower and the velocity of air greater. This sound often starts as a trill but continues as a fricative and thus probably the best term for it is 'alveolar trill fricative' with the symbol $/r̥/$. (The laminal diacritic $/r̥/$ used in Ladefoged & Maddieson (1996) does not capture the sound's defining property). A voiceless allophone of $/r̥/$ occurs in places where voicing assimilation applies.

There are three nasal phonemes, $/m/$, $/n/$ and $/ɲ/$. A labiodental nasal may occur allophonically, as the result of assimilation of the place of articulation with a following labiodental fricative. The velar nasal occurs allophonically before a velar stop, and in this position it is obligatory. The lateral $/l/$ is always voiced and, in standard Czech, it has a clear or neutral quality in all positions in the word. However, some Czech dialects have a phonemic contrast between $/l/$ (which is often palatalized) and dark $/l̥/$. The bilabial nasal $/m/$, lateral $/l/$, and sonorant trill $/r/$ can be syllabic, e.g., *sedm* $/sedm̩/$ 'seven'; *vlk* $/vl̩k/$ 'wolf'; *vrba* $/vr̩ba/$ 'willow'.

p	pero	<i>pero</i>	pen	f	fakulta	<i>fakulta</i>	faculty
b	bota	<i>bota</i>	shoe	v	va:za	<i>váza</i>	vase
t	tento	<i>tento</i>	this	s	si:la	<i>síla</i>	strength
d	du:m	<i>dům</i>	house	z	zima	<i>zima</i>	winter
c	celo	<i>tělo</i>	body	ʃ	šest	<i>šest</i>	six
j	jelo	<i>dělo</i>	gun	ʒ	žena	<i>žena</i>	woman
k	kolo	<i>kolo</i>	wheel	x	xleba	<i>chleba</i>	bread
g	galerije	<i>galerie</i>	gallery	fi	fiora	<i>hora</i>	mountain
m	matka	<i>matka</i>	mother	r	ruka	<i>ruka</i>	hand
n	nofia	<i>noha</i>	leg	ř	řeka	<i>řeka</i>	river
ɲ	ɲetso	<i>něco</i>	something	j	jeden	<i>jeden</i>	one
\overline{ts}	\overline{tsena}	<i>cena</i>	price	l	les	<i>les</i>	forest
$\overline{tʃ}$	$\overline{tʃisti}$	<i>čistý</i>	clean				

Vowels

The vowel system consists of a set of five short vowels $/ɪ \epsilon a o u/$ and their long counterparts $/i: \epsilon: a: o: u:/$, and three diphthongs, all falling: $/ou/$, $/au/$ and $/\epsilon u/$ (the last two can be found only in loan words). The short and long vowels are in opposition in all positions.



The quality of short non-low vowels and their corresponding long counterparts differs, in general, only to a small extent. However, in the pair /ɪ/ and /i:/, the short vowel is noticeably less close and more central than the long one. The greater difference in quality between these two vowels than in the case of the other vowel pairs is reflected by the usage here of a different vowel symbol for each of the two. The vowel /o:/ has a phonemic status only in loan words (and therefore in the table below it is shown in brackets). The short /a/ is pronounced usually as marginally fronter than the long /a:/. Vowel distinctions are preserved in unstressed positions.

ɪ	míle	<i>míle</i>	nicely	i:	mi:lɛ	<i>míle</i>	mile
ɛ	lɛt	<i>lɛt</i>	flight	ɛ:	lɛ:t	<i>lét</i>	summer (pl.gen.)
a	řat	<i>řad</i>	row (pl.gen.)	a:	řa:t	<i>řád</i>	order
o	voda	<i>voda</i>	water	(o:)	go:l	<i>gól</i>	goal
u	domu	<i>domu</i>	house (gen.)	u:	domu:	<i>domů</i>	home (adverb)
ou	mouxa	<i>moucha</i>	fly (noun)				
(au)	auto	<i>auto</i>	car				
(ɛu)	neutra:lɲi:	<i>neutrální</i>	neutral				

