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Paper IX (G-3012N) – English Linguistics and Phonetics

ARTICULATORS & STRICTURES

In order to understand the sounds particularly Consonants of English, it is important to learn about the following basic concepts:

Articulators

&

Strictures

ARTICULATORS

Peter Ladefoged and Keith Johnson define articulators as, 'The parts of the vocal tract that can be used to form sounds are called *articulators*'.

The articulators can be divided into two types: Active articulators and Passive articulators

- **Active articulators** : Articulators that move from their position of rest towards other articulator/s or to make contact with another articulator/s. These articulators form the lower surface of the vocal tract. Thus, they include the lower lip and the tongue.
- **Passive articulators** : Articulators that do not move from their position. These articulators form the upper surface of the vocal tract and thus include the upper lip, upper teeth, roof of the mouth and the back wall of the throat or pharynx.

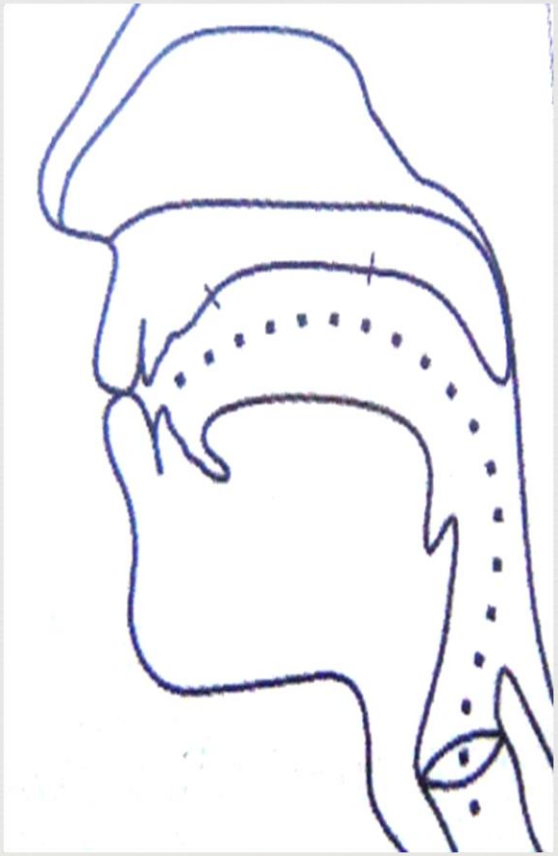
For instance, in the articulation of /f/, the lower lip moves from its position of rest to make contact with the upper teeth. Here the lower is the active articulator while the upper teeth is the passive articulator. In the production of /t/, the active articulator is the tongue (the tip and blade of tongue) as it moves to make a firm contact with the alveolar ridge which is the passive articulator.

STRICTURES

- **Complete closure** – In this type of stricture, there is a complete obstruction of the passage of air as the articulators come in firm contact with each other.
- ✓ If this obstruction is in the oral cavity, it is known as the complete oral closure. If the soft palate is raised then the nasal cavity is blocked preventing air to pass through the nasal cavity.

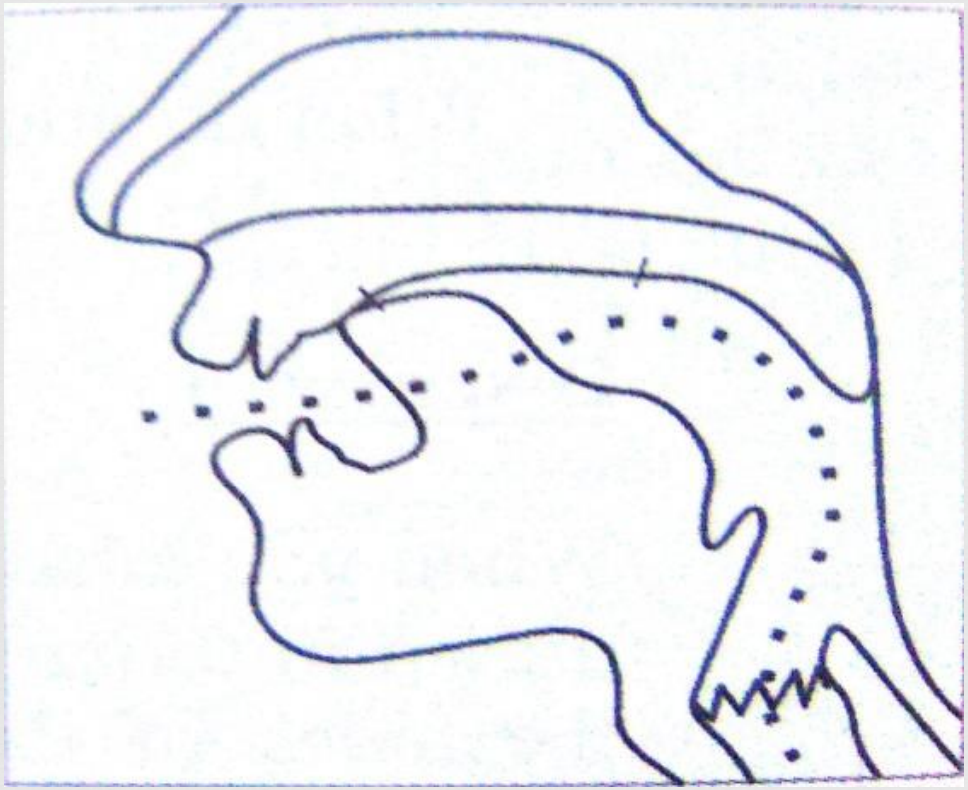
An instance of complete oral closure is the production of sound /d/ in which there is complete oral closure as the tip and blade of tongue makes firm contact with the alveolar ridge or teeth ridge. Similarly, when /g/ is articulated, the complete closure of oral cavity occurs due to the back of tongue making contact with the soft palate or velum.

