

## **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*

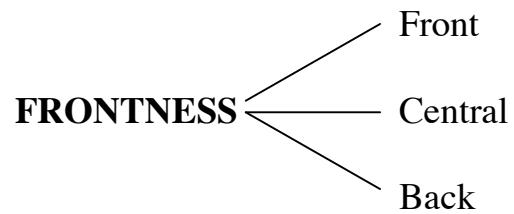
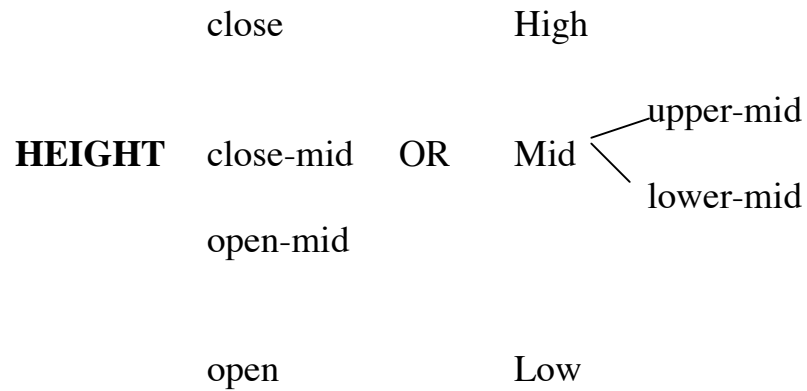
[ow]    *no, bone*

[ej]    *make, take*

[aw]    *cow, renown*

[ɔj]    *boy, joy*

Note with regard to terminology:



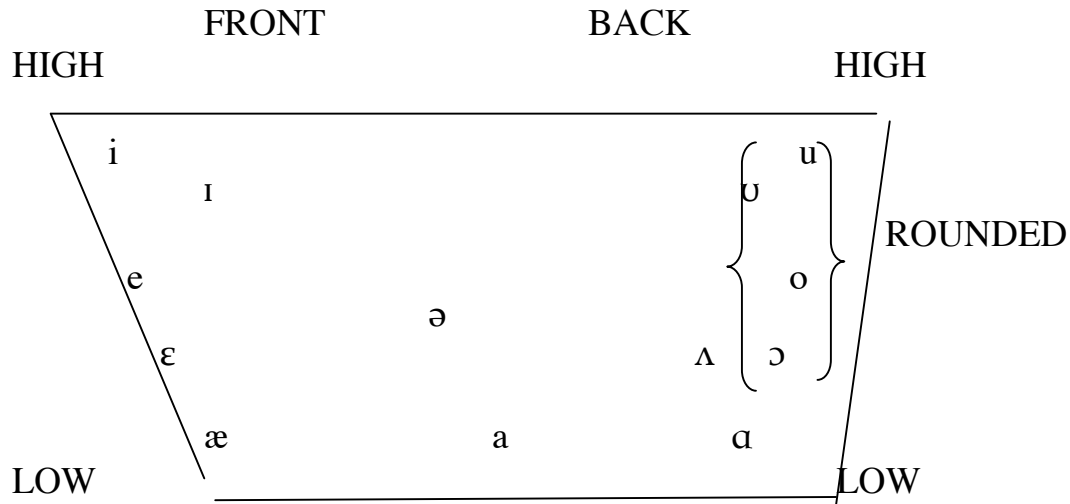
## THE SCHWA

[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 [ʌ<sub>+</sub>]

Check your articulation!

## RHOTIC VOWELS

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

<u>b</u> ird S <u>i</u> r f <u>u</u> r	}	[ə]	→	SCHWAR ↓ central rhotic vowel
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## **RHOTIC VOWEL ARTICULATION:**

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

Retraction of the tongue root: ALWAYS PRESENT!

lard [ɫ̥]

normal [ɫ̥] or [ɫ̥]

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

fear [iə̯]

poor [uə̯]

VOWEL + RHOTIC APPROXIMANT = RHOTIC VOWEL
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## **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:

fo <u>o</u> d	[u]	}	<b>TENSE VOWELS</b>
be <u>a</u> t	[i]		

bo <u>o</u> k	[ʊ]	}	<b>LAX VOWELS</b>
bi <u>i</u> t	[ɪ]		