Vibrato - a tool of expression

Diaphragmatic - pulses of air that travel through the vocal cords (pulses come from solar plexes)

- Fluctuation of pitch and volume that's why it's a bit deeper/fuller quality
 - On the pulse it's louder and on the pitch; in between the pulses it's softer and slightly under the pitch (like a quarter tone)
- It's the smoothest form, as it's like a wave of air pressure; it floats on the breath b/c you're getting the stream of air under the lungs creating a wave through the vocal cords
- Pulses are always out (not in and out); equal pressure/pulses
- It's the slowest it uses the largest muscle

Used in all musical genres

Throat - pulsating movement of the larynx

- Air waves not pressure this type manipulates the air wave (not pulsing it)
- Fluctuation of pitch *not* volume
- Usually this type of vibrato is delayed

Not used in classical; used a lot by "crooners" - especially prevalent in Jazz and Blues and goes with the words

Shimmer - the base of the tongue moving, causing the whole laryngeal apparatus to sympathetically vibrate

- Fluctuation of pitch *not* volume
- Machine gun style like you're laughing; more intense than diaphragmatic
- Tied for first for the fastest form of vibrato because it uses the smallest muscles
- Imitates instruments (trumpets usually)

Used in all musical genres

Vocal Fold Flutter - the French cabaret style (like Edith Piaff)

- Caprino "little goat"
- No fluctuation in pitch *nor* volume
- Tied for first for the fastest form of vibrato

Not used in many Western genres - exception is some folk singers from 1960's/70's - Joan Biaz, Judy Collins; Modern example - Celine Dion

Mediterranean/Trill - embellishment style vibrato

- Alteration of 2 different pitches ½ step interval, like a trill
- Short notes (nothing sustained longer than a quarter note usually)
- No fluctuation in volume

Used only in modern Hip Hop