Complete closure at the lip region in articulation of /p/ as in *past:*



- **Partial closure** – In case of this type of stricture, there is partial closure of the vocal tract. The centre of the vocal tract is obstructed while the air passes freely through the sides of the tongue. For example, when /l/ is articulated as in *leap*, the tip of the tongue touches the teeth ridge thereby closing the centre of the vocal tract but the air passes through the sides of the tongue.

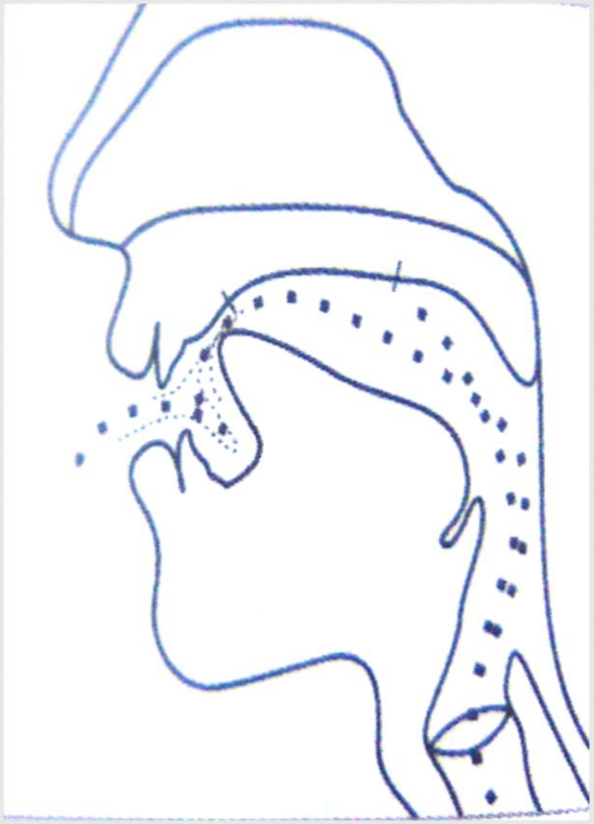
Closure in the centre of vocal tract in articulation of /l/ as in *leap*



- **Close approximation** – In this type of stricture, the articulators come very close to each other so that the gap between them is so narrow that the air passes through the gap with audible friction.

For instance, when /s/ is produced, the tip and blade of tongue come very close to the teeth ridge so that the gap between them is very narrow. As such the air passes through this gap with audible friction making the sound /s/ an alveolar fricative.

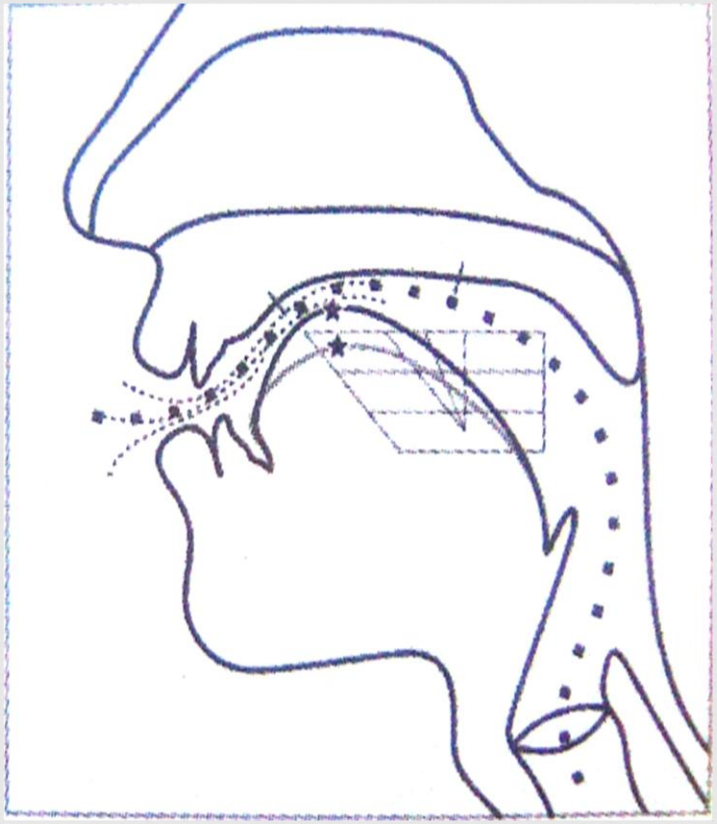
Stricture of close approximation in articulation of /s/ as in *seep*



