

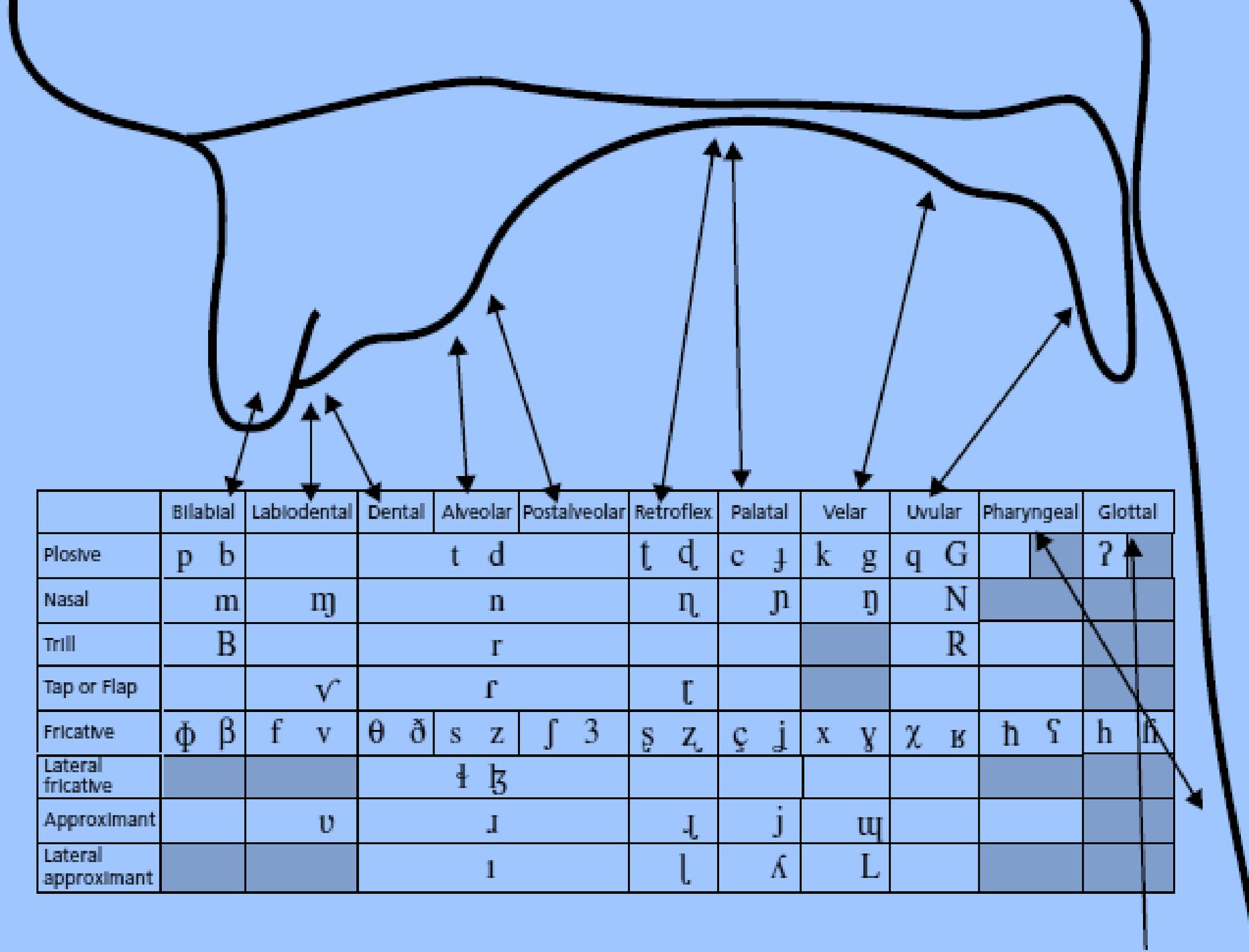
THE INTERNATIONAL PHONETIC ALPHABET (revised to 2005)

CONSONANTS (PULMONIC)

