



LIN 3201 – Sounds of Human Language

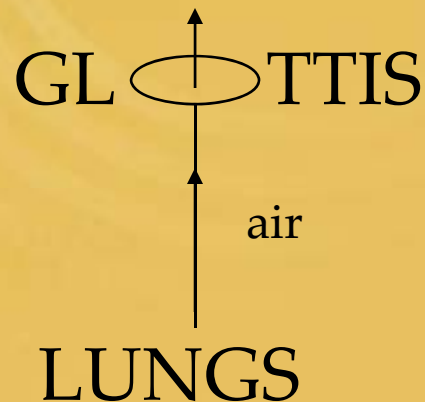


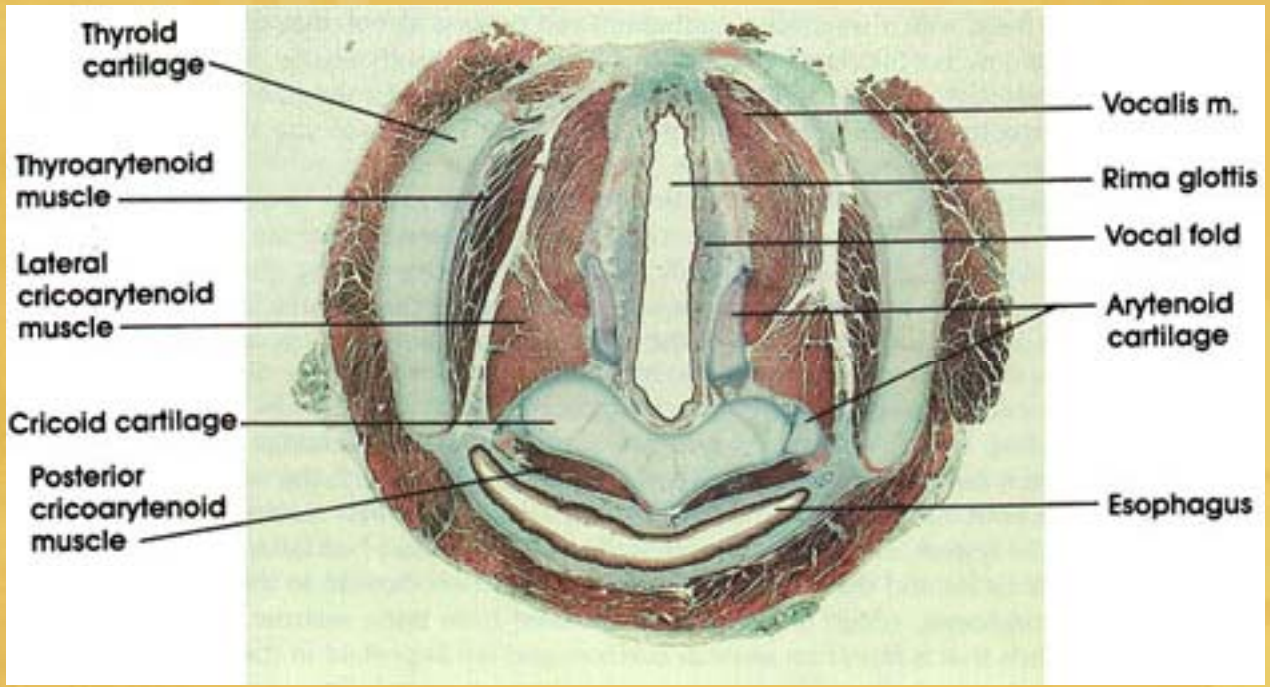
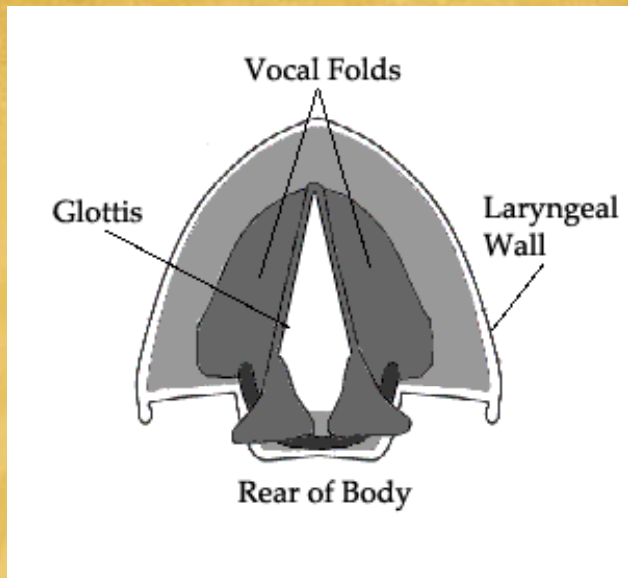
Phonation

