Techniques for Maintaining a Low Larynx and Open Throat in Classical Singing

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Here is substantial objective evidence to support the time honored, widespread acceptance of the open throat as an essential component of classical singing technique. 

When the larynx is relaxed and low and the base of the tongue released, the pharyngeal wall relaxes and widens. The acoustic result of the throat shape created by this combination of actions is a balanced timbre (bright/dark), smooth negotiation of register transitions, and the presence of the singer’s formant—acoustic phenomena that allow for optimal projection with the least amount of effort. These circumstances aid not only in marketability of the voice, but also contribute to its overall health, as minimal vocal effort improves endurance and decreases the likelihood of injury.

This aspect of technique is challenging for most singers. Because a sustained low larynx and wide pharynx are not the norm for speech in the majority of individuals, voice students seldom have pre-established muscle memory for this action. Extensive resources for finding and reinforcing this element of classical singing technique are essential. A high larynx often accompanies unwanted tension in the tongue and pharynx, which can negatively affect the position of the soft palate. Pedagogic strategies presented here not only facilitate a low laryngeal position, but also encourage relaxation and widening of the pharynx, while allowing the soft palate to assume a desirable, widely arched position.

The singing teacher must be aware of the many factors that, individually or collectively, are likely to inhibit this throat position. Typically, extraneous tensions engage the laryngeal elevators and disturb the delicate balance between the elevators and depressors. The same tensions that affect laryngeal position also can limit expansion of the pharynx. One must keenly observe the singer, both visually and aurally, to identify the scope of these tensions. The following questions are among those one can consider:

• Are tensions in the jaw or tongue causing a problem? (The answer is always yes.)
• Are these tensions present during the inhalation or do they begin at onset?
• Is body alignment a factor?
• Is breath coordination such that the folds adduct efficiently?
• Do initial consonants cause a problem?
Does the singer have the typical problem with singing front vowels without appreciably raising the larynx?

Is the upper register the primary challenge?

Of paramount importance is the coupling of any method designed to lower the larynx with the intentional release of the tongue. A simple way to detect the presence of tension in the tongue is to be sure it is readily visible in the mouth, even when looking up at the student from a seated position. The tongue should be full, wide, and slightly arched in its neutral position. Occasionally, the root of the tongue tenses without visibly affecting its body (the part we can see in the mouth). For this reason, one should listen for absolute clarity of sound and quality of vibrato, as tongue tension manifests in extraneous noise in the voice and/or a vibrato that is too prominent, uneven, wide, or too narrow. One must proactively address the issue of tongue tension before and during the implementation of techniques for achieving a low larynx. (A previously published article devoted to the subject offers specific suggestions regarding this complicated task.)

The position of the jaw affects the musculature of the larynx, tongue, and pharynx. When the jaw protrudes or its muscles tense, the throat cannot release to the optimal position. The jaw should swing slightly back and down during inhalation while the tongue relaxes laterally toward the molars and the soft palate stretches to a wide position. One can easily feel the impact of jaw position by inhaling to an open throat position, then jutting the jaw forward and back. (Similarly, the result of poor head/neck alignment is noticeable, both aurally and physically, when one sustains a pitch while alternating between a forward-reaching head position, and that in which the spine is properly aligned.) The transfer of jaw tension to the throat is noticeable by hanging the mouth open and engaging the masseters (one of the primary muscle pairs that elevate the jaw to close the mouth) without allowing the mouth aperture to change.

Singers often allow movement of the articulators to alter the throat position. One must be attentive to this possibility and develop strategies for achieving independence between the muscles of articulation and those that affect throat shape. Front vowels are especially problematic because the larynx naturally rises for those vowels in speech. Consonants usually continue to interfere with the open throat position even after the singer has a solid, physical understanding of the open throat. Many of the exercises described below can be adapted to focus on these issues.

