

VOWELS

The acoustic quality of the vowels depend on the shape and size of the vocal tract.

ARTICULATORY DIMENSIONS

1. **HEIGHT: VERTICAL DIMENSION**

The movement of the lower jaw;
the movement of the tongue.

2. **FRONTNESS: HORIZONTAL DIMENSION**

The arching of the tongue toward the front, centre and back of the oral cavity.

3. **LIP-ROUNDING:**

rounded
neutral
spread

4. **TONGUE ROOT POSITION:**

The root position (forward or back) changes the size of the pharynx.

5. **VELIC MOVEMENT:**

If the velum is lowered, a nasal quality is present.

SIMPLE VOWELS (=monophthongs) in Canadian English:

[i] *beat*

[u] *boot*

[ɪ] *bit*

[ʊ] *book*

[ɛ] *bet*

[ʌ] *cut*

[æ] *bat*

[ɑ] *pot*

DIPHTHONGS:



Vowels that exhibit a change in quality within a single syllable.

In the transcription the starting and finishing points are indicated.

The second member of the diphthong (= finishing point) is at most times (but not always!) a glide.

Canadian diphthongs:

[aj] *buy, my*

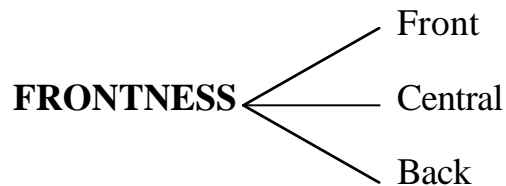
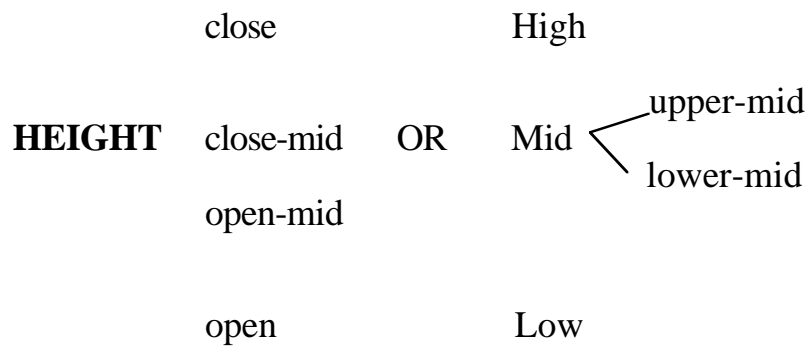
[ow] *no, bone*

[ej] *make, take*

[aw] *cow, renown*

[ɔj] *boy, joy*

Note with regard to terminology:



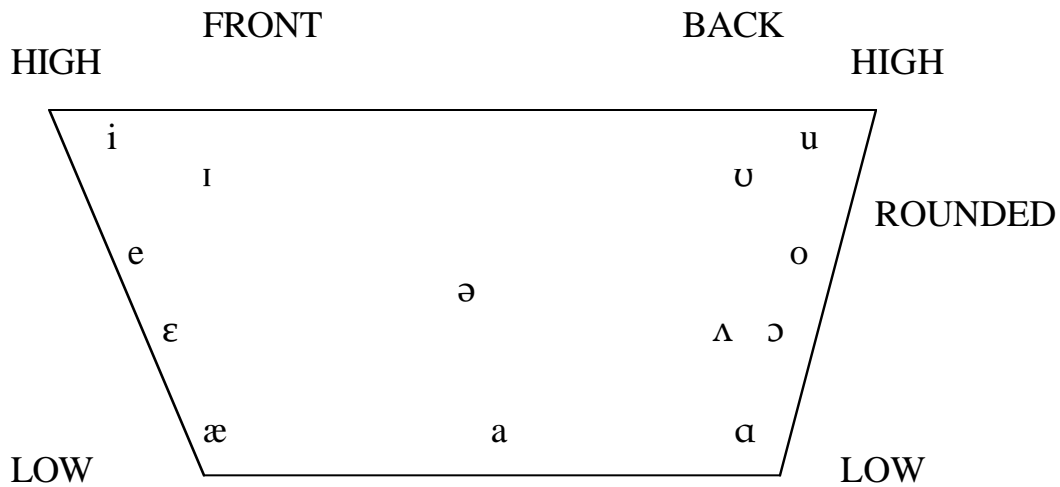
THE SCHWA

[ə] mid-central unrounded vowel (schwa)

Articulation: At the mid-point both in terms of height and frontness; the tongue is at the rest position.

about [ə]
nation [ə]

SUMMARY OF CANADIAN ENGLISH VOWELS:



[ʌ] back, open-mid (lower-mid), unrounded vowel

[ɔ] back, open-mid (lower-mid), rounded vowel

NOTE: Many speakers have [ʌ] with advanced articulation, that is almost central [ɘ]

Check your articulation!

RHOTIC VOWELS

Vowels having an r-like quality: r-coloured vowels

bird }
Sir } [ə] → SCHWAR
fur }
 ↓
 central rhotic vowel

RHOTIC VOWEL ARTICULATION:

Retraction of the front
of the tongue }
 } may be present
Bunching up the back
of the tongue }

Retraction of the tongue root: ALWAYS PRESENT!

lard [ɑ̃]

normal [ɑ̃] or [ɔ̃]

RHOTIC DIPHTHONGS: The second member of the diphthong is a schwar.

fear [iə:]
poor [uə:]

VOWEL + RHOTIC APPROXIMANT = RHOTIC VOWEL

TENSENESS

TENSE VOWELS are produced with a general tension of the speech muscles.

LAX VOWELS are produced with a more relaxed speech muscle movement.

The terms **TENSE/LAX** do not capture significant phonetic differences.

TENSENESS/LAXNESS have to be interpreted as a complex of articulatory characteristics.

1. **TONGUE ROOT POSITION:** In the articulation of tense vowels the root moves more forward -- advanced tongue root (ATR).
2. **LIP POSITION:** Tense vowels are more rounded, or the lips are more spread.
3. **TONGUE BODY POSITION:** Tense vowels are articulated with the tongue in a higher position.

Examples:

food [u] }
beat [i] } **TENSE VOWELS**

book [ʊ] }
bit [ɪ] } **LAX VOWELS**