

Focus of Attention in Voice Training and Performance: Applications to the Voice Studio

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An understanding of anatomy and physiology, if accurate, can be of help to teachers in dealing with singers' problems; but too much concern with anatomy, and the purely mechanical, anatomical aspects of singing on the part of singers, can actually inhibit their ability to sing. Indeed frequently, this over-concern with anatomy can be the cause of those very problems.¹

THOMAS HEMSLEY'S WARNING OF AN "over-concern with anatomy" is an apt introduction to the topic of focus of attention in singing. The question of where singers should place their attention during learning and performance, known as focus of attention in the motor learning field, is a highly relevant, yet possibly overlooked aspect of voice training. In general, the vast majority of focus of attention studies (more than 180 of them) have found that an external focus of attention (focusing on the effect of a movement) is superior, in a variety of ways, to an internal focus of attention (focusing on the body movement itself).² Recent meta-analyses over two decades of focus of attention research confirm that external focus is advantageous for both performance and learning, regardless of age, health condition, or level of expertise.³ For a detailed analysis of the research and theoretical underpinnings of focus of attention in both athletics and music, please reference the earlier *Journal of Singing* article, "Focus of Attention Research: A Review and Update for Teachers of Singing."⁴ The current article offers practical applications of the aforementioned research to the voice studio.

In all of motor learning theory, focus of attention is, arguably, the area of research that has the most relevance to singers. Where singers should place their attention while singing is the topic of thousands of voice lessons that take place every day. For example, if the desired pedagogic result is to create more space in the pharynx, the teacher has several options. One pedagogic approach could be to give an internal focus cue, such as, "Lower the larynx," which makes direct reference to the body part in question. Alternatively, the teacher could choose an external focus cue, such as, "Pretend you are about to yawn," which does not reference the body part directly but often results in the intended goal of a lowered larynx.

There are usually many possible ways to address technical issues in the voice studio, and teachers have important choices to make when it comes to decid-

ing upon which directive to give a student. This author's research concerning focus of attention in voice training found that survey responses from a sample of 278 singers suggest that singers are instructed with external focus approximately 50.83% of the time, internal focus approximately 39.42% of the time, and a combination of both internal and external focus approximately 6.48% of the time.⁵ The choice of directive a teacher chooses to give a student may be a complex puzzle that includes the teacher's own experience as a voice student, pedagogic training they may have received, previous success or failure using certain directives, and a number of other variables. Teachers ideally should be aware of the robust research conducted throughout the last two decades in the field of motor learning and decide, through experimentation, if its findings merit incorporation into their own pedagogies. Such an approach would align well with the Evidence-Based Voice-Pedagogy framework, in which scientific research, teacher experience, and student perspectives are all valued.⁶

This article aims to guide teachers wishing to "translate" internal focus directives into external focus directives, whenever appropriate. Imagery, the use of props, character voices, primal sounds, and emotional engagement will be introduced as common strategies for inducing an external focus. Issues of posture, breath, space in the vocal tract, and tension will be examined, as well as ways to engage the powers of imitation and imagination to activate automatic control processes.

POSTURE AND ALIGNMENT

Excellent posture is often regarded as an indispensable ingredient in a solid vocal technique, because for singers the instrument is the body and poor body alignment can disrupt the free emission of sound. In the survey study this author conducted with singers, entitled "Instructions given to singers in voice lessons," the majority of instructions regarding posture (57.82%) unsurprisingly called the singers' attention to the body itself, thereby inducing an internal focus.⁷ While it may seem difficult to address postural issues using external focus of attention directives that do not directly reference the body, it is indeed possible and potentially worth the creative effort.

The importance of feeling "grounded" is a common maxim among singers and teachers. In the survey with

singers, a number of singers wrote that they had been instructed to feel their feet firmly connected or rooted into the ground, which is an internal focus directive, due to its direct reference to the feet (a body part). As shown in motor learning research, changing one or two words can change a focus of attention instruction from internal to external and result in significant performance gains.⁸ So instead of referencing "the feet," instructions could be slightly altered to make reference to the singer's shoes being rooted into the ground. It is a seemingly minor alteration but potentially powerful, given the extensive research showing the benefits of an external focus of attention.⁹ Alternatively, feeling the pressure of the ground supporting one's weight is another way to avoid referring to body parts, such as the feet, directly. Similarly, images and analogies are powerful external focus tools, as shown by one singer from the survey who poetically wrote, "You are a tree. Grounded, tall, and poised."¹⁰

