As a western Slavic language of the Indo-European family, Czech is closest to Slovak and Polish. It is spoken as a native language by nearly 10 million people in the Czech Republic (Czech Statistical Office n.d.). About two million people living abroad, mostly in the USA, Canada, Austria, Germany, Slovakia, and the UK, claim Czech heritage (Ministry of Foreign Affairs of the Czech Republic 2009). However, it is not known how many of them are native speakers of Czech.

Sociolinguistically, the language situation in the Czech Republic bears diglossic features. There is a substantial gap between formal, highly codified language and the language used in everyday situations. Our aim is to describe the way most people speak most of the time rather than artificial orthoepic norms (for the latter see Palková 1997: 320–345).

Geographically, in the western part of the country (Bohemia and western Moravia) pronunciation is relatively homogeneous compared to the greater dialectal diversity of the east (the rest of Moravia), where several dialectal areas can be distinguished (Cvrček 2010: 24). Still, there are a number of features common to Moravian dialects, distinguishing them clearly from the pronunciation of Bohemia and allowing native speakers to identify someone as either Bohemian or Moravian. The present paper elaborates on the earlier illustration of Czech (Dankovičová 1997a) by describing the differences between Bohemian Czech (BC), spoken by more than six million Czech citizens, and Moravian Czech (MC), spoken by about three-and-a-half million Czech citizens. At the same time, our illustration provides additional information about what both varieties have in common.

The transcriptions of the sample text are based on recordings of a 32-year-old male native speaker of BC from the south of Bohemia, and a 44-year-old female native speaker of MC from the east of Moravia. Examples given throughout the text are recorded by the Bohemian speaker and, where MC differs from BC, also by the speaker from Moravia.
Consonants

<table>
<thead>
<tr>
<th>Consonant</th>
<th>Bilabial</th>
<th>Labio-dental</th>
<th>Alveolar</th>
<th>Post-alveolar</th>
<th>Palatal</th>
<th>Velar</th>
<th>Glottal</th>
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<td>Plosive</td>
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<tr>
<td>Affricate</td>
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<td>ŭj</td>
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</table>

The consonant inventories of BC and MC are the same. Phonemes /dʃ/ and /ʃ/ came into Czech with borrowings. The youngest and most easily identified as foreign is /dʒ/, whereas /ʃ/, as the oldest of the three, occurs in a few native Czech words, such as foukat /foukat/ ‘blow’ and doufat /doufat/ ‘hope’. Phonetic implementation of consonant phonemes does not differ in BC and MC either. In the stop series, /b d g/ are prevoiced (i.e. voiced during closure) and contrast with voiceless unaspirated /ptk/. While /d/ is realized as apico-alveolar, /t/ is more likely to be lamino-dental (Machač 2006: 139–141). A stop before another stop is generally released. The release of palatal stops is affricated (Machač & Skarnitzl 2004: 30–31). Intervocally, /d/ is sometimes reduced to [ɾ] (Machač & Skarnitzl 2009: 37–38), and /v/ becomes a labio-dental approximant [ʋ] (Skarnitzl & Volín 2005). Sibilants /ʃ ʒ/ are non-retroflex post-alveolars articulated with tongue blade rather than with the tongue tip (Zygis 2003). Both /ɾ/ and /ɹ/ are trills though commonly realized with a single contact. Phonetically, the sound /ɾ/ is a period of friction interrupted at the beginning by a contact or contacts created by a retracted apico-alveolar gesture (see Figure 1). The approximant /l/ is mainly pronounced apico-alveolar, although a velarized pronunciation without a firm tongue tip contact is not unusual (Šimáčková 2009). Sonorants /ɾ/ and /ɹ/, and marginally also /m/ and /n/, become syllabic between two consonants or after a consonant at the end of a word, e.g. vlk /vlk/ ‘wolf’, kopr /kopř/ ‘dill’, Rožmberkové /rožmberkové/ ‘House of Rosenberg’, sedmnáct /sedmnáct/ ‘seventeen’. Alveolar /n/ as well as bilabial /m/ commonly undergo place assimilation. Before labiodentals, /n/ and /m/ change into [ɲ], e.g. konference /konférenːsɛ/ ‘conference’, tramvaj /tramvaj/ ‘tram’. The alveolar nasal...
Obstruent voicing

The key source of differences between pronouncing consonants in Bohemian and in Moravian Czech are voice assimilations. In addition, there is a difference in how voice assimilation interacts with word-final devoicing.

