Vocal Pedagogy for the Choral Conductor and Amateur Singer

Kevin D. Skelton
Oxford University
Oxfordshire, United Kingdom

Though professional singers work their entire careers to perfect their vocal techniques, the fundamentals of efficient and healthy vocalism are the same as they are for the amateur singer participating in a community, church, youth, or children's choir. The present paper is intended solely as an introduction to the basics of vocal pedagogy. The supplementary bibliography lists more comprehensive and detailed works on the subject, and works which I would encourage any serious choral conductor or vocal teacher to consult (the present paper only serving as an introduction). My main aim is to demonstrate that vocal technique can and should be based in concrete principles felt physically by the singer. Though I do not reject the value of imagery or metaphor in certain contexts, it is also clear that focussing solely on such methods is often confusing for a singer, and can unnecessarily complicate vocal instruction. Furthermore, I should like to dissuade conductors and teachers from using “prescriptive clichés” in the choir rehearsal or vocal class. These phrases (scattered throughout this paper in quotation marks), though frequent in their use and intention, do not directly address specific technical faults, especially in a group dynamic in which each individual associates certain phrases with different technical adjustments.

My discourse will be divided into four sections, each beginning with a brief discussion of the issue and a basic description of good technique in that category. Subsequently, I should like to offer a few exercises or concepts to assist one in establishing a vocal technique, as mentioned above. It should be kept in mind that each of these four sections (posture, breathing, vowel formation, and resonance) are interdependent, and should never be addressed too long in isolation; effective vocal technique is, after all, the coordination of several functions within the body.

Posture

Posture, as I will discuss it here, relates to two specific ideas: that of the whole body, and that of the vocal tract. Beginning with the posture of the whole body, I should like to consider two types: that while standing and that while sitting.

Considering that most choir rehearsals take place seated, sitting posture ought to be a top priority. Conductors frequently ask their singers to “sit tall,” “sit at the front of your chair,” “stand while sitting,” or simply “perch!” Such phrases, are not necessarily incorrect, however they are ineffective if not associated in the singer’s mind with specific postural adjustments. Generally speaking, one’s back should be relatively flat, and one’s sternum in a comfortably high position. Efficient sitting posture can be either with one’s back against the chair (depending on the chair), or sitting at the front of one’s chair. Whilst sitting, I advocate one foot further in front of the other, the back foot even slightly under the chair. One should then lean slightly forward, placing some of the body’s weight on the front foot. Aside from maintaining or even increasing attentiveness, sitting at the front of one’s chair, as described above, can also improve breathing, as will be explained below.

Standing posture maintains the above principles; however, maintaining a flat back and high sternum can become problematic. Feet should be about shoulder width apart, and knees should not be locked. When one’s feet are parallel, often one’s lower back arches slightly. To fix this one may consciously think of placing more weight on the balls of the feet, and tilting the pelvis somewhat to flatten the back. Also, and rather more effective, is to stand with one foot in front of the other (considerably less distance, however, than while sitting). This allows a rather relaxed and dynamic posture, and the back generally flattens on its own accord.

I have mentioned the position of the sternum, which is often a source of confusion for singers, and often disputed amongst pedagogues as well. The easiest and most effective way
of finding this position is simply to put one's hands directly over the head. One can then bring the hands down slowly to the sides, consciously maintaining the position of the upper torso. Such an exercise can also effect head position that should basically rest comfortably on the spine. The head and neck are the main culprits in technical faults. There is commonly a tendency to stick the head out, often accompanied by a raised chin, especially in high ranges. While the optimal angle of the head is different for each individual, the spine should always remain in line, and the neck muscles relaxed sufficiently so one is capable of moving the head from side to side, and even slightly up and down. Also in extreme ranges, the jaw often tightens and pushes forward. Relaxation exercises of moving the jaw slightly from side to side can help to fix this, as can occasionally singing with an over-bite to exaggerate the sensation of having the top part of the head further forward than the jaw and chin. For improving one's awareness of proper posture, perhaps the best option is to take some lessons in Alexander technique. This technique is based on the construction of the skeleton, and while promoting a minimum of muscular tension to support the body, is also effective in increasing one's energy—both excellent components of good singing.