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	Bilabial	Labiodental	Dental	Alveolar	Postalveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal	Glottal
Plosive	p b			t d		ʈ ɖ	c ɟ	k ɡ	q ɢ		ʔ
Nasal	m	ɱ		n		ɳ	ɲ	ŋ	ɴ		
Trill	ʙ			r					ʀ		
Tap or Flap		ⱱ		ɾ		ɽ					
Fricative	ɸ β	f v	θ ð	s z	ʃ ʒ	ʂ ʐ	ç ʝ	x ɣ	χ ʁ	ħ ʕ	h ɦ
Lateral fricative				ɬ ɮ							
Approximant		ʋ		ɹ		ɻ	j	ɰ			
Lateral approximant				l		ɭ	ʎ	ʟ			

Where symbols appear in pairs, the one to the right represents a voiced consonant. Shaded areas denote articulations judged impossible.



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The following places in the speech organ system are important for the purpose of production of various sounds.

- ❖ The upper lip is labial.
- ❖ The upper teeth, either on the edge of the teeth or inner surface is dental
- ❖ The alveolar ridge, the gum line just behind the teeth is alveolar.
- ❖ The back of the alveolar ridge is post-alveolar.
- ❖ The hard palate on the roof of the mouth is palatal.
- ❖ The soft palate further back on the roof of the mouth is velar.
- ❖ The uvula hanging down at the entrance to the throat is uvular.
- ❖ The throat itself is pharynx, meaning pharyngeal.

Source: <http://www.ic.arizona.edu/~lsp/Phonetics/ConsonantsI/Phonetics2c.html>

1. The sound that is produced by bringing the two lips together is called a '**bilabial sound**' e.g. [p], [b]
2. The **labiodental** sounds are produced with the lower lip and the upper teeth e.g. [f], [v]
3. An **alveolar** sound is produced by the tip of the tongue towards the alveolar ridge, the ridge of cartilage behind the teeth, e.g. [t], [d], [s], [z], [n], [l] (in other languages)
4. A **dental** consonant is produced with the tip of tongue against the upper teeth, such as [θ], [ð].
5. An **alveo-palatal** sound is produced by the front of the tongue towards the area between the alveolar ridge and the hard palate, e.g. [ʃ] , [ʒ], [tʃ] ,[dʒ]
6. A **palatal** sound is produced by the body of the tongue towards the hard palate, e.g. [ç], [j]

7. A **velar** sound is produced by the body of the tongue towards the velum, e.g. [k], [g], [ŋ].

8. A **uvular** sound is produced by the back of the tongue towards the uvula.

Uvular sounds do not exist in English, but the French "r" is pronounced as uvular sound.

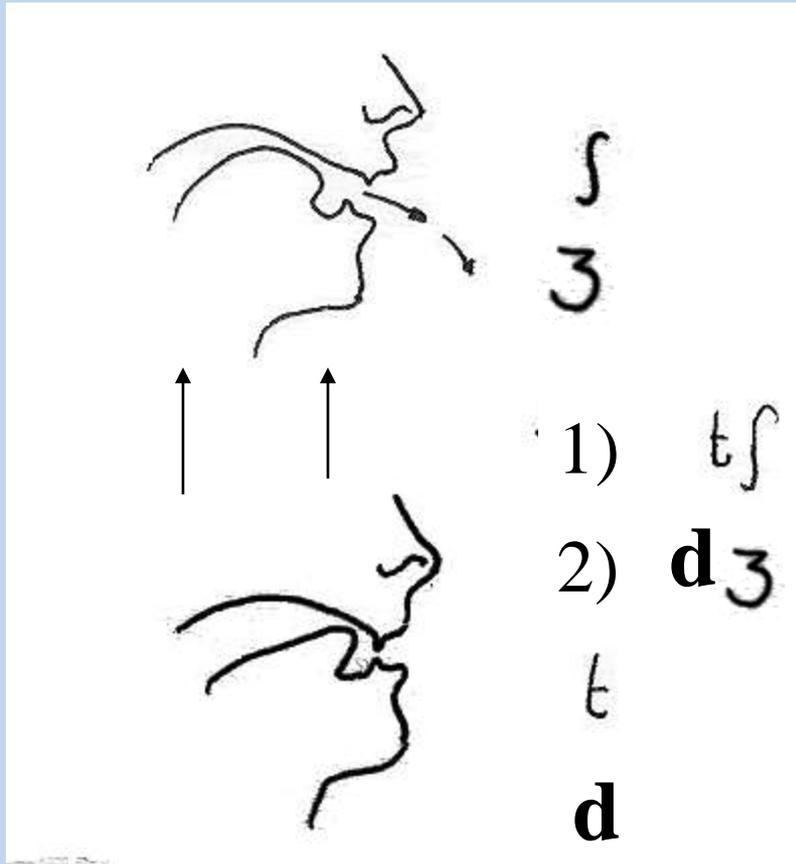
9. A **pharyngeal** sound is made by the articulation of the tongue root towards the back of the pharynx.