**STRATEGIES AND TECHNIQUES**

Methods that include imagery and indirect physical manipulation are included below (Indirect Strategies), in addition to noninvasive techniques that involve gentle manual manipulation (Tactile Strategies). These more subtle tactics are unlikely to result in inappropriate muscular action that requires correction; however, methods that may seem exaggerated or unnatural are more likely to be immediately effective for those singers in whom laryngeal tension/elevation is solidly ingrained (Assertive Strategies). As with any aspect of technique in which undesirable muscle memory is firmly established, an attempt to execute a new coordination has a strong tendency to revert to the habitual one. For this reason, the most frequent result of exaggeration is that the singer lands in the middle between the two, thus achieving the desired result. Although a more aggressive approach may necessitate careful monitoring, it can be highly advantageous.

Effective instruction begins by familiarizing the student with the location and movement of the larynx. Allow the student to palpate your own larynx, guiding her/him to the location of the thyroid cartilage and hyoid bone. While the student is holding your larynx with the thumb and forefinger, demonstrate the descent of the larynx that occurs upon inhalation, and explain that this is the optimal position for classical singing. Then, while the student is still holding your thyroid cartilage, swallow to demonstrate the laryngeal elevation that occurs when one swallows, and inform the student to avoid this position while singing. Instruct the student to find his/her own larynx in the same way and to experiment with both downward release and elevation. To demonstrate the unnatural depression of the larynx, have the singer press the tongue down into the floor of the mouth so there will be a clear understanding of the difference between this position and the more relaxed position that occurs with inhalation without tongue depression.

The challenge of singing with an open throat (low larynx, wide pharynx) usually begins with the onset. Most singers can learn to release the larynx during inhalation;
the difficulty of changing the habitual throat position tends to occur at the mere thought of phonation. The following techniques provide tangible sensations to help position the throat properly for the onset; when the singer sustains the thought process and physical action of the directives throughout phonation, the laryngeal position remains stable for the duration of the phrase.

**Indirect Strategies**

1. Gently place a finger on the larynx to track its position during inhalation, then exhale and inhale several times without allowing the larynx to rise.
2. Inhale with a relaxed throat and tongue, and then position the folds as though someone suddenly has interrupted you just after you have taken a breath to speak. While suspending this position, begin the sung tone.
3. Imagine widening the neck around the collar, or think “fat neck.”
4. Yawn while inhaling, keeping the tongue in the [n] or American [l] position, or inhale while producing a snoring sound (keep the tongue wide, not bunched).
5. Inhale through a yawn and while holding this position, phonate through a uvular R. Suggestions 3 and 4 allow the larynx to descend without depression of the tongue.
6. Visualize the sound emanating from the suprasternal notch—the indentation in the middle of the throat just below the larynx and above the clavicle bones—as though it is a little mouth. Placing a finger in this notch may improve the outcome.
7. Visualize the knobby points of the clavicle bones (on either side of the notch) separating laterally during inhalation.
8. During inhalation and throughout the subsequent onset and phonation, picture an inverted Y along the length of the front of the neck, with the stem signifying the downward direction of the larynx, and the inverted V representing the widening of the pharynx. One can enhance this visualization by tracing the Y along the throat with both index fingers. If the timbre lacks resonance, picture an upright Y that arises from the lower Y, and divides just below the nose in the direction of each cheekbone. This image corresponds with the physical action of #2 under Tactile Strategies.
9. Place a finger below the base of the skull, just above the large bump in the spine. Think of the jaw melting into the neck and inhale into the fingertip.
10. Hold the breath with puffy cheeks; and then, allowing only a tiny air stream to escape the lips, phonate loudly on a low pitch. The sound should resemble a foghorn, and there should be a sensation of widening in the lower throat. Release the cheeks and lips, allowing the air to escape suddenly, and burst into a neutral vowel sung in the middle register. (If you are not sure of the sound of a foghorn, a YouTube search reveals plenty of examples.)
11. Inhale, and just prior to phonation position the throat as though you are about to burp. Suppress the “burp” and sing with the larynx in this anchored position. Another option is to speak through a burp (“excuse me” is an appropriate phrase for this), then apply that sensation to singing.