The vocal tract, when the rest of the body is well aligned, will basically be in an appropriate position to produce a healthy and efficient vocal tone. The positions of two parts of the vocal tract, however, are famous (or, better, infamous) amongst the discussions of vocal pedagogues and choral conductors. The phrases, "lower the larynx" and "raise the soft palette" are the most commonly heard, and both ask the singer to bring under direct control parts of the vocal tract that are mostly effected by surrounding muscle groups. In consideration of the amateur singer particularly, I think addressing these areas explicitly in vocal instruction is mostly counter-productive; however, I should like to address them if only to point out why choral conductors should not. The proper position for the larynx while singing ought to be close to that of the larynx while resting—neither elevated nor depressed. A depressed larynx, as happens when one yawns, is a component of certain vocal techniques, however, these techniques have been proven to limit technical facility in certain ways, and even damage the voice when practiced for extended periods of time. Professional singers occasionally do have to address the position of the soft palette when dealing with certain details of vocal tone, such as nasality or vibrato rate. Generally speaking though, correct posture does most of the work where the soft palette is concerned, and should one wish to address the issue with amateur singers, working with the outer features of the face—raising eyebrows, lifting cheekbones, or smiling—are more effective than asking one to manipulate a rather obscure and complicated area in the roof of the mouth.

Breathing

Breathing, being the motor behind the voice, can lead to numerous technical faults if not done efficiently and properly. The instruction, "Support!" is of little use unless the actual process of supporting is understood. Inhalation should generally be inaudible. The upper torso should remain still (assuming that one's sternum is already in the high position described above), and the area below the ribcage should expand, mostly at the sides and in the front, though "back breathing" is advocated frequently. The term "support" best describes the movement that ensues in the lower torso during phonation. As phonation begins, the lower torso should maintain the expanded position of inhalation. During the course of phonation as more air leaves the lungs, the lower torso must decrease in size, however a certain degree of muscle antagonism must occur so that the flow of air through the larynx remains steady, neither too slow nor too fast. While there are differences of opinion regarding this abdominal muscle work, the most effective method, in my opinion, is for one to try and maintain the lateral expansion while the frontal abdominal area slowly moves inward (this being a result of natural airflow, rather than a conscious contraction of the lower abdominal muscles). Such a method of "support" not only assists in the steady flow of air, but also results in a longer period of exhalation.

To correct and improve one's breathing technique requires some rudimentary groundwork. Firstly, one must be convinced that the air being breathed, though in reality entering the lungs, is felt in the abdomen. Lying horizontally on one's back and breathing
normally shows this to a certain extent. In choir rehearsals and private lessons an effective exercise is to have the singer sit on a chair with the feet a little more than shoulder width apart, elbows resting on the knees, and forearms resting comfortably in front. One should then relax the entire upper torso, neck and head, and then breathe normally. While breathing, if the exercise is done correctly, the singer will very quickly and rather intensely feel only movement in the lower abdominal region. This should be brought to the singer’s attention, and kept in mind constantly as a natural phenomenon (while breathing with upper chest expansion, though frequent amongst singers, is not). Then, either sitting or standing with good posture (note how the gentle lean forward while sitting is useful), one can place one’s thumbs and forefingers on the sides, just under the ribcage. While breathing there during inhalation, the singer should attempt to maintain that outward expansion during exhalation, generally on a voiceless fricative such as [s] or [t]. This gentle pinch on the sides, though useful in first understanding the concept of “support,” can cause tension in the upper body, and thus, ought to be used sparingly; thereafter, the lateral expansion should be maintained consciously. A further possibility for engaging with the lower body during respiration is to slouch back in one’s chair, the entire upper body relaxed. In this position, as with the relaxed position leaning over the knees, the lower body movement is very noticeable; also, the teacher or conductor can easily address issues of tension in the upper body in this posture that may interfere with the sought sensation.

An important aspect of breathing is what takes place between inhalation and phonation. The “onset” or “attack” of a note is often problematic, and this is generally due to a closing of the larynx immediately before phonation begins. This is often of linguistic necessity in German or English when a word begins with a vowel, or used as an expressive tool; however, it should be used sparingly. The problem arises because people habitually close their larynx as a means of holding their breath (perhaps best evidenced when lifting a heavy object). This places a great deal of pressure on the larynx, and generally results in an excess release of air at the beginning of phonation. To rectify this, one must learn the concept of “breath suspension.” Rapid panting, both audible and inaudible are useful for this, and they also help with the feeling of “breathing low.” Another excellent exercise (and one that also assists in increasing breath capacity and control in general) is a system involving equal lengths of inhalation, suspension, and exhalation. The important point during this process is to prevent the larynx from closing; air is retained in the body through engagement of the abdominal muscles, not through the closure of the vocal folds. This exaggeration of the breath cycle is essential for correctly understanding the concept of “onset,” and preventing the “glottal attack” which can severely affect the subsequent tone.