Pharyngeal sounds do not exist in Standard, but are found in languages such as Arabic and Hebrew.

10. A **glottal** sound is produced by the glottis themselves. Examples of glottal sounds in English are [h] and [ʔ].

Affricate sounds

- Affricate sounds are made by making a complete closure at some point in the mouth, similar to plosives. However, affricate sounds differ from plosives as the air is released slower than a plosive.
- So, an affricate sound starts like a fricative sound where the narrowing of the articulators are made for the purpose of 'friction', however,
- at the point of actual articulation, there is a contact between the two articulators and thus it ends as a stop/plosive.
- The sounds [tʃ] in church and [dʒ] in judge belong to this group.



These sounds are produced by combining the two sounds as shown here.

The plosive sound is made by the t/d and then is changed to a fricative like sound that follows the release of pressure.

- 1) **church**, **crunch** & **lunch**
- 2) **Jeans**, **generator** & **bridge**

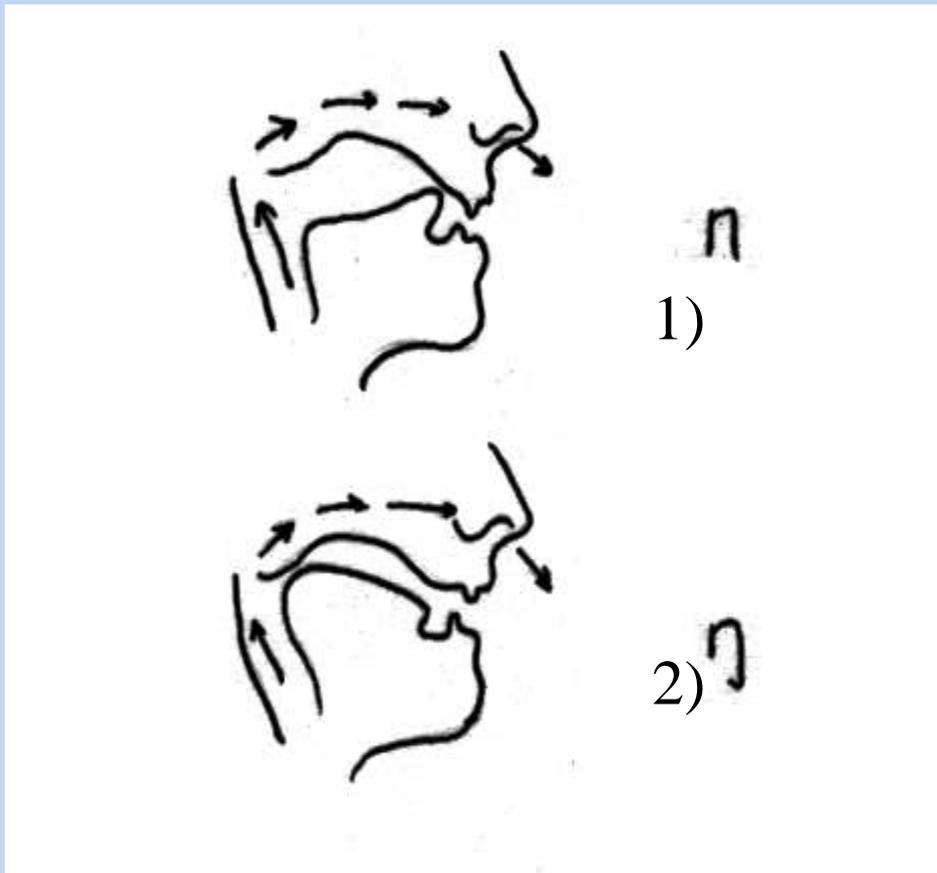
These sounds are known as

Palato-alveolar Affricate

Nasals

Nasal sounds are produced by making a complete closure of the oral cavity by lowering the uvula and allowing the air to escape through the nose cavity.

This group includes the sounds m, n and ŋ