Both in BC and MC, obstruents devoice word-finally, e.g. závod [za:vot] ‘race’, rez [res] ‘rust’. In connected speech, BC and MC differ with respect to final obstruent devoicing when the next word begins in a vowel, e.g. závod aut ‘car race’. Speakers of BC insert a glottal stop before the initial vowel and devoice the word-final obstruent: [za:vot/aut]. In MC the final obstruent becomes the onset of the following syllable and keeps its voicing [za:vot/pe] ‘a lot of’ (Volín 2010: 53). Stop–fricative sequences, especially if voiceless, may be simplified to affricates, e.g. dětská [jet ska:] ‘children’s (adj, f)’, větší [vjet’i:] ‘bigger’.

Underlying mismatches in the voicing of adjacent obstruents are usually resolved by voice assimilation which is generally regressive. The voicing agreement is obligatory word-internally, thus prosba ‘plea’ is pronounced as [prozba] and lebka ‘skull’ as [lepka]. Across a word boundary, voicing of adjacent obstruents varies within and across speakers. In BC, regressive voicing assimilation in consonant clusters applies in fewer contexts than in MC. First, a BC exception to the regressive direction of voice assimilation is the cluster /š/
pronounced as voiceless [sx] (e.g. shoda [sxoda] ‘agreement’, shnit [sxnɪːt] ‘rot’), although in a small number of words voiced [zfi] occurs (e.g. shora [zfiːra] ‘from above’, shlok [zfluk] ‘cluster’). More notably, in MC but not in BC is word-boundary regressive assimilation triggered by sonorants as well as obstruents, yielding MC pronunciations such as k lesu [g ˈlesu] ‘to the forest’.

In this context, it is important to discuss the classification of sounds /v/ and /r£/ as sonorant or obstruent. The labiodental ‘fricative’ /v/ behaves as an obstruent in that it undergoes voice assimilation (e.g. in vplout [fplout] ‘sail into’, krev teče [kref teʃe] ‘blood flows’) but at the same time it has some properties of sonorants. First, like other sonorants it does not trigger voice assimilation within a word, e.g. tvar [tvar] ‘shape’, sval [sval] ‘muscle’. Second, in MC always, but in BC only about half of the time, /v/ triggers voice assimilation across a word boundary, e.g. napsat větu [napsat vjetu] ∼ [napsad vjetu] ‘write a sentence’ (Volín & Skarnitzl 2006). And third, in both MC and BC, it is phonetically often weakened to the approximant [v] (Skarnitzl & Volín 2005). The sound /r£/ is usually paired off with the alveolar trill /r/ in tables of Czech consonant phonemes. However, it is in fact an obstruent. Phonetically it is a trilled fricative (see above), phonologically, it does not behave as a sonorant in that it cannot occupy the position of a syllable nucleus, and unlike /r/ and other sonorants which do not devoice contextually, it loses voicing word-finally and when it is adjacent to a voiceless obstruent, e.g. kouř [kou̯r] ‘smoke’, dvířka [dviːɾka] ‘little door’, přes [přes] ‘over’. In addition, /r£/ triggers voice assimilation across a word boundary in both Czech varieties (e.g. až řekneš ‘when you say’ pronounced as [aʒ řeknɛʃ] and jak řekneš ‘how you say’ as [jaŋ řeknɛʃ]), although in BC only obstruents do that.

Two obstruent phonemes lack an opposite voicing counterpart at the same place of articulation – the voiceless velar fricative /x/ and the voiced glottal fricative /ɿ/. The two fricatives are connected through processes of final devoicing and voice assimilation. In devoicing contexts /ɿ/ is substituted by [x], e.g. in sníh taje [sni:x taje] ‘snow is melting’, lehká [le̞xkaː] ‘light (f)’. In voicing contexts, /x/ has the voiced allophone [ɣ], e.g. prach země [praʃ zemɲe] ‘dust of the earth’, but there are speakers who pronounce [ɦ] here instead, i.e. [praɦ zemɲe]. Another allophone arising from voicing assimilation is [dצ] substituted for /tʃ/, e.g. moc dobrá /moʃts dobraː/ [modצ dobraː] ‘very good (f)’.