**Tactile Strategies**

1. Hold the larynx down while singing by placing thumb and forefinger around the top of the larynx between the hyoid bone and the thyroid cartilage, and gently pull down. If the sound seems too dark, place the tip of a finger on the end of the nose and push up (like a pig nose).
2. During phonation, with the forefinger and thumb forming a C, situate the tips of these fingers on either side of the throat just beneath the mandible, directly above the ends of the hyoid bone. Pull downward while slightly pinching the fingers together to create resistance against the skin. As the fingers reach the bottom of the thyroid cartilage, move the thumb and forefinger outward around the neck while continuing to apply pressure on the skin. Note: students will tend to gently stroke instead of applying enough pressure for the gesture to be effective. The teacher can use his/her thumbs to produce the desired effect on the student’s throat.
3. Place the hands on the sternum, one on top of the other, and press down. This action assists the laryngeal depressors.
4. While singing, place the hands on the chest, with fingers parted and fingertips pointed toward the sternum. While placing pressure against the skin, pull the hands laterally away from the sternum. This
action inhibits tension in the chest muscles, which directly transfers to the various muscles of the throat. It is especially common for men to tense the chest in an unconscious attempt to “assist” in the support of the sound.

5. This exercise is a possible remedy for cases where there is so much tension present that the larynx is quite held. A depressed tongue may be locking it in a low but inflexible position, or a bunched up tongue and tight, narrow soft palate may be confining it to a high position. It could be neither low nor high, but have incredible tension within and surrounding it. To release the larynx, lay the back of the fingers of one or both hands along the side(s) of the throat just under the jawline, pointing the fingers upward at a 45-degree angle. Move the hand up and down quickly. Try this first without phonating, then with a sung pitch. Phonation while doing this will resemble a turkey gobble.

**Assertive Strategies**

1. Inhale and press the lips together for a [b] sound. Make a grunting noise by phonating without releasing air through the mouth or nose. After a second or so, the air pressure inside the throat and mouth will increase to the point where phonation is no longer possible. At that point, allow the sound to “explode” into a short, spoken “buh.” Try this a few times, and then progress to bursting into a sustained, sung pitch.

2. With hands resting on the chest (index fingers on clavicle), inhale while mentally guiding the larynx toward the hands, then produce forceful, low pitched, breathy, grunting gorilla-like sounds, and imagine these noises emanating from the chest. It may take a few attempts, especially for female singers, to find the coordination to do this with the depth required for the technique to be successful. After this is accomplished, immediately follow the deep sounds with a sung pitch. Do not reset for phonation, and the sound emitted will be surprisingly free and full. This strategy is particularly helpful for singing higher pitches because of the natural tendency for the larynx to rise in the upper register. Practice producing two of the grunting noises immediately followed by the desired starting pitch—“huh, huh, huh” (low, low, high). Pressing down on the chest assists the outcome of this strategy.

3. For female singers, singing with a deliberate register break in the sound (yodeling) from heavy chest to head voice is also an effective aid for production of a low-larynx sound in the upper range. Chest voice, when correctly produced in classical singing, is a deep sound. When the singer yodels from this deep sound to a higher pitch (at least an octave interval) while retaining this image of vocal color and avoiding throat adjustments, the outcome is a stable yet spinning production.

4. Allow the head to drop forward as far as it can do so comfortably. The lips should slightly part, and the singer should be conscious of draining all tension from the jaw and tongue. Inhale through the slurp position, and laterally stretch the back of the pharyngeal wall. Phonate on the nondescript, neutral vowel that occurs naturally with the specified tongue position for inhalation. Be sure to allow ample airflow and to maintain high tongue position; otherwise, the throat will feel compressed. If properly executed, the perception of sound placement likely will be “in the mask.” If this is not the case, and throat tension is present, review the steps above and be sure to implement each prescribed action. After successfully accomplishing these steps, complete the exercise by slowing raising the head while continuing to phonate *without consciously changing the position of the larynx, pharynx, or tongue*. Continue to monitor support/airflow. As the head rises, the sound will remain free of tension, with the pharynx widened and the larynx in a comfortable low position, allowing for full resonance.