Assimilation

Czech has assimilations of place and manner of articulation, and also voicing assimilation. Both assimilation of place of articulation and of voicing are normally anticipatory. Some examples of assimilation of place were mentioned in the discussion of consonants. Assimilation of manner of articulation is relatively rare; if it occurs, it concerns usually combination of /t/ and /s/, /t/ and /ʃ/, /d/ and /z/, or /d/ and /ʒ/, which may become affricates /t͡s/, /t͡ʃ/, /d͡z/ and /d͡ʒ/ respectively (e.g., *dětský* can be pronounced either as [jɛtski:] or [jɛt͡ski:]).

Voicing assimilation affects most consonants. Apart from matching voicing to the following consonant, it also causes devoicing at the end of the word before a pause. When subject to voicing assimilation, the voiced glottal fricative /ɦ/ and the voiceless velar fricative /x/ behave like a voiced/voiceless pair. For instance, in *běh Prahou* /ɦ/ in *běh* is realized as [x].

Suprasegmentals

Primary lexical stress falls on the first syllable of a word; thus it does not have a contrastive phonological role and functions rather as an indication of the word boundary. The stress marks in the transcription below indicate which syllables were accented by the speaker in the recorded passage. ˈ represents the major and ˌ the minor intonation phrase boundary.

Transcription of recorded passage

'severa:k a 'sluntse se 'ɦa:daɫɪ ˌ gdo ˌ z ɲɪx je 'sɪɫnejʃi: ˌ ˌ f tom 'spatɕɪɫɪ 'pɔtsɛstnɛ:ɦio ˌ 'kteri: 'kra:ʃɛɫ 'zaɦalen 'pla:ʃcɛm ˌ ˌ ujednaɫɪ teɫɪ ˌ ze 'ten se ma: 'povaʒovat 'za sɪɫnejʃi:ɦio ˌ ˌ gdo 'prvɲi: 'doka:ʒɛ ˌ ˌ abɪsɪ 'pɔtsɛstni: 'svle:kl 'pla:ʃc ˌ ˌ tu zaʃaɫɪaɫ 'severa:k 'foukat 'zɛ ʃɲi: 'si:ɫɪ ˌ ˌ ale ˌ ʃɲi:m vɪ:ts 'foukaɫ ˌ ˌ ci:m 'vɪ:ts se 'pɔtsɛstni: 'zaɦaloval 'do sve:ɦio 'pla:sɛɛ ˌ ˌ konɛʃɲɛ se 'severa:k 'vzdaɫ 'ma:ɦne:ɦio 'u:sɪɫɪ ˌ ˌ ˌ pak zaʃaɫɪaɫ 'sluntse 'svi:cɪt a 'ɦɲa:t ˌ ˌ a 'za ɲɛjaki: 'okamʒɪk 'pɔtsɛstni: ˌ ˌ 'ktere:mu bɪɫo 'ɦɔrko ˌ ˌ 'sxɔɲɪ 'pla:ʃc ˌ ˌ tak musɛɫ 'severa:k 'uznaɫ ˌ ˌ ze 'sluntse je 'sɪɫnejʃi: ˌ ˌ

Orthographic version

Severák a Slunce se hádali, kdo z nich je silnější. V tom spatřili pocestného, který kráčel zahalen pláštěm. Ujednali tedy, že ten se má považovat za silnějšího, kdo první dokáže, aby si pocestný svlékl plášť. Tu začal Severák foukat ze vší síly, ale čím víc foukal, tím víc se pocestný zahaloval do svého pláště. Konečně se Severák vzdal marného úsilí. Pak začalo Slunce svítit a hřát a za nějaký okamžik pocestný, kterému bylo horko, shodil plášť. Tak musel Severák uznat, že Slunce je silnější.

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