These sounds are produced by blocking the oral passage with uvula.

The air passes through the nasal passage and creates the nasal sound.

1) *no*, *been*, *nine* & *know*. It is known as a

Alveolar Nasal

2) *Song*, *English* & *thank*. It is known as a **Velar Nasal**

(This sound is common in words that have 'ng & 'nk' spellings.)

The sound 'm' is produced by closing both lips and allowing the air to travel through the nasal passages

My/ dream/ smile/ remember



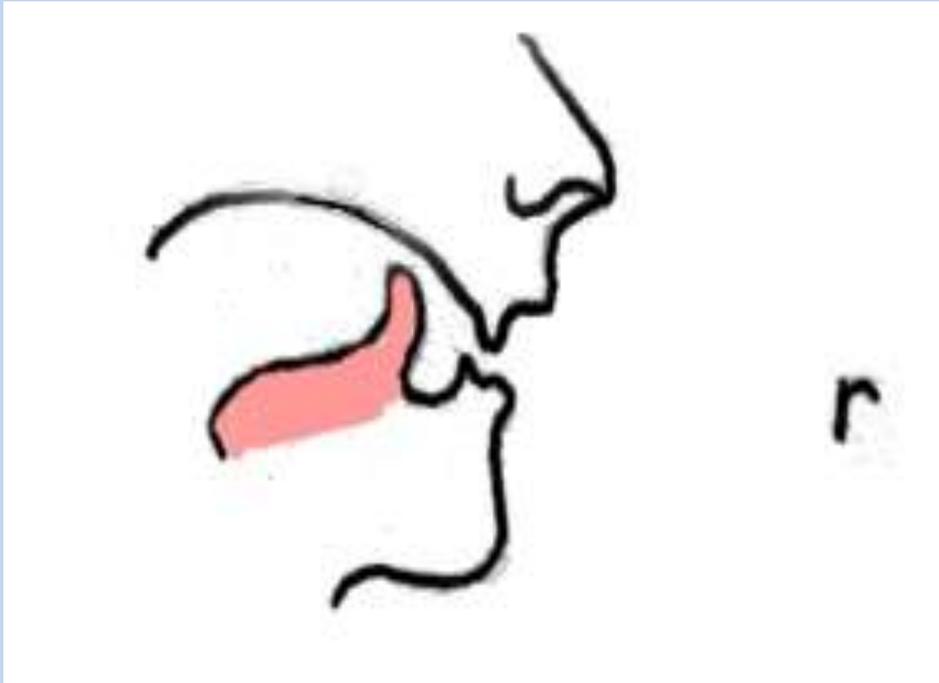
This sound is known as a **Bilabial Nasal**

Oral Continuants

Some consonants are produced in way which some what matches to the production of vowel-sounds.

Some are also midway between a consonant and a vowel, the 'w' and 'y' in 'yes' and where are sometimes called semi-vowels or glides.

These with 'l' and 'r' make up the group called continuants or sonorants.



The sound 'r' is produced when the tip of the tongue is held close to the alveolar ridge (but not touching).

The side of the tongue should touch the lower back teeth.

The sound is usually quite difficult for many speakers of different language-family and can be confused with 'l'.

(*red*, describe, bread, free, drain, trouble)

This is known as a

Post-alveolar Approximant

The sound of 'l' is divided into two distinct sounds, which are produced according to the following rules.