Multiple singers who participated in the survey reported that they were frequently instructed to elongate the spine, an internal focus directive because it draws the attention to another specific part of the body: the spine.¹¹ In contrast, other singers were instructed to elongate the spine via analogy. One singer wrote, "Feel like you're the skeleton hanging in the anatomy lab." Other responses, such as, "Imagine that you are stretching into the ceiling," "Stand like you're balancing on a tightrope," and "You are a marionette," also evoke a sense of length without drawing explicit attention to specific body parts involved in proper alignment.¹²

BREATH

In an interview about breathing and support for singing, celebrated pedagogue Stephen King said, "Of course, when you start talking about it too much, they overdo it. 'Push this out, pull this in'—they lose the balance. This is the hardest thing to learn and takes the most patience to teach."¹³ Comparably, in regard to excess abdominal tension, renowned pedagogue Scott McCoy advises teachers to "resist your first instinct, which will be to direct the student to relax the abdominal wall."¹⁴ Instead he has them pretend to use a hula hoop or do an Elvis impression, both of which may cause the abs to release, thereby reducing subglottal pressure and freeing

the voice. These are perfect examples of teachers who are acutely aware of the anatomic nature of the issues at hand but consciously choose to use external focus directives to provide the solution. Although they do not use attentional focus verbiage in their explanations, King and McCoy seem to be pointing to the benefit of finding directives that do not make explicit reference to body parts, in the often challenging task of teaching breathing and *appoggio* (breath support).

We now must look a little deeper into teaching about breath through the lens of focus of attention. The first thing that many voice teachers teach new students is their philosophy on inhalation. Common directives in the survey for singers involved expansion of the ribcage, release of the abdominals, and use of the diaphragm.¹⁵ In contrast to these internally focused instructions, many of the surveyed singers reported analogy instructions that induce an external focus, such as, “Imagine opening your wings,” “Fill the pitcher,” or “Inner tube expansion.”¹⁶ To generate a low breath (accompanied by an open throat), Lynn Holding prompts her students to take “happy inhalations” that are a response to a pleasant imaginary scenario.¹⁷ Finding external focus directives in regard to inhalation, which may be able to take the place of mechanical directives that reference the body directly, can be an exercise in creativity for the teacher, and the sky’s the limit when it comes to creating unique, memorable instructions.

Using props can be very useful in inducing an external focus of attention for a body-centric activity, such as singing. Quite common in the teaching of breath support is the use of a “support belt” that students are directed to breathe into and resist against. In Jerome Hines’s book of interviews with great singers, Placido Domingo, Roberta Peters, and Patrice Munzel mention the use of a belt in their breath support training.¹⁸ Others, like voice teacher Ruth Golden, direct students to breathe into the piano as a way to anchor the breath.¹⁹ These kinds of props induce an external focus of attention, especially when the teacher instructs the student to concentrate on the piano or the belt, not their abdomen. Even something as simple as a chair can be a useful tool for achieving an external focus. One singer from the survey wrote about her teacher’s method, “She will have me sit on the edge of a chair and will tell me to sing through the chair.”²⁰ The use of the chair may help to activate the

lower body indirectly, by calling attention to the chair instead of specific muscles. Similarly, Speech-Language Pathologist Leda Searce recommends the use of an exercise ball, the wall, and a chair to provide laryngeal anchoring from the torso, pelvic floor, and lower body.²¹ Singing while performing a wall squat and thinking about the external focus cue that Searce recommends, “let the wall hold you,” requires support mechanisms to activate through necessity and without the singer actually thinking about engaging the muscles of inspiration or expiration.²² In time, this feeling of support should become second nature.

The drinking straw, now famous for its use in semi-occluded vocal tract exercises, is another beneficial tool to promote external focus of attention. Stephen King gives an initial explanation of what he wants to happen in the abdominal wall, but then exclusively trains the *appoggio* in exercises and a great deal of straw work.²³ In his experience, the desired result—proper engagement of the abdominals—is achieved automatically when attention is placed on phonating through a straw. The body creates a memory that becomes repeatable with practice, and the teacher may be able to avoid direct manipulation of the abdominals, which could cause some singers to overwork. Another indirect way to activate support and reduce excess subglottal pressure is through the use of sirens. Acclaimed mezzo soprano Marilyn Horne said that she learned how to achieve a “slender emission of air” through siren exercises.²⁴