- **Open approximation** – In this type of stricture, the articulators come close to each other but the gap between them is wide enough to allow the passage of air without causing any friction.

Semi-vowels /j/ and /w/, and all the vowels in English are produced with this type of stricture.

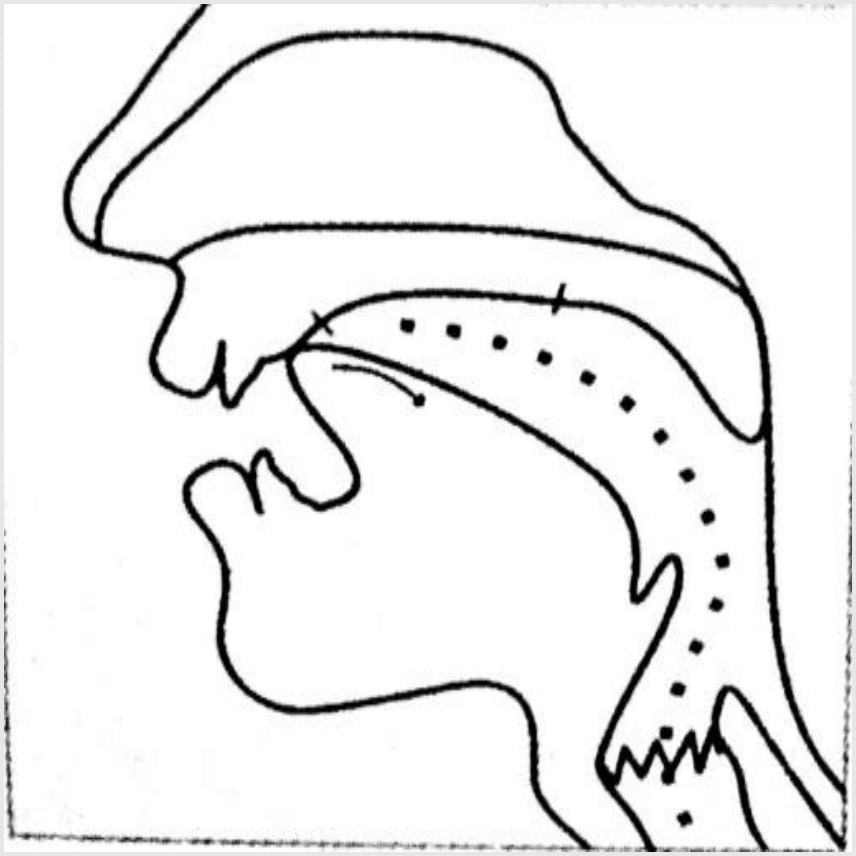
Front of tongue comes close to hard palate in semi-vowel /j/ as in *yes*



- **Intermittent closure** – The stricture is such that the air passes through the articulators intermittently. This is due to the active articulator making rapid contact/s with the passive articulator and release thereof.

An instance of a sound that involves intermittent closure is Scottish [r]. In the case of a flap like [r] in *very*, the active articulator makes a quick contact with the passive articulator only once.

Tip of tongue makes a quick contact once with the alveolar ridge and moves away in articulation of [r] as in *very*



SUMMARY

- There are two types of articulators:
  - Active Articulators
  - Passive Articulators

- There are fives types of strictures:
  - Complete Closure
  - Partial Closure
  - Close Approximation
  - Open Approximation
  - Intermittent Closure

References:

Ladefoged, Peter, and Keith Johnson. A Course in Phonetics. United Kingdom: Wadsworth Cengage Learning, 2011

Roach, Peter. English Phonetics and Phonology: A Practical Course. Cambridge: Cambridge University Press, 2009

Sethi, J., and P.V. Dhamija. A Course in Phonetics and Spoken English. New Delhi: Prentice Hall of India Private Limited, 2006