GOOD SINGING! And How to get them there….

Technical Vocal tips for a healthy-fuller sound and methods to improve any size group quickly and safely!

KNOW THE 'SINGING PARTS' AND HOW THEY FUNCTION!

BREATHING

…something we've learned to do incorrectly since early childhood, thanks to fear.

We breathe to Live! "The last function of breathing is phonation."[1] The first function of the larynx (voice box) was as a shut-off valve for the lungs and to create a fulcrum for the body (utilized during such activities as heavy lifting, giving birth, and other bodily functions).

Breathing consciously? Everyone breathes but few do it consciously or for optimal singing. I strive for my voice students to become "Conservators of Air" by becoming 'conscious' of their breathing while singing.

INSPIRATORY MUSCLES:

"When you inhale, air enters through your mouth and nose, travels through the back of your throat (pharynx), through your voice box (larynx), and down your windpipe (trachea)"[2] and so on…

The Diaphragm*:* This large muscle divides the thorax (chest cavity) from the abdomen (stomach) and is the second largest muscle in the body. It actually creates a division of the trunk by its attachments to the ribs, spine, and sternum. In its relaxed position, it resembles a double-dome upon which the lungs set. As the diaphragm is pulled downward, it presses the viscera (organ sack) down and out of its way and creates a vacuum within the lungs.

The External Intercostals: A layer of muscles between the ribs allowing the ribs to be expanded. The external intercostals *lift the ribs upward and outward,* working in tandem with the diaphragm for optimal air intake. These actions assist the diaphragm in creating a vacuum within the lungs.

EXPIRATORY MUSCLES:

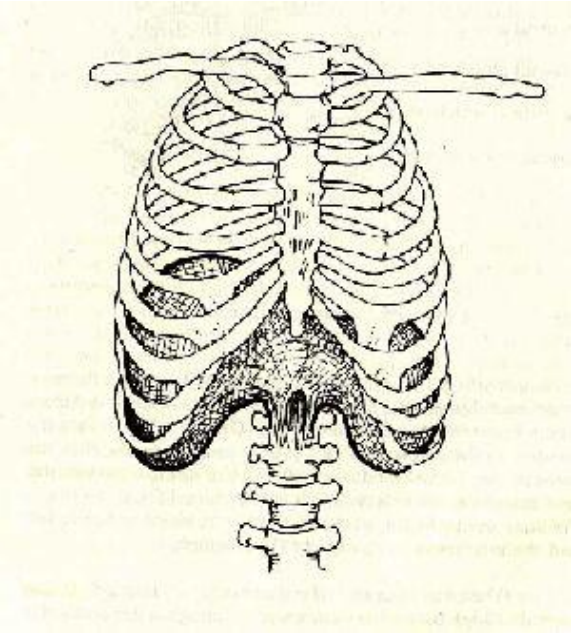
Internal Intercostals: Similar to the external intercostals, this set of muscles *assist in pulling the ribs inward and down* to expel the air. (Optimal singing breath is expelled buy controlled release of the diaphragm.)

Abdominals: There are four sets in this category: rectus, external obliques, internal obliques, and the transverse (Four sets, yet referred to as a "six pack"?) *Flexibility is key to this set of muscles* when talking about breathing especially in conjunction with singing and speaking. Don't misinterpret, strong abdominal muscles are necessary to support the breath and the voice. *Their purpose here is contraction towards center to aid the diaphragm in forcing the air from the lungs.* This is accomplished when the diaphragm returns to its 'relaxed' position, allowing the viscera back up into the base of the rib cage.

Diaphragm*:* As the diaphragm pulls back to its starting point, it returns to its domed shape squeezing the air from the lungs assisted by the ribs and abdominals.

As singers – we work to SLOW the diaphragm in its upward ascent for steadier air-flow, control, and efficiency. ***It takes less air than you think to sing!*** *(squeek a balloon)*

[1] Doscher, Barbara The Functional Unity of the Singing Voice, 2nd ed., Scarecrow Press, Lanham, MD, 1994, p. 1.
[2] http://www.medgraph.com/breathbybreath.html#lungswork



Drawing of the ribcage and diaphragm at rest.[3]

Notes on breathing:

- The breath should never be heard and barely seen. If the shoulders are going up with the breath, start over! Relax the stomach, let it expand, and breathe into your lower back/pelvis.

