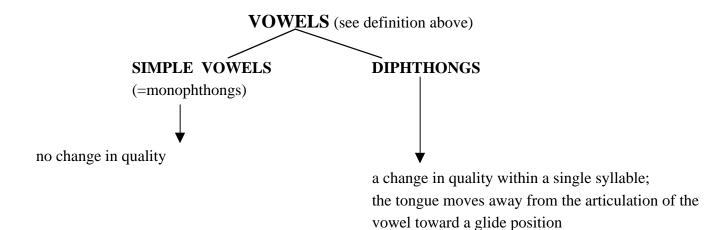
LING 220 LECTURE #5

# **PHONETICS: THE SOUNDS OF LANGUAGE (continued)**



# SIMPLE VOWELS IN CANADIAN ENGLISH:

- *b<u>i</u>d* [I]
- $b\underline{e}t$  [ $\epsilon$ ]
- $b\underline{a}t$  [æ]
- *b<u>oo</u>k* [⋃]
- <u>o</u>r [o]
- *ought* [5]
- $c\underline{u}t$  [ $\Lambda$ ]
- $c\underline{o}t$  [a]

## **DIPHTHONGS IN CANADIAN ENGLISH:**

*heat* [ij]

 $m\underline{a}ke$  [ej]

sh<u>oe</u> [uw]

*boat* [ow]

*b<u>uy</u>* [aj]

*boy* [oj] or [ɔj]

*c<u>ow</u>* [aw]

STUDY *Table 2.13* on p. 30

#### ARTICULATORY DIMENSIONS

1. HEIGHT: the *vertical* movement of the tongue

vertical dimension

2. FRONTNESS: the horizontal movement of the tongue

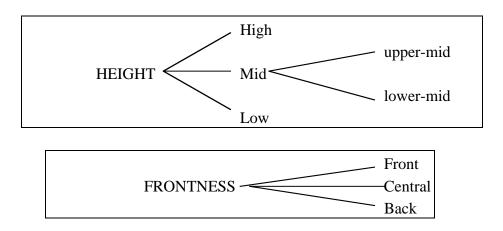
horizontal dimension

- 3. LIP MOVEMENT: rounded, neutral, or spread
- 4. TONGUE ROOT POSITION: the root position (forward or back) changes the size of the pharynx.
- 5. VELIC POSITION: if the velum is lowered, a nasal quality is present.

STUDY *Figure* 2.8 and 2.9 on pp. 31-32.

STUDY *Table 2.14* on p. 31.

# Note with regard to terminology:



#### TENSE AND LAX VOWELS

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.



$$\left.\begin{array}{cc} b\underline{oo}k & [\upsilon] \\ & & \\ b\underline{i}t & [I] \end{array}\right\} \ LAX \ VOWELS$$

STUDY *Table 2.15* on p. 32.

THE SCHWA:

[ə] mid-central unrounded vowel (schwa)

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

*about* [ə]

RHOTIC VOWELS: vowels having an r-like quality.

bird, fur, Sir [&]

dark [a]

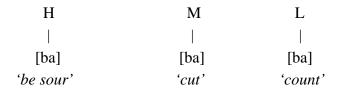
## **SUPRASEGMENTALS**

Those properties that occur above the level of segments (regardless of their place or manner of articulation) are called *suprasegmental* (or *prosodic*) properties. These are *pitch*, *loudness and length*.

PITCH: the auditory property of a sound that enables us to put it on a scale that ranges from low to high.

There are two kinds of controlled pitch movements:

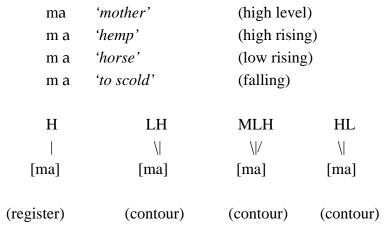
- 1. TONE: a pitch that signals differences in meaning.
  - a. LEVEL or REGISTER TONES: tones that do not change in pitch.
    - e.g. Nupe (spoken in Nigeria)



The line drawn from the letters (H, M and L) to the respective vowel is called association line.

autosegmental notation

- b. CONTOUR TONES: Tones that change pitch on a single syllable.
- e.g. Mandarin



STUDY *Figures 2.11* and 2.13 on p. 36.

2.	INTONATION: pitch movement in spoken utterances that is not related to differences
	in word meaning.



Sam bought a new vacuum cleaner bag.

b. NON-TERMINAL (INTONATION) CONTOUR: rising or level pitch patterns.

$$\begin{array}{cccc} LH & H & LH \\ \bigvee & / & \bigvee \\ Bill? & Can you come here? \end{array}$$

STUDY *Figures 2.17* and *2.18* on p. 38.

## LENGTH:

Differences in length may signal differences in meaning.

Finnish:

$$t\underline{u}li$$
 [u] 'fire'  $t\underline{u}uli$  [u:] 'wind'

STRESS: The combined effect of pitch, loudness and length → vowel prominence!

Primary stress: [']

Secondary stress: [`]

# Examples:

èxplanátion

tèlegráphic

Stress may have a grammatical role:

súbject (NOUN)

subjéct (VERB)

STUDY Table 2.21 on p. 40.