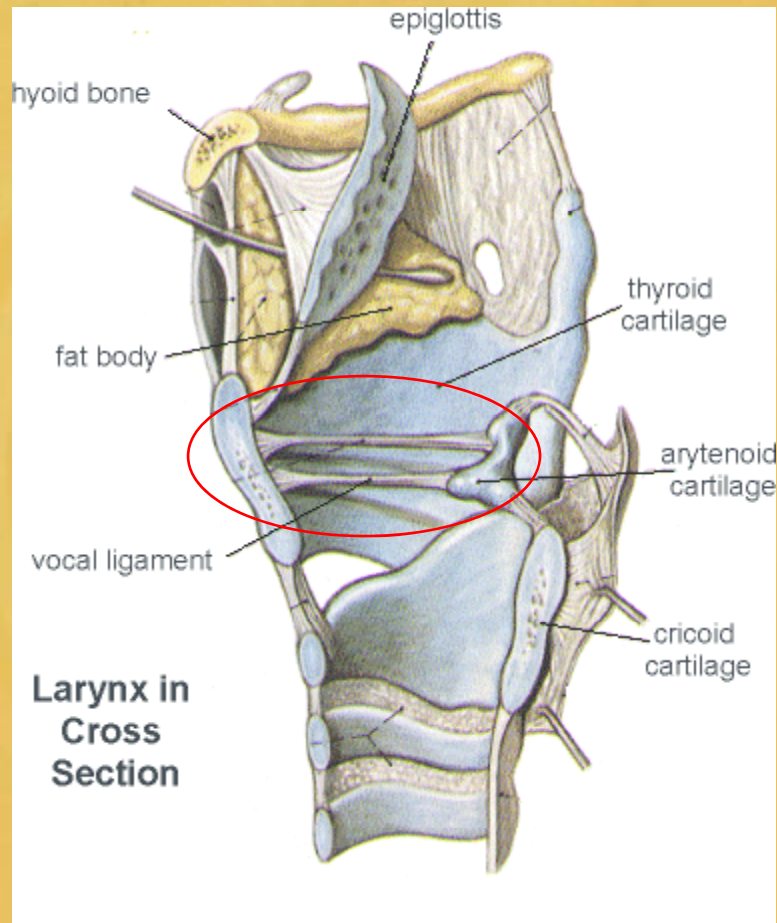


Phonation / voicing

- Phonation is a term used to describe the various types of activities at the larynx.
- It refers to different states of glottis which modifies sound quality when the air is coming from the lungs.

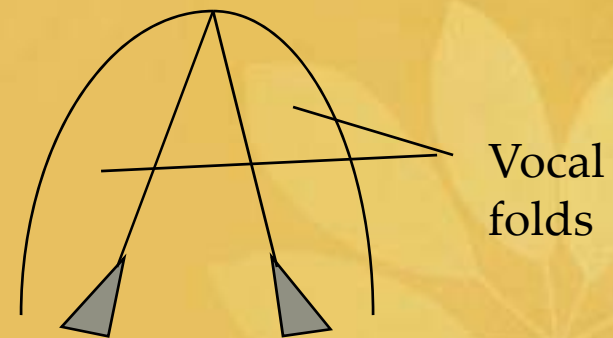






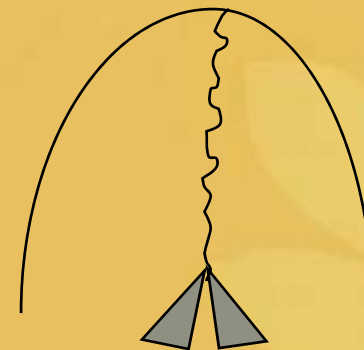
Types of Phonation

- 1. Voiceless – a sound is voiceless when the air passing through glottis does not face any obstruction. The vocal folds are open. E.g - [f], [t], [ʃ]
 - It is possible to make a voiced sound devoiced.
 - [m̥] - /m̥ m̥ m̥/
 - [p̥] - /p̥ eɪ/ 'play'



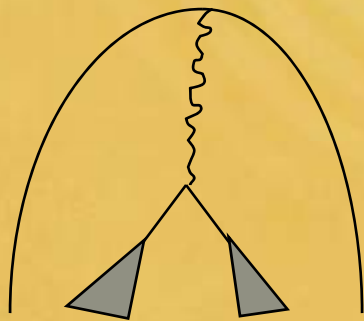
Types of Phonation

- 2. Voiced / modal – a sound is voiced when the vocal folds are close together (joined loosely) and the air passing through makes them vibrate periodically.
- E.g [m], [j], [v]
- Periodic vibration is based on Bernoulli's Principle.