> "Why is a low breath so important? The importance of the low breath and the low expansion of the body are to allowing for a "rounder" quality of tone and a more open throat through a lower larynx position. If the breath travels to a low point in the body, the singer feels more "grounded" and less likely to "push too much breath through the cords". The feeling is one of approaching a high note with a sense of "sinking into the floor with knees bent". In making this statement the law of opposition working comes into action."[4]

- Breathe in gently through your nose, into the space of a yawn. (Yawn and feel the soft-palate raise – better yet go watch it in a mirror so you know what it looks like as well as how it feels!) As the breathing process becomes more second nature, one can take the breath through the mouth into the same "space of the yawn." (Mouth breathing may dehydrate {dry-out} the oral pharynx quicker. Main reason for good hydration!) ***Note:*** Another analogy to consider is the ***"surprise Ah!"*** response (a visualization of being surprised at something causing the high palate reflex while breathing through both the nose and mouth) instead. This kind of physical analogy lifts the palate without the over-stretch of the yawn.

- It is imperative that the breath be taken <u>early</u> enough for it to feel relaxed and low. Air should remain in constant motion and never 'held.' This is accomplished by planning the breath so that the lungs are full and the air begins exhalation just prior to singing. (Directors – it is our job to guide the choirs breath when possible. Conduct it and breathe with your group!) Not only will this method aid in a silent breath, but is also allows the cords time to adduct (come together) in a gentle manner conducive for a beautiful tone. Choral singers get into a bad habit of "gasping" for their breath usually due to lack of planning. As a choral conductor, I make a point of having all choristers mark their music with a big "B" 2-3 beats before their entrance and I will gesture and breathe with them. It is amazing the improvement that takes place not only in their tone, but also in their pitch accuracy. *(a cappella pieces need to have at least a full measure or more conducted to get ALL breathing together – then the starting pitch will be together and better in tune!)*

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[3] Doscher, <u>op. cit.</u>, 10.

[4] http://www.voiceteacher.com/support.html

- ***Some visualizations for breathing with exercises:***
  THREE words best describe the singing breath: ***LOW – SILENT – CALMING…***

  8-8-12 Have choir, with hands on tummies, Exhale and then Inhale on an 8 count – expanding tummies. Now "SUSPEND" the air (not out or in without HOLDING the breath) for another 8 count. Then exhale bottom-up keeping chest tall/open on a 12 count. REPEAT! Then breath normal…

  Strive to feel as if you are inhaling **as** your sing! Although physically impossible, use your imagination and try! This is one way to slow the escape of air and focus it for more efficient use.
  Take a half-breath and sing as you expand/grow through the phrase! Resist collapsing… Did you have more air than you anticipated?

  A good visual, although I do not like the way the ribs are in constant motion… In normal breathing yes, for singing we prefer less motion and a more open posture.
  http://www.youtube.com/watch?v=hp-gCvW8PRY

  FYI: Singing requires less air than you might think! Singers should be able to "*hold a lit candle a few inches in front of their mouth without making the flame flicker as they sing.*" …Andreas Poulimenos

POSTURE

STAND UP! And remember the head always leads.

Like athletes poising themselves for the start of a race, singers must also consider a preparatory stance. Although, slight adjustments may be necessary by individuals, let's start with the basics from the bottom up:

1. Feet, slightly less than shoulder width apart, one slightly ahead of the other so that the weight of your body rests on the "balls" of your feet (NOT your heels).
2. Knees should be relaxed and slightly bent – never locked!
3. The pelvis should feel slightly "tucked" as if suspended from the spine (tuck your tush).
4. The rib cage should feel full and buoyant! Arms dangling freely at the sides.
5. The head should feel suspended as by a balloon – large enough to hold it upright, but not so large as to stretch the neck.
6. Once there, note how your ears are over your shoulders – which are over your hips- which are over your ankles… Nice tall and straight spine – top to bottom!

Take a few moments to experiment with increasing the size of the suspending balloon... Then add a weight hanging from the tailbone... Allow your body to literally "feel" suspended in air. Your spine should be in good alignment if you are feeling the suspension. It doesn't end there. Now, try standing upright and sense your alignment. Is it the same, or at least similar?

Steps 1-5 above are good postural starting positions for all singers, speakers, and actors. From this position (on the balls of your feet – not back on your heels) one can easily move in any direction. By placing your weight onto the balls of your feet, you shift torso support into the front of your thighs. Back on your heels the abdominals hold you upright and inhibit deep breathing.