Lastly, singing with emotion is also a powerful tool for engaging the muscles of respiration in an automatic way and without conscious effort. Esteemed tenor and teacher George Shirley, seemingly an advocate of not overmanipulating the body, said that “When I’m really emotionally involved in my singing, I can feel all the muscles around my back become firmer.”²⁵ Often, as the result of emotional investment, the body engages exactly as it should in properly supported singing. Another teacher might try to achieve support the other way around, through direct intervention with the back muscles. This is, of course, understandable, given the teacher understands the precise physiological problem and may want to address it head on. Before going directly to the body, this teacher could consider first asking the student to sing with completely invested dramatic intent and emotion. Does the sound achieve the desired sup-

port? If so, see if the student can articulate what allowed this to happen. If not, an internal focus directive (e.g., engaging the back muscles) may be called for. This author recommends, based on the research in the motor learning literature, that teachers use external focus as the first line of defense in their teaching, whenever possible. Naturally, teachers may have to resort to internal focus directives when the desired technical changes are resistant to the external focus directives.

SPACE IN THE VOCAL TRACT

For classical singers especially, creating more space and modifying the shape of the vocal tract is crucial to accommodating a large, resonant tone. Two common ways to change the space and shape of the vocal tract are achieved through laryngeal and soft palate positioning.

In her interview with Jerome Hines, famed mezzo soprano Risë Stevens said, “A lot of singers make a terrible mistake: they’re always thinking about the larynx. When I did not know about the larynx I was singing better.”²⁶ Stevens would have likely endorsed the opinion that teachers should ask themselves if they can find a way to encourage the correct laryngeal position, while inducing an external focus of attention. “Lower the larynx” was a frequent response from the survey.²⁷ However, as Dr. Leo P. Reckford astutely told Jerome Hines, “Any concentration on a certain organ will eventually result in a subconscious overexertion and might lead to unnecessary tensions.”²⁸ As stated before, much of the focus of attention research arguably confirms this observation. To avoid discussion of the larynx directly, the power of the mind can be beneficial in subtly and simply activating the body. Voice teacher Julia Faulker instructs her students to “think about leaning down as you go up,” and Patricia McCaffrey talks about all notes being on a geometric plane.²⁹ These shifts in typical thinking patterns are externally focused and also tend to subliminally prevent the larynx from going up excessively as the pitch ascends.

Sometimes a subtle suggestion (such as thinking down as the pitch ascends) may not be a strong enough pedagogic intervention. For instance, to train in a new laryngeal position for a beginning student with excessive laryngeal elevation, a more exaggerated external focus of attention approach may be necessary. The student

can be asked to imitate different cartoon characters that speak with low larynges, such as Goofy or Yogi Bear. Singer and voice pedagogue Heidi Grant Murphy admits to using funny voices to find the correct space: “Sometimes I make them find their old-opera-lady voice, the one who says, ‘you-hoo’ and gets them to create the right balance of space and clarity.”³⁰ Relatedly, this author has been shocked to find the excellent sounds that her very beginning students have been able to produce while facetiously “imitating” an opera singer. Using a caricature voice is an easy way to focus the student’s attention externally on the resulting sound, rather than the complicated and interweaving parts that come together to create the conditions for that sound. Comparably, Scott McCoy shares a panting exercise in which he asks the student to pant like a chihuahua and retriever, which causes the student to learn different laryngeal positions implicitly. Once they can find these two varying pant positions, McCoy has the student perform short scales immediately following the retriever pant (which necessitates a lower laryngeal position).³¹ This could also be an interesting exercise to try with a classical singer wishing to crossover into popular music, in which the chihuahua pant could be used to facilitate a higher laryngeal position.

Along with instructions pertaining to the larynx, a very frequent instruction regarding the creation of space in the survey for singers was, “Lift the soft palate.”³² This directive is simple, direct, and definitely highly internally focused. In contrast, one respondent wrote, “Bite the apple (not lift your palate!).”³³ Within this response, one presumes that the teacher specifically did *not* want the student to think about consciously lifting the soft palate. Rather, the external focus directive to “bite the apple” puts the singer’s attention on an everyday action (biting) that often creates the result of a lifted soft palate.

Frequently a simple description of a familiar experience, that elicits a bodily response, is all that the student needs. Voice pedagogue Bill Schuman evokes the feeling of lifting the soft palate this way: “You know when you are sitting in church getting the giggles and you’re trying not to let it show? That’s your soft palate! That’s it.”³⁴ Other external focus responses from the survey that used familiar or “primal” activities were, “Sing through a yawn-like space/snorish space,” and “Feel like you’re about to sneeze.”³⁵ No direct mention is made of the soft

palate. Instead the attention is placed on everyday activities (sneezing, snoring) that automatically lift the palate.

