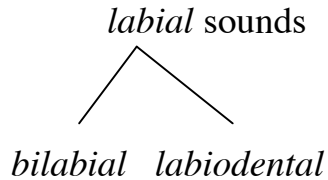


ARTICULATORS IN THE ORAL CAVITY

LIPS (Latin *labia*)



e.g. bee, my

e.g. fly, yeal

TEETH (Latin *dentes*)

dental sounds

e.g. think, they

ALVEOLAR RIDGE (Latin *alveolus* ‘tray’)



A small protuberance behind the upper teeth.

alveolar sounds

e.g. seal, zoo, take, dip

PALATE (Latin *palatum*)



The arched bony structure that forms the forward part of the roof of the mouth.

palatal sounds

e.g. yes

palato-alveolar (or *alveo-palatal* or *post-alveolar*) sounds

e.g. shoe, church, jug

retroflex sounds: articulated with the tip of the tongue curled back at the back of the alveolar ridge (see later).

VELUM (Latin *velum* [palati] ‘veil’ [of the palate])

□

- soft, muscular part of the roof of the mouth;
- it can be raised and pressed against the back wall of the pharynx: the nasal cavity is shut off;
- when the velum is lowered, the nasal passages are open: *nasal* or *nasalized* sounds.

e.g. moon (nasal sound)
bean (nasalized sound)

VELIC PORT: the passage that is open between the nasal and pharyngeal cavities while the velum is lowered □ *nasal resonance!*

NOTE: *velar* sounds:

□

the tongue is below the lower surface of the velum

e.g. gum, car

velic movement: the lowering or raising of the velum.
(velum: soft palate)

UVULA (Latin *uvula* ‘little grape’)

The soft fleshy tip of the velum;
it hangs down at the back of the mouth.

uvular sounds (English does not have uvular sounds)

PHARYNX (Greek *pharynx* ‘throat’)

The part of the vocal tract that extends from the posterior portion of the nasal cavity downward through the back of the oral cavity to the larynx.

The pharynx is the critical area in which the food passage way and the air passage way cross.

□
from the back of the lower part of the pharynx the food enters the

ESOPHAGUS (= food pipe) □ leading to the stomach.

The pharyngeal cavity consists of three parts:

- a. **LARYNGEAL PHARYNX** (= laryngopharynx):
the lowest part; above the larynx
- b. **ORAL PHARYNX** (= oropharynx):
at the very back of the mouth
- c. **NASAL PHARYNX** (= nasopharynx):
entrance to the nasal cavities.

pharyngeal sounds (English does not have pharyngeals)

TONGUE

The floor of the oral cavity is largely formed by a three-dimensional muscle mass: *the tongue*.

Five regions:

- a. **TIP or APEX**

apical sounds

apico-dentals, apico-alveolars

- b. **BLADE or LAMINA** (below the alveolar ridge at rest)

laminal sounds

lamino-dentals, lamino-alveolars, lamino palato-alveolars

- c. **FRONT or ANTERO-DORSUM** (below the palate at rest)

antero-dorsal sounds (= palatal sounds)

- d. **BACK or DORSUM:**

dorsal sounds

dorso-velar, dorso-uvular

- e. **ROOT or RADIX:** opposite the back wall of the pharynx

radical sounds

THE BASIC (OR FUNCTIONAL) COMPONENTS OF SPEECH

Any speech sound will always have these two components:

1. **INITIATION:** an activity that *initiates* a flow of air (= airstream mechanism)

The organ used for this purpose is called an INITIATOR (e.g. the lungs).

2. **ARTICULATION:** an activity that modulates or *articulates* the airstream, thus generating a specific type of sound.

The organs utilized for articulation are called **ARTICULATORS**.

EXPERIMENT:

- a. Remove initiation while articulating [s], [f] etc.
- b. Remove articulation while continuing the initiatory airflow as long as you can.

SPEECH SOUNDS

VOWELS



The airflow is FREE;

The vocal folds vibrate during articulation.

CONSONANTS



The airflow may be STOPPED, IMPEDED or DIVERTED through the nasal tract.

The vocal folds may or may not vibrate during articulation.

The **consonants** will be described on the basis of their

- a. **MANNER OF ARTICULATION**
(= degree and type of constriction in the vocal tract)
- b. **PLACE OF ARTICULATION**
(= where does the articulation occur?)
- c. **STATE OF THE VOCAL FOLDS**
(= do they vibrate during articulation?)

THE NAMING OF SPEECH SOUNDS

Active articulator: **TONGUE**

Passive articulator: **PLACE**



This is used in the naming of speech sounds,
e.g. *palatal, velar* etc.

BOTH articulators are named, if

- a. The tongue does not participate in the articulation
e.g. *bilabial, labiodental* etc.
- b. More accurate description is needed
e.g. *apico-alveolar* etc.