Singers and actors must perform in all sorts of positions. Whether standing, seated, or reclining the principles are the same. Do your best to maintain a straight spine and avoid slouching or slumping in any manner that will decrease your chest cavity and lung capacity. Sometimes easier said than done.

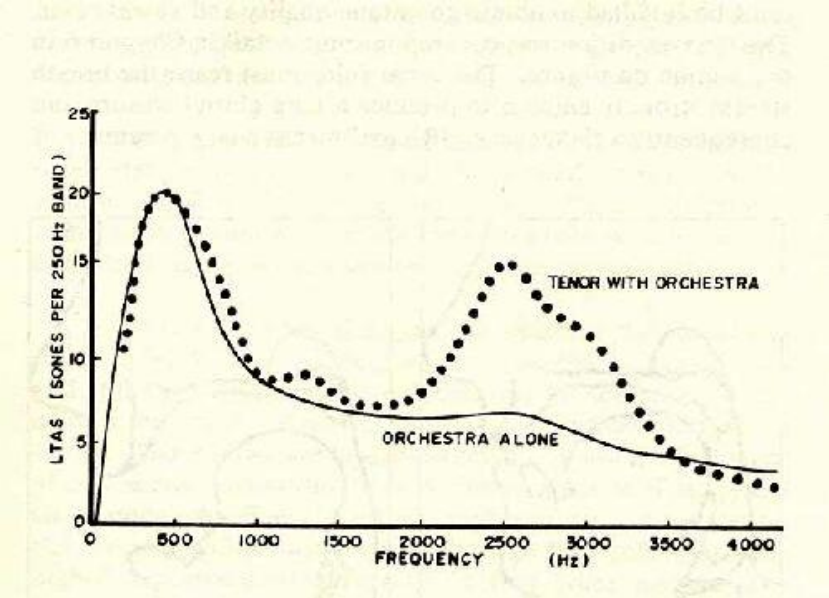
EXTRA CREDIT!……

BREATH & SUPPORT *(from a Classical Singers point of view)*

Pertaining to singing...

Vocal maturity happens later than you think! Female voices typically mature in their early to mid 20s. While male voices typically wait until mid 30s! And the larger the voice, the later it '*blooms*'…

There is an acoustic phenomenon in the human voice called the *singer's formant*. The singer's formant, in brief, is produced when the resonance contributors (i.e. lowered larynx, support, oral and laryngeal pharynx, vowel formations, etc.) are in sync and therefore produce sound waves in the range of 2500-3000 cps (cycles per second or hertz). The Italianate School of Singing comes closest to perfection in the *Bel Canto* style of singing…



Average spectra of the sound of a symphony orchestra
without a singer (solid line) and with a singer (dotted line).
From *Fundamentals of Musical Acoustics* by A. H. Benade, 1990, p. 379.

There are three primary methods for increasing vocal intensity (volume), and all relate to "support":

1) Increase the subglottal pressure. (Air-flow control from the lower tummy via diaphragm)
2) Changes in pitch (higher) can also aid in increasing intensity through glottal closure, air speed, and acoustical variances.
3) Adjusting the vocal tract, singer's formant… In my words – by vowel modification. [See chapter 7, pp.140-143 in The Functional Unity of Singing Voice by Barbara Doscher]

WATCH THESE TWO SINGERS ON THE INTERNET, NOTE THEIR BREATHING AND LACK OF FACIAL/MOUTH TENTION AND HOW LITTLE THEIR MOUTHS MOVE TO FORM THE WORDS! So relaxed! So beautiful!

Luciano Pavarotti http://www.youtube.com/watch?v=TOfC9LfR3PI and
Leontyne Price http://www.youtube.com/watch?v=OK3OjbwBBwg&feature=related
(there was a better video but still AMAZING!)

"Singers" Terminology for Support… *(w/exercises)*

The Singers World is one unto its self. The exercises and terminology would spin the average non-musicians head or give reason for considering institutionalizing the singer and teacher. Many times the singer has to literally juggle several technical ideas simultaneously while singing numerous notes with text and meaning. The following are examples of warm-ups that re-enforce various aspects of singing. Throughout, good posture and breathing should be maintained.

Lip Trills (Raspberries)

Beginners – on a single pitch, teeth slightly parted, let the lips vibrate/flutter. Keep the flutter and pitch on an even keel. A constant steady vibration tells us the airflow is steady and even.