In addition to challenging the teacher to create imaginative ways to incorporate external focus directives into their teaching, it seems that these types of directives also add a great degree of fun and play into the voice studio environment. Can this sense of play be sustained when singers and teachers are faced with the potentially demoralizing issues of jaw and tongue tension?

TONGUE AND JAW TENSION

In her interview with Jerome Hines, operatic mezzo Fiorenza Cossotto advised, “I have always believed that too much thinking about where you put the tongue, et cetera, causes rigidity. Instead, you should keep it as simple as possible.”³⁶ Cossotto would likely call into question one survey participant’s response regarding tongue position: “Keep the tongue rolled forward, the tip touching the lower front teeth and the middle hump striving towards the ridge behind the top front teeth.”³⁷ While many teachers would agree that this information is correct, is it the best way to address the issue of tongue placement? Perhaps for some students it is, and this preference should be honored in the pedagogic process. However, teacher and singer George Gibson advises his students to “inhale through an [i] vowel regardless of what vowel you start with in the forthcoming phrase.”³⁸ This preparation of the vowel may automatically put the tongue in an arched position with the tip lying behind the bottom teeth and without directly calling the student’s attention to tongue placement.

In regard to excess tongue tension, Julia Faulkner observes, “If I say, ‘release the back of the tongue,’ you’ll start pushing the tongue down.” Instead she explains her method, which undeniably induces an external focus of attention: “You have to think through and out so that the energy moves to the focus point in front of you. These are all psychological tricks to get you not to think back where your tongue is. We can talk about it, but I don’t like to focus on it. I want to give you something else to think about that will be more helpful.”³⁹

Commonly linked to tongue tension is jaw tension. According to the survey, teachers often direct students to relax or release the jaw.⁴⁰ Scott McCoy is probably not one of those teachers. He cautions that “If we tell the

student ‘your jaw is too tight,’ the reflexive action is to tighten even further . . . The more productive approach is to inspire a movement that is impossible in the presence of excess evil tension; therefore, we wiggle.”⁴¹ His method is to ask the student to quickly wiggle the jaw side to side while singing. This action-oriented approach is very likely superior to asking the student, point blank, to release jaw tension. However, some may justifiably consider this instruction to be somewhat internally focused, because the attention of the student is still brought to the jaw. It is important to remember that all focus of attention instructions exist on a spectrum. To tweak the instruction toward the external focus side of the spectrum, the teacher could put pieces of tape (which have been successfully utilized in focus of attention studies) on either side of the student’s jaw and instruct the student to make the tape wiggle side to side.⁴² Thus, the student is focusing on the tape (external focus) rather than the jaw (internal focus).

Other external focus directives to relax the jaw and tongue can draw from the student’s experience. One singer from the survey reported that their teacher tells them to “Imagine you’ve been shot with Novocaine,” which omits the mechanical how-to (release the tongue and jaw).⁴³ Instead, the singer is immediately transported back to a time when they experienced getting a Novocaine shot at the dentist and felt the resulting numbness and relaxation of the entire mouth and jaw area. Similarly, pretending to be totally clueless while saying the word “duh” or imagining that one is drooling can allow for the necessary “letting go” that the teacher is looking for and simultaneously inculcate an external focus of attention.

IMITATION AND IMAGINATION

One of the most primal and intuitive skills that humans possess is the ability to imitate. Modelling the target sound for a student is one of the most common pedagogic techniques that classical voice teachers employ.⁴⁴ The ubiquity of modelling as a teaching tool suggests that voice teachers achieve effective results with this method. Asking a student to listen and then imitate is an example of implicit learning and the epitome of an external focus of attention cue. Instead of directly telling the student what to fix or how to fix it, the teacher can

demonstrate and a student with a highly tuned ear can sympathetically recreate the desired sound. The body movements required to create the sound self-organize, presumably without too much effortful attention to specific body movements. Imitating an ideal sound can also happen inside the singer's head, which brings to light another external focus tool, the power of imagination.