Vowel Formation

The majority of singing takes place on vowels, and while consonants are obviously necessary for textual intelligibility, correct understanding of vowel formation is essential to good singing. Most importantly, vowels are formed chiefly by the position of the tongue, not by “dropping the jaw” or “puckering the lips.” While it is true that the lips must round slightly for certain vowels ([o] and [u] and their variants), one should strive to maintain a comfortable and relaxed position for the majority of vowels (the consonants being the only reason for moving the lips and jaw). When dealing with amateur singers, there are a few basic principles that greatly influence vowel clarity and vocal tone. The first is that the tip of the tongue should be in contact with the back of the lower teeth during all vowels except [u] (and then only slightly back from the teeth). One can differentiate between two types of vowels: “definite” and “indefinite.” “Definite” or “pure” vowels are those where the height of the tongue is most comfortable for us ([a], [o]—also called “open” vowels; [æ], [ɪ]—often called “closed” vowels). These generally cause little problem if the tip of the tongue does not pull away from the back of the bottom teeth. “Indefinite” vowels are most frequent in English and German ([æ], [ɪ], etc.), and cause the most difficulty for amateur and professional singers alike. For these vowels the tongue is in a high position, arched significantly, so that, should one look in the mirror, the back of the throat would not be visible. The difference in position of the tongue is quite small in comparison to the “closed”
vowels, thus "indefinite" vowels are often sung as their "closed" counterparts ([e] for [s], [i] for [I], etc.).

Though most vowel formation does occur with the tongue, the lips are required for [o] and [u], and for some of the French and German vowels ([y], [ae], etc.). The most important point here is that the rounding of the lips should not be accompanied by tension either in the lips or in the jaw; also, the lower jaw should not protrude outwards. Again, employing a slight overbite in practice can help release tension, as can the occasional use of a lip trill, which cannot be performed when there is tension in the mouth.

One further point regarding vowels is the concept of "vowel modification." It is true that higher pitches in one's range require more space to maintain a pleasing tone; however, this modification is frequently much smaller than some believe. The basic principle behind modification is to open the mouth only a little on whichever vowel is being sung, not to actually change the vowel itself (except in very extreme circumstances where the sound would otherwise sound shrill).

Resonance

Discussion of resonance or "placement" of the voice can be a rather complicated matter, and is in some ways redundant, as the voice will inevitably resonate well should one's posture, breathing, and vowel formation be in check. However, it does give an opportunity to discuss a technical application for consonants, as well as beginning to feel the sensations of good singing. Again some misconceptions about resonance exist, the most notable being the concepts of "registers," "passaggio," "chest" and "head" voice. Phonation begins in the larynx, and thus the only resonance that can occur takes place in the vocal tract, that is, from the larynx until the sound leaves the body. Certain functions within the larynx can influence the sound to begin with, yet these are due to the amount of sub-glottal air pressure and laryngeal posture. Phonation can be discussed in terms of "heavy" or "pressed" at one extreme, and "light" or "breathy" at the other. "Flow" is the healthiest sort of phonation, allowing the greatest vocal facility with the least strain on the vocal folds. The above concepts of posture and breathing seek to produce and support this method of sound production. The vibrations one feels in the chest or head is a system of sympathetic vibrations. "Chest voice" is generally a result of "heavy" phonation, whereas "head voice" is most often associated with "flow" phonation.

When people speak of the "masque" they mean the sensations felt during singing in certain parts of the face. Generally at the sides of nose and in the forehead, these sensations and/or vibrations occur when the vocal tract is serving as a good resonator (i.e., the vocal tract, which is not felt directly, is doing the resonating, whereas the "masque" is sympathetically vibrating in response). Though the aim is for the voice to resonate well on the sustained vowels, consonants are the best tool for discovering this resonance in the first place, and then incorporating good resonance into the majority of vocal sounds. In the breathing section, voiceless fricatives were mentioned as a great aid in improving the steadiness of airflow for phonation. In regards to resonance, nasals and voiced fricatives are the most helpful.