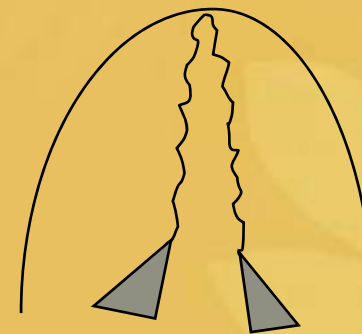


Types of Phonation

- 3. Breathy / murmur – a sound is breathy when vocal folds are vibrating as in voiced sound but stronger air airflow is required. Therefore, the glottis is more open in breathy than in voiced phonation.
 - Diacritics: [̤]
 - [̤] = [b^h]



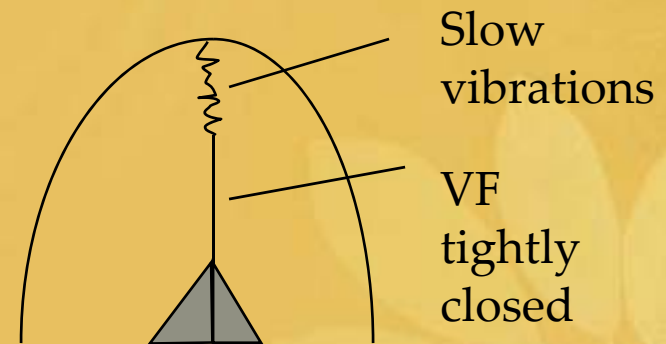
Partial air for extra air through glottis

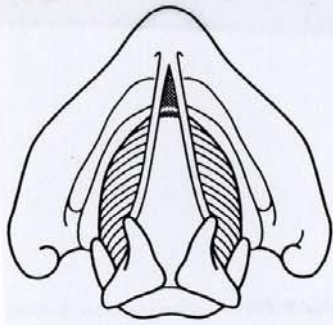


Relaxed, flapping vocal folds

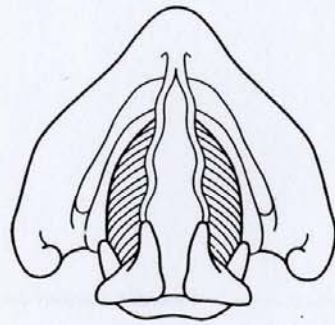
Types of Phonation

- 4. Creaky – a sound is said to be creaky when the rate of vibration of vocal cords is very slow and only part of the vocal folds are vibrating.
 - Diacritics: [ᵐ], [ᵑ]

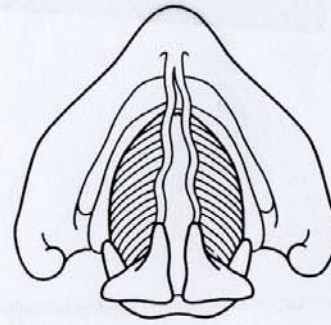




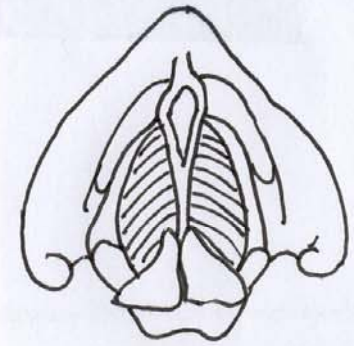
Voiceless



Breathy/
Murmur



Voiced



Creaky

Don't get confused



Breathy or murmur



Whisper

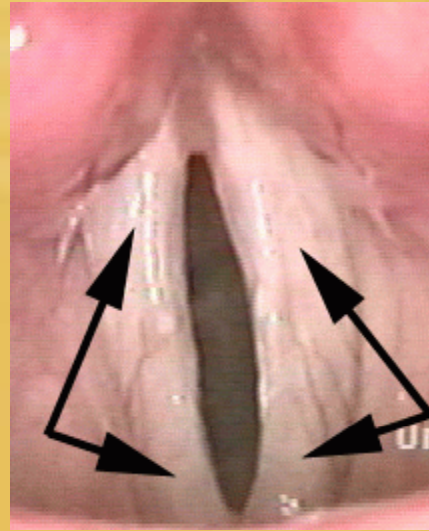
- RAT has this right: breathy and murmur are two words for the same thing; whisper is different
- For some reason, Cat says that breathy is breathy, but that whisper is also called murmur



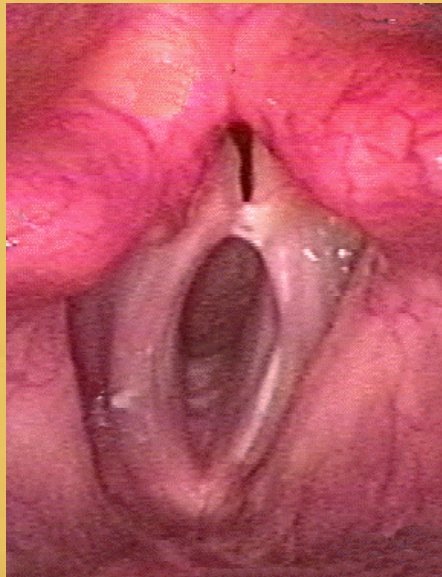
voiced



voiceless



breathy



creaky