Writing in 1946, celebrated tenor Beniamino Gigli predated the scientific study of focus of attention. Still, his personal experience led him to passionately advocate for singers to adopt what we, in present times, could consider an external focus of attention. Gigli believed in the power of the mind to create the perfect conditions for excellent vocalism and wrote that "the very fact of mentally conceiving, and mentally shaping and colouring each vowel sound to be sung before producing it, induces simple and spontaneous (natural) movements of the parts concerned."⁴⁵ A split-second detailed imagining of the sound about to be sung was the "mental preparation" that Gigli believed was the key to his own remarkable singing and a habit that he practiced consistently throughout his career. Trying to physically manipulate the body parts involved in the creation of the sound would, according to Gigli, "only lead to grossly exaggerated forms with consequent stiffening, in degree, of the parts engaged in such production; the tonal product suffers accordingly."⁴⁶ Gigli is essentially describing the "constrained action hypothesis," which posits that an internal focus of attention encourages a conscious type of control that inhibits the motor system, thereby hindering automaticity and the body's innate capability to self-organize.⁴⁷ External focus, in contrast, has been shown to promote automatic control processes that lead to more fluent and regular movements.⁴⁸ Ingo Titze also recently wrote about self-organization in vocal mechanics and advised against too much manipulation of individual parts of the system. "Let the vocal system organize itself. Give it the right output targets and it will find a way to get there with lots of alternative solutions."⁴⁹

Proclaiming the power of automatic control processes has been echoed by voice teachers since Gigli, as well. Victor A. Fields poetically wrote that, "you sing only as beautiful a tone as you can think, since your voice always follows your thought." Fields goes on to say that, "After a long period of struggling with the

consciously controlled muscular responses of the vocal tract, it is sometimes difficult to accept the supervisory control of the mind or to surrender oneself completely to it."⁵⁰ Likewise, George Shirley observed that "We get involved in ways that interfere with what will naturally happen in our bodies if we trigger it with our minds."⁵¹ Indeed the central theme of Thomas Hemsley's book, *Singing & Imagination*, proclaimed that "One of the most difficult things for any singer to learn, and one of the most important, is to be able to mentally hear the tones that they wish to sing before they are released to actual sound."⁵² He goes further to posit that the lack of this mental intention is the root cause of many singing faults that "are assumed to have an anatomical cause."⁵³ Admittedly, it is necessary for the student and teacher to work together to co-create what they consider to be the "ideal" sound. Once the desired sound quality has been defined, teachers should aim to incorporate the use of imagination into their teaching directives and empower their students to trust the automatic control that can result.

CONCLUSION

Baritone Louis Quilico lamented, "The terrible thing about singing is . . . you emphasize, you emphasize, you overdo."⁵⁴ A voice teacher's job is to emphasize the aspects of a singer's technique that need improvement and find the best ways to address those issues. In their zeal to diagnose a problem, teachers should take care that they do not cause its magnification. Too much emphasis on the mechanics of the body movement, or internal focus of attention instructions, may be linked to this "overdoing" that Quilico references. Teachers are often expert diagnosticians but being able to accurately diagnose a problem is frequently quite different than knowing the most effective and efficient way to fix it.

Research in motor learning points to the value of using external focus of attention instructions to improve learning and performance. Voice teachers may want to assess their teaching strategies and work toward increasing their arsenal of teaching tools that utilize an external focus of attention. Ideally, the teacher will be able to obtain the desired result with an external focus directive but if the student is not achieving success with external focus directives, internal focus may be necessary and appropriate for

the situation. Teachers should try out different directives with their students and compare and contrast the efficacy of internal versus external focus directives. There will undoubtedly be technical skills that require and benefit from an internal focus of attention. However, whenever possible, teachers should aim to use internal focus directives as an interim step in the learning process and switch back to external focus directives as soon as possible to maximize the performance and learning benefits of such instruction. As discussed in this author's earlier article, the closer the student is to the performance stage, the more critical external focus may be.⁵⁵

Victor Fields advocated for the importance of joy in the cultivation of excellent singing and observed that common teaching directives (many of which happen to be examples of internal focus directives) can be detrimental to joy. Fields cautioned against the use of phrases such as, "Don't let your chest slump! Don't forget to hold your chin in! Keep your posture erect! Breathe with your diaphragm! Don't keep your tongue too high! Place the tone upward and forward! Don't forget your phrasing! Watch your diction! Close the vowel! Open the throat! etc.! etc.!" and continues by asking in earnest, "How can a pupil be joyous under these conditions?"⁵⁶ It is hoped that a few ideas in this article can serve as a jumping off point for each teacher's own exploration and creative pursuit of unique teaching instructions that direct their students away from bodily focus and toward joy as much as possible.

NOTES

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