"Nasal" resonance is best described as sensations felt in the nose and on either side of the nose, and these can be felt by singing on [m], [n], and [ŋ]. When singing on nasal consonants, one can lightly touch both the bridge of the nose and the area below the eyes to feel the vibrations. One thing to keep in mind, however, is that overuse of nasal consonants in seeking resonance may result in an overly nasal tone. An easy tool for checking that this is not the case is by simply pinching the nose closed on a vowel, and ensuring that the sensations and/or tone do not change. Also, excessive nasality could be due to faults in posture or breathing affecting the position of the soft palate.

Voiced fricatives are another excellent way to improve resonance, and generally they do not lead to nasality. All voiced fricatives are useful, and one can feel the sensations they create by placing one's fingertips lightly on the forehead. The only issue with voiced fricatives is that, when accompanied with certain tensions, they can sound almost as "mixed consonants" with their unvoiced equivalent (i.e., [z]/[s], [v]/[f]). Placing one's hand in front
of the mouth to monitor the flow of air can be useful, as can the use of both a lip or tongue trill to relax the lips and tongue.

"Stop" or "plosive" consonants, especially those involving the tip of the tongue and lips ([p], [b], [t], [d]), can assist in keeping sensations out of the throat while singing, as can the "liquid" [l] and the "glide" [j]. The other "stop" consonants ([k], [g]) can also help with the "forward" sensation of sound, while also helping to relax tension at the back of the tongue. These plosives do not create the same continual sensations as the nasals and voiced fricatives discussed above, however they are useful in maintaining sensations in the "masque," even if only briefly.

Conclusions

As mentioned at the beginning of this paper, the ideas expressed here should only serve as an introduction to the fundamentals of vocal pedagogy. Greater understanding of vocal mechanics is certainly valuable; however, the main point I would like to make is that vocal technique is most effective and consistent when rooted in ideas and experiences that can be felt in certain terms by the singer.

Annotated Bibliography


Similiar in organization and approach to Miller's The Structure of Singing (see below), Doscher's The Functional Unity of the Singing Voice approaches the issue of vocal pedagogy more light-heartedly and with a slightly less complicated vocabulary. Though not as comprehensive as Miller's book, Doscher does discuss all of the important issues, and is in some ways a better introductory textbook for the amateur singer or choral conductor.


As the title implies, McKinney's book is a useful manual for seeking resolutions to specific vocal-technical problems. McKinney's discourse is very clearly organized and concise, each aspect of vocal technique being treated separately, and with the similar "diagnosis-prescription" approach. Though useful in many contexts, this book should be used as a supplementary text to the books by Doscher (1994) and/or Miller (1996). One of the biggest faults in vocal pedagogy is to find "quick-fixes" which often create temporary improvement in the vocal sound, but often ignore more fundamental problems, or in time create new ones.


Miller has written several books on vocal pedagogy, and whilst all are useful guides for the vocal pedagogue, his National Schools of Singing is of particular interest to choral conductors. In my experience, many choral conductors pick-up bits and pieces of vocal pedagogy during the course of their careers, either from their own private lessons, or from various workshops they have attended. The problem however is that there are several singing techniques, and often specific ideas relating to the act of singing can be in opposition. Though Miller is clearly in favour of a specific approach to vocal production (which he makes clear throughout National Schools of Singing, and is the basis of The Structure of Singing), his study of various "National Schools" helps to demonstrate why different approaches to singing exist, how these systems are established, and the strengths and weaknesses of each.


Miller's The Structure of Singing is one of the most comprehensive and complete introductions to vocal pedagogy. While often employing a rather sophisticated vocabulary, especially when discussing vocal mechanics, the book is coherently organized treating each issue of vocal production and pedagogy individually, starting with the basics of technique and progressing to more specific and specialized matters relating to the professional voice teacher and singer. One aspect of Miller's book that is invaluable is the inclusion of several exercises in each chapter that seek to help the singer realize the specific technical points discussed. These exercises are
incredibly varied, and many are ideal for inclusion in solo or group warm-ups. Six appendices supplement the principal text, and each is useful for quick reference relating to various matters from physiology to explanation of the International Phonetic Alphabet symbols.