Vowels

![Figure 2 Bohemian Czech (left) and Moravian Czech (right) monophthongs in the IPA chart.](https://www.cambridge.org/core)
The Czech vowel inventory contains ten monophthongs and three diphthongs. The monophthongal vowel system has been described as consisting of five different vowel qualities /i e a o u/ occurring in two quantities, i.e. as short and long vowels. More recently, it has been accepted (see e.g. Dankovičová 1997a) that the short–long distinction in the high front vowel pair is not realized on the basis of duration only but entails a qualitative difference as well. This is especially clear in BC where the short counterpart of the ‘long’ high front vowel is realized as mid-high [i]. It can be seen in Figure 3 that for BC speakers the two (mid-)high front vowels differ in their F1 and F2 values to a much larger extent than they do for MC speakers. As a consequence, BC speakers rely less on the durational difference between the short and the long high front vowel. Podlipský et al. (2009) show that the long high front vowel is only about 1.3 times longer than its short counterpart, while the long/short ratio is about 1.7 for the other four vowel pairs. This is why in this illustration the high front vowels are transcribed as [iː i] for BC. In MC, the high front vowels are spectrally more similar, the primary difference between them being duration, hence the transcription [iː i]. The front mid vowels in both varieties are realized as mid-low, i.e. as [ɛ] and [ɛː], while the corresponding
mid-back vowels /o/ and /oː/ remain mid, resulting in less vowel height symmetry between front and back vowels (see Figures 2 and 3).

In Czech, short vowels are about 3.5 times more frequent than their long counterparts (Ludvíková 1987: 93). In both varieties, long /oː/ occurs very rarely and almost exclusively in loanwords, e.g. tón /tɔn/ ‘tone’, oda /ɔːda/ ‘ode’. In BC, the vowel /ε/ is also infrequent because in many native morphemes it is replaced by /iː/ (e.g. ‘small (n)’: malé /maːˈleː/ in MC and maly /maːliː/ in BC; ‘length’: délka /diːlka/ in MC and délka /diːlka/ in BC).

The diphthongs are /au/, /eu/ and /ou/ in both Czech varieties, but /au/ and /eu/ occur only in loanwords and interjections, e.g. euro /euro/ ‘euro’, leukémie /lɛukɛˈmiɛ/ ‘leukemia’, autor /ɔutor/ ‘author’, au /au/ ‘ouch’.

Phonetically, short vowels in both varieties may be subject to articulatory undershoot induced by increased speech tempo or casual speech style (see Volín 2010: 44).

**Phonotactics**

Phonotactically, Czech allows as many as four consonants in a syllable onset (pstruh /pstrux/ ‘trout’) and three in a coda (pomst /pomst/ ‘revenge (gen pl)’), although this is rare and about half of all syllables are in fact CV (Palková 1997: 272). A number of Czech onset clusters violate the sonority hierarchy (e.g. mzda /mzda/ ‘wage’, rtut /rtʊt/ ‘mercury’, pták /ptɑːk/ ‘bird’) but the complexity of these structures is often reduced in actual pronunciation. One strategy is insertion of a short epenthetic vowel, e.g. lpět [l̩pɛt] ‘adhere to’, dbát [d̩bɑːt] ‘observe (a rule)’. Another strategy is deletion, e.g. která [kɛrtɑː] ‘which (f)’. Most words beginning with the cluster /j/ + C are lexiconalized also without the /j/ (jměno /jmeːno/ ‘name’, jde /jdeː/ ~ /jdeː/ ‘go (3sg)’, jsem /jseːm/ ~ /jseːm/ ‘I am’). The preference for the canonical CV structure is also evident in strategies repairing onsetsless syllables. In MC, a coda of the preceding syllable will usually be resyllabified into the missing onset (závod aut ‘car race’ [zaːvoːd aut], see above), otherwise a glottal stop is used, e.g. nejupřímější [nejʊ̚pɐ̯ɪːmɛjʃiː] ‘the most sincere’, Žežem, otevři se [zɛʃɛm ʃotevːɾɪ se] ‘Open, Sesame.’. In BC, glottal stop insertion is preferred and resyllabification is relatively infrequent. When it does occur the resyllabified obstruent is never voiced as it is in MC, e.g. závod aut is in BC [zaːvoːt ʔaut], possibly [zaːvoːt ʔaut], never *[zaːvoːd aut]. In BC frequent native words beginning with /o/ are also lexicalized with a prothetic /v/, e.g. očí /ɔt͡ʃi/ ~ /vɔtʃi/ ‘eyes’.

**Suprasegmentals**

Czech has first stress fixed to the first syllable of a word, with the exception that a monosyllabic preposition mostly forms a single metrical unit with the following word and bears stress, e.g. moře [moːɾe] ‘sea’ vs. do moře [domoːɾe] ‘into the sea’. As is common in fixed-stress languages (see Cutler 2005: 273), phonetic realization of Czech stress is weak (Volín 2010: 57). Vowel duration does not function as a cue to stress, it is reserved for marking vowel quantity contrasts which occur independently of stress, e.g. uhel [ʔuʃɛl] ‘charcoal’ vs. ūhel [ʔuʃɛl] ‘angle’, plocha [ploxa] ‘area’ vs. plochá [ploxɑː] ‘flat (f)’. Nevertheless, vowel duration is variable to some extent: final syllables in intonation phrases are subject to substantial lengthening (e.g. Dankovičová 1997b).