If the sound occurs at the beginning or middle of the word then a distinct and clear 'l' is pronounced;

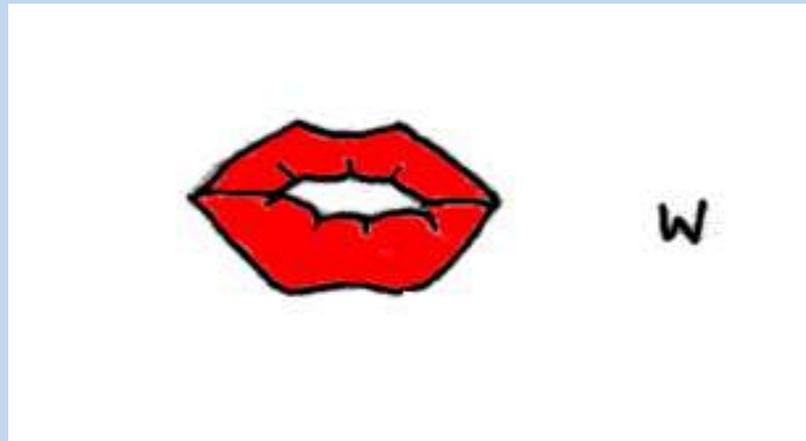
However, if the sound occurs at the end of the word then the sound is produced differently which is called a 'dark l'.

Clear- the tip touches the centre or the alveolar ridge allowing the air to escape around the sides

Dark- the same as the clear 'l' but the centre of the tongue is raised to the soft plate.



Know as **Laterals**



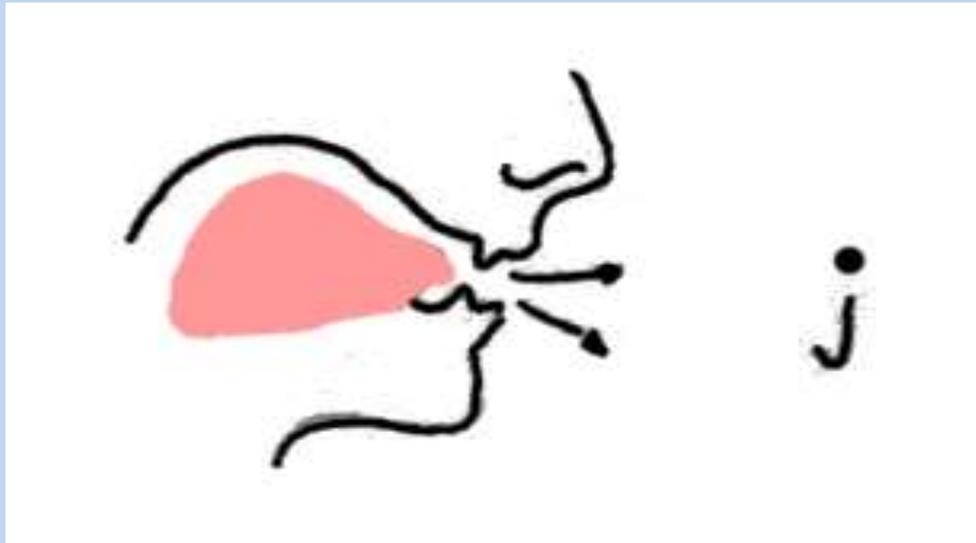
A 'w' sound is similar to the *you* sound but the lips are rounded to give more intensity to air that goes off.

The tongue too is similarly positioned but even the tongue is raised slightly higher than in 'you'.