5. Between inhalation and phonation, simulate the initial stage of vomiting. The action causes the pharynx to widen, the larynx to drop, and the back of the tongue to release upward toward the soft palate. Continue this sensation through the onset, and if necessary, through the duration of the phonation. This is extremely counterintuitive for most singers, and several attempts may be required before the individual fully commits to actuating the instruction. The presupposition is that this position will close the throat; however, quite the opposite is true. If the singer can trust the sensation long enough to achieve phonation with this muscular coordination, assuming there is adequate airflow, he or she will immediately...
realize the vocal freedom that comes with this seemingly invasive process.

6. Inhalation phonation is a technique used in voice therapy. It is also useful for various pedagogic issues, including achieving an open throat during phonation. Muscles that cause laryngeal tension release during this type of phonation, which allows the pharynx to open and the larynx to descend to a comfortably low position. Inhalation phonation is exactly as the term describes. Phonation occurs inversely, with the folds set into vibration as the air moves down through the vocal folds. Steps for utilizing this strategy successfully are as follows:

- Prior to inhalation, the tongue must feel relaxed and thick to the point of almost gagging. This sensation is alleviated at the onset of the phonated inhalation. Relax shoulders, neck, and jaw.

- Exhale, and then interrupt the exhalation with inhalation phonation on a nonspecified pitch.

- Execute the exhaled phonation on the desired pitch immediately after the inhaled phonation; even a miniscule allowance of time will result in a readjustment of the throat position, which negatively affects the outcome. It is helpful to think “in-out” and to correspondingly point backward then forward during the inhalation-exhalation.

- To facilitate this coordination, reverse the process and sing a pitch, then interrupt the sound with an inhaled pitch. Again, there should be absolutely no time between the two modes of phonation. Although the concept and coordination of inhalation phonation are quite difficult for some singers to grasp, this particular technique, unlike some, is worth pursuing in spite of numerous failed attempts. Once performed properly, the results are immediate, accurate, and gratifying.

**SUMMARY**

Although all of the strategies listed above will not benefit every singer, each method was included based on its effectiveness for a majority of students. It cannot be emphasized strongly enough that success of each approach is dependent upon addressing issues that may interfere with the desired action. The internal dialogue may sound something like this:

- Alignment? Check.
- Breath management? Check.
- Tongue and jaw tension? Check.
- Articulators? Check.
- And then . . . success? Check.

**NOTES**


**Carla LeFevre** holds graduate degrees in voice performance and pedagogy from the University of Iowa, and undergraduate degrees in horn and voice from the University of Central Missouri. She has served for twenty-six years as a member of the voice faculty at the University of North Carolina-Greensboro, and was the primary voice teacher for the National Opera Company in its two final seasons. Dr. LeFevre has extensive performing experience in the area of oratorio and art song, and her operatic repertoire includes numerous leading roles. A versatile soprano, she has over fifty oratorio performance credits, ranging from the Bach passions to the Verdi Requiem. She has been a prolific performer of contemporary music and also frequently adapts her vocal style to the Broadway genre.

Students of Dr. LeFevre have participated in twenty-seven different young artist programs throughout the country, including Santa Fe, San Francisco, Glimmerglass, Wolf Trap, Pittsburgh, Virginia, Central City, Sarasota, Chautauqua, and Des Moines. They have been winners in district and regional Metropolitan Opera auditions, as well as various other national voice competitions, and many hold university faculty positions.

Throughout her career, Dr. LeFevre’s area of research has been centered on voice injuries/disorders and the methodology associated with appropriate therapeutic rehabilitation. As a result, Dr. LeFevre has worked with numerous injured singers throughout the therapeutic process.