Czech rhythm has proved difficult to classify using acoustic measures (e.g. Dankovičová & Dellwo 2007). As is typical of syllable-timed languages, Czech exhibits little vowel reduction. On the other hand, compared to syllable-timed languages, Czech allows more complex consonant clusters, which contributes to relatively greater variability of consonant-interval durations.

It should be noted that prosodic structure exerts influence on word-boundary phenomena such as assimilations, glottal stop insertion and resyllabification (as described in the previous section). In both dialects, the preference for glottal stop insertion as opposed to resyllabification increases across stronger prosodic boundaries.
Transcription

Bohemian Czech

|| severa˘k a ‘slun˘fse se ˘ha˘dal| g˘do ‘z˘n˘ix je ‘sil˘nej˘i| ‘f tom ‘s$p˘tr˘il˘i ‘p˘o˘st˘est˘nej˘io |
\|‘kter˘i| kra˘tfel| za˘ha˘len| pla˘f˘c˘em| ‘?]uje˘dn˘ah˘ ‘ted˘i| 3e ‘ten se ma ‘pova˘so˘v˘ad ‘za
\|‘sil˘nej˘i|‘fio| ‘g˘do ‘pr˘vn˘i| ‘doka˘ze| ‘?abi si ‘p˘o˘st˘est˘ni| ‘s˘ule˘kl| pla˘f˘c˘| tu ‘za˘j˘al| severa˘k
\|‘fouk˘ad ‘ze ‘f˘j˘i| ‘si˘l˘i| ‘?]ale ‘ti˘m| ‘v˘rts ‘foukal| ‘ci˘m ‘v˘rts ‘se ‘p˘o˘st˘est˘ni| ‘za˘ha˘lo˘val ‘do
\|‘s˘ve˘fio| pla˘f˘c˘| ‘kone˘fne| se ‘se˘ra˘g ‘v˘zda˘l ‘ma˘rne˘fio| ‘?us˘ili| ‘]pa˘ ‘za˘j˘alo ‘slun˘fse
\|‘svi˘c˘id a ‘f˘ra˘t| ‘?]a ‘ze ‘nej˘ak| ‘o˘k˘am˘zik| ‘p˘o˘st˘est˘ni| ‘]ktere˘mu ‘bila ‘˘f˘orko| ‘sxo˘jil
\|pla˘f˘c˘| ‘ta˘ ]mu ‘se˘ra˘k ‘?u˘zna˘t| 3e ‘slun˘fse ‘je ‘sil˘nej˘i|

Moravian Czech

|| severa˘k ‘?a ‘slun˘fse se ˘ha˘dal| g˘do ‘z˘n˘ih je ‘sil˘nej˘i| ‘f tom ‘s$p˘tr˘il˘i ‘p˘o˘st˘est˘nej˘io |
\|‘kter˘i| kra˘tfel| za˘ha˘len| pla˘f˘c˘em| ‘?]uje˘dn˘ali ‘ted˘i| 3e ‘ten se ma ‘pova˘so˘v˘ad ‘za
\|‘sil˘nej˘i|‘fio| ‘g˘do pr˘vn˘i| ‘doka˘ze| ‘?abi si ‘p˘o˘st˘est˘ni| ‘s˘yle˘kl| pla˘f˘c˘| tu ‘za˘j˘al| severa˘k
\|‘fouk˘ad ‘ze ‘f˘j˘i| ‘si˘l˘i| ‘?]ale ‘ti˘m| ‘v˘rts ‘foukal| ‘ci˘m ‘v˘rts ‘se ‘p˘o˘st˘est˘ni| ‘za˘ha˘lo˘val ‘do
\|‘s˘ve˘fio| pla˘f˘c˘| ‘kone˘fne| se ‘se˘ra˘g ‘v˘zda˘l ‘ma˘rne˘fio| ‘?us˘ili| ‘]pa˘ ‘za˘j˘alo ‘slun˘fse
\|‘svi˘c˘id a ‘f˘ra˘t| ‘?]a ‘ze ‘nej˘ak| ‘o˘k˘am˘zik| ‘p˘o˘st˘est˘ni| ‘]ktere˘mu ‘bilo ‘˘f˘orko| ‘z˘h˘ojil
\|pla˘f˘c˘| ta˘ ] ‘mu ‘se˘ra˘k ‘?u˘zna˘t| 3e ‘slun˘fse ‘je ‘sil˘nej˘i|

Orthographic version


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