For example:

(*w*edding, *w*indow, *w*here, *w*as, *w*hat, *w*ear, re*w*ind & *w*ish)

Known as a **Labio-velar semi-vowel**



The sound [j] is produced by raising the centre of the tongue towards the soft plate and lips are **neutral**

(**y**esterday, **y**ear, yeah)

Known as a **Palatal semi-vowel**

Phone, Phoneme, allophones



- **stop** there
s[t]op
- **top** of the speed
[t^h]op
- give a **little** bit of salt
li[r]le

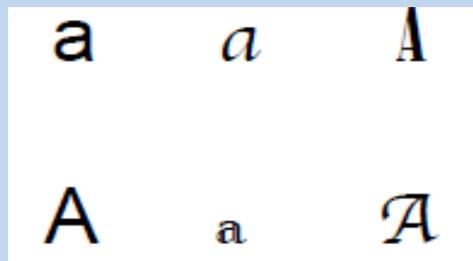
Power of the human mind

The human mind is very powerful. It handles the variation of (in) anything and many things so well that there remains no space for us but to wonder!

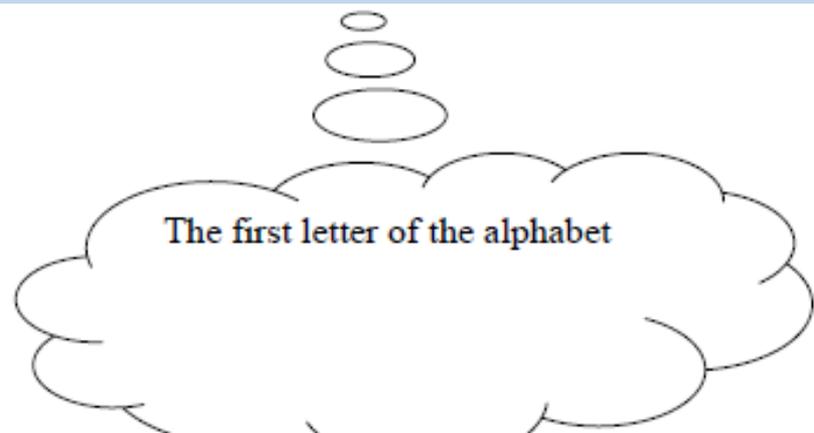
We have seen how 'signs' are so discrete and they are all different from one another and each of them has independent meaning.

However, there are situations when a minute precision is not required to distinguish the 'sign' and 'signified'. For example

What are these ?

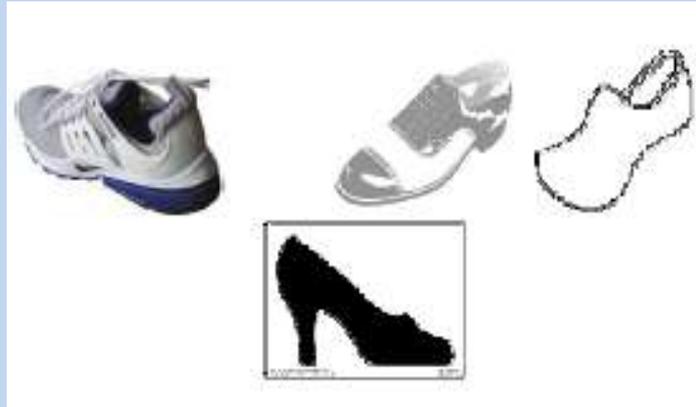


Do you all agree that they are →



OK, let us see one more example

What are the names of the object in the picture given below:



→ Just [shoes]

OK, hold on how about this one,

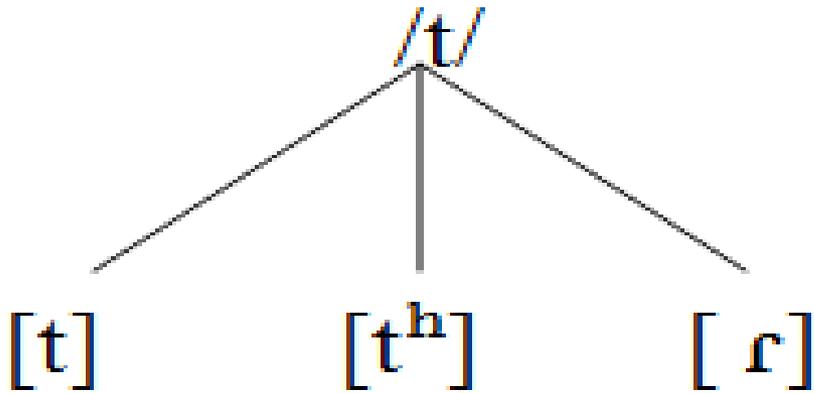
What????? Did you say.....