The Next level – All of the above apply, except now we move down a five tone scale. As the student progresses, he/she will learn how to adjust the airflow to maintain a steady fluttering of the lips. (Think back to your childhood days and the "motor-boat" sounds you used at play.) Additional exercises include Lip-trills encompassing 1-3-5-3-1, 1-3-5-8-5-3-1, and 1-3-5-8-5-8-5-8-5-3-1 (also maintaining the beach-ball and bucket of weights below).

Purpose: The idea here is to warm the chords and get the air moving in a constant steady flow. This exercise can also incorporate various vowel formations to get the entire vocal tract moving and stretching. Use the following vowel sounds behind the fluttering lips: –oo, -oh, -ih, and –ah. Sometimes –ee works well with some female voices in their higher range. Move through the mid-range first, and then expand to the outer limits of the voice. Keep the air moving!

Owl Sighs…

Using "Whooo!" and lots of air, make a 'heady' sound starting as high as comfortable – sighing over the top and resonating to the bottom of your range. This should be done quickly so as not to tighten any muscle. Think of keeping the throat open and relaxed. Note that there should be a sense of 'nothing happening' from the base of the sternum to just above the tongue… (*4-6 of these will usually suffice…*)

SOME THOUGHTS ON "*SUPPORT*" *(w/exercises)*

Here is where things go into "*La la Land*." Check your logic at the door and turn on your imagination. One important thought throughout: ***"Up is down, and Down is up."*** - As the pitch goes up, the support pulls down. And likewise in reverse, when the pitch goes down, the support lifts upward. (getting lighter)

"The Beach Ball"

- You are standing in waist-high water at a beach.
- You have a mid-size beach ball in your hands resting on top of the water (this is your starting position).
- As the notes ascend, you gentle press the ball into the water (the higher the pitch travels – the lower the ball goes). Use your abdominal and lower torso muscles to lower the ball into the water, not your arms.
- As the pitch falls you gentle allow the ball to come back towards the surface

Exercise 1: On a five-tone scale (later expanding to a full octave – 8 tone), start on a neutral sound, let's say 'Mah.' Slowly at first, sing Up the scale in a Downward motion. Yes… Up the scale (pitch) with a Downward motion (ball). [NOTE: The ball needs to be down before the desired pitch is actually reached!] Once at the top pitch/bottom ball position, reverse the actions. Sing Down the scale in an Upward motion. Be AWARE of your abdominal muscles and their contrary motion. There! You've started supporting your tone! *(Shower Towel?)*

As you move your five-tone scale up and down your range, the size of the beach ball must change. The higher the pitch level = the larger the ball and therefore the more resistance. The opposite is true for the lower end of your range. Be careful not to allow the ball to slip from your (abdominal) grasp while under the water… It will splash you in the face and your sound will reflect it.

Exercise 2: Check posture, breath, then with beach ball ready sing 1-3, 2-4, 3-5-4-2-1… (Mee 1-3, May 2-4, Mah 3-5-4-2-1 also works well). In this exercise the motion of the ball goes down & up in increments opposite of pitch direction. [pitch up = ball down, pitch down = ball up]

Bucket full of bricks over a cliff… ***(with regard to descending pitch lines)***

- You're standing at the edge of a cliff (or over an open 'man-hole') with a rope in your hands… The end of the rope is a bucket full of bricks (weight varies) resting on the ground below…
- As pitch interval descend, hand over hand pull the bucket up towards you. The larger the interval, the further down the rope you will need to reach for that upward lift. The idea of lifting low notes can help any singer remain in tune, whether as a soloist or in a choir.
- The opposite would be for a singer to 'go down' or 'press down' on a low note. Results: flat pitch, flat tone, less resonance/volume.

Exercise #1: Let's begin with a simple descending minor third, mid to low range. Start on Mee and move to Ah (3--1___). Now, grasp the imaginary rope and take-up the slack. On Mee – start lifting the bucket (pull) with one hand, reaching with the other hand for another pull as you slide "Up-wards" for the lower pitch. Contrary motion - "Up is down, and Down is up!"

Exercise #2: Utilizing the full octave range, start at the top and move 8—5 5—3 3—1___… Some ideas for vowels would be: May 8—5, Maw 5—3, Mah 3—1___. Allow the voice to slide between pitches at first and feel the up-ward lift as each pull coincides with each change of interval.