Chairs!!!!!!!!!!!!!!

Ok, I must say you are great!!

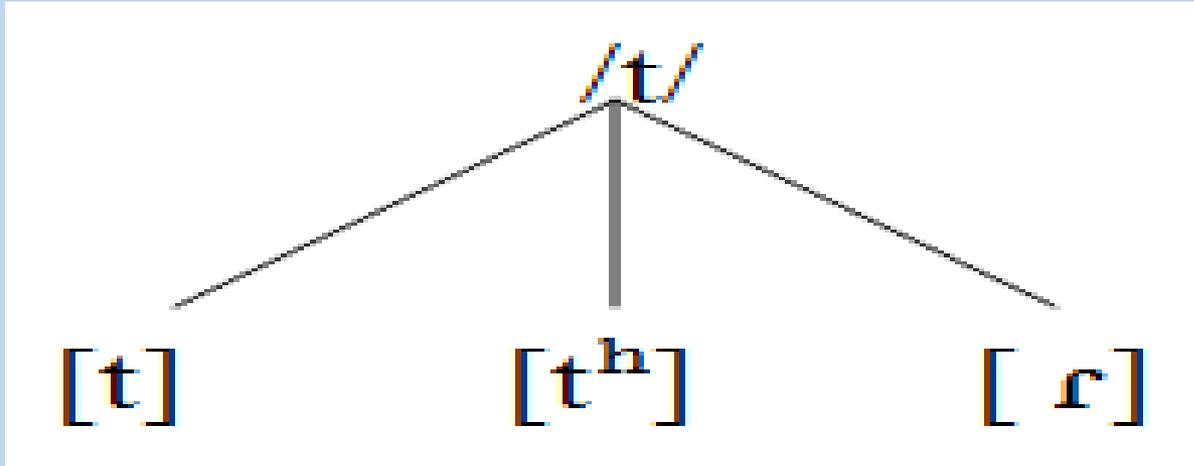


Then, why should it be a problem!!!!

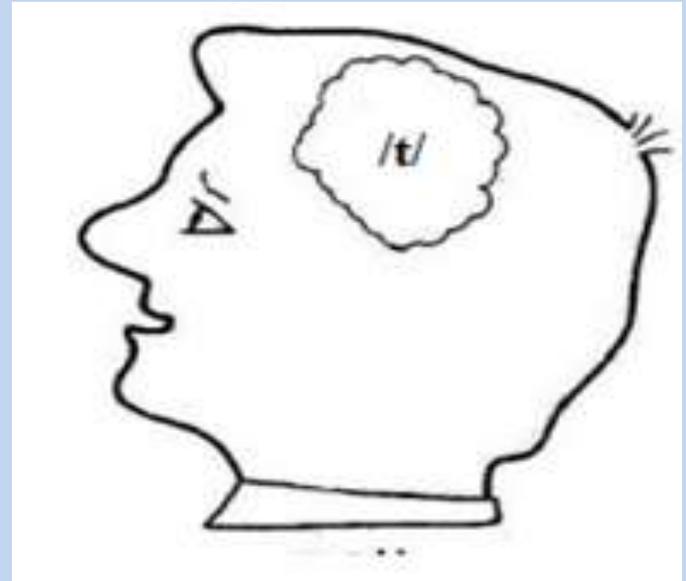


- **stop** there
s[t]op
- **top** of the speed
[t^h]op
- give a **little** bit of salt
li[ɾ]le

Stop, top and little



ahaa!!!!!!



Phoneme: a phoneme is an abstract unit of sound and it is minimal meaning unit of any language, which when replaced, changes the meaning of the word.

Phone: a phone is the actual realization of a phoneme in a language. It is the physical representation of the phoneme which is the property of human mind.

Allophones: Allophones are the variants of a phoneme in different context without any change in the meaning of the word.

This is why,

Book → books = [s]

Bag → bags = [z]

Bus → buses = [iz]